

Priscila Lena Farias / Anna Calvera
Marcos da Costa Braga / Zuleica Schincariol (eds.)

DESIGN
TECHNOLOGIES
FRONTIERS
TERRITORIES / CONCEPTS /
TECHNOLOGIES

ICDHS 2012 8th Conference of the International
Committee for Design History & Design Studies

Blucher

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PRESENTATION /

This book is a collection of the papers presented at the 8th Conference of the International Committee for Design History and Design Studies (ICDHS). It registers the main ideas and trends on design history and design studies discussed during this academic meeting held in São Paulo, Brazil, in September 2012, which gathered researchers from 26 different countries, coming from America, Europe, Asia and Australasia.

Promoted by a committee composed by well-known design scholars from America, Europe and Asia, ICDHS conferences aim to assess the current state of affairs of design history and design studies. The activity of the group began with a conference organized in Barcelona (Spain) in 1999, which was followed by a second meeting in La Havana (Cuba), in 2000. The Committee was inaugurated in the Istanbul (Turkey) conference, in 2002. The activity continued in the conferences held in Guadalajara (Mexico, 2004), Helsinki & Tallinn (Finland & Estonia, 2006), Osaka (Japan, 2008), and Brussels (Belgium, 2010).

The theme chosen for the 8th edition of the conference, "Design Frontiers: territories, concepts, technologies", aimed to provoke discussions on how design history and design studies may push the limits of design knowledge. The frontiers of design may be challenged in many ways: by the exploration of new territories, by the establishment of new concepts, by the emergence of new technologies, as well as by rediscovering the past and by finding new ways of applying current wisdom; and the papers published in this volume address one or more of those challenges.

The Call for Papers announced 6 tracks, proposed by members of ICDHS board and the Brazilian organizing committee, and resulted in 369 proposals, in form of abstracts, coming from 36 different countries. All proposals were carefully reviewed by at least 2 members of the Program Committee, composed of 88 researchers from 57 institutions in 19 different countries, appointed by the track chairs. Efforts have been done in order to ensure that the proposals selected would cover different areas, methods, approaches and positions, resulting in 150 accepted proposals. Following a second round of reviews, based on the full paper version of the proposals, 112 papers were indicated to be presented in parallel sessions, and 13 in the poster session.

This book, therefore, combines the 125 papers resulting from the Call for Papers, divided in 6 sections (History of design education, Identities and territories, National policies on design, Techniques and technologies, The New Imperialism, Open strand), with the text version of the lectures by three keynote speakers.

The first chapter includes papers by Régulo Franco Jordan, director of the El Brujo archeological site and of Museo Cao in Peru, about the art and symbolism of the Moche, a pre-Inca culture; Guilherme Cunha Lima, professor and researcher at Rio de Janeiro State University School of Industrial Design, on design history in Brazil; and Veronica Devalle professor and researcher at University of Buenos Aires Faculty of Architecture, Design and Urbanism, on current problems in the historiography of design.

The second chapter includes the 19 papers presented in the 'History of design education' sessions chaired by Haruhiko Fujita (Osaka University, Japan) and Silvio Barreto Campello (Federal University of Pernambuco, Brazil). Those papers focus on historical studies of design education, with a particular interest in comparative studies of design education in different countries, cultures, periods, in its relationship with art and technology education.

The next chapter gathers 30 papers that aim at design from the perspective of identity and territorial issues, approaching topics such as micro history, collective identities, gender, internationalization, marginalization and globalization. Such papers were presented in the 'Identities and territories' sessions chaired by Oscar Salinas Flores (National University of Mexico, Mexico) and Clíce Mazzilli (University of São Paulo, Brazil).

Chapter 4, 'National policies on design', includes 12 papers presented in the sessions chaired by Javier Gimeno-Martínez (VU University Amsterdam, Netherlands & Artesis University College of Antwerp, Belgium) and Cyntia Malaguti (University of São Paulo, Brazil). The papers address totally or partially state funded plans and institutions for the promotion of design, studied as signifying practices in both their economic and cultural dimensions.

The following chapter contains 28 papers presented in the 'Techniques and technologies' sessions chaired by Paul Atkinson (Sheffield Hallam University, UK) and Charles Vincent (Mackenzie Presbyterian University, Brazil). The focus here are methodologies and different models of process and practice, including histories of technique and practice and studies on cross and inter disciplinary collaborations, and on the impact of emerging and enabling technologies on the production, reception and consumption of design.

Chapter 6 gathers 14 papers that were presented in the sessions entitled 'The New Imperialism: the international face of design and design history', chaired by Jonathan Woodham (University of Brighton, UK) and Denise Dantas (University of São Paulo, Brazil). Such investigations draw attention to the nature of design practice and history in the wider world, beyond the orthodox mapping of activity in the mainstream industrialized nations of the west, helping to redraw the world map of contemporary design activity, history and politics.

Finally, Chapter 7 brings further investigations on territorial, conceptual and technological frontiers of design, congregating 22 papers presented in the 'Open strand' sessions chaired by Victor Margolin (University of Illinois at Chicago, US) and Priscila Farias (University of São Paulo, Brazil).

We would like to thank all authors, track chairs and members of the program committee for their contribution in setting a very high standard of quality while assuring a wide-range of perspectives and views for the conference, and the members of the organization committee for making it all happen. We are sure that the papers published here will foster more investigations and discussions on design history and design studies.

The Editors

Priscila L. Farias

Anna Calvera

Marcos da Costa Braga

Zuleica Schincariol

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KEYNOTE LECTURES

Art, symbolism and power in Moche Society, North Coast of Peru

JORDÁN, Régulo Franco / Director of the El Brujo archeological site and of Museo Cao / Fundación Wiese / Peru

The Moche (2nd-8th centuries A.D.) were one of the most powerful kingdoms of their time on the North Coast of Peru, as were the Nasca in Ica south of Lima and the Tiahuanaco in the altiplano between Peru and Bolivia. Their achievements in their various cultural manifestations are compared with the grandeur of the Maya in Central America. They extended over a territory of 600 kilometers, from Piura in the north to Huarney in the south. Moche art and symbolism reflect high development in knowledge of the laws of nature that permitted them to recreate it for magical-religious uses. Moche works of art in temple murals, in goldwork, in textiles, in ceramics, etc. express, without doubt, an extraordinary artistic quality that was enjoyed by the powerful Moche lords and their gods.

1. The Moche Territory

The Moche occupied the deltas and slopes of the valleys that are constantly bathed by the waters that come from the mountains and that provide water for life and agriculture. They constructed complex intervalley water canals to irrigate the desertic fields and dry lands that lacked water to make them fertile. One of the aspects of these valleys is that there is little rain, with some intervalley coastal desert strips that are fed by the seasonal humidity of the winter season, forming lomas with a biodiversity of species.

One of the natural resources for life has been the cold and deep waters of the Pacific Ocean. All these resources served as inspiration for Moche iconography and thought. Nevertheless, it is important to emphasize that the North Coast of Peru was always impacted by the El Niño intercontinental phenomenon, also called the ENSO phenomenon, which always put the north coastal societies at risk from very early times up to the present.

2. Sociopolitical Organization and Economy

Despite the fact that there are still many questions to be resolved, we do not know much about the sociopolitical organization of the Moche civilization. Nevertheless, it is known that in later periods, after the 15th century, there existed in each valley political units called *cacicazgos*, governed by local kings or *Alaec* in the Moche language, who had subordinate lords and specialists under their control, at least within the regions of Trujillo and Lambayeque (Zevallos 1989, 1992). In view of the evidence obtained up to now, we can deduce that the Moche were a very complex and hierarchical society and that each of the valleys was under the aegis of a principal lord who governed and acquired a semidivine image that concentrated all the powers, especially religious power which was an effective means of control of the society so that all proceeded harmoniously. Since then, it has always been thought that the Moche formed a theocratic government with efficient mechanisms of reciprocity among the intervalley ethnic groups of the whole territory, including the Lambayeque, Moche, Virú, Chao, Santa, Nepeña and possibly the Huarney valleys. The main support for this portrayal is the ceramic iconography and other media of ideological transmission of a ceremonial nature (Figure 1).

The economic aspect was based on the payment of tribute, which served for the construction of great public and religious works, as well as major extensions of efficient intervalley irrigation canals, which can be compared to large modern projects. Other economic aspects were reciprocity and redistribution of subsistence goods and merchandise, which permitted the construction of warehouses in each of the religious headquarters where the productive apparatus of the royal domain and the dependent sites was controlled (Moseley 1982).



Figure 1. Iconographic representation of the sacrifice ceremony. [Taken from Donnan 1999].



Figure 2. Iconographic representation of a navigation theme (Taken from Donnan 1999).

The surplus from this redistribution made possible the maintenance of a group of fulltime artisans at the service of the elite. Many of the objects they produced were used by the lords in order to demonstrate their power and prestige in a complex and hierarchical society. Because of this, we can now admire great artistic works in the temple murals, ceramics, textiles, metallurgy, etc., which suggest the intervention of very advanced and sophisticated technologies.

The Moche were expert navigators who made diverse crossings to the north and south (Figure 2). These crossings were made for commercial and ceremonial purposes and to supply exotic products from distant lands, such as the *Spondylus* brought from the coasts of Ecuador for ritual purposes, or the lapis lazuli brought from Chile. At present, we can still observe in the area of Huan-chaco in Trujillo, in the north of Peru, totora reed balsas boldly controlled by fisherman who sit or kneel, using cane oars in the same way their pre-Hispanic ancestors did hundreds of years ago.

3. Art for the Gods and the Lords

The only culture that can rival the Moche is the Maya culture. According to Elizabeth Benson (2004), the expressions in art between the Maya and the Moche are shared and in a few cases differentiated. For example, the ceramic art is very refined and informative, the use of seashells and *Spondylus*, and the abstract and symbolic representations, such as the interesting Moche theme of the “rebellion of the artifacts” which can be compared with the rebellion of the objects in the *Popol Vuh* of the Maya. But one of the principal comparative aspects is that both cultures have constructed imposing pyramidal structures, those of the Maya in stone and those of the Moche in adobe or mud. Shared characteristics are that these sacred buildings were interred, one being built over another, containing tombs, offerings and murals of great religious significance (Figs. 3-5).

Moche ceramic production as is currently shown in Peruvian and foreign museums is of great value and realism and expresses a great deal of information in sculpture and iconography about religious life. Together with Nasca ceramics of the south coast of Peru, this is perhaps in one of the richest collections of ceramic production known in pre-Columbian America (Figs. 6-7). The plastic perfection in the diverse representations, especially in the “portrait vessels”, make this culture one of the most advanced in the New World in what Wendell Bennett rightfully baptized as the



Figure 3. Huaca Rajada or Sipán, where the royal tombs of Sipán were discovered



Figure 4. Huaca Cao Viejo in the El Brujo Complex, where the Lady of Cao was discovered.



Figure 5. Huaca de la Luna, Moche Valley, where beautiful polichrome murals have been discovered.

time of the “master craftsmen”. Well-known representations in Moche ceramics are scenes of ceremonial life, funerary scenes, important figures being carried in litters, figures playing musical instruments, scenes of navigation and representations of beautiful landscapes with animals and plants typical of coastal ecosystems. However, the best known scenes are those of burial, human sacrifice in mountains and purification.

Moche ceramics were classified into five phases, from I to V, by Rafael Larco Hoyle (1948), which developed during approximately six centuries of occupation. Specialists also now speak of subdivisions into Early Mochica, Middle Mochica and Late Mochica (Castillo 2011). The corpus of Moche ceramics and their iconographic representations has recently been enriched by discoveries made by large projects on the North Coast and, especially, by the contributions of Christopher Donnan (1999), who has dedicated his life to study of the Moche. This investigator, for example, has studied extensively the ceramic effigy vessels of important figures of the elite that were portrayed in different ways and with different characteristics of headdress, facial painting and expressions, especially one elite Moche individual, identified by a wound or cut over the left side of his upper lip, who was depicted repeatedly from childhood to adulthood (Donnan 2004). In addition, Donnan has called attention to the principal religious symbol of the Moche, defined by a shield and a club

tied together with other accessories of battle and power. Thanks to the art and symbolism of the ceramics, the religious life of this classic society of the North Coast of Peru can be known.

Metallurgy is another highly valued cultural manifestation. The able specialists worked at the service of the elite. Most of the metalwork was offered for ceremonies and funerary rituals. The Moche applied a very advanced technology expressed in smelting, casting, laminating, cutting out, embossing, twisting, etc., as well as other sophisticated techniques, such as filigree in the later phases (Figs. 8-9). Gold, silver, copper and four alloys of these were used for many ornaments, including masks, crowns, collars, ear ornaments, needles, depilation tweezers, hooks, small spoons and cups, among other objects (Fraresso 2008). The motifs or designs on the jewelry have much to do with magical-religious elements that formed part of the Moche cosmovision.

Textile production was another of the outstanding achievements, as much for the versatile command of techniques as for esthetic and iconographic beauty. The Moche formed textile workshops for the use of religious leaders and the expenses of the ceremonies. The prime material was produced thanks to a fluid exchange of products, which led to the obtaining of animal fibers, dyes and a massive production of cotton. Male or female weavers made beautiful cloaks, clothes, sashes, headdresses, cloths to cover walls and personal accessories using the techniques of tapestry, gauze, double cloth, embroidery and painted cloth (see Castillo and Ugaz 1999). Much of this textile production has disappeared due to the effects of humidity because of two factors: the cemeteries are near wetland areas and the rains of the El Niño phenomenon accelerated their destruction.

Featherwork art is also outstanding, but rarely preserved in the excavations, and was used in the clothes of the dead of greatest prestige and social rank. The multicolored feathers were obtained by trade with peoples of the tropical forest.

Art in wood is little known because of the scarcity of collections based on controlled excavations and because of poor preservation. Nevertheless, magnificent artistic works, such as idols, fig-



Figure 6. Sculptural Moche ceramic vessel, representing a handsome warrior with his weapons, found at Huaca de la Luna [Courtesy of Ricardo Morales].

Figure 7. Sculptural Moche ceramic vessel, representing a duck warrior, found at Huaca de la Luna [Courtesy of Ricardo Morales].

Figure 8. Gilded copper mask with gold laminae, found at Huaca de Dos Cabezas, Jequetepeque Valley.

Figure 9. Ceremonial attire made of textile and adorned with a face and small sheets of metal, found at Huaca de la Luna [Courtesy Ricardo Morales].



Figure 10. Wooden sculpture representing an idol 2.48 meters tall, found in Huaca Cao Viejo in the El Brujo Complex.

Figure 11. Small wooden sculpture with incrustations of semiprecious stones, representing a Moche agricultural deity.

urines and sculpted ceremonial staffs, have been recovered. For example, there are two extraordinary Moche sculptures which were covered with golden metal and incrustations of semiprecious stones, and which were recovered from archaeological contexts. One is an idol 2.40 meters high that may represent the humanized lunar deity and is accompanied on the upper part by fantastic creatures or lunar animals. It was discovered in the Huaca Cao Viejo of the El Brujo Complex [Franco and Vilela 2006] (Figure 10). Another image is a handsome sculpture that adorned a ceremonial staff discovered in the tomb of a priest in the Virú Valley. It represents a Moche agricultural deity [Strong 1947] (Figure 11).

In the last two decades, there have been two major long-term projects of archaeological investigation: the El Brujo Project carried out by the Wiese Foundation and the Peruvian Ministry of Culture, and the Huacas of Moche Project carried out by a private trust and the National University of Trujillo. They recovered from obscurity two monumental pyramids of adobe, Huaca Cao Viejo and Huaca de la Luna, where there are beautiful polychrome



Figure 12. Part of a mural in high relief with representations of stylized manta rays, found in the upper part of the Huaca Cao Viejo.

painted images on relief-carved mud which express the sacred and divine art that could be represented in the principal Moche temples. There are images of the supernatural world linked with the propitiation and recreation of the world, some life-size images of ritual battles, a procession of prisoners, human sacrifices, the ceremonial calendar, and supernatural beings of Moche cosmology [Morales 2012; Franco and Vilela 2006] (Figs. 12-13).

4. The Lost and Discovered Treasures of the Moche Tombs

At the time of the Spanish conquest, the plundering and destruction of many pre-Columbian relics occurred due to indifference to Andean reality. It is all part of a process of hundreds of years that still has not ended. The pillaging of treasures and important tombs was destined to feed the major collections of the world and some private museums.

There had never been scientific recovery of a fabulous tomb from the pre-Inca past until 1987. In that year, Walter Alva and his team achieved a first for the scientific world when they rescued from the looters and from their very own excavations various royal tombs at the site of Sipán or Huaca Rajada in the Lambayeque Valley. This news went round the world and was published in National Geographic magazine. At the time, the tombs were considered to be the greatest in the New World, comparable to that of Tutankamon. These tombs pertained to two Moche rulers or high dignitaries, the "Lord of Sipán" and the "Old Lord of Sipán", united in kinship by the maternal line, as well as important priests that were found with their ornaments of gold, jewels, emblems of power, animals, and sacrificed men and women [Alva and Donnan 1993; Alva 2012] (Figs. 14-17).

Another of the finds that has attracted world attention is the discovery in 2005 of the tomb of the Lady of Cao by the author and his team in a privileged sector of the Huaca Cao Viejo of the El Brujo Complex. It was publicized in 2006 by National Geographic magazine and other international media. For the first time in Peruvian archaeology, a tomb was found of a female Moche sovereign who governed the destinies of the Chicama Valley between 300 and 400 years A.D. She was buried accompanied by



Figure 13. Beautiful mural known as the "Complex Theme" or ceremonial calendar, found at Huaca de la Luna [Courtesy of Ricardo Morales].



Figure 14. Beautiful ear ornament pertaining to the Lord of Sipán, with the figure of a warrior priest accompanied by two human figures.

Figure 15. Gold rattle pertaining to the Lord of Sipán, representing a principal Moche deity known as the Decapitator.

Figure 16. Gold nose ornament pertaining to the Old Lord of Sipán, representing a small warrior with a complex headdress bearing an owl symbol.

Figure 17. Metal figurine with incrustations of semiprecious stones, found in one of the tombs of Sipán.

Figure 18. Gold ornaments with semiprecious stones and ceramic vessels, found in association with the tomb of the Lady of Cao.

a principal priest, a secondary priest, a guardian, a guide to the underworld and sacrificed maidens. The mausoleum enclosure where she was buried contains beautiful murals on its walls with representations of stylized images of the magical-religious world of the Lady of Cao and of the Moche in general. The presence of tattoos in the form of serpents, spiders, geometric figures and lunar animals on the forearms, hands and feet of this dignitary allow us to recognize that she had supernatural or clairvoyant powers to look at the heavens and perhaps to cure. The emblems of power, personal jewelry and ornaments give her, without a doubt, the investiture of a ruler [Figure 18]. This find has changed the notion of power in ancient Peru [Franco 2008, 2010, 2012].

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Régulo Franco Jordán studied archeology at the Universidad Nacional Mayor de San Marcos, in Peru, and, since 1990, is the director of the archaeological program of El Brujo and of Museo Cao (Wiese Foundation). He has participated in several archaeological projects since 1980, including the sites of Pachacamac, Cajamarquilla, Puruchuco and Túcume. He has taught at The Getty Institute, ICROMM, CRA-Terre, Universidad Nacional la Cantuta, Instituto Superior CEPEA and at international courses promoted by UNESCO. During his career he has received several national and international honorable distinctions, especially following the discovery of the royal tomb of the Lady of Cao. He has lectured at various national and foreign universities, such as Harvard, Yale, Florida, Louvain (Belgium) and Dumbarton Oaks (Washington DC.). He has also participated in scientific events organized in Peru, Germany, Italy, Spain, Argentina and France, talking about archeology, heritage, tourism and land conservation. He is the author of numerous papers and books on his research at Pachacamac, Cajamarquilla, and, especially, at El Brujo.

Pioneers of Brazilian Design

CUNHA LIMA, Guilherme / PhD / Rio de Janeiro State University, School of Industrial Design / Brazil

The design is a field of knowledge, and as such, exists even before the profession itself. It begins when man realizes that, by creating instruments, he was increasing his ability to interact with the environment. By creating drawings he was tempting to communicate with their peers. But the profession of designer is a result of the organization of the workforce. It is the result of the great expertise that came in the wake of the needs caused by the complexity of major social changes promoted by the Industrial Revolution.

In 1996, we begun a research, supported by the National Counsel of Technological and Scientific Development- CNPq, about the life and work of Brazilian designers who pioneered the modern Brazilian design. In order to understand the process we decided to divide History in periods. We started with three periods, and recently had to add another one, so we came to a division of the history of Brazilian design in four distinct and consecutive periods:

1. Forerunners
2. Pioneers
3. Contemporaries
4. Digital

The first period includes the Colony, the Empire and early Republic. The second one starts in 1922 and ends with the graduation of the first class of students of ESDI, the first design school in South America. The third period ends in the late twentieth century. And the fourth one begins in 2000. The Brazilian designers, in general, tended to disregard their historic past. Although this trend is not exclusive to our field, it has been difficult for us, designers, to recognize our activity in the past, and in consequence we do not place ourselves in that same past. On the other hand, the architects have not the slightest doubt that the pyramids, palaces and popular houses of ancient Egypt are architecture. But it is difficult for designers to see that the utensils, instruments and furniture that were inside those buildings, are the result of design. Likewise, writing with its supports and tools is not viewed as a solution arising from design. This way of thinking has been changing in recent years, due largely to post-graduate courses that have been established across the country. Another criticism to be made is the fact that we give too much prestige to a rational design. This ruled out the Latin, African and Indigenous contributions.

The fact is that we do not have yet a history of Brazilian Design to give us support in our research. And so we have to work twice as hard, researching specific issues and our having to fit them in historical contexts that are not ours.

A major problem is that we understand the crisis of development in the Brazilian reality. Maybe, if we used the concepts proposed by Darcy Ribeiro, one of our great anthropologists to define our de-

velopment, things got clearer. He proposes the use of two forms of understanding and action:

1. **Accelerated evolutionary** "development processes of companies that renew their productive system autonomously and reform its institutions towards a transition to another type of socio-cultural training, as people who are there for themselves."
2. **Historical Update** "a crucial feature of this process is his sense of reflexive modernization with loss of autonomy."

The first option is the one that confronts us as the most positive, since it proposes a movement of independent renewal. And Darcy Ribeiro explains:

Evolutionary Acceleration "to indicate the procedures used direct, intentional or not, to induct progress with the preservation of the autonomy of society who experiences it [...] is the case in societies experiencing a technological revolution based on their own creativity, or the full adoption of technological innovations and local government achieved by other companies, or, based on both sources."

The second option is our old acquaintance. Darcy Ribeiro leaves no doubt as to the effects of it:

Historical Update "In many cases, these effects produce profound changes in their progressive way of life, but inevitably lead to the establishment relationships of dependency between principal society and peripheral society, subject to reflex action."

He quotes as an example the expansion of technology of durable goods during Industrial Revolution, as the railroads and port facilities, which modernized the peripheral countries in order to make them more efficient as producers of raw materials and certain items, but always importers of industrial goods.

If we decide for the acceleration of our development, rejecting the simple update, we must prepare ourselves for it. In terms of society as a whole, the problem is a political / economical where design should be inserted in a comprehensive manner. In terms of design as a specific field, our trump card is education and especially research, because only from that joint action can create stand-alone solutions to our realities.

Therefore it is imperative for us to know our past. The central countries know the importance of having this knowledge, and invest heavily in this way. For some years now, the English universities are working firmly in a detailed survey of all knowledge stored by Great Britanny in the nineteenth century, charting the most important historical moment of British domination. This task of making our past known is one of our greatest challenges. Our cultural maturity depends on this knowledge. Thus it is imperative that we recognize the presence of design in our past. And it is also necessary that we create our own parameters of analysis, for the understanding of our own history. At this point I use again the example

of the architects, who believe that architecture is built space, with or without their help. They study the ancient buildings not using to the methodology of archaeologists and engineers, but with the proper instruments designed by them for the study of architecture. The Brazilian architecture recognizes its history from the colonial era. And the modern Brazilian architecture has developed from a thorough and extensive study of its colonial origins. The mixture between knowledge of these origins and exogenous influences of European modernism has given rise to an autonomous architecture that contributes and has international recognition.

When we ask the question: – When Design History starts? Soon it comes to our mind the image of the Bauhaus. This modern movement advocated a rationalist approach to the design, in antagonism to the excesses of the styles created by the Industrial Revolution in the nineteenth century. The functionalist axiom Form follows function took the world, without taking into account the reality of the peripheral countries. We must remember that the Industrial Revolution had very different consequences for the central countries, which made the revolution, and the peripheral countries that suffered it. While in Europe is being generated a new technology, the periphery is being transformed into a captive market and producer of cheap raw materials. The clash with functionalism will happen when, after the Second World War, our architecture begins to impose itself as a form of expression. And if functionalism lost in this fight at the front part of the architecture, was particularly happy in the design field, of dependency we stayed prevented from accepting our own way of being. This is not to say that functionalism is not a good idea, or that should be avoided, but we mean that it is not the only valid solution to make design. We must not stay in a position of dogmatic acceptance of exogenous ideas, however tempting they might be. With the acceptance of these and other dogmas in the attempt to update ourselves historically in relation to the culture of the central countries, we give up a large slice of our history, an entire experience, the struggles of our ancestors, only to feel that we part of a continuous European history, moreover, a few decades late.

We could try to answer the question saying that the design begins when the first man conceives the first artefact. Most objects that have survived are actually the result of an evolution of anonymous design. And that is very well placed in the book *Design: first define the problem*, by Jens Bernsen:

The carpenter's hammer or the woodcutter's axe of are optimal solutions to a problem. Tools are perfectly balanced, functional and visually. The raw material that was used are made in the best shape and function as a natural extension of the skills of those who use them. And yet, designs are anonymous. They were adapted to its purpose through a process of gradual development, with improvements being added over the generations, until these tools acquire its final form.

In relation to graphic design, without going into the dawn of humanity, a basic framework is the invention of printing by Gutenberg. This event is of great importance in the history of mankind because, in addition to revolutionize the understanding among men, the production of the printed book, it also established the

concept of assembly line in Renaissance, used so effectively by Henry Ford in his factory in the early twentieth century. Printing spreads across Europe, and from that point to the rest of the world. Its introduction in America occurs irregularly. In some cases it comes with the conquerors, in other cases with the settlers, and in our case, only on the eve of Independence. But in anyway the activity of Graphic Design is already centennial by the time of the Bauhaus in Germany.

I have chosen to speak today about two pioneers of Brazilian Design.

Let me start by Orlando Costa Ferreira. He is, without doubt, the great forerunner of research for the formation of a History of Brazilian Design. For those who do not know heard of him yet, I will talk about what I wrote when the first edition of my book *O Grafico Amador: the origins of modern Brazilian typography*. I described him as: librarian, essayist, professor and editor. At the time I was young and a bit shy, perhaps, but should have added: designer, which he so richly deserves. Behind the elusive label of editor he always hid an intense activity in graphic design, creation and production of books and newspapers experimental culture. The other labels of essayist and university professor conceal a brilliant career as a researcher. The history of books and graphic production owes much to this man from Pernambuco who will later be installed in Rio de Janeiro.

On August 15, 1915, in the Engenho Conceição, the city of Rio Formoso, Pernambuco, Orlando da Costa Ferreira was born. He learns to read and write with his own family members. He studied informally with private teachers in his primary school times. He was self-taught, without getting far from the books. As he gets older, the age will only increase this passion.

In 1942, now residing in Recife, he won a competition for a place in the prestigious the Bank of Brazil. In March 1945 he married D. Lize. He graduated in Librarianship in 1949. During his years Recife, along with Aloísio Magalhães, Gaston de Holanda, and José Laurenio de Melo, founded the private press *O Grafico Amador*. Laurenio wrote an introduction for the book I wrote about the private press, giving us a vision of how they worked:

These four characters decided at a time of tremendous existential availability to be typographers and printers, crafting some little books in a precarious and improvised workshop [...] to the activity undertook I think you can apply the tenet of collective creation. Everyone did everything: text, graphic design, and composition, printing, finishing.

After this experience he was named to head the Literary Supplement of the *Jornal do Commercio* of Recife. But even when in the head of these projects, he always kept teaching at the university, and never deviated from his line of research, descriptive bibliography and history of the printing arts in Brazil, which led to his great interest in various types of printing processes, photo mechanical matrices, typography, paper making and book binding.

In 1964, the Bank of Brazil transferred him from Recife to Rio de

Janeiro. In the following year he assumed the organization of the Bank's Technical Library. In Rio, he has the opportunity to research the major libraries and archives. In 1973, he retired from the Bank of Brazil, and later in that year was named the director of the Library Foundation of Casa de Rui Barbosa. At this point it's almost done the first volume of his magnum opus *Imagem e Letra* (Image and Letter). But he does not have time to finish the second volume because he died in 1975. The first volume Image has two editions, the first by Editora Melhoramentos, today almost impossible to obtain, and the second, a beautiful book published by EDUSP.

Since the publication of this book, it has been consulted by almost all of those who wish to know the past of several printing techniques, which will occur in the Brazilian reality. It is remarkable the extent of his study, locating the first experiments in printing techniques with examples of Brazilian books and periodicals across the country. These studies demonstrate a thorough knowledge of historical sources, many of them first quoted in the context that is his specialty. For these reasons, thirty-five years later, it continues to be consulted by new researchers, keeping always something new to anyone who looks at his work.

The second pioneer, in reality a forerunner, of whom I want to speak today is Eliseu Visconti, well known as a painter and little known as a designer. In 2000, when the Seminary Brazil / Italy, UERJ, promoted an exhibition entitled Eliseu Visconti, designer, our intention was to replace the subject under discussion and try to show that this activity developed by him had the character of design, in parallel to his activities as artist. Even though perhaps they would not be the terms in which Visconti define himself, what interested us was to show the result of his work in that particular field, together with the demonstration that he always spent his time in this activity, with a constant dedication, even an insistence, on always be investing time and though on this sector. This exhibition was here in São Paulo, at the headquarters of ADG (the Association of Graphic Designers), and Anhembi-Morumbi University.

Today it is possible to speak of Visconti as a designer. There have been many exhibitions and books published that showed his production in the field of design. Right here in São Paulo, there was recently a major exhibition of his work, showing that aspect as well. But it was not always so, for years he was known only as a great painter in Brazil. The first person to raise the question is the teacher and art critic Frederico Morais, in 1980 on Aspects of Brazilian Art:

We do not have in Brazil a critical study specialized in architecture, photography and industrial design. When it occurs, certainly Visconti's contribution as a pioneer of design will be highlighted.

Eliseu D'Angelo Visconti was born on July 30, 1866 in Giffoni Valle Piana, province of Salerno, Italy, son of Gabriele D'Angelo Visconti and Cristina. He was naturalized Brazilian in December 15, 1889, by Decree 58 A of the Republic of the United States of Brazil, the so-called "great naturalization." He died in Rio de Ja-

neiro on October 15, 1944. His godmother Baroness Guararema protected this son of farmers, since childhood. In Rio de Janeiro he studied at the Liceu de Artes e Ofícios, a school of arts and crafts, where he displayed a great interest in industrial arts. After that, he attended the School of Fine Arts, becoming a painter.

In 1893, Visconti won a scholarship from the Brazilian government to study painting in Paris. It is curious, and from our point of view a statement of his wishes, the fact that in 1895, after two years of study at the School of Fine Arts, he enrolled in the School Guérin to study Decorative Arts, until 1897, with Eugène Grasset, the great French designer of Art Nouveau. Italian by birth but Brazilian the upbringing and choice, Visconti, when student at the school Guérin in 1896, designed the cover of the *Revue du Brésil*, one of the first concrete manifestations of propaganda of Brazil abroad. The year 1900 gives us a good view of how Visconti got along with his two interests. In this year, he is awarded a silver medal by the paintings *Gioventu* and *Oréadas*, at the same time received an Honourable Mention in the Section of Decorative Art and Applied Arts, both in the International Exhibition of Paris. Back in Brazil, after a period of eight years in Europe, finished his scholarship from the Brazilian government, he held his first exhibition at the National School of Fine Arts in Rio de Janeiro, where he shows his work at Decorative Art Applies to Industry. These are projects of lighting fixtures, iron objects, grids, ceramics, stained glass, textile design, wallpaper, book covers, magazines and posters. He won a commission to decorate the then new Teatro Municipal reason why he moved to Paris between 1905 and 1907. In 1914 and 1915, he returned to Paris in his studio on the Street Didot, to design and implement the decoration of the foyer of the same Theatre. In 1934 he was commissioned to design and implement a new frieze for the proscenium of the Teatro Municipal, this time aided by his daughter Yvonne, and Agenor Cavalleiro Henrique de Barros. But despite the extensive work he developed, he never felt truly satisfied. In 1926, in an interview with *O Jornal* he complains, disappointed by the lack of encouragement for his activities in the applied arts:

When I returned from Europe, as a pensioner of the government, I held an exhibition of art applied to industry, with the intention of the decorative art was the transforming element to characterize this sector in the country. They looked at it as a novelty and nothing more.

However, on the other hand, he had the opportunity to put into practice his thoughts on the design. In 1934, the old Flexa Ribeiro, director of the Polytechnic School of Rio de Janeiro, invited him to head a university extension course of Decorative Art. (There are two Flexa Ribeiro. The old one is the father, director of the Polytechnic School, and his son, of the same name, was Secretary of Education in the govern Carlos Lacerda, and took part in the creation of ESDI in 1962). Visconti has organized this course with a similar curriculum of School Guérin of Grasset. He adopted a criterion that distinguished the geometric part of the inspiration naturalist. By his actions he became a pioneer of design education in our country. In 1936, Visconti completed the work of the Teatro Municipal, also terminated its participation in the course of Decorative Art. He was then seventy years, and

perhaps a little tired. In his last eight years of his life devoted himself solely to painting.

About the author

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Traditions, archaeologies and genealogies in the history of Design

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History / Design / Genealogy / Archaeology / Interdisciplinary

This paper considers the problems that currently exist in the historiography of design. Among these, that regarding what should belong to the past of design. The use of the concept of genealogy to describe historical work is then questioned. The text closes with a reflection on the need to continue building an interdisciplinary approach to address design in theoretical and methodological terms.

1. Chronicling, Making an Inventory

In recent years we have looked with enthusiasm at the explosion in the quantity of historical, theoretical and critical research on design throughout the world (Margolin 2005). That which began in the English speaking world in a more or less consolidated form and which has expanded in other regions is currently experiencing a period of maturation during which questions arise regarding the materials used as well as methods and temporal and spatial limitations. Thus, there is a patchwork of what has been chronicled that depends, to a greater or lesser extent, on the sources possessed and selected.

We can see without difficulty that the historiographies of design do not mutually coincide and have disagreements that could well be seen as obstacles. However, these differences may be very productive when it comes to thinking about future research. In Latin America alone there are major disputes, the first has to do with how pasts are designed, updated or are forgotten when working in history. In this region we have design histories which link it to modernism as a cultural and political movement but also to others which, based on a materialist vision, analyze production and work conditions to determine the difference between a production of design and other types of material production. There are also those that, far from considering the moment of rupture in a form of production and work, analyze continuities and ways in which men and women have produced a limited repertoire of objects related to their daily lives.

This latter tendency, which we might call continuationist, to the extent that it sets out a linearity in history from pre-history forward, did not arise by chance nor is it the product of lack of knowledge of work which have been undertaken in other regions, particularly the United States and Europe, accurately called design studies by Margolin. It is a different dimension of the problem, a pre-positioning that determines a historical approach. Latin America is a region where the forgetting of colonialism continues to be a position that is taken, and its remembering a declaration of principles. Consequently, colonial pasts present themselves as the key to the understanding of historical sources. The debate centers on the status of crafts and whether these should be included in the his-

tory of material culture and whether visual culture has a meaning different from that which we see in Europe and the USA. To ignore crafts is to ignore a past of domination and not make visible the material production of pre-Hispanic cultures. This would to repeat a colonial logic, it would be to think that there was no past prior to the arrival of the Spanish and Portuguese in Latin America and if there was, there was little of it and that of scant interest.

The counterpart to this would be the canonical history of design, that which begins with Pevsner and can also be found in Giedion. They are stories - and I want to emphasize the term "stories" to refer to history - which have been fairly and properly challenged on the basis of being normative histories regarding what design is, supported by the great figures and works of what is known as the Modern Movement. Other than a critical reading which problematizes the normative dimension of modernism in design - a reading which was fertile in Brazil - the most problematic aspect of modernism and in particular of that which was known as the Modern Movement, was not so much the personalism as its universalist pretension which, looked on kindly, was based on technical and scientific reason as the basis of human intervention in the world, and unkindly looked at, was a rationalization of Eurocentric domination. Looked at through a critique of instrumental reason - with reference to Adorno - it was based on technical and scientific reason which was at the same time the rationalization of domination.

Design rules which built a clearly recognizable language and which, as well as developing deontological arguments, established criteria for the analysis of material production in the world with a strong support in philosophy and philosophy of technology. These were not design rules without a solid basis of argumentation and a good part of this basis constituted the inaugural discourse of design as a practice distinct from all the others that make up what we might today call the human environment. The act of baptism and differentiation was that which founded a school in the sense that it created a form of comprehension of design which has interpellated us. Here, at least in Argentina, Chile and Brazil, the tradition of Ulm and the Bauhaus has been strong and contributed to defining design not as a practice but rather as a discipline, as a limited body of knowledge giving rise to a limited body of practices.

It is true that the panorama has grown more complex. Moving seamlessly from pre-Colombian crafts to work associated with the Modern Movement presents us with such a level of indeterminacy as would, in principle, seem to limit all attempts to define that which history might deal with. That margin which resembles the ellipsis of Kubrick's "2001: A Space Odyssey" reveals the traditions on which are based the histories of design today. And the traditions differ, in a healthy way. These speak of the role of design but also of the forms in which it has been thought. What are its set-

tings? Its actors? Its audiences? What forms of work are recovered? What economic and social models are assumed as emergency contexts? Is it a practice that accounts for cultural identity? Is it linked to a particular form of production? What connections does it acknowledge with cultural modernization processes? Or should it, rather, be considered in light of the industrialization process in social and economic terms?

The universe of that which we could work with opens in a promising way but it is equally true that it could cover, or try to cover, the totality of human production since industrialization and even before and this presents us with a series of problems.

The fact is that that we do history by cutting things out from the past. It is not possible to cover the history of all visual or material human production without running the risk, as Borges would say, of the map coinciding in size with the territory. Doing history on the basis of the objects has allowed for a questioning of the initial classifications - those of the Modern Movement in the first place - but the issue is whether it is possible question the content of that narrow inventory, that of the Modern Movement, and propose another kind of organization and classification of the material while omitting any reference to the normative system of the new classification. In this case, the problem we will face is the same, even in the case of a universe of reference that is much broader, democratic and popular. In other words, inventories should be subjected to criticism rather than replaced by another inventory (including using historical political and cultural reasons, as the request for the inclusion of craft as a moment in design turns out to be).

To finish this point, to the degree to which anything is justly or unjustly included or excluded without putting in place the disciplinary criteria of this limitation, the risk is run of replacing one moral judgment with another. By saying this I am trying to say that it is very hard to question an order of classification and replace it with another without examining the assumptions on which the task of classification is based.

2. Genealogies, Ideologies

Doing history always involves deciding what to exclude and what to include and will always have present a theory formulated in prescriptive, descriptive and, in the best case, interpretative terms. These can all be separated in logical terms but from the point of view of the critic they occur as the ideological aspect of the formulation of the problem to be investigated, in this particular case, the distinctiveness of design. The most appropriate course of action would therefore be to make explicit that theory, or formulation, of what we consider to be design.

Here there opens up the questions of the assumptions which support the task of preparing a history of design. Without any attempt to be exhaustive I would like to mention in passing those that have founded, to a greater or lesser extent, significant arguments. Among others, the assumption of utility (design as that

responsible for the world of objects, intended for the production of useful objects), the assumption of instrumentality (design participating in a means-ends logic, the development of tools to deal with problems and needs), the assumption of rationality (design as a rational and ordered response to a chaotic world), the assumption of the mass production (design as one of the artificers of material culture in a mass world), the industrialist assumption (design as a professional response to the challenges of manufacturing, based heavily on a historical materialist reading of history) and the assumption of identity (design as a maker of objects with symbolic and utilitarian weight, defined in historical and cultural terms).

These assumptions, at the same times as they produce definitions about the activity of design, are products of histories of material production, histories of human beings and their surroundings. Histories which link events with others, which construct networks of traditions in which one aspect of knowledge links to another, in which a given practice recognizes its roots in others, ways of constructing, not finding, families and histories. This is the point to which it is interesting to arrive.

From the moment in which design constitutes itself as a discipline, as a limited body of knowledge supporting a recognizable body of professional practices, it tends, like all disciplines, to construct a genealogy to give itself both a foundation and a horizon of reference and projection. This is the path usually taken in all disciplines. All or almost all, tend to feed off the support of other disciplines and when they produce history it is only to be expected that they make use of the forms of doing so that come from the disciplines that are reference points for them. Arising from this, one of the challenges for the historiography of design is to think about the traditions on which "doing the history of design" is based. In Argentina, where Tomás Maldonado developed his artistic side and began his work as a designer, design consolidated itself following the traditional models of Bauhaus and Ulm and the tendencies which took modern architecture as a reference point. From then on, by bringing in as a frame of reference some historiographic tendencies from architecture, the relationship between design and the world of architecture was consolidated. This relationship seems natural but it is largely sustained on the basis of sharing a narrative form. In this case, the emphasis on showing the production process of the pieces as a gesture seen as being in itself eloquent seems to reiterate the argument of the exhibition of the architectural project. By way of example, the architectural replicability of the design projects which appeared early on in the Argentine design journal *Summa*, which began to be published in 1963. When *Summa* began to present design pieces it subjected them to the same kinds of arguments that it was accustomed to using for architecture: technical specifications, materials, designers, project phases, morphological description and applications (as a substitute for the completed work). The image of the piece was an argument in itself and the text served solely as an indicator of its technical characteristics. This example is used to show that

copying forms of argumentation is a particularly effective way of constructing genealogies. More than sharing ontological characteristics of the objects, they are sharing narratives, social forms of the production of meaning, as Margolin put it so well.

This point is of interest and the fact that design studies have expanded all over the world allows for a comparison to made of the genealogies is fascinating. In this comparison we find that design is founded in studies of material culture and that, far from approaching the world of modern architecture, it seeks to recover that which the normative history of design has left out. A history which instead of reading the productions of high culture also carries out fundamental work in the area of mass culture and recognizes in studies of consumption patterns a clear reference point for distinguishing itself from other kinds of practices. Furthermore, and now from Europe, the debate on the relationship between style and cultural belonging has been shown, as has been well pointed out by Anna Calvera [Calvera 2010], to be an argument of significance. The coexistence and tensions between the industrial arts, applied arts, decorative arts and design make the aesthetic, as it was before, a privileged stage for the reading of both social and production conflicts. Thus to produce a history of design means including the debate about class societies, patterns of differentiation and the construction of social belonging through tastes and habits. This type of study recognizes the sociology of culture, cultural studies and cultural history as obligatory points of reference.

Equally legitimate as these background issues are those used by the more restrictive vision of design, that which links it to constructivist avant-gardes and modern architecture. Design can indeed be read in terms of the discussion around the mode of production of material objects and class membership. As I already said, the debate around the form of industrial mass production allows for the localization of the aesthetic dimension of the objects at a crossing point which allows another type of conflict to be understood. From this arises the strange convergence of aesthetic, political and scientific arguments.

These arguments, even in their most absurd aspects, were absolutely critical to a technical imagination which replaced beauty with function. The social horizon of projection was in line with a good part of the thinking of the artistic and architectural avant-gardes in the sense of the elimination of styles as marks of class differentiation and also of history. It is not an error to think about a constructivist genealogy for design, nor is it to suspect the presence of a historical materialist reading of material production. It is one of the many genealogies that exist and that can be read in historical terms.

3. The three metaphors

So far I have worked with two metaphors. The first was Borges's map metaphor to establish the dilemma of the universe of study and in this case the process of selecting what to study from it. It

is a fact that a map which, with the objective of being accurate, grows to the point of being the same size as they area it represents is useless. The problem consists of identifying the limits of the "mapable". In parallel to this, the task of construction of that about which history can be written requires a significant series of theoretical decisions. The first step has been taken over the last thirty years, in journals and other publications that specialize in design¹.

The second metaphor is so every day that we find it natural. It is about understanding knowledge as a tree that connects twigs - more specialized knowledge - with branches, to the trunk. In fact we talk about branches of knowledge in reference to their common shared background. The problem with this metaphor is its normative character. In this case its normative character shows itself in the idea that design should be related to a particular discipline type and, as it also seeks to maintain, to science. The botanical metaphor of the tree makes us think that what we are dealing with are family relationships, natural ones, instead of understanding that these relationships are historical constructions. And that constitutes an obstacle.

Finally, a third metaphor, drawn up by Dora Giordano. Think of the production of knowledge of design as a river. Thus as we think of the Amazon basin we can think of different branches of knowledge, the history of different practices and the convergence of a similar form of understanding the events of history which allows us to give shape to that which we understand as design. Rather than being the branches of a genealogy design would, in this metaphor, be a set of tributaries that make up its watershed.

A metaphor both rich and classical, which speaks of the event and of the time. Never, according to Heraclitus, can we cross the same river twice although history, fortunately, allows us to imagine it.

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¹ The early initiative that was "Design Issue" is also notable in this regard.

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HISTORY OF DESIGN EDUCATION

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Historical studies of design education, with a particular interest in comparative studies of design education in different countries, cultures, periods, in its relationship with art and technology education.

Academies of Art and schools of Design: a comparative study of Art and Design education

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Art academy / Design education / Disegno / Dessin / Decorative arts

Design education has rapidly spread worldwide since the mid-twentieth century. In some countries, design schools have enormously increased in number compared with art schools. The delicate but essential oneness of art and design education will be viewed in a long perspective of history spanning from the Accademia del Disegno founded in Firenze in 1563 to the Government School of Design founded in London in 1837, and to the écoles d'art et de design in France in the twenty-first century.

1. Introduction

This paper will present changing meanings of 'design' and its related words in Italy and France. It will also demonstrate that 'art' and 'design' essentially play complementary roles in the history and theory of art and design as well as in the names of academies and schools in these closely related disciplines even today. I will analyze this interwoven history in two phases: first, with regard to 'Italian-French interactions in the sixteenth to eighteenth centuries' and second, in relation to the 'French-British interactions in the eighteenth to twentieth centuries'.

2. Italian-French interactions in the sixteenth to eighteenth centuries

The first art academy was founded in Firenze in 1563 by Cosimo I de' Medici as part of the *Accademia e Compagnia delle Arti del Disegno*. It consisted of two different organizations: 'Arts of Design/ Drawing' Academy and Company. Both of these English translations, 'Arts of Design' and 'Arts of Drawing', are rather historical names referring to the arts based on 'disegno', principally painting, sculpture, and architecture.

According to Giorgio Vasari, one of the most influential figures in the formation of the academy and company, '*disegno* is the Father of Painting, Sculpture, and Architecture'. *Disegno* refers not only to artists' drawings but also to architects' drawings. Along with the study of the human body, anatomy, and life drawings, mathematics was a core subject of the Medicean institution's curriculum.¹ This curriculum explains the reasons why *disegno* was considered not only artists' drawings but also architects' drawings—or, in a sense, technical or technological drawings.

In 1784, the Grand Duke of Tuscany Pietro Leopoldo decreed that

1 K.-E. Barzman, 'The Florentine Accademia del Disegno: Liberal Education and the Renaissance Artist', *Academies of Art between Renaissance and Romanticism*, SDU uitgeverij, 's-Gravenhage, pp. 14-25.

all schools of drawing in Firenze would be combined under one roof, the newly founded Academy of Fine Arts, *Accademia di Belle Arti*. The most prestigious Arts of '*Disegno*' Academy and Company changed its name simply to the Arts of *Disegno* Academy, *Accademia delle Arti del Disegno*, conserving the task of formation and supervision of artistic production of the Grand Duchy of Tuscany.

The Academy of Fine Arts in Firenze was one of the first art academies in Italy to adopt a new name, 'Accademia di Belle Arti'; another early example was the *Accademia di Belle Arti di Brera*, which was founded in Milano in 1776. Art academies in Roma, Bologna, Napoli, Venezia, and Parma were founded much earlier than Milano. However, they did not first use the term 'Belle Arti' but instead chose names such as the *Accademia di San Luca*, Roma, for example. Many older academies used the name 'disegno', sometimes in combination with the names of specific arts. The Academy in Ferrara was the Academy of the Drawing of Figure and Architecture (*Accademia del Disegno di Figura e di Architettura*). This name displays both the artistic and architectural meaning of 'disegno'. One of Leonardo's drawings in the Uffizi gallery presents this double aspect of 'disegno'.

Although the term 'Belle Arti' itself was used in documents of some art academies in Italy, such as the *Accademia di San Luca*, Roma, even at the beginning of the eighteenth century, it was not until the last quarter of the same century when a few Italian academies began to adopt the term in their school names. Many other art academies in Italy adopted the term of 'Belle Arti' in the early nineteenth century. When reviewing its background, we can see a series of French discourses on 'Beaux-Arts' in the eighteenth century as well as the reorganization of art education in France around the turn of the century.

French interaction with Italy in art education started even earlier. In 1666, the *Académie de France à Roma* was founded. In 1676, the *Accademia di San Luca*, Roma was amalgamated with the Royal Academy of Painting and Sculpture (*Académie royale de Peinture et de Sculpture*), which had been organized in Paris in 1648.² From Paris, Charles Le Brun also ruled the *Accademia di San Luca*, Roma. However, it is not directly related to 'Beaux-Arts', since académies were still segregated by separate arts or music even in France.

It was in 1816 when the *Académie des Beaux-Arts* was organized in France, its predecessor being the *Classe des Beaux-Arts* of the

2 Nikolaus Pevsner, *Academies of Art, Past and Present*, The University Press, Cambridge, 1940, pp. 101-102.

Institut de France, formed in 1803. Both the Royal Academy of Painting & Sculpture (*Académie royale de Peinture et de Sculpture*) and the Royal Academy of Architecture (*Académie royale de Architecture*), as well as the academy of music, had been abolished during the French Revolution.

Although the Italian term 'Belle Arti' could be as old as or even older than the French term 'Beaux-Arts', French 'Beaux-Arts' was more systematically discussed in the eighteenth century. In this regard, Charles Batteux's *The Fine Arts Reduced to a Single Principle* (*Les beaux arts réduits à un même principe*), published in 1746, was the most important piece of literature in the mid-eighteenth century.³ Batteux set forth a clear-cut system related to the fine arts. Devoted entirely to this subject, the book was very influential and its views were widely accepted, not only in France but throughout Europe as well.

A French tendency to distinguish the artistic from the technical can be observed in another related word, 'dessein'. It was spelled 'dessin' in some special cases. Its early example appeared in rather negative terms in the first systematically edited French Dictionary, Richelet's *Dictionnaire François*, published in 1680. In this dictionary, the French word 'dessein' was mostly spelled with an 'e' after the double 'ss', as explained below:

Dessein, dessin, as a term for painting, some modern people write the word without 'e' after double 'ss'. However, it should not be imitated. Their distinction is not established.⁴ [Richelet 1680: 698]

This explanation has two aspects. One is that 'dessein' with an 'e' was its original spelling, and a new spelling that did not include 'e' after the double 'ss' became popular for use in the seventeenth century by certain groups of people to denote the drawing of paintings. The other is that no clear distinction existed yet between these two different spellings, 'dessein' and 'dessin'.

Another publication that exerted great influence in terms of 'Beaux-Arts' was *Encycloédie* by Diderot and d'Alembert, first published in 1751.⁵ Diderot actually disliked and criticized Batteux's 'Beaux-Arts', which subsequently was not included in its first publication. In a supplementary volume published in 1776, 'beaux-arts' finally appeared in the *Encycloédie*. Even in this case, Batteux was not directly referred to. Instead, the explanation of 'beaux-arts' was based completely on a translation from a German book by Johann Georg Sulzer, a Swiss-born scholar who was active in Germany.⁶

However, the *Encycloédie* was very popular and was also printed

3 Charles Batteux, *Les beaux arts réduits à un même principe*, Paris, 1746.

4 P. Richelet. *Dictionnaire François*, Genève, 1680. « Quelques modernes écrivent le mot de *dessein* étant un terme de peinture sans e après les deux ss; mais on ne les doit pas imiter en cela. Leur distinction n'est pas fondée [...] » See also Nathalie Heinich, *Du peintre à l'artiste; artisans et académiciens à l'âge classique*, Les Éditions de Minuit, Paris, 1993, pp. 152-158.

5 D. Diderot et J. le R. d'Alembert (ed.), *Encyclopédie, ou, Dictionnaire raisonné des sciences, des arts et des métiers, par une société de gens de lettres*, Paris, 1751, 1777.

6 Johann Georg Sulzer, *Allgemeine Theorie der schönen Künste*, Leipzig, 1771-74.

in Italy. Although the foundation of the *Accademia di Brera* in Milano in 1776 was of course a coincidence, its name, *Accademia di Belle Arti*, was perhaps suggested by the *Encycloédie*'s new supplement published in the same year. The change of school name in Firenze in 1784 to the *Accademia di Belle Arti* could also be supported by the new entry of 'beaux-arts' in the *Encycloédie*, which was widely used in Italy.

Art academy in Italy changed its name, generally speaking, from *Accademia delle Arti del Disegno* to the *Accademia di Belle Arti* at the beginning of the nineteenth century. This is a period when Napoléon Bonaparte ruled over northern Italy. From this point of view, it is possible to say that *Accademia delle Arti del Disegno* in Italy was renamed the *Accademia di Belle Arti* one after the other in the later phase of French absolute monarchy from Louis XIV to Napoléon Bonaparte. Charles Batteux's *Les beaux arts (réduits à un même principe)*, published in 1746, was dedicated to Louis XV.

3. French-British interactions in the eighteenth to twentieth centuries

Diderot's *Encycloédie* was based on Chambers' *Cyclopaedia*, first published in London in 1728. It was very rich in its description of 'design' in comparison with, for instance, Richelet's French Dictionary.⁷ Starting from the general meanings of design, such as thought, plan, or representation of a painting, poem, or building, Chambers' *Cyclopaedia* then describes 'design' in textile production in great detail. Its description of 'drawing' in painting is also very detailed, referring to actual methods of drawing and to qualities in drawings, such as corrections, good taste, elegance, character, diversity, expression, or perspective.⁸ The entry of 'design' in Chambers' *Cyclopaedia* is, however, more characterized by a 'mechanical method of designing'. It includes, for instance, how to use grid and optical devices for design.

It is said that the so-called 'Industrial Revolution' in Britain was not a sudden revolution but a continuous process of developments. Even though the Chambers' *Cyclopaedia* was published in 1728, a few years before the invention of the flying shuttle, one of the key developments in the industrialization of weaving, we can see aspects of the early years of the continuous process of industrial developments in Britain in its description of 'design'.

Even though they are used in more conventional terms, 'liberal arts' and 'mechanical arts', based on the Chambers' *Cyclopaedia* published in London in 1728, show that Diderot was in a sense more radical rather than conservative, equally regarding all of the arts in the *Encycloédie*, which is full of beautiful illustrations of mechanical arts and industries. It consistently spells 'dessein'

7 E. Chambers (ed.), *Cyclopaedia: or, a universal dictionary of arts and sciences*, London, 1728.

8 The description of 'Design' in Chambers' *Cyclopaedia* [1728] is at least twice as long as 'Dessein' in Richelet's *Dictionnaire François* [1728 edition] or Furetière's *Dictionnaire Universel François et Latin* [1727 edition].

with an 'e', instead of 'dessin' without the 'e' after the 'ss', with both drawings of human figures and of mannequins being illustrated as 'dessein'. It is a very noteworthy fact that not only was a drawing enlarger used but a 'camera obscura' was also employed to illustrate 'dessein'. Both 'representation' and 'reproduction' were 'dessein' in eighteenth-century France—or at least in the *Encycloédie*.

Rather ironically, however, Diderot's *Encycloédie* became one of the major media to spread the idea of 'beaux-arts' all across Europe. 'Fine arts', an English equivalent to 'beaux-arts', also became commonly used in the late eighteenth century, and it is generally accepted that it was based on Charles Batteux's 'beaux-arts', which was first translated as 'polite arts' and then as 'fine arts' in Britain.

Diderot's *Encycloédie* started as a French enlarged version of the Chambers' *Cyclopaedia*, reflecting both French tendency and British influence. It finally became a much larger encyclopedia than the *Cyclopaedia*. Reflecting a new French tendency, *Encycloédie*'s explanation of 'dessein' as a term to denote drawing for painting was very much amplified. However, it also included a considerably detailed explanation of 'dessein' as a term for music, architecture, and textile production, which were not included in most French dictionaries previously published, such as Richelet, Furetière, or the *Dictionnaire de l'Académie française*.⁹

When we read these descriptions and see 'dessein' in Diderot's *Encycloédie*, in which it is applied to human figures, mannequins, and drawing enlargers, as well as 'camera obscura', it is understandable that the idea of 'dessein' was used for a school that sought to provide drawing education on ideas of every sort and to implement the practical application of universal principles in eighteenth-century France. It was the Royal Free Drawing School or Design School (*École Royale Gratuite de Dessin*) established in Paris in 1767 that tried to fulfill the Enlightenment idea of providing an education that was open to all males and females, rich and poor.¹⁰

In the case of this school, 'dessin' was perhaps first spelled with an 'e' and then without an 'e' after the 'ss' around 1776. In the same year, the supplement volume of the *Encycloédie* was still using 'dessein' with an 'e' after 'ss' in 1776.¹¹ Therefore, the *École Royale Gratuite de Dessin* was one of the earliest examples of a school that adopted the 'dessin' without an 'e' after 'ss' in its school name. However, it was indeed the 'Royal Free Design School' rather than a 'Drawing School' for painting.

In 1837, seventy years after the 'dessin' school in Paris was

9 This description of qualities in drawing was adopted in later editions of Furetière's *Dictionnaire Universel*.

10 Ulrich Leben, *Object Design in the Age of Enlightenment, The History of the Royal Free Drawing School in Paris*, The J. Paul Getty Museum, Los Angeles, 2004, pp. 34–68.

11 The *Dictionnaire de l'Académie française* first gave the word 'dessin' without an 'e' after 'ss' in its 1798 version and explained it as a term of art. Before the 1798 version, we only find 'dessein' with an 'e' after 'ss' in the *Dictionnaire de l'Académie française*.

founded, the British government founded a similar school in London. It is said that when they constructed the Government School of Design, they had the name '*École Royale de Dessin*' in mind.¹² The Government School of Design became the Royal College of Art in 1899, while the *École Royale Gratuite de Dessin* had become the *École Nationale des Arts Décoratifs* in 1877.

The change of a school name from '*École de dessin*' to '*École des arts décoratifs*' was of historical importance. French authorities chose the new term 'Arts Décoratifs' for this field of specialization, while fine arts specialists, particularly some classical painters, insisted on 'dessin' as the foundation of 'Beaux-Arts'.¹³ The academician Charles Blanc's *Grammaire des arts du dessin* (1867) and its counterpart *Grammaire des arts décoratifs* (1882) seem to have represented a framework of French art education in this age. French academies established a monopoly of 'dessin' in the late nineteenth century by giving the '*École de dessin*' nearly the same status as the *École nationale des Beaux-Arts*. It was the *École nationale des Arts Décoratifs*, today's ENSAD (*École nationale supérieure des Arts Décoratifs*), renamed in 1927, as opposed to the ENSBA (*École nationale supérieure des Beaux-Arts*).

Italy started its school of design (disegno) in the sixteenth century, while France started its school of design (dessin) in the eighteenth century. However, they stopped using these terms for school names during the eighteenth and nineteenth centuries. It was Britain that finally inherited a series of 'design' terms, all of which were derived from a group of related Latin terms, such as 'disegno' or 'dessin'. This is not only an interesting aspect of art and design history in Europe but also an important one, which is perhaps related to circumstances of the eighteenth and nineteenth centuries when Britain appeared more advanced than the other European countries because of its industrial revolution and developments.

In addition to national and academic reasons, there seem to have been local reasons as well for the renaming of some French art schools. One of the first free drawing schools, the *École gratuite de Dessin* was founded in Lyon in 1756, followed by the *École royale gratuite de Dessin* in 1766. While the former became the *École nationale des Beaux-Arts de Lyon* in 1848, the latter became the *École nationale des Arts Décoratifs* in 1877 in Paris, where the other national art school, *École nationale des Beaux-Arts*, already existed.

12 Quentin Bell, *The Schools of Design*, Routledge and Kegan Paul, London, 1963, p. 68. Quentin Bell wrote in his footnote that the late Mr. Drummond said it (the term 'School of Design') arose because the originator did not know the English word for the French word *Dessin*. He also wrote that in France, there have been *Écoles de Dessin* that were actually schools for drawing. As I contend in this paper, however, at least the *École royale gratuite de dessin* was not a school of drawing for painting but was a pioneering school of design in France. In this sense, the English 'School of Design' was not the mistranslation of the French term '*Écoles de Dessin*'. On the other hand, it was perhaps becoming difficult for the French school of design to keep the name 'dessin' in the 1870s when 'dessin' was going to be monopolized by the *Académie des Beaux-Arts* and the *Écoles des Beaux-Arts*.

13 The 'art décoratif' was not an old term but a kind of neologism in mid-nineteenth century France. In E. Littré's *Dictionnaire de la langue française* (1863), we find an early example of the actual use of the term 'art décoratif'.

4. Conclusion: An aspect of art and design education in the twenty-first century

Changes of the names of educational institutions in art and design are continuing in Europe where design education was started as early as the mid-eighteenth century. Recent changes in France are also noteworthy. l'Andéa, *l'Association nationale des directeurs d'écoles supérieures d'art*, is the group of directors of all the French art schools placed under the academic control of the Ministry of Culture and issuing a national degree after three or five years of studies following secondary school advanced level examinations. As of 2012, fifty-four art schools are members of l'Andéa. Among them, nine schools now include the English word 'design' in their school names, such as the *École supérieure d'Art et de Design* of Amiens, Orléans, Reims, and Marseille.

ESAD, an abbreviation for the *École Supérieure d'Art et de Design* (or d'Art et Design), seems to have become comparable to ESBA, *École Supérieure des Beaux-Arts*. The number of ESAD schools that include the word 'design' has been increasing since the 1990s and particularly late 2000s. This is a very unusual phenomenon in the country where the French Academy [*Académie française*] always tries to protect the French language from the creeping invasion of other languages, such as English. We should also pay attention to another fact that all of these schools which include the English word 'design' in their school names are using it in combination with the simple French word 'art' instead of 'beaux-arts', and that the number of schools using the term 'beaux-arts' in their names is decreasing.

We do not know how long this change will continue or how far it will spread. We are possibly witnessing another historic change in art and design education, which is comparable to a change in the almost opposite direction from the *Accademia delle Arti del Disegno* to the *Accademia di Belle Arti* in Italy around 1800. This change occurs only with school names in a particular country. In the act of changing school names, however, we may find a greater and more global transition in the education of art and design beyond the borders of a country.

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A fruitless misunderstanding: the historic models for Dutch Design education

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Japanese industrial design concepts in the transition from the nineteenth to the twentieth century: with special reference to the Japanese industrial design educators Hirayama Eizo (1855 - 1914) and Matsuoka Hisashi (1862 - 1944)

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Industrial design / Kogyoteki Isho / Kogyo Zuan / Japanese industrial design education

In the transition from the nineteenth to the twentieth century, in a departure from the early idea of applying art to industry, Hirayama Eizo and Matsuoka Hisashi discussed industrial design, which was expressed by the Japanese terms of *Kogyoteki Isho* and *Kogyo Zuan*. Matsuoka in particular defined the aim of industrial design as the beautification of all industrial products and harmonization of daily life with beauty.

1. Introduction

In this paper, I investigate the concepts of Japanese industrial design, expressed by the Japanese terms *Kogyoteki Isho* and *Kogyo Zuan*, in the transition from the nineteenth to the twentieth century, by focusing on the ideas of two leading industrial design educators, Hirayama Eizo (1855-1914) and Matsuoka Hisashi (1862-1944).

Hirayama Eizo studied applied art at the School of Applied Art (*Kunstgewerbeschule*) in Vienna from 1874 to 1877, and introduced European applied art theories to Japan by translating important passages from Jacob von Flaké's book titled *Aesthetik des Kunstgewerbe*, Felix Kanitz's book titled *Katechismus der Ornamentik* and Gottfried Semper's book titled *Der Stil* in the 1880s (Amagai 2003). Hirayama worked for the Product Design Department (*Seihin Gazu Gakari*) in the late 1870s and for the Patent Bureau from the late 1880s. He educated students on industrial design at the Training Institute of Industrial Teachers (*Kogyo Kyoin Yoseijo*)¹ and at the Higher Technological School of Tokyo (*Tokyo Koto Kogyo Gakko*, originally known as *Tokyo Kogyo Gakko*) from 1897 to 1907.

Matsuoka Hisashi studied Western-style painting under the direction of Antonio Fontanesi, an Italian painter, at an art school called *Kobu Bijutsu Gakko* in Tokyo from 1876 to 1878, and studied fine art, especially painting, at the Royal Institute of Fine Art in Rome (*Regio Istituto di Belle Arti in Roma*) from 1881 to 1887. After returning to Japan, he established an art association called *Meiji Bijutsu Kai* and worked for the Patent Bureau in the 1890s. He taught industrial design at the Higher Technological School of Tokyo (*Tokyo Koto Kogyo Gakko*) from 1906 to 1914. By publishing many articles on design, especially industrial design (*Kogyo Zuan*), Hirayama and Matsuoka played a leading role in Japanese

¹ The Training Institute of Industrial Teachers was organized in 1894, and it was affiliated to the Higher Technological School of Tokyo in 1902.

industrial design education from the 1890s to the 1910s. Their ideas on industrial design showed changes from the early idea of applying art to industry to the new idea of beautifying all industrial products for daily use, on which the establishment of a new institution for industrial design education was based in the 1920s.

2. *Kogyoteki Isho* and *Kogyo Zuan* as industrial design

After the Meiji Restoration (*Meiji Ishin*) of 1868, Japanese art and design were promoted from above. During the 1870s and the 1880s, the Japanese government established schools, museums, organizations and regulations for art and art industry by following Western models, which was one link in a continuing chain of the efforts to revise the unequal treaties. In 1876, the Ministry of Home Works established an art school called *Kobu Bijutsu Gakko* to teach Western-style painting and sculpture (Amagai 2003: 35-44). This art school was attached to the Imperial College of Engineering (*Kobu Daigakko*) to encourage new Japanese industry. In his book, Henry Dyer, the first principal of the Imperial College of Engineering, wrote:

The chief motive which urged the Japanese in their adoption of Western civilization was neither the desire for increased wealth nor the blind imitation of Western customs; it was the sense of honor which cannot bear to be looked down upon as an inferior power. The new system of education was adopted in order that men might be trained who were able to guide the destinies of the nation under the altered conditions. The laws and the administration of justice were brought into harmony with Western ideas and practice that foreigners might feel they had security for the safety of their persons and property. (Dyer 1904: 311)

At the same time, the Home Ministry organized Western-style museums to promote native art industry, and established the Product Design Department (*Seihin Gazu Gakari*) to provide good design drawings to manufacturers whose products were mainly porcelain, metal work and lacquer works. The Department's aim was to prepare good exhibits, some of which were called *Hyakko Zuan* to express industrial design, for national and international exhibitions. In 1885, the government abolished the Product Design Department and established the Patent Bureau. In 1888, the first Japanese design regulations called *Isho Jorei* were enacted not only to protect design copyrights but also to promote native industry and to encourage the development of the idea of applying art to industry (Amagai 2008).

The excesses of Westernization, however, provoked nationalistic reactions. In 1883, the government decided to close the *Kobu Bijutsu Gakko* and to open a new art school in order to develop

young artists in Japanese-style arts, excluding Western-style drawing, painting and sculpture. In 1889, the Ministry of Education established a new art school called *Tokyo Bijutsu Gakko* to teach Japanese-style painting (*Kaiga*), sculpture (*Chokoku*), metal work (*Kinko*) and lacquer work (*Shikko*). In the same year, the Imperial Household organized the Imperial Museum (*Teikoku Hakubutsu Kan*) to collect and preserve historic works of Japanese traditional art and art industry, and moreover established the Institution of Imperial Artists (*Teisitu Gigei In*) to encourage skillful artists and craftsmen in the Japanese style. These institutions played an important role in the development of the Japanese-style art industry: ceramics (*Yogyo*), cloisonné (*Shippo*), metal work (*Kinko*) and lacquer work (*Shikko*), which were called *Bijutsu Kogei* (Masaki 1908).

By the 1890s, Japan had restored the country's independence with respect to tariffs and legal jurisdiction by bringing the unequal treaties to an end, and new Japanese industry developed. Many joint-stock companies were established and produced new consumer goods comprising Western clothing, buttons, eyeglasses, matches, tin boxes, toys, clocks, enameled ironware, and bicycles. Suzuki Junichiro, a lecturer of industrial economics in the Higher Technological School of Tokyo, wrote:

Up to this period the manufactured articles were mostly intended for home consumption, but subsequently they were made with the object of export, either to Oriental or Occidental countries, and to suit the tastes and the changes of fashion in each foreign market. Business men made the tour of the world in order to study the requirements of foreign markets, while others opened a new field for our products in Australia, the Malay Islands, and South America, both of which proceedings tended greatly to extend the over-sea export of our manufactures. [Suzuki 1908: 546-547]

Against this backdrop, the Japanese term *Kogyoteki Isho* and *Kogyo Zuan* came into being to express industrial design. The term *Kogyoteki Isho* first appeared in the Japanese translation of an international treaty called Paris Convention for the Protection of Industrial Property, which Japan ratified in 1899, and next in the Design Act called *Isho Ho*, which was a revised version of the Design Regulations (*Isho Jorei*), in 1909. The term *Kogyo Zuan* appeared in the name of a new department, which was established at the Training Institution of Industrial Teachers in 1897 and at the Higher Technological School of Tokyo in 1899, to educate students not on art industry but on industrial design². The new department was named *Kogyo Zuan Ka* to express the department of industrial design with the term *Kogyo Zuan* meaning industrial design.

The Paris Convention gave a wide interpretation of industrial property including industrial design, but it did not detail the concept of industrial design itself. The Design Act gave a legal definition of design, but it was too formal and strict to understand the concept of industrial design. Holding a post in the Patent Bureau, Hirayama started to educate students at the depart-

² Higher design education started in 1896 at the Tokyo Art School (*Tokyo Bijutsu Gakko*) for Japanese traditional art industry, and in 1902 at the Kyoto College For Technology (*Kyoto Koto Kogyo Gakko*) for architecture and furniture. Dr. Fujita Haruhiko discusses the beginnings of design education in modern Japan by focusing on Notomi Kaijirō as a pioneer of design education. [Fujita 2001]

ment of industrial design in 1897, and was appointed head of the department in 1899. Taking over the head of the department from Hirayama, Matsuoka started to teach industrial design at the Higher Technological School of Tokyo in 1906. As the leading design educators, Hirayama and Matsuoka discussed both educationally and generally the ideal Japanese industrial design in their articles published from the 1890s to the 1910s.

3. Hirayama's idea of elevating the aesthetic value of industrial products

The idea of applying art to industry, which was introduced by Hirayama from the 1880s and the 1890s, was based on Historicism. By the 1900s, Hirayama had broken away from Historicism, and had the idea of elevating the aesthetic value of industrial products not by applying traditional style paintings and sculptures but by designing new ornamentation. It was in the 1910s that Hirayama directly learned about new European art called *Art Nouveau* and *Secession*.

In his article on the element of design (Hirayama 1902), referring to Frank G. Jackson's book titled *Theory and Practice of Design*, Hirayama pointed out that the industrial designer should design ornamentation, which was developed by the addition of elements derived not from historical art works but from every part of the natural world. In his article on the relationship between invention and design (Hirayama 1904), Hirayama pointed out that the industrial products for daily life should serve the varied necessities of mankind and the desire of beauty, in other words, beauty and utility should unite to form the perfect industrial product. Hirayama explained that the aim of *Isho*, which expressed design, was to elevate the aesthetic value of conveniences without interfering with their utility while the aim of *Hatsume-i*, which expressed invention, was to create and improve convenience.

Hirayama retired from the department of industrial design in 1907, and he was dispatched to the world fair held in Turin, Italy, as a member of the Japanese Exhibition Committee in 1911. During the fair, he made a short trip from Turin to Vienna, where he learned firsthand about many industrial products and furniture, which were based on the new European art called *Art Nouveau* and *Secession*. In his article on the world fair (Hirayama 1912), Hirayama reported that the style of many European products showed the change from the traditional Western art style derived from Greek and Roman style, which was based on Historicism, to the new style, which was characterized by Japanese-style or Chinese-style, especially by simple form, irregular ornamentation and soft color. And moreover, reporting that new European furniture had shown the change from the complex form with carving to the simple and plain form, Hirayama criticized Japanese industrial designers for being all too particular about the details of ornamentation. In his article on the improvement of Japanese goods (Hirayama 1913), Hirayama advised Japanese industrial designers to move beyond *Art Nouveau* and *Secession*, which had spread quickly throughout Japan, and to

design new Japanese ornamentation, and he finally defined that the industrial designer should refine and elaborate not ornamentation but form to elevate the aesthetic value of useful products for daily life.

4. Matsuoka's idea of beautifying all industrial products

Matsuoka published an article on the Design Act in 1906, when he started to teach industrial design at the Higher Technological School of Tokyo. During the early 1910s, Matsuoka published a series of articles on the history of Western architecture and on the improvement of Japanese goods. Matsuoka discussed the aim of industrial design, and advocated the idea of beautifying all industrial products in articles published in the late 1910s.

In his article published in 1906 [Matsuoka 1906], pointing out that *Art Nouveau* and *Secession*, whose character had been mostly derived from Japanese art and art industry, were in vogue among Japanese designers, Matsuoka advised them against imitating European art and design. And he emphasized that the designer should devote himself to displaying his own originality in designing. In Matsuoka's view [Matsuoka 1914], some Japanese designers enthusiastically copied the old Japanese art, some the new European art, while others mixed Japanese art and Western art. Matsuoka criticized them for being the cult of 'art for art's sake'. He emphasized that the industrial designer should give priority to the utility, and encouraged Japanese industrial designers to express their own originality in the designing of new industrial products for daily use. Matsuoka defined:

The industrial designer should accomplish his duty to serve the purpose of beautifying all industrial products by designing daily necessities, common machines and even the ditch covers, and to elevate public taste by harmonizing daily life with beauty. [Matsuoka 1914:4]

At the same time, Matsuoka, as the head of the department of industrial design, requested the government to make efforts to raise the status of the industrial designer, but the government decided to close the department of industrial design and to affiliate its students with the Tokyo Art School (*Tokyo Bijutsu Gakko*) against Matsuoka's wishes in 1914 when Hirayama died. Matsuoka strongly argued against the decision of the government, and he conducted a campaign to establish a new institution for industrial design education in Tokyo with his colleague from the department of industrial design, Yasuda Rokuzo, who had studied applied art under Josef Hoffmann at the school of applied art in Vienna from 1911 to 1912.

Publishing many articles to establish a new school for industrial design and to promote the development of design called *Zuan*, Matsuoka eagerly stressed the idea of beautifying all industrial products for daily use [Matsuoka 1917]. Maintaining the same stance as Matsuoka, Yasuda published articles serially in a newspaper from 1916 to 1917, in which he insisted that the gov-

ernment should develop promising young designers to elevate the quality of Japanese industrial products in general, which he called *Kogei-hin*, through the application of arts and industrial technology [Yasuda 1917].

Matsuoka and Yasuda finally succeeded in their attempts to establish a new industrial design school, which was named *Tokyo Koto Kogei Gakko* (The Tokyo Higher School of Arts and Technology), in 1921. The term *Kogyo Zuan* was replaced by the term *Kogei Zuan* to express the broadened concept of industrial design at the new school. In his address to the first students, Matsuoka, as the first principal of the new school, defined *Kogei* as techniques to produce beautiful and useful goods through the application of the mechanical, electric and chemical industries, and he emphasized that the aim of *Kogei Zuan* was to harmonize arts with industrial technology and to beautify industrial products for daily use in order to elevate their market value [Matsuoka 1921]. It was in the 1920s that Matsuoka's idea of beautifying all industrial products was finally realized.

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Best Maugard, Elena Izcue and Theodoro Braga: Design education in Latin America at the early twentieth century

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Latin America / Nationalism / Interculturality / Design education

Maugard, Izcue and Braga had European education but they had nationalistic ideas for design teaching in their countries. The Escuelas al aire libre (Mexico) followed Maugard who associated free expression and exercises with a Mexican visual alphabet systematized by him. Izcue, successful designer of the Maison Worth, Paris, returning to Peru devoting herself to design teaching based on Indian patterns. Braga in Brazil worked toward stylizations of Brazilian flora and fauna.

1. Best Maugard (1891-1964; 73 years)

The Escuelas al Aire Libre in Mexico (1913 and 1923 till 1932) deliberately and programmatically integrated the idea of art and design as free expression and as culture.

One of the findings of the present research is that most of the well known approaches to the teaching of Modernist Art and Design between 1910 and 1930 associated freedom of expression to some kind of systematized knowledge, although Adolf Best Maugard, the author of the textbook *Manuales y Tratados: Metodo de Dibujo - México - Departamento Edictorial de la Secretaria de Educación*, 1923 had associated freedom of expression to the analysis of visual culture. His method had been used right away at the Escuelas al Aire Libre, even before having been published. Besides presenting beautiful drawings and paintings by children and adolescents, the book suggests a series of exercises to be performed starting from a systematization of the prevailing forms and lines in Mexican visual culture, which he had carried through for almost 20 years of research. He established a kind of formal alphabet of Mexican art and Design composed of 7 patterns, which he advised to use with children, adolescents and adults, stimulating free combinations among them. In his book, there are examples of the use of pattern 6 combined with pattern 2, 3, 4, etc. and even of a single pattern combined with itself.

The first Escuela al Aire Libre founded in 1913 and directed by Alfredo Ramos Martinez was a dissenting branch from the Academia de Bellas Artes. In 1911 students from that academy went on strike claiming that instruction should be modernized and that director Rivas Mercado should resign. He was coincidentally the father of one of the most fervent defenders of Modern Art, Antonieta Mercado, a political activist, lover to José Vasconcelos who increased the number of Escuelas al Aire Libre when he was in power. She lived with him in exile in Paris, where, after falling into profound depression, as it is said, she committed suicide on the premises of Notre Dame de Paris.

The students of the Academy of Fine Arts remained on strike for more than two years and, finally, together with several professors, founded Santa Anita School.

This school was still widely shaped according to European artistic trends such as impressionism and was denominated the Barbizon School as an allusion to the art produced by the Fontainebleau landscape group during the second half of the XIX century, as for instance Millet, Corot, Rousseau, Troyon, etc.

In 1919, the philosopher José Vasconcelos became president of the University of Mexico and stimulated the Arts, publications of translations of the founding books of western culture, thus leading to the reevaluation of Indian culture and interracial crossing.

He was a man of multicultural perspective, and advocated an educational system directed towards cultural hybridism, toward syncretism, stimulating the interrelation between the learned and the popular, and between the prevailing international knowledge and the local cultural values. Among 50 books written by him, *Ulysses Creole* (1935), *La Raza Cosmic* (1925), *Indologia* (1926), *De Robinson a Odiseo* (1952) are the ones that most intensely display a defense of ethnical minorities and racial equity.

After the intervention of Vasconcelos the Escuelas al aire libre became more connected with the education of the people not with education of artists.

The patterns established by Best Maugard had been based on a reading and analysis of Mexican culture and its objects from the formal and aesthetic point of view but with social and political objectives.



Figure 1. Elements or design standards established by Best Mexican.

First he intended to awaken the young to the appreciation of Mexican Art and Design .

Up to the revolution in 1910, Mexican culture, Mexican art and workmanship were looked down upon by people of all social classes and only what was produced in Europe aroused admiration in Mexican people. On the other hand, Best Maugard's book and the Escuelas intended to educate the people especially the spoliated Indian. This was the first movement in Latin America of popular education through Art and also the first movement that approximated education for Art and for Design in Latin America. Best Maugard had systematized a kind of grammar of Mexican ornament or an introduction to Indian autochthonous design. This was setting up the local pattern as design. Vasconcelos enabled the founding of the Chimalistac schools which substituted for Santa Anita School in 1920, and also of that in Coyoacan one year later. As Minister for Public Education [21-24], he expanded the idea of painting "al aire libre" into mural painting and entrusted several works to Orozco, Rivera, etc.

However, the fate of the Escuelas al Aire Libre was strongly affected by Orozco's jealous reactions, who though greatly appraised by the orders of murals for the Department of Culture probably wanted more or wished, perhaps, to be the only one and, as retaliation, so as to stand out against José Vasconcelos's cultural policy, made the Escuelas al Aire Libre the object of his attacks and another point of disagreement with Rivera, who was a fervent defender of the Escuelas and a professor in one of them. The number of Escuelas al Aire Libre increased especially until 1925. Altogether at the end of the 20ies there were 5 Escuelas in the capital and 3 in the country: Taxco, Cholula and Michoacan in addition to several Centros Populares de Pintura with similar methodology to that of the Escuelas al Aire Libre.

Gabriel Fernández Ledesma and Francisco Díaz de León thought out the project of a journal for exchange and communication between the Escuelas and the Centros Populares which was entitled *El Tlacuache, Cuaderno de las Escuelas al Aire Libre*, but only one issue was published.

In 1926 a research showed that all the students at Xochimilco were indians, in Tlalpan 70% were indians and the remaining "criollos" or half-breeds. In Guadalupe Hidalgo and Churubusco the percentage was 50% indians and 50% half-breeds and whites. The success of women was emphasized by the critics who considered it "understandable" because their progress was - so they believed - due to a kind of art based on inward sensibility, a feature attributed to women in those times.

In 1926, after an exhibition by students of the Escuelas al Aire Libre in Mexico had achieved controversial success, Prof. Alfredo Ramos Martínez, director of the Academy and also responsible for the project of the Escuelas, managed to organize a series of exhibitions in Europe with the help of the Mexican Ambassador in Paris, Alfonso Reyes, a writer of great prestige, who later came as

ambassador to Brazil and became a friend of Portinari and Ismael Neri and of many writers of the 2nd modernist period in Brazil such as Manuel Bandeira, Cecília Meireles, Murilo Mendes, etc.

Many works taken to Europe were published in the *Monografía de las Escuelas de Pintura al Aire Libre* in 1926. It seems that the choice of the works followed closely the European expressionist canon, and some pre-cubist items as well, for they differ substantially from the patterns contaminated by popular visuality in the works of other students of the Escuelas published in the textbook by Best Maugard.

The concern to prove to the reader the racial and social diversity of the students of the Escuelas reveals itself in the editorial part of the *Monografía*, which shows for each work a photo of the child or adolescent who produced it.

Little is known about the reception that the Berlin exhibition received. Even Francisco Díaz de León, former director of the Escuela de Tlalpan in his essay in the catalogue of the reevaluative exhibition in 1965 gives no information about it. But thanks to the letters of Alfredo Reyes to the Ministry, it is known that the success in Paris was great and originated many critical reviews, and that Picasso himself helped Ramos Martínez with the fitting up of the exhibition. According to Laura Matute, the researcher that most studied the Escuelas al Aire Libre in depth, the success in Madrid was even greater. Among the newspapers that published commentaries on the exhibition she quotes: *El A.B.C.*; *El Socialista*; *El Imparcial*, *La Libertad*, *La Nación*, *La Gaceta Literaria* and *La Voz* with articles signed by well-known art critics at that time such as José Francês and Gabriel García Moroto.

Alfredo Ramos Martínez returned with a feeling of fulfillment to Mexico. Although he was neither a theoretician nor a great artist, he was a man of intelligence, of really vast general hybrid culture, and was respected by his contemporaries. Today he is referred to by historians and critics as one of the most influential personalities in the modernization of artistic institutions in Mexico.

In Mexico in 1925 and 26, when Mexican and European exhibitions took place, a certain cohesion of the left parties and intellectuals, that had been attained with the revolution of 1910, had already faded away.

The modernists themselves and the muralists that emerged from the trend for the popularization of the Arts transformed the Escuelas al Aire Libre into a bone of contention. Some of them regreted it later on as did Carlos Merida, who wrote on August 30, 1925 an article in *Revista de Revistas* entitled "Juicio Crítico de la Exposición de Artes al Aire Libre" about the Mexican exhibition, in which he disagrees with practically everything and praises only the fact that some works mirror popular art. Nevertheless, a few years later, at the beginning of the 30ies, he exhibited with certain ostentation, works by students of the Escuela de Tlalpan

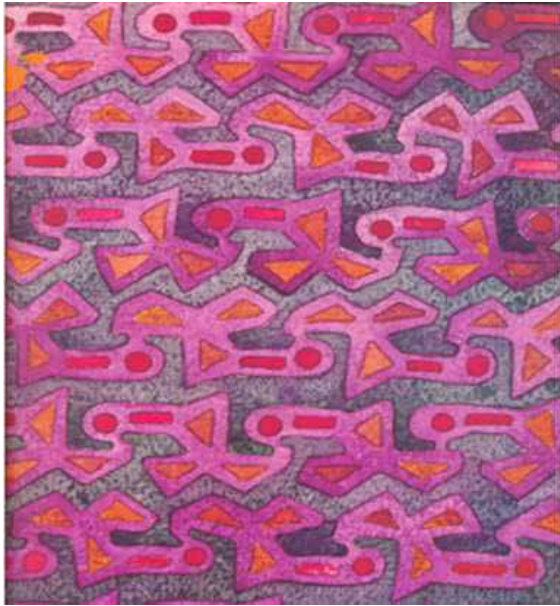


Figure 2. Surface Design by Elena Izcue.

in the Gallery under his superintendence. In the article written in 1925, he criticizes especially the divergence between the methods of freedom in expression as advertised by Ramos Martinez and the resulting visuallity in the works shown which, according to him, revealed criteria imposed on by the professor.

This is a vulnerable point of the campaign of the Escuelas al Aire Libre and of the modernist teaching of Art in general. Even the founders of the Escuelas al Aire Libre and their greatest defenders naively embraced the modernist discourse on the teaching of art, maintaining that - though this was not entirely true - there was an absolute freedom expression, saying that “the students painted what they wanted as the saw it, following the coloring techniques which they liked most”. They attempted to conceal the cultural objectives and the technical procedures which stimulated the students towards a cultural reading - the core of Best Maugard’s method used at the Escuelas al Aire Libre and very clearly demonstrated in his book of 1923, as mentioned above.

Consequently, not very clear statements on the side of the defenders of the Escuelas, an idealized marketing strategy, disregard by some artists and destructive and hardly honest campaigns led to political manipulation of the Escuelas al Aire Libre. In 1932, in a governmental administrative negotiation, the Mexican philanthropical “bugbear”, as Octavio Paz used to say, the Escuelas al Aire Libre were transferred from University supervision to the direct control of the Instituto de Belas Artes [Fine Arts Institute], and then were subordinated to the same curriculum in force in other schools, and thus the experimental feature which brought about their success was lost.

At the meeting of the Counsel which decided to subordinate the Escuelas to the general rule, the only dissenting voice was that of the artist and Counselor Rufino Tamayo. Having studied and taught

as professor at the Escuelas al Aire Libre, he showed admirable fidelity to their principles. More or less at the same time [1919] Elena Izcue begins her campaign in Peru in favor of design teaching in international language but revealing indigenous culture .

2. Elena Izcue (1889-1970; 81 years)

A Peruvian who lived in the late nineteenth century Paris was the designer of the House Worth in France having made several exhibitions in New York.

His work was based on the Peruvian indigenous iconography, in the printing of fabrics, tapestry and graphic design packages. In the design of perfume bottles rested on the current art deco style.

Back in Peru, running from the first world war in Europe, didn’t find opportunity in the nascent Peruvian industry and dedicated herself entirely to teaching design. She wrote several textbooks for primary and secondary schools defending the need to spread the Peruvian indigenous art and design through teaching.

Her project of a School of Design is very peculiar in respect to nationalist ideas but at the same time with formal appropriation of the European codes and visual values besides the exploration of the newest printing techniques of the time.

At that time national patterns were defended in interior decoration, architecture and design in Brazil.

3. Theodoro Braga (1872-1954; 82 years)

The most outspoken designer was Theodoro Braga who worked in Para, Recife, Rio de Janeiro and São Paulo. He directed several important experiences in art and design teaching, one of them the Brazilian Art School (1929) in São Paulo and the School of Fine Arts of São Paulo .

He explain his ideas to an american journalist that interviewed him for this article below

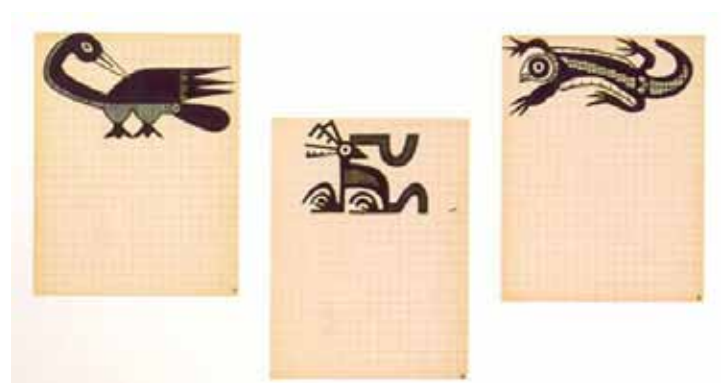


Figure 3. Exercises for secondary school based on Peruvian indigenous iconography.



Figure 4. Examples of Theodoro Braga decorative design.

THE NEW BRAZILIAN DECORATIVE MOVEMENT

By Douglas O. Naylor.

Theodoro Braga has been teaching his theory of decorative design since 1905.

"The idea came to me when I was in Europe", he said. "The National School of Art" sent me there to study in the technical institutes of the various countries. I won the "prêmio viagem" [a national prize]. I found different ways of teaching, original ideas, new adaptations of types, and national movements of various kinds.

Brazilian artists were habitually using lions, cherubs, and columns, the eagles of North America, and the dancing girls of Old Cairo. We had nothing that had grown out of the Brazilian soul or the flora and fauna of this rich country.

I came back, resolved to awaken the artists and designers of my country. I wanted them to see the opportunities of their "terra natal" [home land]. For sixteen years I have taught in a private school in Para".

The journalist commented:

"He opened a portfolio of drawings and began showing the designs of cacao seeds. Victoria water lilies, stately palm trunks, foliage of coffee and rubber trees and Amazonian birds and monkeys. There was a companion drawing for each one, illustrating the possibilities for practical applications" [1922].

Only now we have begun to research on the History of Design Education in Latin America.

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Design history: from service subject to discrete discipline

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Design history / Historiography / Methodology / Pedagogy / Interdisciplinarity

Design history is undergoing an identifiable shift from a relatively marginal and insecure position as a service provider operating within design education, to a recognizable and independent research discipline. This paper examines both the relationship between the practice and purpose of design history within design education as it is taught and researched in various countries, as well as the subject's emerging status as an independent discipline.

1. What is Design History?

Design history has a compound name, design + history. While historians interpret evidence primarily from textual sources to understand social, cultural, economic or political life [Munslow, 2005], design discourse has augmented a focus on designed artifacts and processes, consideration of their production, mediation and consumption and 'networks of stakeholders' [Krippendorf 2006: 64]. Design history is the study of designed artifacts, practices and behaviors, and their surrounding discourses, in order to understand the past, contextualize the present, and forecast the future.

We can refine our definition using two distinctions. John A. Walker differentiated the academic field of *design history* from its subject, the *history of design*. The latter is often deemed to begin when industrialization separated design and manufacture [Walker, 1989]. Design history has therefore prioritized the output of Western, industrialized nations at the expense of non-Western regions and the pre-industrial. A second distinction concerns design history as taught to design students – contextualizing students' design practice through studying the work of other designers, and the social, political and economic and cultural forces that shape design, production and consumption – and design history as a field of research.

Design history's development in the 1970s and 80s was informed by its role in design education, typically within art and design schools. The subject's roots as a distinct field of inquiry lie in the UK, including the establishment of the Design History Society in 1977 [Woodham, 2001], academic conferences, the launch of postgraduate degree programs such as those at Middlesex University [1980; Putnam, 2012] and the Victoria and Albert Museum/Royal College of Art [1984] and the *Journal of Design History* [1988]. In the US, the Design Forum was founded in 1983 (renamed the Design Studies Forum in 2004) and the journal *Design Issues* launched in 1984, treating design history

within a broader remit. Major museums have also contributed significantly to the development of design history.

Clive Dilnot's two-part 1984 account of the 'varieties of design history' noted the limitations of its basis in decorative arts and Pevsnerian modernist architectural histories [1984]. Early monographs such as Forty's *Objects of Desire* and Sparke's *Introduction to Design and Culture* (both 1986) rejected an art historical model based on innovative practitioners, iconic objects, and period styles, instead situating designed objects within social, political and economic contexts. Walker proposed extending design history's research field through a 'Production-Consumption' model [Walker 1989]. While Walker and Dilnot rejected 'grand narratives' in favor of multiple narratives, Margolin [1992] contended that design history needed to define its remit and methods. Woodham [1995: 37] responded that a lack of clearly defined disciplinary boundaries was a *positive* trait and 'interdisciplinary interchange' was a key characteristic of design history.

Design history has borrowed from a diverse range of related studies, particularly continental philosophy, art history, literary studies, cultural anthropology, and history. Multiple frameworks have emerged for situating design in its historical context, including national histories that chart design's role in a chronological narrative [Betts, 2004] and close analyses of specific materials [Meikle, 1995], industries [Błaszczyk, 2002], or political perspectives [Lavin, 2002]. Cultural studies has exerted a strong influence on design history, as did feminist scholarship [Attfield and Kirkham, and Buckley, both 1989]. In the US, popular culture studies, folklore studies, material culture studies, and the history of technology have accommodated work on designed objects. The latter's influence has extended beyond the US (e.g. Atkinson, 2010). Fallan argued recently that design history's 'core concern' remains 'the materiality of objects' [2010: 33]. He positioned design history within material culture studies and advocated the use of methods from anthropology and ethnography, museology, archaeology, and the history of science and technology.

Design historians have drawn from (typically qualitative rather than quantitative) social science research [Attfield 2000, 2007], with little reciprocal interest. Molotch [2011] argues that sociologists have largely ignored material culture, but Shove, Watson, Hand and Ingram [2007] form an exception. Like design history, material culture studies is 'interdisciplinary and cross-disciplinary' [Woodward 2007:27], using methods ranging from semiotic interpretation to empirical observation to understand how artifacts and humans interact (see, for example, Miller

1987 and the *Journal of Material Culture* founded in 1996). From cultural anthropology, design historians have learned that everyday objects have 'social lives' (Appadurai, 1986). Yet social scientific approaches have focused on consumption practices, at the expense of design practice, manufacture and materials, or historical perspectives.

Despite design historians borrowing from various fields, Margolin (2009) described design history's marginal position within (social and cultural) history and the wider humanities. With the publication of three key texts in the last two years, design history seems to have reached a state of reflexive maturity. Lees-Maffei and Houze's anthology, *The Design History Reader* (2010) surveyed the breadth of the field, its methods and key themes, Fallan's *Design History: Understanding Theory and Method* (2010) analyzed the method in further depth and Adamson, Riello and Teasley's *Global Design History* challenged the subject's Western bias, by asking 'that all design be understood as implicated in a network of mutually relevant, geographically expansive connections' (2011: 6). Design history has emerged as a discipline capable of producing sophisticated analyses of the interplay of social, cultural, political and economic forces on designed artifacts, design practitioners, production, consumption and mediation.

2. Design History: Teaching and Research

While design history arose primarily to serve a specific need within design education, its role is changing even within this context. Brawley, Kelly and Timmins (2009) have demonstrated the importance of comparative appraisals of pedagogic trends to identify the marked international differences in pedagogical theory and practice. What follows is an initial attempt to broadly map design history's current position in teaching and research based on primary email interviews and published research, for an international sample of regions.

In the UK, design history has grown out of the studio and back into it again for economic as well as pedagogical reasons. Design history's role within design higher education is practically enshrined in law, but in recent years many dedicated departments of contextual studies (including art and design history) have been disbanded and design historians now report directly to the heads of practice-based courses. This allows for a closer relationship between practice and theory but its implications for the research infrastructure for design history are less reassuring.

The situation in wider Europe is strikingly different to that in the UK. Rather than being increasingly managed within the studio, design historians working in continental European countries including Spain (Campi, 2011; Julier, 2011), Italy (Dalla Mura, 2011; Prina, 2011), Greece (Traganou, 2012), Turkey (Balcioglu, 2012) and Scandinavia (Fallan, 2011), express their desire for a more defined, discrete identity for design history. While they complain of the lack of an institutional structural base for design history, many are also optimistic about the imminent establishment of dedicated MA and PhD programs.

United States design history, too, was developed almost exclusively within design schools (Margolin, 2002: 129). While the historical survey course remains a mainstay of American design education, Lichtman notes a recent shift from teleological narratives towards blended history and studio practice models (Lichtman, 2009). At the graduate level, the prominent courses are the MA in Design History and Decorative Arts run by Parsons the New School of Design in conjunction with the Cooper-Hewitt National Design Museum, and the MA and a PhD program at Bard Graduate Center, New York. However, the majority of design history academics continue to emerge from Art or Architectural History programs or from abroad (Margolin, 2011). The recent revival of the Design Studies Forum within the College Art Association and the founding of its journal, *Design and Culture*, in 2009, as well as the relaunch of Bard Graduate School's journal *Studies in the Decorative Arts as West 86th St: A Journal of Decorative Arts, Design History, and Material Culture* in 2011 exemplify a new wave of interest in design history. In related fields, the University of Delaware with the Henry Francis du Pont Winterthur Museum, offers MA and PhD programs in early American decorative arts from a material culture perspective (Margolin, 2002: 152), and important contributions are made by scholars working within the American Studies Association, the Popular Culture Association and the Society for the History of Technology, and their respective journals.

While Fry provided an early call to arms for the development of Australian design history (Fry 1988), that country lacks dedicated graduate programs in design history, and only recently has a critical mass of active scholars working within academic institutions emerged. Australian design education has tended to follow UK models, with design history as a contextual subject within design practice degrees. Despite this, McNeil (2011) notes revived PhD research in design history, particularly at University of Technology and the University of NSW, both in Sydney, Griffith University in Brisbane, and Swinburne University of Technology, Melbourne. There has been some interest in design history within The Art Association of Australia and New Zealand, as well as the Society of Architectural Historians, Australia and New Zealand annual conferences. A symposium held at Robin Boyd's Walsh St House in Melbourne in 2011, brought together several key scholars from around the country to create the Design History Australia Research Network (DHARN), with the aim of further developing the discipline in Australia.

Finally, Kikuchi has recently written that 'Design Histories and Design Studies in East Asia have been developing steadily, but unfortunately this has not been widely recognized in the UK or in other Euroamerican centres of this field' (2011: 273). She notes that Japan has led the development of design history in East Asia, for example through the 'Nihon Dezain Gakkai (Japan Society for the Science of Design)', established in 1954. Japanese university level design history teaching occurs within art history, aesthetics, history, area studies, English studies, languages, international studies, engineering, architecture and crafts programs. Some isolated design historians teach 'modern design history', for example at Musashino Art University and design history has

greater visibility in the art universities [Kikuchi, 2012]. In Korea, design history is delivered only on a limited basis within design programs and art history and cultural studies courses [Lee, 2012a and 2012b]. While the design history of Hong Kong is more prominent than that of neighbors such as Taiwan due to the availability of empirical materials in English, 'writings on the design history and design studies of the Greater China region [the People's Republic of China, Taiwan and Hong Kong]' have yet to emerge [Wong, 2011: 386]. Possible reasons include a lack of foundation texts, the methodological challenge of reconciling China's long arts and crafts history with the modern, imported, notion of design, and the undervaluing of design history. Taiwanese design history is more developed than that in the PRC due to the influence of the Japanese design education system, while in Greater China the economic return offered by studio-based design education is favored over design history programs which seem to lack such potential. Uniquely, in China, design history textbooks are available to prepare school students for entrance exams for higher education design programs in which design history is taught through survey courses divided into 'World history' (Western) and 'Design history in China', (spanning 5,000 years). Some elite Chinese institutions, such as the Academy of Art & Design, Tsinghua University (formerly Central Academy of Arts & Design), host design history research and the enormous recent growth of China's design industry has prompted optimism about the development of design history there [Wong, 2011: 390], including a dedicated MA program [Wong, 2012].

3. Conclusion: From Service Industry to Discrete Discipline

Globally, the very conditions which catalyzed design history have also been a limiting factor, in that it has often been regarded as a 'service' subject attendant upon design education, and as a subject that is taught rather than researched. However, design history is being consolidated both within design curricula and as a discrete discipline. Fostering the study of design history at undergraduate and postgraduate levels is important not only in terms of the contribution the subject makes to design curricula, but also in providing an institutional base for the research of design historians. Design history needs to develop further as a discipline in order to extend its recognition both as a pedagogical entity and as a research field. We have surveyed design history's development from a focus on a canon of styles and key designers to simultaneously broader and more in-depth contextualised analyses which, for example, add more recent theoretical developments around mediation to the existing foci of production and consumption. Working alongside practitioners, design historians are uniquely placed to contribute to this effort. The European, American, Australian and East Asian samples provided above give cause for optimism about the growth of design history from a service subject to a discrete discipline. However, a case remains to be made for the wider relevance of design history beyond design education. The vitality of design history would be well served through the building of bridges between the subject as it exists within higher education and the ap-

parently boundless popular enthusiasm for related phenomena such as heritage, family history and domesticity. The relationship between designed goods and consumers could hardly be more extensive in capitalist society; design history can expand at least in part by harnessing popular interest.

Acknowledgment

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Pevsner on Design education: meeting contemporary needs through the teaching of Art History

KONDO, Ariyuki / PhD / Ferris University / Japan

Sir Nikolaus Pevsner / Design education / Art history / Contemporary needs

This paper examines Sir Nikolaus Pevsner's view on design education as inseparable from the teaching of the history of art. Taking into consideration Pevsner's contribution to the course of 'democratization' (ending of the monopoly of the élite) of design in the post-war years, the understanding of Pevsner's view on design education ultimately leads to the grasp of a consequential facet of twentieth-century history of design education.

1. Introduction

Sir Nikolaus Pevsner (1902-83), a twentieth-century titan in the history of architecture, art and design, never wrote a book nor an essay exclusively on design education. This, however, does not mean he had nothing to say about the current development of design and education for future generations in design professions. Pevsner, as an art historian, was well aware of the role that he could play in terms of the practice and education of his times. Unhindered by distinctions between different types of artistic creation, viz., painting, architecture, decorative arts, industrial design, etc., he considered increasingly fractionalized branches of art to be different expressions deriving from the same desire to give visual expression to one's frame of mind; and, as art historians deal with the states of minds of artists and designers, Pevsner firmly believed that they were capable of contributing to the education of future designers-to-be, not only in providing knowledge of works created by forebears, but also by shedding light on the minds of artists and designers as wellsprings of creative power.

2. Design and the Spirit of the Age

By 'the designer', Pevsner said, he meant 'a man who invents and draws objects for use' (Pevsner 1948: 91)¹; and the purpose of the use of these objects is, in one way or another, to fulfil contemporary needs. The contemporary needs of a society mirror its systems, its sense of values, its religions, its social life, its scholarship and, above all, the spirit of the age. Based on the notion of the link of the spirit of an age to the 'contemporary needs' of society, and to the role of the designer in inventing and creating objects for fulfilling these 'needs', Pevsner thus came to identify design with the spirit of the age.

This consideration of artistic creativity as the ultimate manifes-

tation of the spirit of an age was not always accepted uncritically. Probably the severest criticism against Pevsner's historiography was made by David Watkin. Watkin notes in Pevsner's writings 'the clear assumption' that 'there is a "spirit" or "essence" which pervades and dominates all intellectual, artistic, and social activity', and maintains that, under this assumption, Pevsner did not consider artists and designers to be 'individuals with unique imaginations and talents', but as 'only manifestations of this all-pervasive spirit or essence' (Watkin 1977: 75). To Watkin, Pevsner's historiography, which is often considered to be descended from that of Burckhardt and Wölfflin and the tradition of Hegelian *Geistesgeschichte*, appeared to be based on the belief that any work of art, whether it is one of architecture, painting, or any other kind of design, is 'merely emanations of the spirit of the age' (Watkin 1977: 74), and that an 'individual artist's role is merely a voice through which the great unconscious of the age can be expressed' (Watkin 1977: 80).

Yet it is this very aspect of Pevsner's scholarship which confirmed for him that the teaching of history of art is inseparable from current developments in design and design education. Considering 'the historian's role' to be the discernment and disclosure of 'the spirit of an age that pervades its social life, its religion, its scholarship, and its arts' (Pevsner 1988: 17), Pevsner concentrated attention on the mind of an artist or designer as the manifestation of the spirit of an age through tangible forms. Pevsner's historiography stresses the pervasion of the spirit of an age in art and design and discerns the 'essence' or 'real nature' of art and design in the minds of artists and designers who channel the spirit of an age through their creations.

3. The Unlimited Scope of Pevsner's Study of Art History

Being interested in this indissoluble connection between the spirit of an age and the minds of artists and designers, Pevsner naturally broadened the scope of his historical study, taking as subjects for his research not only art and design from the past, but also from contemporary developments in design and design education. His own century was as worth studying as the eighteenth and nineteenth centuries.

Untrammelled by borders between the past and the present, Pevsner came to see a strong connection between the past of art and design and the classrooms/studios of future designers. Based on this perception, his first major publication on modern design was *Pioneers of the Modern Movement* (Pevsner 1936)

¹ Pevsner delivered the Cobb Lecture for the Royal Society of Arts under the title of 'Design in Relation to Industry through the Ages' on November 24, 1948.

[fig. 1].² By focusing on the minds of artists and designers in 'a consumers' society' where, in the words of Hannah Arendt, 'whatever we do, we are supposed to do for the sake of "making a living"' (Arendt 1998: 126-7), Pevsner was able to perceive a chain of strong moral beliefs which stretched from early nineteenth-century German-speaking painters of the Nazarenes to the Arts and Crafts movement and on to the Bauhaus. Whether artists or designers such as J. F. Overbeck and Franz Pfaff from the Nazarenes, William Morris from the Arts and Crafts movement, or Walter Gropius of the Bauhaus, all were working for 'the good of society rather than in their own self-interest' (Games 2011: 156); Pevsner identified this link between the Nazarenes and the contemporary design and education movement led by Gropius as a historical unit.

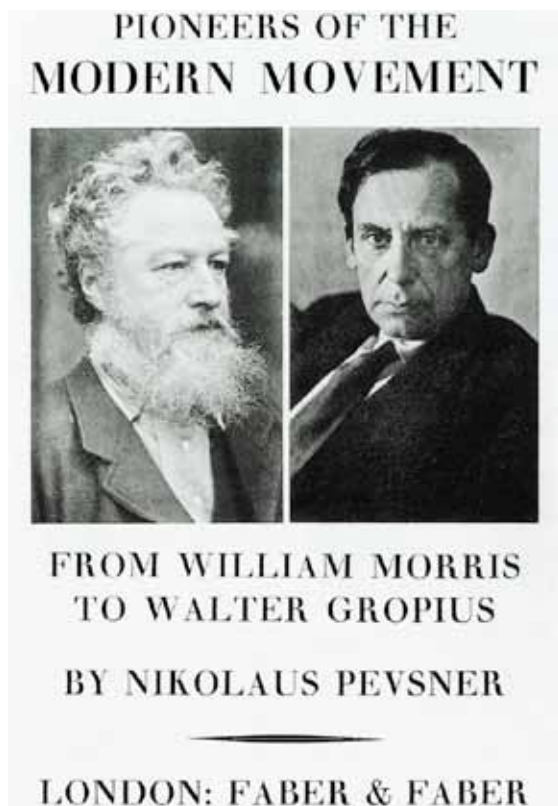


Figure 1. Nikolaus Pevsner, *Pioneers of the Modern Movement: From William Morris to Walter Gropius*, 1936.

It was Pevsner himself who first showed the photograph of William Morris, by that time already a historical figure, to Gropius in a meeting which took place in Berlin in 1935. Gropius responded, 'So that is Morris. I have never seen a picture of him. And yet I owe him so very much' (Pevsner 1949a: 36). This confirmed for Pevsner that the current developments in design and design education were perfectly suitable, and even necessary, subjects of study for art history.

² The revised and partly rewritten edition of this work was first published under the new title *Pioneers of Modern Design* in 1960 and is still one of the most influential texts for design education.

It was not only Pevsner himself who saw the inevitability of this connection between art history and design education. Stephen Games, the author of *Pevsner The Early Life: Germany and Art* (2010) and editor of *Pevsner on Art and Architecture: The Radio Talks* (2002), recalls his student days in the 1970s when Pevsner was a heroic figure for many design students:

I began my student career studying typography and design at the Central School of Art in London, where we were taught that the minutiae of our daily design decisions had some kind of moral energy that would trickle down from us and into the world at large. Outside our own community, design might be unloved and undervalued but the idea was that we knew better and our time would come. Gropius had said so and Pevsner had confirmed it. They were our heroes, and that made us, in their image, also heroic, even if our own individual approaches to design were modulated by other figures. Pevsner was therefore central to how we saw ourselves and I had no thought that he was anything other than a good thing. (Games 2011: 3)

4. Just looking is not enough: The Art Historian's Role in Society

Pevsner never minimized the role that knowledge of the past can play in developments in contemporary society. According to Pevsner, the art historian should always be aware of 'contemporary developments' in society and confront 'contemporary needs'. The uneasy fascistic atmosphere of German society under the reign of terror by the Nazis must have galvanized Pevsner, a German-born, Russian-Jewish historian, into realising that 'the historian can no longer shut himself off from contemporary needs' (Pevsner 1973: viii).³

Art historians were no exception, for Pevsner 'believed implicitly in the power of art history to make cultural connections and deepen understanding of both the historical and the creative process' (Harries 2011: 116). Pevsner deeply believed that art should be functional, carrying some sort of meaning for the people for whom it was created, just as it had in the Middle Ages when art functioned to convey religious ideas and norms. 'The creed of "Art for art's sake"' was what 'Pevsner has so consistently resisted since his student days' (Harries 2011: 529); and for art historians, just looking at masterpieces in the history of art and 'plotting purely aesthetic continuities of line, colour and composition' (Harries 2011: 112) was not enough. By tracing intellectual, ideological and functional threads in the history of art, an art historian has the obligation to play an active part in the development or reformation of society. Pevsner continued to assert this even in post-war times.

5. The Picturesque: An Empirical Verification of Teaching Art History to Meet Contemporary Needs

Pevsner believed that effective methods and practical advice for meeting contemporary needs can be found in the study of history. This belief was based not only on his realisation that there was a chain of strong moral beliefs stretching from early nine-

³ Pevsner states this in his *Academies of Art*, first published in 1940.

teenth-century Nazarene painters to the contemporary design attitudes and methods of the Bauhaus, but also to his discovery of the Picturesque as 'an extension backwards in time of the features he had admired in English Arts and Crafts architecture and design in *Pioneers of the Modern Movement*' (Causey 2004: 169). In his extended study of the Picturesque in the 1940s, Pevsner came to see that the essence of the Picturesque lay in its 'artistic-design attitude', viz., the timeless 'modes' and 'habits' of viewing and considering external objects, not as a method limited to the past; and was therefore not only worthy of being a subject of historical study, but also a suitable attitude for solving contemporary design problems.

In 1949, Pevsner published an article on Richard Payne Knight, an eighteenth-century pioneer of the Picturesque, in *The Art Bulletin* (Pevsner 1949).⁴ In this article, he examines Knight's idea of the Picturesque through the use of various quotations from Knight's writings, and refers to the fact that Knight claimed the Picturesque 'only exist[s] in the modes and habits of viewing and considering them[external objects]' (Knight 1805: 196). Knight's view was an application of the empirical philosopher David Hume's contention that 'Beauty is no quality in things themselves: It exists merely in the mind which contemplates them, and each mind perceives a different beauty.' (Hume 1757: 268) Through refusing to make distinctions between external objects, Knight came to conceive of the Picturesque as arising from the mind's contemplation of external objects. It was this Knightian understanding of the Picturesque from which Pevsner developed his own understanding of the Picturesque.



Figure 2. Nikolaus Pevsner, 'Twentieth-century Picturesque: An Answer to Basil Taylor's Broadcast', *The Architectural Review* (April 1954).

⁴ This article was later republished with some modifications as one of the chapters of the first volume of his *Studies in Art, Architecture and Design* (1968).

Pevsner's position on the Picturesque was expressed most clearly and straightforwardly in his apology for it in the three-page article 'Twentieth-century Picturesque: An Answer to Basil Taylor's Broadcast', published in the *Architectural Review* of April 1954 (fig. 2). Pevsner's firm belief in the Picturesque as being by far the greatest accomplishment of English art was challenged by art historian Basil Taylor of the Royal College of Art in a radio broadcast, *English Art and the Picturesque*, in which 'the Picturesque' was dismissed as 'a sign of imperfect vision', lacking 'seriousness and truth', which prevented 'the English from facing up to the realities of an industrial age' and drew them into 'irrelevancies and a nostalgia for the past' (Pevsner 1954: 227).

Pevsner could not accept Taylor's assertion, for the Picturesque was, in his view, a thoroughly modern subject facing up to the realities of modern society, never a subject of nostalgia. For example, in various issues of *The Architectural Review* of 1944 (fig. 3), of which Pevsner himself was the editor, articles on Picturesque-related subjects such as 'Price on Picturesque Planning', 'Lord Burlington's Bijou, or Sharawaggi at Chiswick' and 'The Genesis of the Picturesque' appeared alongside articles on modern design and contemporary design issues, e.g. Hugh Stubbins's 'wartime housing', Bernard Rudofsky's housing design in São Paulo and Oscar Niemeyer's designs for residential projects in Rio de Janeiro.⁵ Here one can see that Pevsner valued the Picturesque not as a taste which belongs to a specific period in the past, but as a concept with 'modern' significance. Later, in 1967, on the occasion of his receiving of the gold medal of the Royal Institute of British Architects (RIBA), Pevsner delivered an address in which he identified modern functional design with the Picturesque, giving as an example the newly completed functional, yet picturesque, design of Churchill College, Cambridge (RIBA 1967: 318).

According to Pevsner, the key message of the eighteenth-century pioneers of the Picturesque was 'Keep your eyes open. See, analyse what impresses you, and for what reasons. You will then realize that we have available an infinitely richer body of materials for artistic creation than classical theory would make you believe. Use it in your work'; and he stressed that 'To this day we cannot do better than follow that advice' (Pevsner 1954: 227). What Pevsner focussed on in his study of theories of the Picturesque was that the Picturesque is 'the first feeling-your-way' design attitude, a sustainable, workable discipline of inventing works of design, not restricted to a certain period in the past.

6. Conclusion

Pevsner was utterly convinced that the art historian, whose subject of interest is 'the visual expression of the history of man's mind' (Pevsner 1952: 162), could not and should not shut himself off from contemporary needs. In Pevsner's view, 'one of the most urgent tasks' for twentieth-century historiography was to 'reconcile scholarship and direct utility' (Naylor 2004: 179),

⁵ Niemeyer's designs for Cavalcanti House (1940) and the architect's own house (1942), both in Rio de Janeiro, were featured in the May 1944 issue of the *Architectural Review*.

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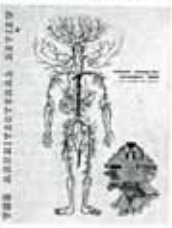
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Vol. LXXV No. 575

THREE SHILLINGS AND SIXPENCE

THE COVER. No better proof of the existence of Zoëgata, the specific spirit of one specific age expressing itself in all its utterances, can be devised than this illustration of the nerve system from Diderot and d'Alembert's Encyclopédie. The anatomical engravings are by Delisle and Prevost and date from 1762. They antedate the demand of Encyclopédie students for scientifically accurate and geographically local presentation, but they are over and above that patterns of remarkable eloquence. It is in fact the combination of medical expertise and abstract form that renders us to-day so immediately conversant. If the character of the pattern is analysed in detail, it will be found to consist of a few comparatively straight and symmetrical main lines and many twisted and twisted asymmetrical lines in between. Now the central article of this issue proves that the hallmark of early picturesque gardening in England is the introduction of winding paths between still maintained straight Baroque avenues. The article demonstrates this principle as typical of the Baroque. So the striking similarity of composition between Delisle's Nerve Man and Stephen Switzer's ideal garden of 1718 turns out to be an example of the signs of an all-enveloping Baroque Zoëgata.



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TWO SHILLINGS AND SIXPENCE

THE COVER illustrates what might be called the theme of this issue—the integration of contemporary architectural practice with eighteenth-century Landscape. The Dance Club plan (in red) in which the building as well as its environment has been "landscaped" to the extent that one is indistinguishable, indeed indistinguishable, from the other—can be regarded as the culmination of a Movement whose first approach shots are to be seen vividly expressed in the great 1718 Plan of Chiswick. Chiswick Garden was one of the first pieces of Land in European history to be laid out deliberately in defiance of the historic principle of symmetry. Ownership of building and background was at once subverted by the Baroque architects but on the principle of perfecting the landscape by pressing it into formal patterns worthy of its architectural form. For right up to the seventeenth century the landscaped landscape was a symmetrical one. The eighteenth century looks away from the symmetrical pattern in landscape but not in architecture. It remained for the twentieth to liberate building visually from the old tight conventions of planning and the style, a move the Landscape Gardeners of the eighteenth century could never quite bring themselves to make. Their buildings remained Palladian in an "Irregular" landscape. Now we landscape the buildings too. And conversely building and background create a unity. In this visual sense the Modern Movement can be described as a further instalment of Picturesque Theory, so, since the Picturesque was known in its own day as the Modern Style (see Anthology p. 48), we might just the name the other way and say the first round of the Modern Movement was played off in the eighteenth century. The plan of Chiswick, by the way, though rightly described as Hogarth's, is actually a copy of Baroque's plan of 1716 done by Le Beau.



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TWO SHILLINGS AND SIXPENCE

THIS MONTH'S COVER is taken from Andrea Vesalius's anatomy book, published in 1543, the accepted textbook of the sixteenth and seventeenth centuries. The illustration is chosen to remind ourselves of a period in which even the technical publication, the school book, the map, etc., had their visual qualities which nowadays are only achieved where the application of art is especially called for and paid for. In what we would call a romantic way, this visual intensity is combined with an equally strong emotional intensity. The skeleton is not placed before us stiff as a doll—which is what an anatomical primer of to-day would do—but in an attitude as though it were a live being stripped of its flesh. There is a great value to the student in such a presentation. So at least contemporary scientists of the student school tell us. At the same time a skeleton thus posing before us fills us with the terror of the medieval Dance of Death. However, the middle ages were over when Vesalius founded modern anatomy. The skeleton's thoughts seem to be resigned but not unhappy, and the master on the pedestal reveals them. Lettering, pose and context are all clearly of the Renaissance.



Figure 3. The Contents of The Architectural Review of 1944 (1. to., February, May, November).

and therefore the art historian cannot remain detached from the realities of contemporary society. While designers are expected to engage in solving contemporary stylistic/artistic problems, art historians, through their use of historical knowledge, make accessible to designers the knowledge of how past artists and designers confronted contemporary needs and worked for the good of society. Believing in the potentiality of art history to encourage young designers to consider their own social positions and the ways in which their designs could meet the needs of their contemporaries, Pevsner recognised the essence of design education to be the integration of a practical education in design methods and skills with the teaching of 'a social history of art' (Pevsner 1973: viii).

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Antipodean Design Science: applied home

WAITE, Noel / PhD / University of Otago / New Zealand

Design history / education / applied sciences / design studies / home science

This paper examines the history of design education at the University of Otago, 1911-2011. Design in Home Science was pedagogically radical in New Zealand because it was part of an interdisciplinary applied sciences programme developed for women and centred on the domestic environment. This paper also explains the influence of Design Studies in contributing to a human-centred interdisciplinary applied science at the University of Otago by 2011.

The 2003 Design Issues 19.1 cover offers an effective piece of communication design that maps the relationship of history, theory and criticism to design practice and its place in the wider natural and artificial environment. In line with the brief of that particular journal, it identifies the centrality of history and theory to a critical understanding of design's role in society. If we were to imagine the model three-dimensionally, the planes might become volumes within the sphere of design, theory perhaps embedded in the centre, criticism jutting out either end providing a platform to reflect back on both the design process and outcome, and finally history, intertwined with theory, but extending above to provide the long view with its hindsight advantage. It is from this last vantage point that I wish to address the question of what we understand by the term Design Studies, and to provide some historical explanation of how it has evolved, both at the University of Otago in New Zealand and, internationally, in response to design developments in the 20th and 21st centuries.

1. American origins

The history of Home Science at Otago begins not, as one might expect, in the colonial centre of Britain, but in America, where it was referred to as Home Economics. The foundation of coursework in domestic science at secondary schools and universities came about as a direct result of the Morrill Land Grant Act of 1862. This government program provided land for state universities that agreed to begin a program to train students for practical fields relating to agriculture and the mechanical arts. The State College of Iowa was the first to offer a course in Domestic Science in 1871 and Home Economics soon became one of the basic offerings of land-grant schools. The Federal Government hoped that these subjects would help Americans rebuild with a population of trained professionals. Ellen Henrietta Richards, the first woman student at MIT, was a key figure in integrating many diverse fields into what was to become the Home Economics field of the 20th century. In her words, 'Home Economics stands

for: Ideal home life of today unhampered by tradition of the past; The resources of modern science to improve home life; Freedom of the home from the dominance of things and their due subordination to ideals; That simplicity in material surroundings that will free the spirit for the more important and permanent interests of home and society (qtd in Leavitt 2002: 45). As cultural historian Sarah Leavitt concluded in 2002, 'Home Economics leaders took familiar ideas such as simplicity and freedom from extravagance, quantified them, taught them to students across the country, and made them important on a national scale,' (2002: 45) and, in New Zealand's case, on an international scale.

The profession of Home Economics provided job opportunities for many women. To make sure the field was respected as an academic endeavor, home economists began a yearly meeting at Lake Placid, New York, in 1899, named their professional organisation the American Home Economics Association and began publishing a journal. The 11 women and one man who attended the pioneering Lake Placid conference are not incidental to New Zealand, as one of the women was later invited to play a key role at Otago. The Conference sought a fuller acknowledgement of the economic and ethical challenges faced in the home. Ellen Richards defined their field thus: Home 'meaning the place for the shelter and nurture of children or for the development of self-sacrificing qualities and of strengths to meet the world'; Economics meaning 'the management of this home on economic lines as to time and energy, as well as to money' (qtd in Shapiro 2009: 167)

However for Ellen Richards, scientific knowledge and academic rigour were not enough. In presenting a public talk entitled 'Chemistry in relation to household Economy' she was asked by a member of the audience how what she was saying related to the questioner's everyday life. Rather than holding to her theories, Richards accepted this as a personal challenge, and worked to ensure that the practical application of scientific knowledge to everyday life was a central tenet of Home Economics. Richards would later argue, 'We must awaken a spirit of investigation & show to the girls who are studying science in our schools that it has a very close relation to our every-day life. We must train them by it to judge for themselves & to think, to reason, from the known facts to the unknown results' (qtd in Hunt 1912: 181). This was especially important as nineteenth-century industrial development and advances in mechanical methods were only just beginning to be applied in the home.

In New Zealand, this innovative educational movement attracted the attention of Canterbury farmer and former soldier Lieutenant Colonel John Studholme during a trip to the United States. Described as a *practical idealist* (Strong 1936: 3), he took a great

interest in social problems, especially as they related to the land, and he committed his time, energy and capital to ensuring the benefits of Home Science could be brought to bear on the social and domestic life of the New Zealand community or as he put it: 'This is essentially the age of invention, of mechanical contrivances for the saving of labour, of an enormous increase in all kinds of scientific knowledge' (Strong 1936: 5).

After a plan to endow a chair in Home Science at Canterbury University where he resided fell through, he made a similar offer to the University of Otago in 1909. Aware of the vital role women played in farm management he wanted to see the education of women taken seriously, and he was adamant about both the necessity and centrality of this new body of knowledge for a university: 'To my mind women's education will never be placed on a proper footing in this country as long as [Home Science] knowledge ... is made to take a lower position in our University to nearly all other, and less essential subjects' (qtd in Strong 1936: 4). And as Otago was the one of the first universities to grant a degree to women, and taught Physiology, a core component of American Domestic Science, he chose the right home for this innovative branch of applied science. Rather than an overarching definition as provided by the Lake Placid pioneers, Studholme articulately set out the core values of the application of this new discipline in terms of family health and wellbeing, and provided a measure in a letter to the Council of the University of Otago: 'The condition of the average house in the country is a true index of the condition of that country.' He concluded his letter by a compelling appeal to Ellen Richards, 'What is the use of all the scientific knowledge that we have been collecting for so many years if we do not apply it so as to make our homes more beautiful and more healthy, unless it eases the drudgery of everyday life? E. Home Science aims at prevention before cure' (qtd in Strong 1936: 5-6).

While possessed of a far-sighted vision and a persuasive argument, new ideas are only received if there is a receptive audience and, here again, Studholme was fortunate in his choice of Dunedin where he received support from Truby King and his newly formed Society for the Promotion of the Health of Women and Children, and Dr Batchelor, the founder of Obstetrics at Otago Medical School. They helped form a citizens committee that matched Colonel Studholme's donation of £300 for 5 years with a further £500, all of which was in addition to a Government grant. With this community and financial support, Studholme personally oversaw the appointment process for a Professor and assistant. In 1911 Professor Boys-Smith and Miss Rawson, both Cambridge-trained scientists, arrived to take up these newly created positions. The new home for Home Science was the inauspiciously named Tin Shed, recently vacated by the School of Mines, and the Professor's own house was to serve as a temporary hostel. Undaunted, Prof. Boys-Smith methodically applied her knowledge to the management of her new home, and the first five students. The Tin Shed provided the basics of a chemical laboratory and a lecture room, where clothing, and household

and social economics were taught. Due to lack of space, cooking was initially taught at the North Dunedin Technical School while the teaching of the fundamental sciences of Chemistry, Anatomy, Physics and Physiology was shared with Medical and Mining students, and this rational and pragmatic use of resources was to characterise the early years of the school.

2. A daring experiment by the University of Otago, New Zealand

Design Studies at Otago University can be said to have arisen out of a tradition of subversion. The establishment of a special School of Home Science at Otago University on 1911 was described in the University's 1969 centennial history as 'a daring experiment' but in the *Otago University Review* of the day as 'this latest freak of theoretical explanation' (Morrell, 95-96). Home Science's status as a School, along with Medicine, Dentistry, Mines and Physical Education, acknowledged its applied or clinical nature. It also had an immersive character in that students stayed at a special Hall of Residence that enabled them to apply the theories offered by this innovative and integrative new programme. Both the process and history and criticism of design were taught as aspects of the Household Arts. An extension or outreach programme funded by the Carnegie Foundation ensured these ideas made their way into the community. At the same time as architect Grete Schutte-Lihotsky unveiled her functional kitchen in Frankfurt, Home Science at Otago designed and built a model flat with demonstrations of labour-saving equipment for the 1925 New Zealand and South Seas International Exhibition in Dunedin.

However, it was not until 1946 that design was offered as a separate subject option, and two more years before a dedicated Senior Lecturer was appointed. The practice of design had a strong arts and craft focus, but this was to change in the 1960s as Home Science refined its pioneering interdisciplinary research approach to 'apply knowledge from sciences, technology and art to the benefit of everyday life' (Gregory 1962). At the same time the New Zealand government had belatedly acknowledged the importance of design, passing the Industrial Design Act in 1966 and establishing the Design Mark accreditation scheme. These internal and external developments provided a strong basis in the 1980s for a re-orientation towards a Design Studies programme modelled on Carnegie Mellon in the United States. This move was in line with the umbrella school's renaming as Consumer & Applied Science in 1988 which led feminist academic Jocelyn Harris to comment: 'The new name of school reflects the marvellous subversion by its staff and graduates of its original aims' (52). By this she meant that a school intended to prepare women for home duties had become a broad ranging professional field dedicated to meeting the needs and desires of a constantly changing society.

3. A science of design to Design Studies

These New Zealand developments took place against a sig-

nificant sea-change in design thinking and practice. The rise of design science in the 1960s raised the first serious intellectual challenge to the dominance of art as a central tenet of design education. In 1962, J.C. Jones and Peter Slann organised The Conference on Systematic and Intuitive Methods in Engineering, Industrial Design, Architecture and Communication. Participants rejected individual craft models and sought a robust professional model that emphasised rigorous intellectual inquiry from collaborative cross-disciplinary teams to explore problems and seek improved solutions. This culminated in Nobel Laureate Herbert Simon's landmark book *The Sciences of the Artificial* in 1969, where he called for 'subject matter that is intellectually tough, analytic, formalizable and teachable' to explore the artificial, or man-made environment. Simon distinguished between the natural sciences which 'are concerned with how things are' and design, which is 'concerned with how things ought to be.' He emphasised the importance of adequately framing and representing the problem through research and design thinking. His simple assertion that 'Everyone designs who devises courses of action aimed at changing existing situations into preferred ones' (Simon 1996: 111-14) also indirectly challenged the notion of the avant-garde or heroic designer mystically outside of the culture for which he or she is designing.

Simon's positivistic science of design (Cross 2001) was itself challenged by Rittel & Webber's characterisation of design problems as 'wicked' in that they consist of a wide range of variables, human and material, that are not always amenable to scientific methods and techniques (Buchanan 1992: 14-19). Working from this premise, Donald Schön proposed in *The Reflective Practitioner* an exploratory process where design can be seen as a continuing and cumulative conversation with the materials of particular situations (Schön 1995: 76-104). Understood in this way design is a mode of inquiry and discovery that is well suited to 'wicked' problems.

Design Studies was initially proposed by Paul Rand during a visit to Carnegie Mellon in the 1970s as a series of courses to help students reflect on and understand the principles of design. More recently, Richard Buchanan has argued that design is 'a new liberal art of technological culture,' providing an 'integrative discipline of understanding, communication and action' (1992: 5-6) that bridges traditional disciplinary divisions in order to better shape the artificial world in which we live.

4. Design as an international 21st-century applied science

In 2001 Design Studies became a department in the Division of Sciences, and in 2011 a part of a new Department of Applied Sciences. This then goes some way to explaining Otago's unique position in New Zealand as, what I have called elsewhere, an emergent design school (Waite 2005: 90-96) – that is the ethos of interdisciplinary learning and research differs from that of immersion art-school programmes. This approach is also emer-

gent in the sense that it takes account of the current state of the evolution of design from a craft to a profession to a discipline. Design Studies implies a critical and reflective approach to designing that does not simply respond to the needs of industry or the desires of the designer – nor does it ignore them – but seeks innovative ways to address and anticipate society's present and future needs and desires. This requires an openness to join an ongoing conversation about what design is, what it can offer, and at what cost to society and the environment. This entails a willingness to move beyond simplistic binaries of theory and practice, art and science, commerce and culture and teaching and research in order to confront the complexity of designing for the human family in all its richness and diversity.

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Bauhaus pedagogy and digital design

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Bauhaus / Digital Design pedagogy / (Architectural) design pedagogy

The present study takes the question “What is left from the Bauhaus,” as its point of departure, and examines the relevancy of the pedagogical model, by foregrounding some of the core ideas of the school, and evaluating these with respect to the set of conditions, specific to the present time, and with respect to the pedagogical problems, aims, and privileges of the contemporary design education, with an emphasis on so-called digital design.

1. The problem

We are just at the eve of Bauhaus’ 100th birthday. It was a short-lived but influential school of design which left us a still-appealing design pedagogy. Even at the beginning of the 21st century, if we are to discuss design education, it is very hard to do so without referring to the model developed and promoted by the Bauhaus. It was surely a pedagogical paradigm shift (à la Kuhn), and a reference point. In its 90th birthday, the school is glorified, but it is not nostalgia: It was not a coincidence that the theme of Bauhaus Exhibition in Berlin is “Bauhaus: A Conceptual Model.” It seems that the importance of Bauhaus does not lie in the historical, but precisely in its legacy: the intellectual/conceptual model it provided. For some, intellectually, Bauhaus stand for what is essential for Modernism, and for some, it still is a rigorous model for the present day. Yet from another point of view, the model is almost already 100 years old, and it was essentially an outcome of its own era; Bauhaus was a school developed within a set of conditions, cultural, intellectual, or otherwise, specific to its own time; and it developed a set of approaches that was specific to the very problems, aims, and privileges of that time. Now, we live in a very different World and the set of conditions and demands as well as the aims are not the same as then, which makes the model defunct.

Digital design, one of the recent and most powerful challenges to Bauhaus pedagogy is perhaps the best illustrative case of this situation: From a certain perspective, digital design, by definition, is incompatible with the Bauhaus pedagogy. Yet from another perspective, which is shared by many, it is assumed that digital design demands (if you prefer marks) yet another paradigm shift; this time, from Bauhaus to “something else.” Of course, addressing that “something else” would be a serious research theme; assuming and accepting that incompatibility and the paradigm shift, by default this is exactly what most of the recent research studies do. Such studies have their own conceptual and theoretical framework(s), and their own standards of evaluation, almost tailored to match the nature of the new model, as they were distinguished by the “traditional” ones, including the Bauhaus. By

nature, such approaches imply that, “nothing is left from the Bauhaus;” of course not an objective observation, but a viewpoint dismissing the model. So, after all, one might well ask a provocative question which deserves and demands an in depth and comprehensive investigation: “What is left from the Bauhaus?” This would be a less followed, but still fruitful path, seeking to re-evaluate and re-consider the original model; the Bauhaus pedagogy with the specificities of the present day.

The present study follows the last path. It takes the question “What is left from the Bauhaus,” as its point of departure, and examines the relevancy of the pedagogical model implied in the treatises of the school, for today. In search for a possibility of a certain conceptual inheritance, methodologically, the study takes and foregrounds some of the core ideas of the school, and evaluates these with respect to the set of conditions, specific to the present time, and with respect to the pedagogical problems, aims, and privileges of the contemporary design education, with an emphasis on so-called digital design.¹

2. Bauhaus and Digital Design

While, implications not yet known, and not yet theorized in the 1950s (Banham 1960), just about the end of the last millennium, the impact and the implications of the computers on the field of design becomes more evident and become the subject of research studies under the categories such as Computer Aided Design, Computational Design, Digital Design, each category having common but at the same time distinct characteristics.

What we refer to digital design today is a phenomena which is neither a holistic (design) model nor a pedagogy, but rather a strong influence on the conventional models of design; coming with a set of demands towards a change in the production of architecture, in the architectural design thinking, and consequently, but more important for the present case, in the education of an architect. Owing to these characteristics, what we call digital design is distinguished from the use of computers simply as assistance to the conventional modes of (design) thinking, making and evaluation.

¹ Before going into examining the essentials of the Bauhaus model, we must warn that actually, there existed three stages of the school under three directors. The original model was formulated under the directorship of Walter Gropius, then advanced and elaborated by Hennes Meyer, and finally transformed and reinterpreted by Mies van der Rohe, in Magdalena Droste’s (2010) words, each new director following the footsteps of the initial model but also, becoming “...formidable opponents and rivals in the process of intellectually defining the Bauhaus...” while distancing themselves from the original model and “...inventing their own Bauhaus.” But these stages can still be seen as logical elaborations on the initial model, and, since one can easily identify the strong conceptual inheritance between these periods, and essential structure remaining intact, one can easily be able to refer to the model as a whole.

In the old days, we all remember our professors saying that “the computers simply have no use in the design process,” of course not without evidence; once then, owing to their limitations, as a tool, they were shackling the designer. Since then, we have come a long way. The present situation that we came by at the very beginning of the 21st century is that, while, here and there, we are still discussing somehow prematurely, how we could integrate (or assimilate) digital technologies into architectural design, and question what to do with them, they have already been penetrated into the field, from many directions, imposing their own demands and conditions, dynamics, processes, and abilities, and perhaps more important, inabilities, already changing radically the way we represent, the way we design, even the way we think (or not be able to think). Being simply a pragmatic opportunity, and providing a brilliant set of potentials and possibilities, they were happily acknowledged and welcomed by the discipline. Apparently, this penetration was not innocent and not without consequences; digital technologies began to not –yet- dismantle, but transform the age-old institution of the design studio and consequently so-called “conventional models” of architectural education.

New Architecture is an “...inevitable logical product of the intellectual, social and technical conditions of our age.” Formulating and demanding such a change is one thing, but it cannot be achieved as a means of architectural production alone, but it requires “E training and preparing a new generation of architects in close contact with modern means of production...” These words are not from a digital design proponent, actually, they do not even belong to the century which we live in. It is Walter Gropius (1955: 6), in his *The New Architecture and the Bauhaus, trying to theorize Bauhaus*.

Then it is not surprising that, in a recent paper, Oxman (2008) argued we are witnessing a transformation that is analogous to what we have witnessed at the beginning of 20th century, when Modernism somewhat crystallized into “...a pedagogical model...” Bauhaus, “...evolved in a period of a similar major shift in theory and design.” At the “First Machine Age” a la Banham (1989), Bauhaus was a paradigm shift in the education of an architect, formulated as an answer to the changing conditions of the Modern era, now at the beginning of “the first digital age,” a la Oxman (2006), we are witnessing a similar change, this time from industrial to digital, providing a new set of conditions and demanding a consequent transformation, from Bauhaus to something else.

Assuming that such a transformation would be evolutionary in nature,² one must depart from the essential characteristics of the Bauhaus by challenging them with the specificities and demands of the digital design.

2 ...as opposed to revolutionary. Already constituted a substantial community, the proponents of digital design, with all their own journals, books, symposiums and congresses, began to develop their own conceptual and theoretical framework(s), their own standards of evaluation, tailored to match the specificities of digital design. This implies a radical break with the tradition of “design,” with an emphasis on the revolutionary nature of the concerned change, which actually each day, isolating digital design from mainstream design research and design theory. We believe, it is an escape from a conflict and a challenge, dragging and transforming digital design theory into a closed-off entity. Notwithstanding, there is still a possibility to incorporate digital design into what already exists which would be more fruitful owing to the fact that it brings us the possibility of reinterpretation and reutilization of an age old wisdom, which puts the emphasis on the evolutionary nature of the concerned change.

1. Built upon a slogan “Art and Technology – A new Unity,” Bauhaus happily acknowledged the “modern” and industrial means of production and the new technology; new tools and new materials.

Today, we can say the same thing for digital design as it is related with the digital revolution and the so-called information age. However, what we refer to digital design is essentially related with computers and computer software. For example, in terms of architecture can we really mention a “digital means of production,” or can we put the digital in the place of “new materials?” Therefore it is somewhat different from Bauhaus’ formulation of a new unity of art and technology perhaps demanding a new type of unity.

2. Apart from its strong ties with the industrial revolution and related issues, being a part of the modernism, Bauhaus have had a very strong ideological content. Seen from a wider perspective, architectural modernism saw architecture as an “Einstrument of philanthropy, liberalism, the ‘greater hope’ and the ‘greater good’” (Rowe and Koetter 1978: 3). This was a valuable content without which architecture ceased to exist. Bauhaus was not free of this belief; (architectural) design could change the world and create a new society. So in Bauhaus, the change was not essentially about the new forms or new architecture, but at the same time through them, a better human life.

Unfortunately, digital design and its related models of design –if not incompatible with, but lack such content. One can never hear or read something about the issues stated above within a discussion addressing digital design and its products, showing that the revolutionary character of the new (digital) design essentially lies in the “formal” content, namely the form of the designed object and the very processes that leads us to that “novel” form. Despite the fact that architectural design is essentially about human life, on such discussions one can rarely find a reference to this issue.

Actually, for these reasons, when we are talking about Bauhaus and its content, we are referring to architecture, while in digital design, essentially, form.

3. Bauhaus embraced a scientific and positivistic conception of design which puts an emphasis on the absolute new created as an outcome of work on function, not from, say, some type of earlier solution. Such an approach demanded a radical break with the tradition. They put the emphasis on students’ development of self-expression. Consequently, in Bauhaus, studies on precedents and past works are not permitted especially at the earlier stages of the education. In the education of an architect, the emphasis is put on the creativity of the student (it was believed that everyone is talented), which would, somehow believed to be surfaced through crafts education without reference to earlier solutions and earlier forms. One can detect an expressionism in the products designed by the students, (but unfortunately not in the Bauhaus architecture). That expressionism later turned into a constructivism (Droste 2010).

Descending from the same roots as modern architecture’s functionalism, digital design also relies on a scientific and positivistic

conception of the design. However, there are differences: first, function is replaced by “data,” as the determinant of form, no matter if this data comes from some rational or relevant, or from a totally arbitrary source. In digital design processes, say, wind can be of equal importance with the function. Second, the place of designer is radically shifted. In the modernist conception, it was always believed that work on function or program will “somehow,” solidify into a meaningful form (Summerson 1957). Now, the designer is like a programmer which sets the processes (or codes) which in turn this processed would transform the data into a form. It is almost like a dream of a classical functionalism, filling the “hiatus” between function (or in its new conception the data) and the resultant form.

Digital design, too, claims a break with the tradition. Actually, although this argument is essentially same with the earlier version, digital design expands it by claiming to produce “non-standard architectures,” departing not only from types, typologies, precedents, but also from so-called “standard architectures.” Consequently, an expressionism could easily be detected in the products, actually there is a striking resemblance between the computer produced products of digital design and products of the Bauhaus’ preliminary course. Different from the Bauhaus, this expressionism can also be observed in the architectural products. When it comes to something like a digital constructivism, we are still on a common ground.

4. One of the essential aspects of Bauhaus education was its emphasis on experiential learning. One must remember the words of Gropius saying that “Paper has become too exclusive a medium of exchange. The book and the drafting board cannot give that invaluable experience gained by trial and error in the workshop and on the building site” (Gropius 1955: 46). Here emphasis is on the “learning by doing” as an integral part of the education rather than a real world experience as something added later to the “academic part of the learning.” Learning by doing, a hands-on experience, a direct contact with the material and the tool was essential to the model, an indispensable element of the pedagogy. Here artist (or designer) is seen as some type of a craftsman.³ By experimenting with materials student is expected to acquire an understanding of “volume, space and color,” a technical skill (Gropius 1955: 51). He or she is expected to develop a form language which is required for expressing ideas.

Digital design, too locates itself with reference to so-called “paper-based” design approaches (Oxman 2008) (Oxman 2006), typically on the opposite corner. However, it does not stand on the corner where Bauhaus model stands. First of all, digital design is not about crafts and not about a hands-on experience with the tectonics, the material or whatever a hands-on experience implies. Similar to the Platonic drawing board both the Bauhaus and digital design opposes, it isolates the designer from making and building.

By nature, typically, if it is taken as a deterministic model, it is

³ See Bauhaus Manifesto in “Programme of the State Bauhaus in Weimar.”

also incompatible with trial-and-error learning; actually, in general, computers are about shortcutting things. This could be observed in the products of the students using computer software extensively: The computer helps the student to short circuit the architectural design process and to jump from the architectural problem to a final form, and with the shiny and attractive images produced, make her or him to believe what she or he created was a piece of architecture. Digital fabrication seems to be a feasible answer to this problem, but it puts a gap between the designer and the designed object.

5. Bauhaus encouraged “being a community” as an active part of the design education. There was an interesting network of students, young masters, masters, craftsmen and so on. Collaboration was an important part of its design pedagogy. It encouraged different crafts and disciplines to come together.

Digital design on the one hand promotes individuality, on the other implies possibility of a new and different type of community, permitting unprecedented collaborative processes with the help of the Internet and information networks. With this respect it has the potential to provide an advance on Bauhaus.

6. Development of standard types was one of the targets of the school. It was a social necessity, not an invention of their era, but a new interpretation owing to the change in methods of production (Gropius 1955: 15).

This is one of the points which digital design excels. Owing to productive and reproductive potentialities of the computers and so-called rapid prototyping, digital design is an illustrative case of Bauhaus’ dream on standard types.

3. Conclusion

Bauhaus was about change. Its founder, Gropius always rejected it being a “style,” or something solidified into a system or dogma. Then it would be totally against its grain to try to preserve Bauhaus as if it was a religious doctrine. It was formulated to be a flexible and adaptable model, an entity open to criticism and reinterpretation, of course by keeping its essence. On the other hand, so-called digital design has a great potential not to be missed, but showing great resistance to be incorporated with something else. Both entities require a critical reconsideration, actually, Bauhaus being already reviewed in this sense (Herdeg 1985) (Wolfe 1981), unfortunately digital design is still experiencing the joy of a type of “digital determinism.”

Once then Bauhaus happily accepted the new technology; new tools and new materials showing its openness to such incorporations. If taken as a new tool and providing a type of digital materiality, it could easily incorporate digital design. Bauhaus basically relied on workshops; it won’t be farfetched to say digital design could be one of such workshops.

One must know that digital design is essentially about form, and when we refer to its processes and products we are actually not referring to architecture or something architectural, but only a formal content. There is a misunderstanding in the evaluation of so-called non-standard architectures. It wouldn't be problematic if digital architecture was to revolutionize all aspects of architecture especially its programmatic and utopian content, not only form. In its present state, it should be reformulated as "non-standard forms," or "non-standard architectural forms." This does not mean it is unacceptable. On the contrary, its emphasis on free-play of form well fits to the Bauhaus pedagogy, so does its emphasis on the revolutionary aspects of form. In turn, there is a great chance that the ideological content of Bauhaus will provide the content for digital design to be evaluated as architecture.

Reliance on the scientific and positivistic conception of the design process, and on an epistemology and ontology that is incompatible with the nature of design is common to both Bauhaus and the digital design. Whether it was carried by computers or designers, design process is essentially a matter of trial-and-error, making and matching, or if we prefer a Popperian formulation, a matter of conjecture/analysis. However, this does not mean that it does not have, say, a computational content, or digital design has nothing to do with it. Trial-and-error as its learning model, Bauhaus could easily be reconsidered in this sense. In parallel, design always requires a body of prior knowledge, an established tradition, not only as a wisdom to start with but more important criticize and to evaluate what we have produced. This is essential to the things produced to be evaluated as a piece of architecture. What is new could only be meaningful (or could be evaluated as new) if it was embedded within an already existing cultural context.

Bauhaus' emphasis on experiential learning and crafts is still one of the basic contents of the present design pedagogy, of course with modifications. In this case there is no problem in incorporating digital design within Bauhaus: Digital design, if taken and reformulated as a digital craft, and computers as excellent tools for (fast and unprecedented) trial-and-error (learning and design) process. Of course, digital design should be incorporated with the conventional modes of making and tools. Actually, the paper-based design-Bauhaus and paper based design-digital design opposition is too weak to embrace and especially the latter formulated on an unwise assumption that conventional design operates by "sketching on paper." Design process is basically about externalization of design ideas by some means to be evaluated. In this sense apart from their own potentials and limitations, means of externalization such as by sketching, computer or physical modeling essentially have no difference in this sense.

Finally, as it was already stated, digital technologies, providing unprecedented collaborative processes with the help of the Internet and information networks, and rapid prototyping is readily applicable to the original model.

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The Information Department at the Ulm School of Design

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HfG Ulm / Information Department / Design education / Language / Communication

Ulm is known for its educational model, particularly for product design and visual communication. Yet the school's smallest department — Information — has hardly been discussed. It can be considered a leftover of an initially planned political school. However, it represents the will to integrate all aspects of modern life into one school. Bill tried to push the department into advertisement, but it was Bense who directed it towards information theory.

1. Introduction

The Ulm School of Design [Hochschule für Gestaltung, HfG] has been widely acknowledged for its pioneering model of design education, and has influenced design departments in many parts of the world. Today, the HfG's most renowned departments are product design, and visual communication — Ulm's biggest departments and generally the predominant disciplines of design. It seems only natural that until today, the smallest department of the HfG is hardly perceived at all, and has only been covered marginally in literature: the Information Department.

In total, only 25 students had been matriculated in the Information Department, of which only seven finished their studies with an HfG diploma. In spite of the students' moderate demand, the history of this department is revelatory for the Ulm School as a whole. Early HfG concept papers and curricular plans reveal controversies over the relation of design education and 'political method'. Initially planned as a standalone department for political method by the school's initiators, it was later — under the influence of designer Max Bill — replanned as a department for journalism and advertisement. However, it was Max Bense who finally had the most formative influence on the department. He introduced rigorous topics like logic, structural analysis of language, cybernetics, and information theory. Within the given context of pioneering product design and visual communication, the Information Department developed into what has been characterised as a 'kitchen of design theory' by Gui Bonsiepe [Krampen 2003: 159].

2. Prologue: Post-War Democratization and the Ulmer Volkshochschule

The plans for the Ulm School were driven by an anti-fascist, democratic impetus. Inge Scholl, the later initiator and founder of the HfG, and her younger siblings Hans and Sophie had initially been engaged in the Hitler Youth in Ulm. However, with the beginning of World War II, Hans and Sophie Scholl started to turn

away from Nazism and eventually became active resisters in the 'White Rose' circle. After being caught distributing anti-Nazi pamphlets, they were executed in 1943 [Zankel 2008]. Immediately after the war, Inge Scholl and Otl Aicher started to organize public lectures in Ulm to throw a light on the Nazi past, and to promote a political and cultural new beginning, taking up the humanism and anti-fascism of the 'White Rose' resistance group. By 1946, this led to the foundation of a community college for adult education (*Volkshochschule*), offering evening lectures mainly in literature, politics, philosophy, and theology, and also art and science.

3. Planning Phase: Shifting Relations between Politics and Design

One of the guest speakers of the Volkshochschule was Hans Werner Richter, initiator of the 'Group 47', the most influential association of avant-garde authors in post-war western Germany. Richter aimed for a 'humanist socialism' and the reinvention of truly 'universal universities' [Spitz 2002: 56-57]. In Scholl and Aicher he found kindred spirits with a hands-on attitude, quite different from often resigned German intellectuals, who — after the Nazis' industrialisation of war and death — saw an irresolvable contradiction between technology and culture, and therefore oriented back to classic pre-industrial German culture of 'Goethe-Schiller-Beethoven'. In contrast, 'the Ulmers [E] were attempting to rescue the concept of *Industriekultur* from Nazi corruption by regrounding it with humanist tradition of social responsibility and moral education' [Betts 1998].

Around 1949/50, Aicher, Richter, and Scholl developed concrete plans for a full time college — to be named 'Geschwister-Scholl-Schule' after the Scholl siblings. A typewritten synopsis lists seven major subjects: Politics, journalism, broadcasting, photography, advertising, industrial design, and city planning [Scholl 1950]. It also advocates a still up-to-date universal approach, which today would be referred to as 'interdisciplinary':

The time for exclusive professional specialization is over. Politics, science, art, and economics must be viewed in their integral relationship. Education for knowledge must be replaced by education towards unprejudiced *universal thinking*.

The chances for obtaining the necessary funding increased a lot when Bauhaus graduate Max Bill, in contrast to Aicher already an internationally renowned designer, architect, and 'concrete' artist, joined the planning team. The price for Bill's coalition was a substantial change of the school's focus. Bill succeeded in transforming the concept from a political school with integrated art, to a design school that integrated some political education. This became also manifest in the school's new name Bill had enforced:

Hochschule für Gestaltung [school of design]. This shift made Richter withdraw completely in 1950, leaving a big gap in the subjects of politics and journalism [Spitz 2002: 86, 95].

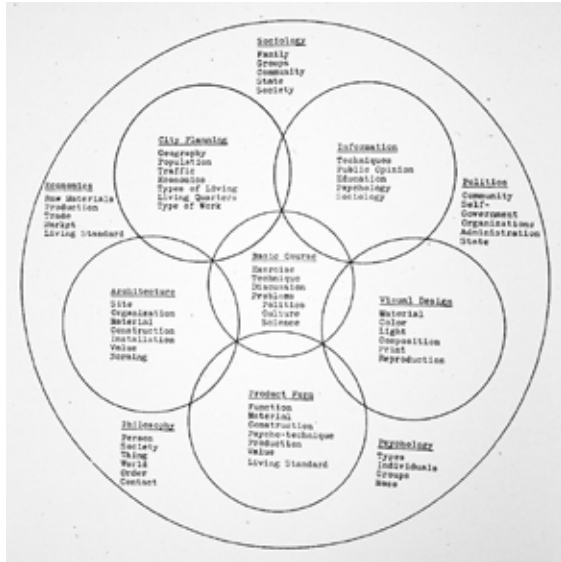


Figure 1. A diagramme from a 1951 concept script illustrates the school's universal approach [Scholl 1951].

4. 1953–55: A Beginning without Information Department

In 1953, the first students started their studies at the HfG. The construction work for the new school buildings had just started, so classes were still held in the Volkshochschule. In the first year all students took the 'basic course', so the first year could be used to plan and build-up the departments. Whereas other departments already had their leading figures, the Information Department was still lacking a full time head to push things forward. In an early HfG information brochure [HfG 1952], the yet non-existent Department was described with a focus on journalism and advertising:

The training is structured like an editorial office or the advertising department of a company. The basics of journalism and working methods are learned like they are necessary in practice. It is planned to expand the department into radio and television.

In a syllabus the general orientation was mainly towards politically responsible journalism, with a strong emphasis on practical work [HfG 1953a]. This was seen as a completion, or a rather a replacement, of traditional education of journalists at universities, which as such was hardly existent. The usual way of becoming a journalist was studying classic literature at university and adapting to the very different practice of journalism afterwards.¹ Being innovative at its time, the list of topics² reads not too extraordinary today:

1 Compare interview with Gui Bonsiepe in [Krampen 2003: 155] and [Kalow 1962].

2 The list has been shortened by the author.

- News, information sources, editorial, comment, review, interview, report, feature.
- Public relations, operating manuals, text and image, montage.
- Economy, business management, copyright law.
- Means of advertising, ads, placards, shop window, brands, packaging, brochure.
- Political science, constitution, parliamentarism, parties, unions, organizations.
- Opinion polls and statistics, interview techniques, test methods, market research.
- Copy text, typefaces, typography, photography, film, graphics, window dressing [sic!], exhibitions.

Max Bense had been teaching as a guest lecturer since the opening of the HfG in 1953 [Walther 2003]. The interim curriculum for 1953/54 lists Bense as lecturer for 'Aesthetics', and for a seminar on the 'Theory of Beauty, and the Mode of Being of Works of Art' [HfG 1953b]. Being a full professor of philosophy at Stuttgart University, Max Bense could only serve as a part-time department head. Still, he took responsibility for the curriculum development and tried to help finding someone appropriate to lead the department. In an updated version of the information brochure of 1955, Bense's influence becomes noticeable [HfG 1955]:

The Information Division, yet in an evolutionary state, is concerned with the problems of information and communication. Its sphere of action ranges from simple press reports via advertising and broadcasting to the results of cybernetics.

The focus is now set on problems of information and communication — which sounds noticeably more theoretic and scientific, less skill and craft oriented. The terms 'advertisement' and 'journalism' are placed back to a second sentence and complimented with 'cybernetics' — an emerging predecessor of computer science, based on information and systems theory.

After the withdrawal of Richter, attempts had been made to gain another progressive author to lead the department. In 1955 negotiations with avant-garde writer Arno Schmidt failed — mainly due to Bill's depreciatory concept of the department as a public relations service for the school, and a text provider for Visual Communication. Bill's view obviously was stuck in the 1953 program with its focus on journalism and advertisement, ignoring Bense's reforms completely. In her diaries, Schmidt's wife Alice describes how a meeting between Schmidt and Bill turned into a hefty quarrel, when Bill asked Schmidt to teach students how to develop 'sharp advertising copy and slogans' [Schmidt 2008]. It is circulated that Schmidt's answer back was analogous to 'Do not even think I will sell your nicely designed toilet lids' [Bonsiepe 2011].

5. The Bense Era 1955–58: Pumping Intellectual Matter into the School

Bense published his plans for the department in 1956 ('Texts and Signs as Information: An Experimental Curriculum for Information', Bense 1956a). In the introductory remarks the impending consequences on literature studies are addressed: 'A radical shift from traditional philology towards the measurement of information in all types of texts — be it utilitarian copy or artistic literature'. Also a close cooperation of the Information Department with the Visual Communication Department is announced, 'due to their shared scientific foundations found in semantics and information theory'. Bense divides the curriculum into two parts: Information Science and Information Practice. Whereas the description of Information *Science* fills more than two pages with detailed lists of 30 teaching subjects, Information *Practice* (i.e. journalistic text types, advertising copy etc.) is dealt with in only two sentences. A more than obvious emphasis on scientific and experimental topics at the expense of applied journalistic and commercial writing.

The planned curriculum displayed a novel approach to text work. Text now was to be examined under the aspect of how much information it contains, using means known from natural science. Emphatic philological interpretation of literature as pieces of written art was rejected. The liberal arts approach to text exegesis was to be replaced by precise analytic means like statistics, logic, and syntactics. In a way, this anticipated the direction the school should take with its science-oriented reforms of 1957/58. Just like artistic painting was regarded useless for visual com-

munication, an artistic approach to text was considered useless for contemporary verbal communication. Also in the exercises he proposed, parallels to Gugelot's modular approach to product design and Maldonado's assignments like 'grid surfaces, Paeno curves, exact-inexact' can be found. In Bense's experiments, text and language are not treated as literature, but rather as linguistic systems (Bense 1956a):

- Conversion of natural languages and artificial languages into precise languages.
- Experiments on grid systems, shortening techniques and montage techniques.
- Concentration and dispersion of form and topics.
- Syntactic and semantic shortening, compression, distortion, lengthening, alienation.
- Accidental and attributive descriptions, phenomenological reduction and deflation of meaning.

Of course Bense could not teach all of the 30 proposed subjects along with his duties in Stuttgart. He tried to fill gaps by recommending colleagues to teach in Ulm, among others Elisabeth Walther, and Abraham Moles (Walter 2003). They gave lessons not only in the Information Department, but also in shared scientific subjects for students of all departments. It is safe to assume that this input contributed to the school's tendency towards a greater integration of scientific methods into the design process. The dis-



Figure 2. 'Experimental Curriculum for Information' (Bense 1956).

pute over this development eventually resulted in Bill leaving the school in 1957 — a consequence that Bense regretted, since he always respected Bill and his ‘concrete art’ painting.

When Bense left Ulm in 1958 he concluded that he had been ‘pumping intellectual matter into the school for four years’ [Rübenach 1987]. His lectures on philosophy, philosophy of sciences, logic, linguistics, mathematical operations, statistics, and communication theory were a crucial contribution not only for the Information Department. However, his distinct topic of ‘Information Aesthetics’ — failed to connect with design practice. The proposed quantitative analysis of art and design artefacts did not show relevance, neither for ‘beauty’ nor for what now is called usability. A theory in which aesthetics are defined based on statistical probability, and aesthetic information is equalled with ‘negative entropy’ [Bense 1956b: 48–51] is not wrong in principle, but simply not helpful for solving design challenges.³

During its existence from 1955 to 1964, only 25 students have been matriculated in the Information Department. These students can easily be divided into two generations. A first generation of only five students joined the department in 1955 after the mandatory basic course and finished their studies in 1959. Whereas in other departments there was a continuous intake every year, there was almost no overlap between this first generation and subsequent students of Information. The second generation joined the department between 1959 and 1962, when Bense had already left. Hence, only five students got the ‘maximum dose’ of Bense input. Even if a sample of five is way too small to draw ascertained conclusions, it is noticeable that this generation took a distinct direction. Whereas the second generation later worked primarily in the area of journalism and publishing, the ‘Bense-generation’ shows a greater engagement in non-journalistic areas like design theory, design education, social sciences and communication, environmental design in their professional life [Müller-Krauspe 2003]. An individual graduate worth remarking is Gui Bonsiepe, who stayed in Ulm until 1968 as a docent and editor of the ‘ulm’ journal, which had a strong influence on the emerging design discourse in the 1960s.

Gert Kalow, a journalist who had been lecturer in the Information Department since 1956, headed the department after Bense had left. During Kalow’s tenure the department oriented again towards journalism [Kalow 1962]. After 1962, new students were not admitted anymore and the department was phased out in the following years [Müller-Krauspe 2007: 84].

6. Conclusion: Relevance for Design Education Today

The Ulm school was a place of controversy. A good amount of these controversies were about the question what design

³ An example from [Bense 1982: 328] may serve as an illustration: The amount of information H of a text of N characters of a repertoire of r elements equals: $H = N \cdot \sum p_r \cdot \log 1/p_r$. For instance, the word ‘t o m o r r o w’ therefore contains 32,88 bit of information.

should be, and how to teach it. Some of the controversies were fought out already in the planning phase: The dominance of design over political education, the commitment to cover all aspects of industrialised production and communication, and the integration of natural and social sciences into the curriculum. However, there was a recurring controversy about the *relation* between design and science. The result is valid until today: Design cannot be completely absorbed in science, and not at all in ‘artistic intuition’.

Design disciplines traditionally are defined by a material-oriented view: Product designers use solid materials, visual communication designers use paper and ink, digital designers use pixels and vectors. In this perspective, someone using language is a *writer* — not a designer.

In contrast, when we take the perspective of user activity, the conclusion is different. There are design artefacts — be they solid, paper-based, or digital — that are defined by *use processes*, and there are those driven by *communication processes* [Oswald 2010]. If we really want to educate *communication* designers, as opposed to *graphic* designers, then we should deal with all aspects of communication — visual and verbal. Otherwise design will continue to offer superficial auxiliary services.

Even if it has not become mainstream: The concept of integrating verbal and visual communication into one school was innovative in its time. Perhaps it is time to give the concept another try, it might help to reduce the designer’s lack of discursivity and could boost design theory once again.

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Search for meaning: a study on the Cranbrook Academy of Art's Graphic Design Department

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Cranbrook Academy of Art / Post-modern Design / Visual Language

This paper proposes to study the design process and design criticism in the well known post-modern moment in Cranbrook Academy of Art's Department of Graphic Design under Katherine McCoy's Co-Chairmanship (1971 to 1995). This research intends to show some problematic concepts, like Deconstruction, that surrounded the school and some visual examples of graphic experimentation that could be seen as visual meaningful ideas.

1. Introduction

The Cranbrook Academy of Art was built in Bloomfield Hills, in Detroit's Metropolitan area – state of Michigan, United States in 1930's by the conception and investments of George G. Booth and designed by the Finnish architect Eliel Saarinen who directed the academy in the earlier years. The school was conceived as an institute directed to the development and teaching of nine areas in the arts field, and since its foundation is an important educational center of innovation, research and creation. The Design Department was found in the late 1930's and had as faculty and alumni some very well known designers such as Charles and Ray Eames, Florence Knoll, Harry Bertoia and Eero Saarinen.

But only in the beginning of the 1970's, when Katherine and Michael McCoy were invited to co-chair the department, the graphic design production became relevant. The Design Department was divided in 2D, under coordination of Katherine McCoy and 3D under Michael McCoy. Both worked in the school for almost 25 years. Katherine McCoy, in interview, explained that this period (1971-1995) could be divided into three distinct phases: modern (when they started), transition or late modernism (formal post-modern), and the critical post-modern phase (when it became more theoretical and experimental – late 1970's to 1990's).

Throughout these periods we can perceive a formal and critical change, that first seemed to question modernism and later, the visual and verbal language. Although it is important to note that the whole Cranbrook's environment openness is an important factor and accordingly to BRAYBROOK (1985: 78) "Cranbrook was a living learning community where students and faculty could freely interact". In addition to that, (BRAYBROOK, 1985: 80) McCoy explains the informal and open structure of the school, and more importantly, the idea of having weekly critique sessions that provide the students to develop verbal abilities.

In the late 1970's some of the students and the faculty of Cran-

brook's Design Department questioned the modern functionalist approach, and especially during the 1980's new ideas were explored to make the designer also a producer of graphic meaning.

The students and faculty started to read and create graphic work that could engage text (verbal content) and graphic ideas and images. Some of these we can find in some graphic examples inserted in this article.

The idea that design form has meaning was not always unanimous. It must be remembered that until the 1970's design was mostly ruled by formal, functional and neutral assumptions. The modern approach seemed to sought graphic design as a neutral support to the text/content.

For this paper, we intend to discuss some of the graphic and theoretical ideas of Cranbrook's students and faculty in the critical post-modern phase (1978-1991), based on field research in October of 2010 where interviews were collected and also based on relevant selected bibliography.

2. Theory and criticism

One of the first graphic experiments having the theory as a background is the work made in 1978: the graphic design project for the special Issue of the *French Currents of the Letter of the Visible Language Journal* (Fig 1 and 2). The project was developed under the leadership of Katherine McCoy and the consultancy of Daniel Liebeskind, and made by the students Richard Kerr, Alice Hetch, Jane Kosstrin and Herbert Thompson. The special Issue brings articles with post-structuralism themes.

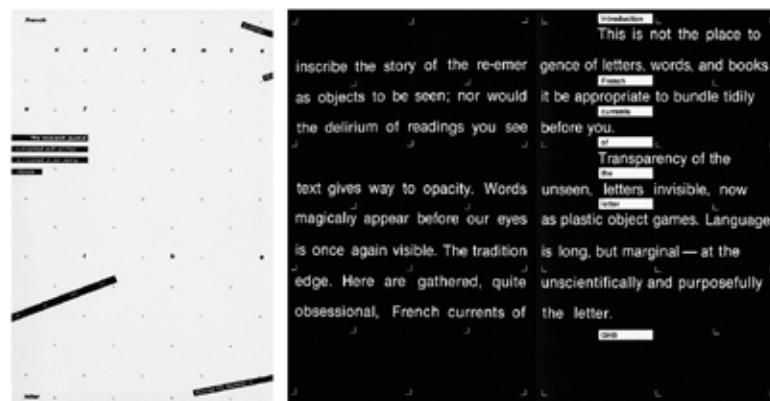


Figure 1. French Currents of the Letter: cover and introduction spread.



Figure 2. French Currents of the Letter: pages from essays 1, 5 and 8

The graphic format intended to reflect the reading and interpretation of the text of the Issue. Katherine McCoy, in interview, said that before this work they hadn't had the influence of post-structuralism.

The design team realized that they needed to understand the theories presented in the text to make a graphic interpretation, Richard Kerr argues in interview that: "We all needed a "crash" course in semiotics and specifically: the French avante garde. Daniel Libeskind gave us information for we better understand the academic articles"(2011).

Katherine McCoy explains the concept of the project by quoting the Issue introduction written by George H. Bauer:

"This is not the place to inscribe the story of the re-emergence of letters, words and books as objects to be seen; nor would be appropriate to bundle tidily the delirium of readings you see before you. Transparency of the text gives way to opacity. Words unseen, letters invisible, now magically appear before our eyes as plastic object games. Language is once again visible. The tradition is long, but marginal – at the edge. Here are gathered, quite unscientifically and purposefully obsessional, French Currents of the Letter" (Fig. 1).

The idea of making text into a concrete matter, in other words, visible instead of invisible, could have a parallel relation with the Derridean idea of Grammatology (Derrida 1976): to emphasize written language over phonetics, adapting it to graphic design and making it visible.

This project, by forcing the reader to pay attention to the text, making it extremely graphic, breaking with some design/editorial rules, brought something new.

Rick Poynor (2003) explains that:

As the reader proceeds through the eight essays, standard book conventions are progressively undermined. The text column expands to fill the inner margins, interlinear space increases, word spaces inflate until the text explode into particles, and footnotes, usually confined to a subsidiary role, slide across into the body of the text. The intention was to highlight the physicality of the printed word's presentation and to establish new non-linear connections between words, opening the possibility of alternative ways of reading. (Poynor 2005: 53)

The progression functions in a way that the first article of the Issue is perfectly readable, but from then on the articles begin to change, having the final (the 8th) a complete extreme, where the spaces between words and the leading make the verbal content looks like a spread out texture (fig. 2).

Richard Kerr, one of the students involved in the project, explained in interview that they had envisioned a ninth progression, where they would expand the words even more, just like the graphic treatment presented in the Issue cover, enlarging, for example, not only spaces between words, but between the letter units. However the idea was abandoned.

The students also wrote a design statement to explain the graphic strategy, that gave to the Issue complementary conceptual information, showing how the students were engaged not only to produce, but to argue. It shows a reflection about to the complexity of the articles related to the graphic design solution. But even with the extreme experiment of text and reading in the design, Katherine McCoy explains in interview that:

We sent the design concept with the eight formats to the Visible Language editor, Merald Wroldsted, for his review, and we

wondered what he would think about the reading difficulty of the last two essay formats. So we were very pleased when he called me and said the design was brilliant! He was completely supportive and instructed us to proceed with the final artwork for printing as quickly as possible. However, I always did wonder if the authors of the last two essays were unhappy that their writing was so difficult to read.

Beside this introductory work (French Currents) that mixed theory and graphic design, the Department became really well known by the end of the 1980's and beginning of the 1990's for the experiments involving new ideas of working with graphic design, exploring the interrelationship between text and image. Several authors claim that those Cranbrook experiments were mainly inspired by deconstruction and post-structuralism.

They were, indeed, reading and applying theory to discuss and produce graphic work. In 1990, the book *Cranbrook Design: The New Discourse*, was published to show works from the exhibition of the same title. In the book, we have, besides the work produced in the 1980's from students and faculty, some theoretical articles that reveal new ideas in graphic design. One of the articles written by Katherine and Michael McCoy explains this new approach and the searching for meaning in graphic work:

New influences rapidly began to appear in the Design Department, centered around reading in post-Structuralism French literary theory and post-Modern art criticism. The emerging ideas emphasized the construction of meaning between the audience and the graphic design piece, a visual transaction that parallels verbal communication. Building on the linguistic theories of semiotics but rejecting the faith in the scientifically predictable transmission of meaning, these ideas began to have an impact on the student's graphic design work. New experiments explored the relationships of text and image and the processes of reading and seeing, with texts and images meant to be read in detail, their meanings decoded. Students began to deconstruct the dynamics of visual language and understand it as a filter that inescapably manipulates the audience's response. (MCCOY 1990: 15/16)

In the text above we have the declaration from the McCoy's about the post-structuralism influences in the deconstructing of the dynamics in visual language. And they introduce the idea of the construction of meaning between the graphic piece and the audience. As we can interpret in the two student's posters explained below, one can see several meaning games at play in the work. These are not always easy to interpret, making some critics skeptical of this idea of audience participation. Also the works below intensively show the inner background of the designers which could be seen as the author's personal content.

The Scott Zukowski's poster from 1986 (Fig. 3) has graphic and verbal elements, that in the first sight, seem distant from the context, are very ambiguous; but after Katherine McCoy's explanation, the work seems to tell a story. There are several double coded images and text, like the word "LOAF", the image of a lunch case, the image of a relaxing chair and the text "He is an idle man". The use of all elements could tell to the observer that maybe "LOAF" describes a person who is idle and relaxing (or lazy). But the other element, the traditional factory worker's lunch box, according to Katherine McCoy in interview, could mean that the



Figure 3. In order: Scott Zukowsky "Loaf" and Scott Santoro "Find" Posters

loafing person is a hard worker. However, the elements are quite dark for a person who is happy about being at home just relaxing. McCoy explains that Scott Zukowski made this poster to his dad, not because he was lazy, but because he had lost his job in the factory. The poster is about unemployment.

The FIND poster of Scott Santoro¹, 1987 (Fig. 3), is another double coded work. Santoro appropriates two photographs that, according to Katherine McCoy in interview, looked like two male genitals. In the first photo there is the word "Findlay", town's name in the state of Ohio. In another context "find lay" can be slang for "look for sex". Below the images there is the textual information, with the word "FIND" in evidence and below the text "Lounge, February 13, 10 pm". This was a poster developed for a Valentine's Day party. The secret message is "go to the lounge (party) and find a lay". Katherine McCoy explains that the image in the middle, a plumbing system, is the kind of imagery that Santoro often experimented with because of the plumbing background in his family (his father was a plumber and Scott often assisted him as a boy). The designer of the poster also wrote a text called *Plumbing design*, where he explains the relation between his own family background and how it affects his design process. Santoro explains:

The FIND poster was designed for a St. Valentine's day party with a water theme (as in buckets of it -everyone was going to get wet they said). It's the first instance where I deliberately incorporated plumbing imagery into my design. Here a sexy valve with Egyptian hieroglyphics (because water was so fundamental to that society), and blunt language that read: FIND IN LOUNGE February 13, 10pm. All very double-coded (Santoro 2010)2.

We must also remember that in the 1980's and 1990's the Cranbrook work was widely published. A number of articles were written about the school, like Lupton's "The Academy of Deconstruction" for *Eye #3* magazine. Lupton's concept seems to stigmatize and generalize the school's approach. She shows

1 Student between 1986 to 1988

2 Available on: [http://www.worksight.com/plumbing design/Manuscript_Plumbing%20Design_Brno_2010.pdf](http://www.worksight.com/plumbing%20design/Manuscript_Plumbing%20Design_Brno_2010.pdf) - accessed in 5th of April 2011.

the pioneer theoretical approach of the school, that was diverse, but the title seems to privilege Deconstruction Theory. Besides Lupton, also Chuck Byrne and Martha Witte [1990], in their article about Deconstruction in Graphic Design, write about the importance of literary theory influence to graphic design in Cranbrook. (Byrne, Witte 1990: 251)

Rick Poynor [1991], in his book *Typography Now: The next wave*, shows some graphic and typographic works that explores the break with traditional typography. He argues:

Cranbrook has been at the forefront in exploring the dense, complex layering of elements that is one of the most salient (and frequently criticized) characteristics of the new typographic design. Unlike the earlier work of the New Wave Designers, this is not simply a formal exercise in collage-making; the method arises directly from an engagement with content. The Cranbrook theorists' aim, derived from French philosophy and literary theory, is to deconstruct, or break apart and expose the manipulative visual language and different levels of meaning embodied in a design, in the same way that a literary critic might deconstruct and decode the verbal language of a novel. (Poynor 1991: 13)

In that time the deconstruction term could be over-emphasized, as the criticism defined Cranbrook as the school that followed deconstruction as a strict discipline. In fact, the students and faculty had access to critical texts, but it was just one of a number of theories discussed in Cranbrook. The term was clearly in vogue, having as one example the Mark Wigley and Philip Johnson's Deconstructive Architecture exhibition in the Museum of Modern Art in New York City.

Julia Moszkowicz [2011] in *Lost in Translation: The Emergence*

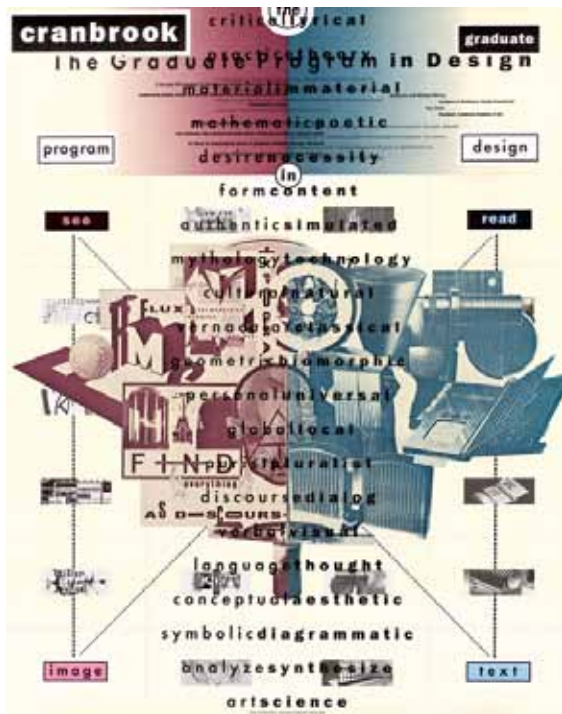


Figure 4. Design Department Poster designed by Katherine McCoy

and Erasure of 'New Thinking' within Graphic Design Criticism in the 1990s, recaptures the ideas about the criticism and post-modern investigation, especially in Cranbrook during the 1990's and uses as reference point, Lupton's [1991] and Mike Mills's [1992] articles for *Eye* in 1992. According to Moszkowicz, Lupton's article criticizes Cranbrook work under accusation of authorship intentions.

Despite an initial appreciation of the intellectual aspirations of Cranbrook Designers, Lupton accuses the Department of Two-Dimensional Design of ultimately nurturing an 'artistic self-contained' genre that fails to look beyond the graphic artifact to the world of business and media. (Moszkowicz 2011: 244)

The author, in this article, also works with Mike Mills' argument, that seems to demonstrate enthusiasm for the Cranbrook's intellectual approach, but criticizes the same. (Moszkowicz 2011: 246)

Another famous graphic work, this one made by Katherine McCoy, drew attention to criticism as it apparently sought to sell deconstruction theory. The poster publicizing Cranbrook Design Department's program – 1989 (Fig. 4) was considered by Poynor as influenced by Derridean Deconstruction (2003: 51). The author describes the use of the opposite words in the middle of the poster. However we must remember that, actually, Derrida questioned the opposite hierarchies to prove its arbitrariness.

Katherine McCoy explained in interview that they weren't really opposites, but word-pairs with related conceptions. The poster is very interesting also for the content being suggested by the conceptual word-pairs and with the see/read/image/text diagram, that is one of the key ideas: to learn how to explore relationships between text and image and to learn how to read and see.

The key idea to understand the theoretical approaches in Cranbrook is to understand that the Department was a free thinking environment, where the students and faculty had access to several theoretical references. The influence of some of those post-structuralist and post-modern references had spread out and were studied in many other schools, besides Cranbrook. As teachers, Katherine and Michael McCoy supported the individual search of each student to it find his/her own voice. That principle differed from other schools with confined methods, where all students worked with the same references. They believed in mutual search [by exchange] and not in mutual conclusion [where everyone needed to have the same result]. (McCoy 1990: 14).

Conclusion

As we could understand in the making of this article, the Cranbrook Academy of Art was really a school where the debates and the influence of theories were very important to work experimentation. However, deconstruction was not the main base. In some projects like the posters FIND and LOAF one can clearly see the author's personal background, and if some critics have defined the designer authorship strategy of Cranbrook as being a post-structuralist strategy, they were right in some way. Despite of that, we must always remember the importance of Cranbrook's

openness and the search for meaning in design, even if some projects were complex or even ambiguous.

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(not)Solving (non)problems: Design contributions to Education in a complex world

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Problem solving / Complexity / General Education / Epistemology of Design

Considering that the concept of problem solving, although recurring in the context of general Education, is still very differently understood by its actors, this paper posits that the 40 years of discussions about the congruence of the terms “problem” and “solution” with Design practice represent an acceptance of the complex (not complicated) nature of the field that can contribute to the development of a culture of complexity in general Education.

1. Problem-solving and complexity in general Education

General Education can be characterized by its intrinsic goals, of value in themselves – different from the extrinsic ones of specialist Education –, which means that it should prepare young people for the different social roles they will play during their lives, and not for a specific one, such as a profession. In this sense, the choices that determine the objectives of the educational systems worldwide and the curriculums they adopt are associated with ideas about what kinds of human beings are desirable by a certain society (Silva, 2005: 15) and, therefore, with understandings about what constitutes the present and what will be indispensable in the future.

Alvin Toffler (1980) argues that the moment we live in is a transition period between two waves that represent important structural changes in the world: the Industrial Era and what is generally called “Information Age” or “Technological Revolution”. The tension between these two waves is evident in Education, since schools, as we know them, were established to raise desirable citizens to the industrial context, and its disagreement with the perspectives and values of contemporary society, often personified in the behavior and interests of students, is increasing and each time clearer.

This anachronism is accompanied by all sorts of propositions to reform or transform the educational systems, which seem to have certain concerns in common. Many of them stress that, instead of just receiving and storing information transmitted by the teacher, students should develop competences and skills that are transversal to the different domains of knowledge in order to enable them to use what they learn in schools in real-life settings, and consequently prepare them to deal with the complexity that is inherent to it.

In this context, the idea of preparing students to be competent problem solvers is recurring in documents from governments and organizations related to Education¹, especially in the OECD's² *Program for International Student Assessment* (PISA) framework, where it symbolizes the capacity of using multiple understandings to deal with real and complex situations. Since 2003, the Program, which evaluates educational systems of over 60 countries, not only assesses students' reading, mathematics and science literacies, but also their problem solving skills, claiming that it ‘provides a basis for future learning, for effectively participating in society and for conducting personal activities’ (OECD 2003: 154).

However, in Education, the concept of problem solving is traditionally associated with its origins in the teaching of Mathematics and with repetition and memorization of procedures to be applied in abstract and decontextualized situations. Although current discourses in Math Education have a more contemporary view, this new approach to the notion of problem solving, as a cross-curricular competence related to cognitive development, is relatively recent, what makes it very differently understood, not only by Math teachers but by educators in general.

The concept of “complexity” is very important in this scenario since it is often used to describe the situations students have to deal with in real-life settings, which are the ones that require the use of problem solving skills. According to Morin (2009), Perrenoud (2001) and Ardoino (in Morin 2001), the numerous issues that are faced by Education today can be attributed to the lack of acceptance of the complex nature of educational relations and systems, as well as of life as a whole.

The trivial usage of the adjective “complex” that opposes it to notions of simplicity and clarity and treats it as a synonym of “complicated” presupposes negative nuances of something that is not yet organized, that is waiting to be simplified. As sophisticated as it may be, the “complicated” is always enclosed within the limits of *here and now*, like a puzzle that regardless of its subtlety, has answers that can be considered right or wrong. On the other hand, the “complex” is open to the eventualities of *what is to come*, and one of its defining characteristics is that it is at the *base* of things, thoughts, actions and organizations, which means that we cannot get rid of it or disentangle it to a

1 Such as the Brazilian curricular framework – Parâmetros Curriculares Nacionais (Brasil 1997), the Partnership for 21st Century Skills' framework (P21 2009) and the European Union's recommendation Key competences for lifelong learning (European Union 2012).

2 Organisation for Economic Co-operation and Development

“non-complex” state (Arduino in Morin, 2001: 550). This impossibility incurs in the emergence of aspects that were considered antagonistic before, and now have to be thought together.

The current model of Education is still based on principles that favor a culture of denial of paradoxes, conflicts and uncertainties that are intrinsic to reality. It separates what is connected, it unifies what is multiple, and eliminates anything that brings disorders or contradictions to our understanding, portraying living and social phenomena as results of linear causality (Morin 2009: 18). In this context, the different understandings held in general Education on the idea of problem solving can either be related to a “complex” or a “complicated” view of the world and of the problems students are encouraged to solve.

2. Problem-solving and complexity in Design

In the field of Design, formulations on the concept of problem solving are intimately related to epistemological and methodological discussions that in the last 40 years have been changing understandings in the area. Since Herbert Simon emblemized Design as devising ‘courses of action aimed at changing existing situations into preferred ones’ (1984: 129) in the 1969 book, *The Sciences of the Artificial*, which is an analogous description to the one used in Cognitive Psychology to characterize problem solving, many talk about Design as a problem solving process. Nevertheless, it seems that after Simon, efforts from different authors in the field have been towards comprehending the singularities of this process in the concrete activity of designers, questioning the concepts of “problem” and “solution”, as well as the path from one to the other.

The distinction made by Rittel & Webber (1973) that Design problems are *wicked*, instead of *tame* like the ones scientists deal with, was the first landmark in this trajectory of questioning, as it contested the growing tendencies to rationalize Design methodology strengthened by the *Design Methods Movement* of the 1960's. The authors sustained that, in Design, problems are ill-defined and they are never solved in a definite way. One cannot first understand the problem and then search for a solution. Defining and solving the problem are parts of the same interdependent process where the formulation of the problem is the problem (Rittel & Webber 1973: 162). The idea that designers deal with *wicked* problems became one of the “canons” of the field, and its acceptance was later reinvigorated by the article *Wicked Problems in Design Thinking* (1992) in which Richard Buchanan associates it to the *indetermined* (not undetermined) nature of the subject matter of Design (1992: 16-7).

A deeper questioning on the matter of problem solving was put forward in the 1980's by Donald Schön (2000), who observed the practice and the teaching of Design in order to elaborate a perspective on educating “reflective professionals”, the ones that are able to deal with unexpected, conflicting and unique aspects of real-life situations. The author proposed an “epistemology of practice”, putting trust in the tacit knowledge that emerge

in these instable moments, and the replacement of the ideas of “problem” and “solution” for “situation” and “construction”, based on an internal coherence that is subject to constant revisions according to the dialogue that is developed during the action. Schön's concept of “reflective practice” is influential in many fields, and in Design, his formulations can be understood as a better succeeded move from an objectivist view, in which ‘the distinction between the methodological and epistemological realms is no longer necessary or even relevant’ (Findeli 2001: 10).

More recently, approaches from Richard Coyne (2005) and Alain Findeli (2001) update the comprehension of problem solving in a way that is more adjusted to the paradigm of complexity described by Morin, Perrenoud and Arduino. Coyne revisits Rittel & Webber's article and argues that there aren't two kinds of problems, but that *all* problems can be considered *wicked*. According to the author, the understanding of some problems as *tame* is ‘incidental to the entire context of motivations, commitments, and proclivities’ (Coyne 2005: 8) by which solutions are socially decided and rules are conventionalized and adopted. The well-defined problems would be versions of diminished “wickedness”, applicable to contexts in which we sometimes choose to make up formulations in terms of goals and constraints (2005: 8-9).

This notion is similar to Arduino's (in Morin 2001: 551), when he says that a dichotomy in universe between simple and complex things seems unlikely. To him, conceptions and representations are properties lent to the objects by us, and therefore it would be more accurate to say that what exist are data and ideas that we elaborate *regarding* these objects, which means that we should reflect upon the subjects' perspective instead of on the object itself. The world observed through its regularities can be simple, but dealing with complexity presupposes being able to apprehend the heterogeneous scenario and to maintain perspectives that normally would be considered antagonistic together. Thus, some people would be more inclined to deal with problems observing its complexity, and others to surround themselves with constraints and specific methods. In this sense, Design can be identified as a favorable field to the construction of perspectives that are able to observe and value conflicting aspects of different situations, while other professional or scientific areas that still work with deterministic conceptions can be considered unfavorable.

Alain Findeli (2001), for his part, proposes a ‘new logical structure of the design process’ (2001: 10) in which he substitutes the words “problem” and “solution” by states “A” and “B” of the same system:

The designer's task is to understand the dynamic morphology of the system, its “intelligence.” One cannot act **upon** a system, only **within** a system; one cannot act against the “intelligence” of a system, only encourage or discourage a system to keep going its own way; state B of the system is, among various possibilities, the one favored by the designer and the client according to their general set of values; state B is only a transitory, more or less stable, state within a dynamic process, never a solution; the production of a material object is not the only way to transform state A into state B; and since the designer and the user also are also involved in the process, they end up being transformed, too,

and this learning dimension should be considered as pertaining to the project. (Findeli 2001: 10)

According to Findeli and the other authors mentioned in this article, the expression “problem solving” doesn’t seem to be congruent with the reality of the daily practice of Design. Problems aren’t exactly “problems” if one recognizes the complexity inherent to each and every situation, and that eventual characterizations of simplicity are due to sets of motivations, commitments, and proclivities applicable to contexts in which we sometimes choose to use this kind of approach. Solutions aren’t exactly “solutions” once the fundamental characteristic of everything that is man-made, everything that is artificial, is that it *could be other* (Dilnot 1998: 8), and not a definite, irrevocable answer. The solving process, in this sense, can be understood as a dialogue with a complex situation, in which its conflicting aspects are recognized and some of them are selected as relevant on the basis of an internal coherence and the general set of values of the people involved, and not on the tranquilizing rigidity that lies in the application of a familiar method or in the certainties of an illusory objectivity.

3. Final considerations

According to Perrenoud (2001:47), the acceptance of complexity ‘isn’t a purely personal choice, it is a dimension of the culture of a society, a profession, a teaching institution’³, which means that it is imperative to be in an environment that favors complexity in order to build a perspective that is sensitive to it. In accordance to the theoretical references presented, we believe that the transformation in the understanding of the idea of problem solving in the last 40 years represents that the field of Design has come to accept the complex (not complicated) nature of the situations it deals with, and also the growth of a cultural dimension that allows students and professionals to develop new ways of comprehending and acting towards reality.

More than proposing that students in general Education be able to “solve problems” as way of preparing them to real life, what should be in question is: to what extent the culture of schools favors students to develop a posture towards real-life situations that enables them to think about them in their complexity? To what degree is it promoted a perspective capable of looking at this complexity not as something one has to “deal” with, as if it were an abnormal or defective characteristic, but as a substantial ingredient to any learning or creative experience?

In Design situations, like in the ever so mentioned real-life situations, it is not possible to “solve” anything and neither it is about “problems” that can be defined beforehand, and the change in posture is exactly in not perceiving this realization as something bad or discouraging. It is a change similar to what Ardoino describes as a move from a universe of “holes”, understood as gaps or insufficiencies that, at least theoretically, could be fulfilled in the future or in another life, towards an acceptance of an

³ não é uma escolha puramente individual, é uma dimensão da cultura de uma sociedade, de uma profissão, de um estabelecimento de ensino (freely translated to English by the authors)

“emptiness” that will never be satisfied, but past initial frustrations and denials, constitutes ‘one of the most powerful stimulus of human experience and knowledge’⁴ (Ardoino in Morin 2001: 554).

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The role of typeface categorization systems in the typographic education of the printer: a corrective legacy still with us today

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Classification / Typeface Design / Vox / Nicolette Gray / Historiography

This paper traces the origins of current classificatory tools to the early typeface categorizations developed for use within the printing trade over a century ago. It identifies a set of corrective values underpinning these early categorizations passed on through the influence of the Vox system and a problem of bias. It locates in the scholarship of Nicolette Gray, an alternative perspective in constructing more representative overviews of typeform design.

1. Introduction

Categorization systems, often formalized into proper classifications, are a key feature of the typographic education toolkit, being used in both the synchronic and diachronic representation of the type design field, and also to facilitate an understanding of the visual forms of Latin typefaces especially. Of the more formal classifications developed, the Vox system (Vox: 1954 a & b) has provided a particular point of international reference.

Analysis shows, that the origins of the categorization system underpinning the Vox system can be located in the typeface categorizations as developed initially by printers, later typefounders and scholars, in Europe and North America at the end of the nineteenth and start of the twentieth centuries. Yet, these early categorizations can be shown to embody a set of commercial and corrective aesthetic values contemporary with their original publication dates. More particularly, they exhibit a descriptive bias to text typefaces at the expense of advertising forms.

Alternative views, however, were in existence. Nicolette Gray made a study of advertising typefaces of the nineteenth century (Gray 1938), from which she was able to offer new insight into the formal invention of such types in relation to subsequent developments in the broader field. Rediscovery of this aspect of past practice provided a long overdue challenge to existing historiographies and opened up possibilities for re-contextualizing subsequent formal tendencies in typeface design, arguably key to developing more appropriate overview tools for the educational contexts of today.

2. Categorization tools for educating the printer

The categorization of typeforms grew out of a changing climate in production, when, during the nineteenth century, printers experienced an intense broadening in the range of typefaces at

their disposal. Alongside the existing book styles and sizes, new display styles were introduced for setting at much larger sizes. Type styles also began to be deliberately 'revived' from earlier periods. However, as these typeforms were being introduced there was little consistency between manufacturers in the use of terms to describe them. Sans serif types, for example, were variously marketed as 'grotesque', 'sans surryphs', 'gothic', 'doric' and even as 'egyptians' though the latter term was more familiarly associated with typeforms with slab serifs. (Gray 1976: 194) It became increasingly necessary to find a way of ordering type: to ease communication between printers and clients, and as an organizational aid within the printing trade.

To help printers negotiate these new developments, two new publications were, by the turn of the new century, offering typeform classifications: *Practical printing* (Southward 1898) and *Plain printing types* (De Vinne 1900). Very much in the genre of trade manuals, these volumes reflected a very practical concern with application, written for printers by printers and using the language of practice, as it would have been familiar to the intended readership. The emphasis in classification is formal and functional, the latter especially clear (De Vinne 1900: 192–3). The scope of classification is restricted to contemporary types in common use. In contrast to the very UK-focused Southward, De Vinne included types in use both in Britain and the United States, the rigor of his survey effectively introducing type design as a new area for scholarly study.

The need to order types was not restricted to printers alone and type manufacturers soon took on the categorization challenge themselves, though the earliest foundry systems were intended for archive contexts not the commercial market. In 1903 Thibaudeau devised a system for the historic material of the Peignot foundry in France (Thibaudeau 1924), with Bullen, Librarian for the American Typefounders, publishing his system between 1911–12 (Bullen 1911–12). Bullen's intention in this was not simply the tidying of history. Rather he introduces an analytical approach for better understanding typefaces as forms, so that once understood, they could be used to better effect (Bullen 1911–12, vol. II no. 3: 173). Here we see a shift in agenda from that of Southward and De Vinne in the explicit intent to improve printing practice through education. Although defined differently, the basic categories of Bullen's system differed little however, from the common-usage terminologies of theirs (fig. 1)

Bullen's advocacy of the qualitative benefits of a more informed approach to the variety of typefaces available was echoed by printer D. B. Updike, in the introduction to *Printing types* (Updike

Southward (GB) 1898	De Vinne (USA) 1900	Bullen (USA) 1911–12
<p>Body or text types</p> <p>The <i>modern face Roman</i></p> <p>The <i>old style</i>, or <i>Caslon Roman</i>, otherwise called <i>Caslon Elzevir</i> or 'old face' to distinguish it from modern imitations</p> <p>The <i>modernised old face</i>, commonly called <i>old style</i>.</p> <p>The <i>Jenson style roman</i> or 'Venetian' founts</p> <p>The <i>French old style</i></p> <p>To these may be added types of the kind which founders call 'cut on the back', based on a style invented by the Basle printer Froben.</p> <p>Fancy or display types</p> <p>Ionic (Clarendon, etc)</p> <p>Sans-serif (doric, grotesque)</p> <p>Scripts (rondes and character scripts)</p> <p>Black letter</p> <p>Skeleton face</p> <p>wide (extended, expanded)</p> <p>narrow (condensed, elongated)</p> <p>inclination forward and backward (back slope)</p> <p>lining, blocking, shading, rimming, outlining, floriated, face tinting, grounding etc</p>	<p><i>Roman</i>, including: old style; modern face; modernised old-style; Modern faces of roman letter eg scotch-face, condensed french-face, compressed face, round faces, light faces, etc.</p> <p><i>Italic</i>, a simplified style of disconnected script. Its capitals differ from roman mostly in their inclination.</p> <p><i>Script types</i>, imitations of different styles of handwriting, but every one of them [...] modelled on some fashion of roman letter preferred or used by early copyists.</p> <p><i>Black-letter</i>, a degenerate form of roman, in which angles are substituted for curves.</p> <p><i>Gothic</i>, without serifs, the simplest and rudest of all styles, seems an imitation of roman capitals cut in stone.</p> <p><i>Italian</i>, a roman in which the positions of hair-line and thick-stroke have been transposed'.</p> <p><i>Title, or fat-face</i>, a broad style of roman with over-thick body-marks.</p> <p><i>Antique</i>, a roman in which the lines of all the characters are nearly uniform as to thickness, with square corners and of greatly increased boldness.</p> <p><i>Ornaments</i> of every style, and even the newest varieties of eccentric types, show some conformity to the roman model.</p>	<p>Latin</p> <p>Italic</p> <p>Script</p> <p>Texts or black letter</p> <p>Roman</p> <p>Body or book types</p> <p>old style roman</p> <p>modern Roman</p> <p>Display types</p> <p>gothic</p> <p>antique</p> <p>ionics</p> <p>old style antique</p> <p>old style antique/ionic</p> <p>latin</p> <p>french ionic</p> <p>french antique</p> <p>egyptian</p> <p>runic</p> <p>celts</p> <p>'fancy' or 'ornamental'</p> <p>Publicity types,</p> <p>'a new classification [...] includes many admirable designs, such as Cheltenham, Della Robia, Pabst old style, Bewick roman, which are unsuitable for the body of periodicals or books of standard literature, but which have a limited use in books of luxury and a widening use in the field of commercial publicity.'</p>

Figure 1. Typeform categorizations of Southward, De Vinne and Bullen

1922: xxxv), the first extensive historical overview of type design. The emphasis of the categorization underpinning Updike's overview charted the morphological progression of typeform against geographical location and period, though the scope of the work was restricted to book types.

Other historically determined overviews followed: Morison's *On type designs past and present* (Morison 1926), also bookish in emphasis and *Type designs* from Johnson (Johnson 1934). Along with Updike, such overview texts became seminal reference. Within these overviews, the basic principles of typeface categorization are still at work, although in a perhaps less explicit way than self-titled 'classification' systems. And while not intended as proposals for more general use, these overview categorizations (fig. 2) maintained their seminal status and the similarities in both content and emphasis they share with each other and those that followed indicates the extent of this influence. This is especially true of the Johnson categorization as compared with that of the later Vox system (fig. 3).

3. A corrective legacy

Yet, these early categorizations in which lie the structural origins of the Vox system, are themselves underpinned in their structural emphases and objectives by a set of values contemporary

with them. Of particular significance is a narrative emphasis and detailed descriptive bias typically afforded to 'roman' types (ie intended for books). The morphological shifts between iterations of roman are noticeably attended to in the categorizations of Southward, Morison, and Johnson and later in the Vox categories of 'humanes', 'garaldes', 'reales' and 'didones'.

With book production remaining the main occupation of type design until the late eighteenth/early nineteenth centuries, in quantitative terms the production of roman types had dominated for the greater period of type history. That such an emphasis should be reflected in categorization is perhaps not surprising, though the distribution of material across all categories was found not to be operating on such a quantitative basis. What we find is that roman typefaces are afforded a detailed level of differentiation not afforded to 'display' types (ie developed for advertising contexts), even though the latter show a greater breadth of formal invention.

So-called Venetian/Jenson-style/humanist/humane types are formally distinguished from old face/garalde, even though the formal differences are very subtle and even though such a distinction is only appropriate for a very few types. However, a basic distinction, which can differentiate between large numbers of slab serif types on the basis of their serif structure is not made,

Updike (USA) (1911–6)	Morison (GB) 1926	Johnson (GB) 1934
Types of the C15th in: Germany Italy France Netherlands Spain England	(The Carolingian miniscule) (Gothic and humanistic hands) The first gothic types (The Neo-Carolingian hand) The first humanist types Nicholas Jenson Aldus	Gothic types Roman, <i>The venetians and old-face group</i> The evolution of the modern-face roman Old-face types in the Victorian age Italic, <i>the old-face</i> Italic type in the eighteenth century Script types Early advertising types, <i>fat faces and egyptians (and sans serifs)</i>
The Aldine italic	The origins of ‘Old face’ The Aldine italic The Arrighi italic The Garamond Old face Robert Granjon Christopher van Dyck	
Types between 1500-1800 in: Germany Italy France, with specific index reference made to royal types, the <i>Imprimerie Royale and the Fournier family</i> . Netherlands, with specific index reference made to the work of the <i>Plantin press and Elzevir</i> . Spain England, with specific index reference made to the period from <i>Pynson to William Caslon, William Caslon and the Caslon foundry, John Baskerville, and Wilson, Fry, Martin and other foundries</i> .	The Dutch letter ‘Modern’ face Phillipe Grandjean P S Fournier J M Fleischman The Caslons John Baskerville John Bell’s Modern The influence of calligraphy F A Didot Giambattista Bodoni The effect of the Industrial Revolution	
Types used in the American colonies, and some early American specimens.	New ‘Black’ letters The Caslon revival Louis Perrin	
Nineteenth century ‘classical’ types, Bodoni and the Didots.	The Gothic revival William Morris Private Press types	
English types: 1800-1844	J F Unger	
Revival of Caslon and Fell types.	The Brush-drawn letter German type design American type design French type design	
English and American revival of early typeforms and its effect on continental types.		

Figure 2. Early historical categorizations of typeforms

if such types are acknowledged at all. Morison omits them entirely, while the Vox system simply groups ‘clarendons’ or ‘ionics’ (that is bracketed slab serifs) and ‘egyptians’ (that is square-ended, unbracketed slab serifs) together as ‘mécanes’.

Such bias reflects a general preoccupation at that time with the ancestry of the roman typeface, located in the inscriptional lettering of the Roman Imperial period. Edward Johnston’s revivalist teaching at the Central School (1899–1912) helped to focus attention on the ‘Trajan’ letter, identified as an exemplary model (Mosley 1964). Here the corrective agenda was clear, borne of a perceived need to return to ‘absolute standards’, and to reintroduce, ‘good taste into an art, which had been debased; which the lamentable vagaries of nineteenth-century commercialism’ had diverted from its true nature and purpose. (Gray 1960: 13)

More generally though a qualitative distinction was drawn between printed matter of an ephemeral nature ie commercial jobbing printing, and the production of books with the prestige of books, extended to the roman types in which they were typi-

cally printed. This association with durable commercial value and existing orthodoxies helped to distinguish book types from the throw-away experimentation of their commercial advertising counterparts, not seen as worthy of serious or scholarly attention. (Carter 1938)

Commercial market forces also determined an interest in the manufacture and marketing of roman types. The first half of the twentieth century was the boom era for the large-scale machine type manufacturers such as Monotype and Linotype. The considerable economic costs of their machinery and fonts focused the market upon the sales of ‘investment’ types, ie roman text faces not as susceptible to the vagaries of fashion and which would generally see more use than those types intended for display purposes. In a series such as Monotype’s historic revivals, aesthetic orthodoxy could be turned into economic gain in the hands of an individual such as Morison, who, as Warde would later recall, was someone able to infuse his wide ranging scholarly interests into marketable products intended for a commercial publishing context in need of some corrective steering. (Warde 1967)

Johnson (GB) 1934	Vox (F) 1954 (a) + b	Din 16518 (D) proposal 1959	Din 16518 (D) 1964	British Standard 2961 (GB) 1967	Pohlen (NL) 2010
Gothic types Roman, <i>The venetians and old-face group</i> <i>The evolution of the modern-face</i> roman Old-face types in the Victorian age Italic, <i>the old-face</i> Italic type in the eighteenth century Script types Early advertising types, <i>fat faces and egyptians</i> <i>(and sans serifs)</i>	1 (médievés) 2 humanes 3 galdes 4 réales (granvilles, 1972) 5 didones 6 simplices 7 mécanes 8 incisés 9 manuales 10 scriptes	1 Romans 1-1 Renaissance styles (Venetians) Early types and styles (Jenson) 1-12 Late styles (Garamond) 1-13 Modern styles (Palatino) 1-2 Baroque styles 1-21 Dutch styles (Van Dijk) 1-22 English styles (Caslon) 1-23 French styles (Fournier) 1-24 Modern styles (Times) 1-3 Classical styles 1-31 Early styles (Bodoni) 1-32 Late styles (Bulmer) 1-33 News styles (Melior) 1-34 Modern styles (Corvinus) 1-4 Free Romans 1-41 Victorian styles (Auriol) 1-42 Non-serif romans (Lydian, Optima) Individual styles (Hammer Uncial, Matura) 1-5 Linear Romans 1-51 Early styles (Grot no.9) 1-52 Modern styles (Futura, Gill) 1-6 Block styles 1-61 Early styles (19c-) 1-62 Late styles (Clarendon) 1-63 Modern styles (Beton) 1-64 Typewriter types. 1-7 Scripts 1-71 Stress variation (Legend) 1-72 Expanding strokes (Invitation script) 1-73 Uniform stroke (Signal) 1-74 Brush stroke (Mistral) 2 Black letter 2-1 Textura (Black letter gothic) 2-2 Rotunda (Wallau) 2-3 Schwabacher (Alt-Schwabacher) 2-4 Fraktur (Unger) 2-5 Kurrent (Chancery) 3 Non-roman characters 3-1 Greek 3-2 Cyrillic 3-3 Hebrew 3-4 Arabic 3-5 Others	Venetianische Renaissance-Antiqua Französische Renaissance-Antiqua Barock-Antiqua Klassizistische Antiqua Serifenbetonte Linear-Antiqua Serifenlose Linear-Antiqua Antiqua-Varianten Schriftschriften/Script Handschriftliche Antiqua/Manuale Gebrochene Schriften Gotisch Rundgotisch Schwabacher Fraktur Fraktur-Varianten Fremde Schrift	humanist galdes transitional didone slab-serif lineale grotesque neo-grotesque geometric humanist glyphic script graphic	Vox +1 Text typefaces 1-1 Humanistic 1-2 Galdes 1-3 Transitionals 1-4 Didones 1-5 Slab-serifs 1-6 Humanistic sans-serifs 1-7 Neoclassical sans-serifs 1-8 Benton sans-serifs 1-9 Geometrical sans-serifs 1-10 Glyphics 1-11 Scripts 1-12 Graphics 1-13 Gothic Vox +2 Display typefaces 2-1 Classic Deco 2-2 Typographic 2-3 Disorder 2-4 Techno 2-5 Modular 2-6 Fantasy Vox +3 Pi fonts 3-1 Ornaments 3-2 Symbols 3-3 Pictograms Vox +4 Non-Latin

Figure 3. The influence of Vox

4. Rebuilding the past

While this paper seeks to argue the ongoing validity of a proxy-reliance on these early categorizations, the original historical scholarship informing them is often far from obsolete. Refinements have been made over the years yet much of the thorough research activity has withstood the test of time. What needs to be recognized, is that while the facts presented may be accurate, the selectivity employed in bringing this information together was informed by a view of history very much of its time.

All classificatory tools are products of their times, in terms of the histories they choose to represent and the objectives they seek to address. It is indeed arguable that roman typefaces require a greater level of understanding to be able to use them effectively within text, and that display typefaces perhaps 'speak for themselves' in terms of their forms. Yet, arguable or not, the issue is that in their bias towards roman text types, these early categorizations do not tell us the full story in terms of the progression of formal invention across the whole field of type design. Further, not having that full story remains an ongoing obstacle to adequately locating and understanding more recent formal progressions.

This becomes clear in reading the study made by Gray (Gray 1938) of the, until then, widely ignored advertising typefaces of the nineteenth century. Her detailed documentation tracks the shifts in contextual influences and the changing formal references made within type design across the century, from which she is able to offer new insight into the formal configuration of stylistic elements in operation within type design both then, and subsequently.

In so doing, Gray facilitates the re-contextualization of a design trend more generally associated with the digital era. King locates the trend of merging 'disparate typographic styles' very clearly within the digital type design developments following the introduction of PostScript (King 2001). Such merging of styles might be characterized by an overt historic eclecticism, as in Scott Makela's Dead History typeface from 1990 (fig. 4), or in far more subtle reconfigurations. Frere-Jones's FF Dolores font from 1992 combines, for example, character shapes loosely derived from the roman model with the unevenness of line and rhythm associated with handwriting and a set of thick slab serifs borrowed from the graphic vernacular (fig.5). Yet, the fragmentation of visual elements and their reconfiguration in alternative combinations in new stylistic contexts is clearly identified by Gray as being symptomatic of a fundamental shift in practice over a century earlier. Of the introduction of the Latin-Runic types from 1865 onwards, she comments, that they:

'completed the break up of the idea of display faces being variations on one basic alphabet. These new semi-ornamental letters are exercises in a new freedom, and although so far no very drastic changes have been made, categories are becoming blurred and classification complicated; a new era has begun.' (Gray 1976: 84)

While the accessibility and low overheads of the digital production technologies clearly facilitated the merging of existing visual languages, and allowed too for an escalation in the scale of produc-

Figure 4. Dead History [screen-shot: <<http://www.emigre.com/EF.php?fid=88>> 1 May 2012]

Figure 5. FF Dolores [screen-shot: <<https://www.fontfont.com/fonts/dolores>> 1 May 2012]

tion of such fusion types, Gray shows (fig. 6) that their introduction is far from a digital phenomenon.

It is perhaps true that the typefaces Gray was referencing represented practices towards the extremes of contemporary creative invention in advertising type design and would have represented a more niche market than the mainstream text typeface design of the day. Yet, the influence of such practices upon the mainstream is evidenced in the greater subtlety introduced to typefaces from the previously advertising-oriented categories of sans serifs and slab serifs, leading to wider application for text purposes and the increased blurring of the distinctions between text and display.

Rediscovery of this past practice offers then the potential for re-exploring existing historiographies of the field, especially in relation to the changing nature throughout the twentieth century of this formal exchange between the areas of text and display type design. Further, the ability to relocate the trend of reconfiguring existing formal references in new contexts much earlier than previously thought, provides the possibility for re-establishing a link between pre- and post-digital practices, thereby overcoming a common fracture in documentation, where separate histories are published for each (see Lawson 1990 and Heller & Fink 1997). At the very least, this rediscovery of the past offers a way forward in terms of redefining existing categorizations of typeface

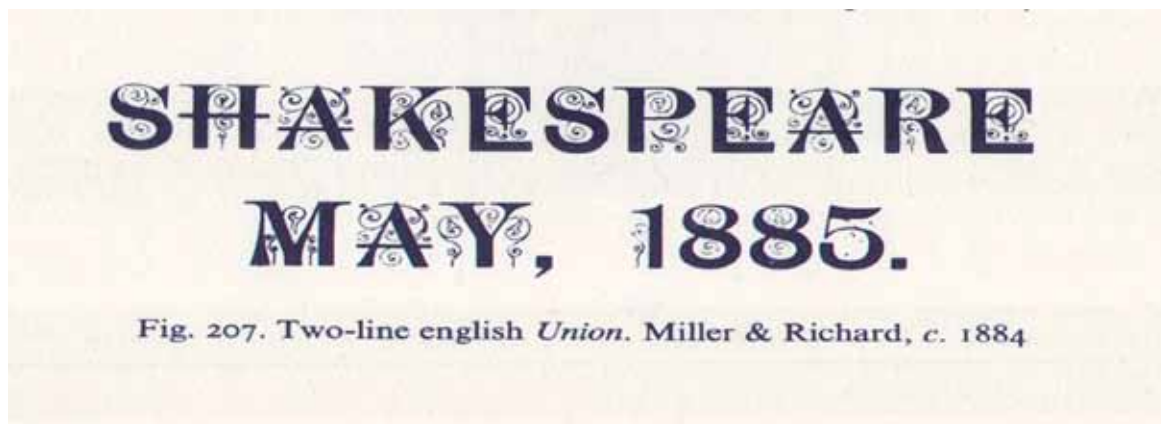


Figure 6. Illustration from Nicolette Gray, showing the exercising of the new freedom in fusing formal references she describes, here serif and sans serif structures combined with decorative detailing (photo by Catherine Dixon).

design, as the basis for providing more accurate representations of the field, especially diachronic overviews, and for use as educational tools in facilitating an understanding of the visual language of typeform.¹

Yet, a reliance on the Vox system, and the embedded bias it carries forward, persists (Blackwell 2004, Pohlen 2011). The Vox system was, when first published, a key structure in the move towards international compliancy in the categorization of typefaces (fig. 3), and such is the scale of the change in approach to be considered, and the ongoing influence of Vox, it remains a kind of default unifying focus. The current limitations of the Vox system are acknowledged, though as examination of the modifications made for the publication *Letter Fountain* (Pohlen 2011) show, perhaps not for the right reasons. Here a series of extensions are built on to the basic original Vox system to enhance the detailed description of especially contemporary display typefaces (fig. 3). However, by simply adding these extensions, a sense is created of a pre-digital era when the Vox system was adequate and a post-digital period after which it wasn't. In so doing the bolt-on modifications both reinforce the false fracture in considerations of recent and past type design practice, and the ongoing association of the digital era alone with the most significant formal shifts in practice.

In conclusion, this paper argues that in having continued with the scholarly and aesthetic premises of the early twentieth century in approaches to the categorization of typefaces, we have missed key ideas, which help to fully understand the progression of formal invention in type design. Does this matter? While we are no longer concerned so much with the education of the printer, there is a lot to be done in providing a set of tools to help the design student fully understand both synchronic and diachronic overviews of the field of typeface design, as well as the basics of the language of type as form. This paper shows that in simply taking the existing tools without fully challenging the values underpinning them, we simply compound the problems we are trying to resolve.

¹ Development of a tool facilitating an understanding of the visual language of typeform following Gray's premise for understanding formal progression was the focus for the author's PhD (Dixon 2001)

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A sparkle in people's eyes

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Co-design / Social design / User-centered design / Participatory design / Methodology

This paper describes a specific design teaching methodology based on user-centered design, pioneered in Brazil in the 1980's, called Social Design (SD). It contextualizes SD in the national and international field, pointing out a main characteristic which makes this teaching practice worth considering in the co-design context: the identification of intrinsic motivation in the user to serve as the main guideline for project development.

1. Introduction

This paper describes a specific Brazilian Design education methodology first established at the Pontifical Catholic University of Rio de Janeiro (PUC-Rio), in the early 1980's and introduced at the Federal University of Espírito Santo (Ufes), in 1998, called Social Design (SD). This methodology, pioneered in Brazil, was the subject of two Master Course dissertations —Rita Couto, 1992 and Heliana Pacheco, 1996—, both at PUC-Rio, and a few articles on Design Education, one of which was presented at the Design Research Society (DRS) 2010 Conference in Montreal, about the use of SD in the first year of the design course at Ufes: "Involvement in the design student approach".

The aim here is to present briefly how this methodology started, its goals and some of its theoretical background. This paper aims to contextualize Social Design in the national and international field, pointing out characteristics which make this teaching practice worth considering in the co-design context. It also aims at differentiating this particular methodology in its approach based on the identification of intrinsic motivation in the user as the main guideline for project development, referred to as "a sparkle in the eye".

2. World context

Elizabeth Saunders and Pieter Jan Stappers (2008) in their paper "Co-creation and the new landscapes of design" present a research about how the practice of co-design began in the 1970's which provide the historical background from which Social Design was to emerge.

According to Saunders and Stappers (2008), although the terms co-creation (or cocreation), co-design (or codesign) are becoming increasingly popular —sometimes used with different meanings—, the practice of collective creativity has been around since the early 1970's, under the name of Participatory Design, mostly in Europe.

At the Design Research Society Conference in Manchester, England, in 1971, the theme was already Design Participation. Nigel Cross (1972), warned that it was time designers rethought and reoriented their approaches, including users in the design project decisions. Also Robert Jungk, in the Closing Comments of the proceedings, predicted that radical changes would occur, but that they would not be taking place before the end of the century (Cross, 1972: 121). He also stated that this participatory involvement was linked not only to the final decision, but also to the process of ideas generation.

There is a difference between traditional user-centered design —mostly a US phenomenon— and the participatory approach, mainly developed in Northern Europe. In the first classical term, designers and researchers work separately observing the user, studying and planning. In co-design, designers and researchers work together, they can even be the same person. Here the user is not passive, but someone who knows about the subject and passes this to the others with authority and "plays a large role in knowledge development, idea generation and concept development." (Sanders & Stappers, 2008:7).

This issue was also discussed when the architect Christopher Alexander, in 1975, recommended that users and students should all be involved together for a successful experience, with the user as part of the creation process and contributor to the development of the project (Alexander, 1976).

Participatory design methodologies spread slowly in the last 30 years. One of the reasons nominated is that:

⌘ participatory design has been seen as academic endeavor with little or no relevance for the competitive marketplace. In many parts of industry, investment in research is looked upon as a non-obvious step, investment in user studies a big and expensive step, and user participation a radical step into the unknown. This is beginning to change now as product development becomes increasingly knowledge-intensive, and industries and universities look to each other for collaborative explorations in innovation. (Sanders and Stappers, 2008:2)

3. The beginning at PUC-Rio

Following these developments, the issue of the inadequacy of conventional design methodologies in the Brazilian context began to be discussed. In the early 1980's, José Luiz Ripper and Ana Maria Branco —Head of Department and Course Coordinator of the Design Department, at PUC-Rio— were the main developers of the practice and teaching of SD, with extensive discussions and analysis on Design Education. Several issues relevant to the relationship between the efficiency of traditional design

methodologies and their use in professional training through education were discussed by questioning the place occupied by the market in the teaching of design practice.

In this new form of exercise, students were encouraged to look for design contexts outside of the University, engaging in real-life situations with users referred to as project partners instead of staying in controlled laboratory situations (Pacheco, 1996).

At PUC-Rio, Design Project disciplines began to invite the user and their demands to be considered in the development of the design solution. Inspired by Paulo Freire, the well-known Brazilian educator, it was believed that the capacity of the design students could be enhanced when they become aware of "how an individual's personal experience is connected to larger societal circumstances." (Pacheco, 2010).

According to the mentors of this methodology at PUC-Rio, the tension between the current design practice at the time —reproducing accepted imported ideas which did not take Brazilian reality into account— and the newly-found needs of design teaching, initiated a practice where students could truly interact with society. They believed that in small communities it would be possible to develop, in the students, the competencies of a designer. In this scenario, the designer is not seen as someone concerned only with Industrial matters, but as a creator of possibilities and potential worlds, someone who understands the reality of communities, their motivations and interests, which would in turn be used to strengthen the development of the project. The design would arise from the relationship of the people with the environment around them, turning passive users into co-creators of their own world and practice (Pacheco, 1996).

It became of extreme importance to find places where this form of Design could be taught and a preference for certain groups becomes more evident. The elderly, children and the handicapped are good examples of alternatives where the Design exercise of the project proved to be more beneficial to the students, causing them to engage in real situations which were open to their participation, instead of abstract questions without feedback from real users. By working with disadvantaged groups, students could circumvent the limits sometimes imposed by traditional industry in the design process and were also presented with a completely new reality, different from their own. Because of this evident difference, answers could not be presumed as easily as with other users and experimentation became clearly necessary.

This choice of groups caused Social Design to be frequently confused with Social Assistance and this seems to be one of the reasons the term "Social Design" was modified by the mentors. The methodology was referred to as "Collective Design" for a while because of its co-creative nature, and later "Living Design", in reference to the fact that the design solution continues to be modified and improved by the user, as well as the methodology, which continued to be developed and improved not only at PUC-Rio but also at Ufes. At the same time, the appeal of the term

Social Design was so strong, that it began to be used with different meanings by other scholars. It also seems, that the term "co-design" defended by Sanders and Stappers is very closely connected to the original conception of SD.

By co-design we indicate collective creativity as it is applied across the whole span of a design process [...] Thus, co-design is a specific instance of co-creation. Co-design refers, for some people, to the collective creativity of collaborating designers. We use co-design in a broader sense to refer to the creativity of designers and people not trained in design, working together in the design development process (Sanders and Stappers, 2008:2).

4. The methodology

Social Design methodology is characterized by asking the students to identify a group of people outside the University, that welcomes them, and with whom they will become involved in the development of a 'real-life' design project. This group can be part of an organisation, i.e. a firm or a school, as people share and integrate knowledge best in social environments (Nonaka and Takeuchi, 1995). It is necessary that students identify a potential user within the organisation with whom they will interact primarily and directly in the development of the design project, a person who will be referred to as their 'interlocutor' for the project.

The design process will be centred on them, as it happens in traditional user-centred design approaches, and the interlocutor takes on the role of 'specialist' in their own activities, guiding the design choices. Students are encouraged to consider intangible aspects in the field —such as culture and values— as well as tangible aspects such as easily available resources and sustainable considerations. It is important that the project is completely integrated in the user's reality and all issues which arise in the development of the project —economic, physical, social, environmental, psychological, or any other consideration— are also analysed from the perspective of the interlocutor.

The interlocutor

The interlocutor represents a different point of view from that of the students, and it's from this newfound exchange that creation can happen, as problems encountered in the real environment are faced from multiple perspectives, and tackled with different skills and abilities. In the experience of project development with the interlocutor, there will be instances where the pace and effectiveness of the solution seem to be in a direct relation to the sense of partnership created, and their level of engagement.

There are a few aspects of Social Design which differentiate it from other user-centred or participatory methodologies which emerged in the last 30 years. In SD, it's not enough to find a social group where an average user could be identified, but students are trained to find an interlocutor with an intrinsic motivation and an action already in place.

Social Design encourages students not to focus on the lack of resources or existing problems, but instead, to identify strengths

in the group and positive points of leverage as a starting point. They are also instructed to base their observations on the reality of what can be perceived in the workspace and to look for feedback from the interlocutor and the other people, as they identify the motivations in place. This identification of positive instead of negative aspects in the field creates the possibility of a design project not based on the overcoming of detected “problems”, but, instead can lay its foundation on the recognition of ‘joyful action’, with engagement resulting from the interlocutor’s intrinsic motivation.

Intrinsic motivation is defined as the doing of an activity for its inherent satisfaction rather than for some separable consequence. When intrinsically motivated, a person is moved to act for the fun or challenge entailed rather than because of external products, pressures or reward. [Ryan and Deci, 2000:56]

The students rely not only on the discourse of the user to identify his/her intrinsic motivation, but more importantly, on their actions. What the interlocutor says is used as a guideline for investigation and it’s only accepted as true when verified by their actions, incorporating some techniques from classic ethnographic research.

The dialogue that takes place in this initial stage is not only verbal, but continues in the experiments the students bring, in order to identify directions and design possibilities to be further investigated. Students are told to look not for people who are waiting for something to happen, or have pending issues but aren’t acting upon them; they must find people who are engaged in their issues and show a particular indicator of intrinsic motivation when they are describing their actions and goals: a metaphorical ‘sparkle in the eyes’.

“When people are intrinsically motivated, they experience interest and enjoyment, they feel competent and self-determining, they perceive the locus of causality for their behavior to be internal, and in some instances they experience flow. The antithesis of interest and flow is pressure and tension. Insofar as people are pressuring themselves, feeling anxious, and working with great urgency, we can be sure that there is at least some extrinsic motivation involved. Their self-esteem may be on the line, they may have deadlines, or some material reward may be involved.” [Deci and Ryan, 1985:34-35]

The proponents of SD believe that when someone has a purpose derived from intrinsic motivation, that will translate into action and the metaphorical “sparkle in their eyes” is a confirmation of that. So, engagement with an action, a force that produces a movement is the basic requirement for the profile of the interlocutor (Pacheco, 2010). Action is the main word here: the design project will not be based on distant dreams or needs but on the direction indicated by their actions. The designer’s first question is not “what do you want/need?”, but “what are you doing?”. Now students learn how to identify an already-existing flow of actions which indicate an objective to guide the development of the solution, as the behaviour is the indicator of the existence of intrinsic motivation, as Deci and Ryan put it:

...behavior is influenced by internal structures that are being continually elaborated and refined to reflect ongoing experiences. The life force or energy for the activity and for the development of

the internal structure is what we refer to as intrinsic motivation. [Deci and Ryan, 1985:6]

The correct identification of an intrinsic motive is of great importance in Social Design, as it will shape the objective of the project, with a direct involvement of the interlocutor. SD proponents believe that the user’s pre-existing action—intrinsically motivated—coupled with a meaningful connection to the objective is what will stimulate the user to adopt the solution when it’s fully developed. Once the objective is defined, the development process is similar to what takes place in conventional user-centred design methodologies, with experimentation and prototyping leading to the refinement of the solution.

Another noteworthy aspect of Social Design is that the designers of the solution take into account all the resources and tools easily available to the users, in order to create an open-source solution which can be altered and improved from what is learned from future experience, by a user/co-creator who is actively engaged in its use.

5. Conclusion

In the increasingly more complex society we live in today, the issues which affect people in this positive way are the issues which will be embraced by users and co-creators of a solution, and will be leveraged by already existing actions in the direction of the same objective, creating a powerful and transformative impact in all co-creators involved, and consequently on society.

Even though developments in the methodology can be envisioned from its current state—e.g. the possibility of including more participation from the interlocutor in the ideation stage—, its main characteristic of identifying intrinsic motivation in the user to serve as the main guideline for project development makes this teaching practice worth considering in the co-design context.

While conventional problem-oriented design approaches—participatory or otherwise—can be extremely useful to bring solutions to many important issues, an intrinsic motivation-based approach such as Social Design can create new possibilities for design solutions and meaningful innovation, with the emergence of new relations between users and the solutions which are an integral part of their everyday lives.

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Past, present and future of designerly ways of knowing

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Design history / Design knowledge / Brazilian context

This article proposes a reflection on Nigel Cross notion of “Designerly ways of Knowing”. In the first part of the text we dedicate our attention to the articles published by Cross in 1982 and 2001. The first one, “Designerly Ways of Knowing”, was published in *Design Studies* and the second, “Designerly Ways of Knowing: Design Discipline Versus Design Science”, was published in *Design Issues*. In the second part of the paper we describe a pedagogic proposal for a postgraduate course in Architecture and Urban Planning developed as a joint project between two Brazilian universities. Its curriculum and structure are strongly based on design practice and stem, in a good measure, from the notions advocated by Cross.

1. Introduction

This article proposes a reflection on Nigel Cross notion of “Designerly ways of Knowing”. Our purpose here is two fold: to highlight some elements that constitute, as a whole, a possible response to what is believed to be the designers knowledge problematic characteristic, the experiential knowledge, which is often tacit; to discuss how this “problematic characteristic” is nowadays being taken into account in pedagogical proposals such as a Brazilian Pedagogic Project we describe here. The first part of this paper is thus dedicated to discuss Cross’ vision on experiential knowledge. His underlying assumption is that, as also sustained by authors such as Schön (1983), Scrivener (2000) and Foqué (2010), what designers know about their own problem solving processes remains largely tacit knowledge – they know it the same way a skilled person ‘knows’ how to perform that skill. (Cross, 2001)

In the first part of this text, we dedicate our attention especially to the articles published by Cross in 1982 and 2001. The first one, “Designerly Ways of Knowing”, published in *Design Studies*, claims the intention to establish the theoretical bases for treating design as a coherent discipline of study. It is here that Cross takes up the argument for a ‘third area’ of education – design – formerly outlined by Bruce Archer in his 1979 article “Design as Discipline” in the same journal. The second article, published in *Design Issues*, “Designerly Ways of Knowing: Design Discipline Versus Design Science”, outlines a brief review of what he calls “the desire to ‘scientize’ design”, which could be traced back to ideas from the 1920’s on.

In the second part we describe a pedagogic proposal for an Architecture and Urban Planning postgraduate course in which elaboration one of the authors took part. One of the premises in this project was based on Cross claiming that, just as the other intellectual cultures in the sciences and the arts concentrate on the under-

lying forms of knowledge peculiar to scientist or the artist, so we must concentrate on the “designerly” ways of knowing, thinking and acting. It goes on citing Cross remembering that as Schön and others, many researchers in the design world have realized that design practice does indeed have its own strong and appropriate intellectual culture.

2. Designerly Ways of Knowing – circumscribing a third culture

Nigel Cross’ 1982 article refers to a principal outcome of the Royal College of Art’s research project on ‘Design in general education’ which resided in the recognition of a neglected “third area” of education, namely Design (with a capital D). The other two areas are science and humanities. To the author, contrasting design with the sciences and the humanities is a useful, if crude, way of beginning to be more articulate about it. Education, in any of these ‘cultures’, entails three aspects: the transmission of knowledge about a phenomenon of study, a training in the appropriate methods of enquiry and an initiation into the belief systems and values of the ‘culture’ Cross goes on proposing that, if we contrast the sciences, the humanities, and design under each aspect identified above, we may become clearer of what we mean by design, and what is particular to it.

Each culture is dedicated to study, reflect and analyze a category of phenomena. If sciences are devoted to the natural world and the humanities addresses the human experience, in design we are interested in the man-made world. As a consequence, the appropriate methods to investigate relevant events in each culture emerge from this reasoning, leading to the proposition that each field would be more acquainted with a set of methods. In the sciences, for instance, the more suitable investigation procedures involve controlled experiment, classification and analysis. Humanities works better with methods employing analogies, metaphors, criticism and evaluation. Design, in its turn, engages its researchers in activities like modeling, pattern-formation and synthesis.

In his 2001 article, Nigel Cross proposes a brief review of some of the historical concerns that have emerged with respect to the relationship between design and science. According to him, the preoccupation regarding the comparison between design and science emerged strongly at two important periods in the modern history of design: in the 1920s, with a search for scientific design products, a demand to producing works of art and design based on objectivity and rationality, that is, on the values of science. In the 1960s, heralded as the “design science decade” by the radical technologist, the concern for scientific design process has its origins in the emergence of new design methods and the ap-

plication of novel, scientific, and computational methods to the novel and pressing problems of the Second World War. The Conference on Design Methods, held in London in September, 1962, generally is regarded as the event which marked the launch of design methodology as a subject or field of inquiry.

The author remembers two protagonists: Buckminster Fuller who called for a “design science revolution” based on science, technology, and rationalism to overcome human and environmental problems that he believed could not be solved by politics and economics; Herbert Simon, who outlined “the sciences of the artificial,” which would consist in the development of “a science of design” in the universities: “a body of intellectually tough, analytic, partly formalizable, partly empirical, teachable doctrine about the design process.”

According to Cross, in the 1970’s there emerged a backlash against design methodology and a rejection of its underlying values. Derived from the social/cultural climate of the late-1960s—the campus revolutions and radical political movements, the new liberal humanism, and the rejection of conservative values led to what Rittel and Webber characterized, in design and planning, as “wicked” problems, fundamentally unamenable to the techniques of science and engineering, which dealt with “tame” problems. The Design Research Society’s 1980 conference on “Design: Science: Method” was a mark in this decade. Cross points out that this event provided an opportunity to air many of the considerations mentioned above. The general feeling from that conference was, perhaps, that it was time to move on from making simplistic comparisons and distinctions between science and design; that perhaps there was not so much for design to learn from science after all, and that perhaps science rather had something to learn from design.

The shaping of Design as Discipline continues in the 1990’s with Donald Schön explicitly challenging the positivist doctrine underlying much of the “design science” movement, and offered instead a constructivist paradigm, point out Cross. Schön criticized Simon’s view of a “science of design” for being based on approaches to solving well-formed problems, whereas professional practice throughout design and technology and elsewhere has to face and deal with “messy, problematic situations.” Schön proposed, instead, to search for “an epistemology of practice implicit in the artistic, intuitive processes which some practitioners do bring to situations of uncertainty, instability, uniqueness, and value conflict,” and which he characterized as “reflective practice.” A synthesis between Simon’s and Schön perspectives would lead to a preliminary conclusion. According to Cross, the study of design could be an interdisciplinary study accessible to all those involved in the creative activity of making the artificial world. Design as a discipline, therefore, can mean design studied on its own terms, and within its own rigorous culture. It can mean a science of design based on the reflective practice of design: design as a discipline, but not design as a science. This discipline seeks to develop domain-independent approaches to theory and research in design.

What designers especially know about is the “artificial world” - the human-made world of artifacts. What they especially know how to do is the proposing of additions to and changes to the artificial world. Their knowledge, skills, and values lie in the techniques of the artificial.

In the second part of this article, we describe a pedagogical project for a post-graduate course in Architecture and Urban Planning developed in Brazil. The proposal is very much based on Cross’ perspective, seeking to value the “designerly ways of knowing”, which includes attributes related to Schön’s “reflective practice” notion and Simon’s concerns about rigor and precision in research

3. Architecture and City: a Brazilian Pedagogical Proposal

In 2010, a Brazilian team of lecturers and researchers at FAU-Mackenzie, in São Paulo, SP, had elaborated a Pedagogical Project for a joint post-graduation Architecture and Urban Planning course to be delivered at UniRitter, university located in Porto Alegre, RS.

Strongly based on design practice and the “designerly ways of knowing”, it confirmed to some extent Cross’ prevision made in his 2001 article, according to which, if the concerns regarding the relationship between science and design had emerged in the 1920’s closing its cycle in the 1960’s, a new cycle of design-science concerns appears to be reemerging in the 2000s, now, evidently, with a different perspective. Here the focus is on academic research - rather than production of objects - with its requirements of rigor, precision and clarity in textual expression. This was precisely the problem addressed in the pedagogical proposal mentioned above. Although on the one hand the authors had a strong desire to value the design practice role in the educational process, on the other hand it was clear that an academic endeavor was being undertaken, which meant we had to pay a strong attention in what characterizes good practices in academic research in areas of design practice, such as architecture and urban planning.

The place set for this dynamic between design practice and design research in an educational project was the so called “laboratory”. It was set up as a strategy for creating opportunities to develop theory and practice simultaneously throughout the course. In the laboratory, the project activities are undertaken within a broad perspective, in a interdisciplinary approach. The laboratory could be understood as a scenario for the greatest part of the architectural teaching, where design students, teachers dedicated to design practice and teachers dedicated to theoretical discussion would interact over the projects being developed by students. In a post-graduate environment, it signifies a complex and challenging experience, once it could not function solely as a professional practice simulator. The laboratory the Brazilian team had in mind meant a place where architectural design and didactic strategies interact in order to satisfy

the requirements of academic production and research. There, in the lab, the students would learn, while engaged in design activities, about employing design methods of research and develop specific research abilities. The projects would always have a two-fold goal: to design and to reflect about the process of designing. The laboratories were imagined, as it is possible to infer, making reference to the traditional architectural ateliers and, in part, suggest the idea of academic experimentation through the process of making.

In order to reach this objective, two investigation lines were structured: 1. Design as Research and 2. Research as Design. The first one holds disciplines related to theory, and provide the bulk of theoretical framework, concentrating disciplines and research aligned with architectural and urban planning criticism, history and historiography. It approaches specifically: a.) Processes and methods in building up academic research; b.) Theoretical framework regarding specifically the architectural project, its forms of representation, its historical strands and modern and contemporary interpretations; c.) Theories, forms and processes of space production of the urban space, with focus in the modern and contemporary modes of urban intervention, its theoretical matrix and new tools.

The second investigation line, Research as Design, holds disciplines related to practice, exercising the application of concepts and theories related to the design process. This line nurtures all forms of speculation regarding the act of design as a mode of building knowledge. It emphasizes: a.) The design practice and its relations with the academic theorization; b.) The value of the architectural repertoire and its mutations in methodological processes in design and teaching; c.) Initiatives of urban requalification and urban design.

The proposed curriculum is organized in a set of three mandatory laboratories and two optional laboratories. Every laboratory articulates the two investigation lines. The disciplines included in the mandatory labs compose a minimum and rigorous nucleus contemplating the relationship between theory and practice. The mandatory labs are: a.) Lab1 – Scientific Work – Processes and Methods; b.) Lab2 – Architecture and Urban Planning Design – processes and methods; c.) Lab 3 – Patrimony, environment and culture.

The optional laboratories are: a.) Lab4 – Contemporary Dwelling; b.) Lab5 – Infrastructure, Connections and Connectivity.

4. Final remarks

The Brazilian Proposal, “Architecture and City”, endorses Nigel Cross position in the following considerations: academic research has its tradition constructed by the exact sciences, but Design is not an exact science. In Cross terms, “what designers especially know about is the “artificial world”-the human-made world of artifacts. What they especially know how to do is the

proposing of additions to and changes to the artificial world. Their knowledge, skills, and values lie in the techniques of the artificial (not “the sciences of the artificial.”). This is one of the arguments that support the option for the 5 Laboratories structuring the pedagogical project described above.

In line with Cross, the Brazilian project seems to recognize that, on one hand, design has its own distinct intellectual culture, which is emphasized in the first investigation line: Design as Research, where the possibilities of building knowledge via design processes may be experimented. On the other hand, shows attention regarding the controversy over the nature of valid design research, particularly in the context of postgraduate education, that, in Brazil means a course strictly dedicated to training academic researchers (Pós-graduação *Stricto Sensu* in Portuguese language). The careful position adopted in the course structure is revealed in the second line of investigation: Research as Design, where more traditionally academic activities are performed.

It seems valid to suggest that the “Laboratory format” respond to some measure, to Cross and other author’s concerns regarding the rigor and quality of research produced in areas of design practice. Articulating activities of design practice with methods of academic research in the same place at the same time, it stimulates the reflection and debate about the knowledge produced in the context of doing, in architecture and urban planning design process. According to Nigel Cross (2002), we are still building the appropriate paradigm for design research, which will be helpful, in the long run, to design practice and design education, and to the broader development of the intellectual culture of our world of design. In our view, the Brazilian pedagogic project is a relevant contribution towards this collective goal.

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John Ross' pioneering role and contribution to printing, publication and education in Korea: 1870-1910

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Teaching arts and crafts or the technology transfer: Ernest Bower and textile design practice in Brazil

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Ernest Bowers / Textile practice / Textile design / Arts and crafts / Textile industry

This study examines the conditions of the Brazilian textile industry when there began to be the first activities involving design printing. Setting out from the biography and skills of Ernest Bowers, it raises issues aimed at understanding if the processes undertaken can be regarded as a technology transfer or the teaching of crafts, on the basis of the resources and constraints of those who carried out this professional practice in Brazil.

1. Introduction

Almost nothing is known about textile design practices in Brazil because most of the research studies are focused on the social/economic aspects of the textile industry; until now, very little has been investigated about the history of textile design projects.

This study can be regarded as innovative in so far as it conducts research into how professional training within the textile industry is carried out in Brazil with a view to preparing qualified textile designers and/or engravers. It brings together primary biographical sources and official reports that have not been drawn on in previous research. Both types of documents are dealt with and understood in the light of the historical bibliography of the textile industry and the teaching of industrial trades.

An outline is provided here of the circumstances in which the modernization of Brazilian industry was undertaken, which among other areas is focused on the improvement of the products. It is assumed that technological dependence and the lack of any sound artistic training, created the conditions that explain the immigration of qualified foreign technicians and the establishment of a model for the reproduction of patterns as an initial competitive strategy.

2. Historical context

Most of the studies concerning the Brazilian textile industry during the period when it was first introduced and when it expanded, stress that the English involvement was a very important aspect of its modernization. The parameters for clothing among consumers which were reflected in Paris, did not apply because what was concerned were the technical and economic factors involved in the production of fabrics in this field, where the English led and inspired the technological development of many nations, among them Brazil. Almost invariably we depended on the

importation of English machinery and equipment, its handicraft techniques, and its experience in factory building, where the bricks and construction plans were imported too. As well as this, the system of administrative management was replicated, in an attempt to learn from the British and thus be able to replace the imported goods.

There was a powerful incentive behind this imitative behavior at the end of the 19th Century because of a widespread notion in Brazil that the modernization of industry would stimulate the social development of the nation. Given the technological gap, the means of overcoming this problem, naturally turned to upgrading the products – after all they reflected our condition as a backward country – because almost all the factories that were set up here were only devoted to the manufacture of “coarse fabrics” that were destined for people who were “less lucky in life”.

In summary, it can be stated that through modernization, it was envisaged that there would be an upgrading of products as a means of putting an end to imports. More sophisticated products catered for the demands of a newly constituted society which accompanied the development that led to the progress of the nation and broadened the range of consumer goods both qualitatively and quantitatively. Consumers required better products which, if they could not be produced by our industry, had to be imported; as a result, there was a need to invest in modernising industry. Thus, one is dealing with a complex system which involves political, social and economic issues.

The search for products of a better quality and which can be distinguished from those of competitors, led to the need for the job of the designer, especially with regard to textile printing. If the production of printed fabrics was already feasible (since around 1895) the introduction of engraving accessories, with all the technological apparatus required for the development of designs, began to appear about ten years later. Since then, the preparation of designs and other activities surrounding them project, have become a key issue.

The main obstacle that had to be overcome concerned the unavailability of artistically and technically prepared personnel for the development of patterns and the creation of matrices for the engraving. In England, there was an opposite trend since the mechanization of production took the form of the proletarianization of artistic work, which significantly widened the interest in training personnel so that they could work in an artistic way (Schmiechen 1990). The recognition of the importance of aesthetic features in

the industrial product had led to the setting up of design schools and also, a wide range of training within the factories.

In contrast, in Brazil, apparently there were no schools which could give training in handicraft design within the textile industry for reasons that will not be discussed here. This problem was addressed within the factory space by combining two factors: the employment of foreign manpower who were able to train the native workers, together with the benchmarks and designs that were ready and which served as models that could be copied. Technology and art could cease to be a problem.

3. A biography of technological dependence

The dependence on machines and specialized foreign personnel by the textile factories allowed several technicians and engineers to operate in different factories, where they could teach their spinning and weaving crafts and set up a system of technological dependence (Zequini 2004), which is little known in what concerns textile design.



Figure 1. Ernest relaxing with his English companions¹.

The most common form of immigration from England for work in industry did not involve well-qualified professionals, according to Jeremy (1981). This author states that few highly skilled professionals were responsible for the most significant part of the transfer technology that existed between the American continent and England, as was probably the case with Ernest Bowers (1891-1945). The immigration was partly caused by the economic and social crisis that affected the Manchester region but was mainly due to the courageous and enterprising character of the workers.

At that time, Brazil was viewed as a land of opportunity, especially for trained professionals. News about the quality of life and cost of living in Brazil were published in England, the newspapers advertised jobs and business vacancies here and showed our best aspects of life. The purpose was to attract immigrants with professional skills.

¹ All photos are from Sara Wain's personal archive.

It is likely that Bowers learnt about an opportunity to work in Brazil through an agent or an advertisement in a newspaper because in 1914, when he arrived here to work as an engraver, he had already been sent to the town of Paracambi-RJ where he worked for *Companhia Brazil Industrial*.

He lived in the Workers' Village, as was common at that time, although in better conditions than the other workers. He had his own house, which suggests an important social distinction. According to Wain (2003), her great-grandfather had a high status job that was well paid.

Although many foreigners ended up living here permanently, owing to their high salaries:

The training of specialized Brazilian workers became a constant cause of concern [for industry]. Textile workers were continually being recruited and given the particular task of preparing Brazilians to take on different positions. At times they resisted carrying out this responsibility since they were already in Brazil and were aware that this could lead to them being replaced by other workers. (Graham 1973: 145)

The special treatment accorded to Bowers was not only due to the fact that he was a foreigner. In England, the engraver occupied a position among the best paid in the sector and it is likely that in Brazil his work was not confined to engraving but also included routines related to the adaptation of designs.

This was possible, and in fact very probable, because he had had a long apprenticeship as an engraver (from the age of 14 to 21) and this included artistic training (Wain, 2003). He was only able to enroll in a technical school after undergoing a rigorous selection process which assessed intellectual and physical skills, especially vision. During this period, Bowers acquired books which supported his professional practice. In his trunk which he brought to Brazil, among other work tools, there was an essential book of his profession, with the title *Calico Engraver*. This was written by William Blackwood (1913); it covered the key concepts and technical principles related to the requirements of modern industry, such as drawing up a design, zinc slab cutting, inking slabs, clamping, manual and machine engraving, the use of pantographs and etching. If these skills are not enough, the young Bowers also had piano lessons and studied shorthand, design and lettering, showing his aptitude for both manual and



Figure 2. Official record of Bowers at CBI



Figure 3. Trunk with books and tools that Bowers brought with him to Brazil



Figure 4. Bower's tools

creative work, unlike most of the large English workforce, which at that time had to work as much as 68 hours a week in the textile factories.

All this knowledge was needed both to operate the printing machines (reports have been found that show that there were sometimes delays of up to five years for this kind of equipment to work properly) and to prepare the designs and matrices for the new prints. These machines operated from the beginning on copper rollers engraved with low relief engraving, where the pattern that had to be printed was engraved. At that time, there were not many companies that possessed that kind of equipment and there were huge obstacles to introducing them.

There are in operation 5 printing machines of one to five colors, and there has just been installed another for eight colors and a tentering, drying and gigning machine, which will be placed in operation as soon as the electric power. (Clark 1910: 51)

The rolls were at first engraved when they were imported and only what were called engraving workshops were established here, which also prepared printing on paper.

This mill [Companhia Progresso Industrial do Brazil] engraves all its own rollers and has a good set of designers. It also has a small school for teaching drawing and designing, in which some good work is done. This school has a complete printing outfit and gets out a weekly paper containing mil News and articles and poetry by the operatives. (Clark 1910: 52)



Figure 6. The football team. Ernest is sitting on far right.

Bowers worked in a sector similar to this for nine years during which time he lived in the country and according to Wain (2003), was very happy here and managed to become integrated perfectly with the environment of the Fluminense town.

According to Keller (1997), together with four English friends and a Brazilian, he was one of the founders of the Paracambi Football Club: "The 'homesick' pioneers were Clarence Hibbs, Frederick Jacques, John Starck, Ernesto Bauer and Jersey Starck (known as English Gelson). The club was founded on May 1st 1912" (p.93), which has prompted doubts about whether Bowers came to Brazil in 1912 (since his name, in a corrupted form is in the minutes), or if the dates referred to by Keller (1997) and their suggestion that they had all previously worked for the *Companhia Progresso Industrial do Brazil*, needs to be revised. However, it can be confirmed that Bowers worked with other English personnel in the factory, as one of the colourists, or rather a colleague in the sector. All of them returned to England.

"Although Bowers enjoyed a high status and good pay in Brazil, the education of his young daughters probably led to his decision to return to England" (Wain 2003: 55), because, according to the research carried out, at that time it would have been necessary to enrol his daughters in a boarding-school in Rio de Janeiro. Several years after he had returned to his country of origin, Bowers started his own engraving business and was regarded in his hometown as having great commercial success.

4. Transfer of technology or the teaching of crafts?

Within the industrial complexes, especially those that possess a complete workers' village, with church, leisure activities and a school, there was a clear intention to improve welfare and carry out education for the workers. Many youngsters had the chance to attend a school which not only sought to form students as citizens but also to help build a prosperous industrial nation (Keller 1997).

All that is known with regard to this is related to the teaching of mechanical crafts and not with the project or planning, or in oth-

er words, science and technology. In spite of this, in the schools inside the workers' village

the children sit at low tables, of which the tops are divided into squares for making designs for weaving. The children learn the use of colours with blocks which they fit in the squares and accustom themselves from an early age to designs of woven patterns. (Pearse 1922: 42)

With regard to graphic design in particular, which is destined to the printshop, Pearse's report [1922: 30] provides an opportunity to revise our ideas about the existence of some kind of formal technical instruction with industry.

In one of the mills which has a large printing department, special art classes were held, besides ordinary educational classes. Some excellent original work had been done by these young students who were qualifying as designers.

It is unlikely that either Bowers or his compatriots had played a purely pedagogical role, because he did not state in any report where the teaching work in itself would be carried out. However, it is certain that teaching was one of his goals:

In Brazil part of his work involved teaching. His job was to oversee and teach; he was not confined to the engraving shop. This was no doubt a part of the appeal. He had wanted to be a teacher and teaching would have suited him. His younger daughter, Joan, recalls that he taught her more about painting, the colour wheel and perspective, than she learnt at school. However, Ernest did not have the opportunity to train as a teacher. His family probably needed his income, an income that would have been delayed by teacher-training (Wain 2003: 44)

It is believed that the transmission of his knowledge was probably restricted to teaching the workman-apprentice the "skills training manual [...] reinforced by observation and continual practice" which, according to Flexor [2002: 190] does not allow any "scientific concern of any kind or rationalization of activities" or in other words, simply perpetuates the imitation of procedures, which was common in the period.

The use of references and the practice of duplicating designs raised by Pearse [1922] serve to confirm that in this teaching-learning system, there is obviously an idea that creativity does not form a part of the process. However, Clark [1910] made it very clear that drawing and designing are taught which clearly



Figure 7. Bower's sketchbook.

presupposes that the design was adapted to the limitations of the production equipment.

This practice was the main problem of the learning process in the manufacturing sector (Flexor 2002). There was never a case of an artist who had a grounding in observation and the continuous practice of an apprentice, because there was never any chance of offering ideas or plans that could modify the existing processes given the fact that the operations were standardized. This explains why all the reports consulted suggest that in Brazil the manufacturers duplicated the foreign designs.

5. Conclusion

When the extensive visual documentation and the oral evidence verified by Sarah Wain is examined, it is evident that there were learning practices, simply because they could be repeated, without any implication that there was a transfer of technology. As a result, it will be necessary (by employing the scientific concepts of the work of the designer/engraver) not only to move technology from one place to another but also to ensure its use and acceptance at its final destination. Moreover, it can be believed that in the case of textile design, what was being dealt with was the teaching of crafts as a part of a teaching process concerned with practical and technical areas.

In theory, the inadequate utilization of foreign knowledge, at times also arises from the fact that we ignore design as a competitive strategy. If at that time "the commercial success of printed cotton depended almost entirely on the appeal of its decorative motifs" (Forty 2007: 65) and this fact was already known in England, here the design of fabrics has still not been exploited to any extent. This suggests that we are experiencing a problem that concerns not only technological backwardness that prevents us from producing equivalent fabrics, but also affects our mentality with regard to the benefits of design and the role of education in this context. Hence one must agree with Markert [1993] who states that for a transfer of technology to have positive results, it must also have been developed at the end of the transfer process with the final conditions of its use in mind. Without doubt, the creation of printed patterns in England accompanied this reasoning because art and technique have walked hand-in-hand, while in Brazil, obsolete reflections have led to a model of reproduced designs being imported, a problem that is still very prevalent today.

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Design in Brazil: which revolution?

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Design in Brazil / Carlos Lacerda / Esdi

The paper is part of a broader research dedicated to bring out key-issues related to the architectural and design practice in Brazil during two seminal decades - the 1950's and the 1960's. This turbulent and very dynamic period comprises the emergence of Brazilian concrete art and poetry, Bossa Nova and Cinema Novo, the establishment of industrial design as a discipline and the building of Brasília, Brazil's new capital, accompanied by a political dispute between different perspectives for the country's development. By concentrating the analysis here upon the creation of Esdi/ Escola Superior de Desenho Industrial (College of Industrial Design, Rio de Janeiro), in 1963, the aim is to address some of the tensions, limits and different interpretations of the constructivist trend in Brazil, in regard to a concept of design deeply rooted in the *Hochschule für Gestaltung* (HfG), school of design created in Ulm under the influence of the reformist agenda of postwar Germany. In this light, rather than trace the creation of Esdi, which has been richly chronicled elsewhere, this paper intends to reexamine and even challenge the major attention this episode has received in design historiography (being, in turn, completely ignored by architectural studies) by considering both the existing tensions between design practices and mass production in Brazil, and the ambiguities of a school originated inside an avant-garde institution such as MAM/Museum of Modern Art of Rio de Janeiro, but finally supported and advocated by a government such as the one of Carlos Lacerda, the first governor of state of Guanabara, created after Brazilian capital was transferred to Brasília. Essentially opposed to the call for social reforms rooted in German design, Lacerda embraced – as a “project of national interest” - what is an undeniable seminal school of design in Latin America, but also a paradigm for many contradictions and complexities involved in the specific context in which dramatic and unprecedented changes were soon to be experienced.

1. Democracy through design

The 1950's and early 60's are, in many ways, a key transitional period in Brazil, a period shaken by the rise of growing confrontations in various fields, indicating an unprecedented level of intellectual and political debate, as well as a turning point in the field of design. Of particular significance in this regard is the creation of Esdi/ Escola Superior de Desenho Industrial (College of Industrial Design), in Rio de Janeiro, in 1963. Despite previous attempts and experiences within the field of design education in Brazil (which can somehow be traced back to the 19th century), Esdi soon became known as *the* pioneering institution for design education not only in Brazil, but also in Latin America. Often associated with the names of Karl Heinz Bergmiller and Alexandre Wollner, two HfG-Ulm alumni that had a central role in the school since its in-

ception, Esdi was widely influential on the curriculum adopted by other design courses in Brazil, and on the very shape of the disciplinary field of design in the country (Nobre 2008). Zuenir Ventura, one of its former faculty members, speaks for many of his contemporaries when he says:

“Esdi was to Brazilian design what Bossa Nova was to Music; “Cinema Novo” to Cinema; “Arena” to Theater; Brasília to Architecture. It was a founding moment, when the world discovered a new Brazil – of Glauber Rocha, Oscar Niemeyer, Tom Jobim, Pelé – and Brazil found out it had something to teach the world. Esdi gave us a parameter, created a new mentality and launched the basis of design in Brazil.” (Ventura 1994)

This decisive role played by Esdi certainly justifies the emphasis that has been given to the school within the field of design studies in Brazil – in a tone that tends to be either one of pride and celebration, as we have just seen, or a strong and oversimplified reaction against it. This, somehow, happened also to the Ulm School of Design (Spitz: 2002). But if we really want to appreciate the uniqueness of Esdi, we might well move beyond these poles now and take into further consideration historical facts that for one reason or another have been largely underestimated, avoided or ignored, even though they can be highly revealing of the complexities of such a peculiar cultural and political moment.

Esdi is often said to be an avant-garde institution and a seminal school of design in Latin America. Undeniable as this might be, we cannot disregard also the ambiguities of a school originated inside a private institution such as the Museum of Modern Art of Rio de Janeiro (MAM), a supreme emblem of modern culture in Brazil in the postwar period, but finally supported by a local government such as the one of Carlos Lacerda, essentially opposed to the social nonconformism embodied in the group of personalities gathered at Ulm.

A very controversial politician, Carlos Lacerda (1914-1977) was involved in several crucial political events in Brazil, and played an important role in the overthrow or resignation of three Brazilian presidents: Getúlio Vargas (1954), Jânio Quadros (1961) and finally João Goulart (1964) – the populist Marxist-leaning President whose call for reforms led to the military putsch. Although Lacerda was a member of the Brazilian Communist Party at the beginning of his political career, in the 1930's, it was as an undisputed leader of a right-wing party, the National Democratic Union (UDN), that he was elected city councillor of Rio de Janeiro (1947), federal deputy (1955) and finally governor of the recently created Guanabara State (1960), following the transfer of the nation's capital to Brasília.

Hoping to be elected in the forthcoming presidential elections, Lacerda initially supported the military coup d'état, in April 1964.

But as the elections of 1965 were cancelled and he saw his ambitions quickly short-circuited, he opposed the regime in alliance with his old enemies Kubitschek and Goulart, was arrested in 1968 and stripped of his right to run for political office for 10 years.

In the beginning of the 1960's, however, Lacerda felt strong enough to believe he would become the next President of Brazil. As governor of Guanabara State – that is, between 1961 and 1965 -, he struggled to preserve the role of Rio de Janeiro as the cultural capital of Brazil. The new federal capital designed by Lucio Costa (urbanism) and Oscar Niemeyer (major buildings) had just been inaugurated by President Juscelino Kubitschek, and Rio feared the decline that was about to start, caused by the loss of its status of national capital of Brazil (which it had retained for more than a century). Lacerda's administration was therefore largely praised for his efforts to solve - at whatever cost - chronic problems of Rio, such as water services, public transportation, education and housing (with publicly financed housing projects on the outskirts of the city, often accompanied by wholesale favela removals). If no real attempt was made to solve the growing problem of urban poverty, he strove to give the city a modern image, somehow comparable to the one of Brasilia.

2. Design as a “common good”

It is not surprising, then, that the new school of design, long dreamed of, was to be finally inaugurated under the local administration of Lacerda. Yet, it becomes quite evident that his position would be quite difficult to reconcile with modern design's predisposition to social reform. How would a man known for his profound anti-communism deal with the social demands that accompanied modern design in its development? A letter addressed by Lacerda to the Chamber of Deputies help us to clarify this question:

“The fast trajectory of industrial design, in our contemporary world, confirms its relevance, not only in raising the value of industrial products, but also in showing that we are going back to an ancient tradition, where an useful object must also be a beautiful one. The fact that these objects are mass-produced by the machine, and not individually made by craftsmen anymore, does not invalidate the idea of Beauty. On the contrary, instead of belonging to a small group or to a privileged individual, Beauty can now be multiplied and turned into a world heritage, a “common good”. Hence the highly democratic sense of industrial design.” [Lacerda 1962]

Rather than supporting a social-democratic agenda, it becomes evident that industrial design would now speak in favor of a populist banner of democracy, as defended by Lacerda. To a certain extent, the relationship between “common good” and democracy referred to the classical theory already criticized by Schumpeter [Schumpeter 1961]. In the very confuse and increasingly unstable Brazilian political scene of the beginning of the 1960's, however, both notions worked together and served strategically and symbolically to a rhetoric that promised to solve social inequalities, even if regarding the favelas as a threat to be eradicated, once and for all. Actually, in his astute rhetoric, Lacerda tried

to achieve social legitimacy by saving from left-wing attacks the very essence of liberal perspective: the idea that “human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets and free trade.” [Harvey 2007: 56].

Despite the fact that democracy was soon to be banished from Brazil for the next two and a half decades, in that particular historical moment it seemed that the new field of design would be helpful in shaping a measured notion of democracy, in dispute between different and often contradictory political streams of thought. And in this sense, it is not surprising that design topics enjoyed considerable attention within Lacerda's discourse, and Esdi itself turned out to embody part of his highly ambitious political plan. With good reason, the modern definition of design could be extended in order to fit the defense of the free market's role in promoting freedom and democracy, as well as to serve what Lacerda, in his own words, called “a project of national interest”. [Lacerda 1962]

3. “Nationalization of Form”

If we look back at the long process that gave shape to Esdi, however, we find that there were many different political positions involved, with no common agenda or ideology. As an intense debate was unfolding, design served at times to proposals recognized as “neoliberals”, and at times to “developmental” ones [Bielchowsky 2000]. In one way or another, economic issues were frequently addressed. One of the arguments quite explicitly used to justify the creation of a school of design insisted, for instance, upon the necessity for the “nationalization of form” of industrial products. It was like this that Lacerda's own Secretary of Education defended the school, less than a year before its opening, while emphasizing the need to stop “money evasion due to royalty payments for foreign products made in Brazil”. He even invoked “psychological reasons determined by the use of imported forms”, which “many times arrive here only after they are discarded from their country of origin.” [Gama Lima Filho 1962]

These words suggest that, despite the international character *par excellence* of design (due to its own dynamic of production, reproduction and dissemination of standardized “types” beyond any political, administrative or territorial limits), design in Brazil served, paradoxically, to fuel nationalist feelings. Notwithstanding its limitations, the emerging discussion on design happened thus to channel the highly politicized debate brought about by different schools of economic thought coexisting in Brazil between 1945 and 1964 (that is, the short period of democratization between the dictatorship of Getúlio Vargas and the military one). So, if it was possible to connect design with the liberal coordinates headed since the 1930's in Brazil by the economist Eugenio Gudin, it was also possible to connect it with a project oriented to overcome underdevelopment conditions with state-induced industrialization, such as the one outlined by the United

Nations Economic Commission for Latin America (best known by its Latin American acronym, CEPAL). In one way or another, there seemed to be a common central issue: the need to establish a development strategy for Brazil, both in economic, social and cultural terms. Even if the means to do so were different, and many times antagonistic.

It might be helpful in this regard to refer to the pivotal role assumed by Italian-born architect Lina Bo Bardi (1914-1992) between the end of the 1950's and the beginning of the 1960's, when she engaged herself in a broad cultural program in the northeastern part of the country, and came to be an influential voice in denouncing industrial design as "the weapon of a system" (Bardi 1994). Indeed, after moving from São Paulo (the major industrial and economic powerhouse of the country) to Bahia (a peripheral and impoverished state, then facing chronic droughts), Lina radically reviewed her own conception of design, earlier so instrumental in introducing the work of Max Bill (HfG's first rector) in Brazil. Rather than supporting the German idealist and rationalist view of design, she would then claim that the canonical lineage linking Bauhaus to Ulm – and soon, to Esdi –, was actually synonymous with an authoritarianism that privileged capitalist forms of production and could only be overcome by social and political revolution in a country such as Brazil, still under preindustrial conditions of production.

The fact that Brazilian cultural scene bore these confrontations indicates a maturation process which proved to be very fertile to the field of design. In this process, not only Esdi was considered emblematic, but design itself an inevitable battleground, where designers, intellectuals, economists and politicians intersected and interwove with sociopolitical ideas and ideals. So while Lina Bo Bardi focused on the persistence of poverty – clearly identifying herself with a larger plan to stimulate the overcome of the Brazilian underdevelopment – Lacerda kept on rejecting the characterization of Brazil as an underdeveloped country and preferred, instead, to consider it "an unequally developed country, where people start to understand they have rights to the benefits of civilization and technics". Consequently, in face of the growing social demands during João Goulart government (1961-1964), and shortly after the inauguration of Esdi, he felt encouraged to state once more his beliefs, claiming that Brazil needed not a "social revolution", but a "technological" one (Lacerda 1965: 137). Adding a couple of weeks later, immediately after the President's overthrow: "Technology will do for us what Karl Marx wanted to do for the world". (Lacerda 1965: 149). A strange prophecy that shows no awareness of the limits that design – and architecture - would face in Brazil in the years ahead, finding in Brasília its greatest expression.

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The historical trajectory of the pioneers of design education in Brazil: ESDI/ UERJ and ED/UEMG

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Industrial design / Design / History / Teaching / Pioneers

This current paper presents a historical survey of the creation of two pioneering institutions in the teaching of Design, in Brazil, the School of Design / State University of Minas Gerais (formerly Art Foundation of Minas Gerais) and the Superior School of Industrial Design / State University of Rio de Janeiro, focusing on aspects of the context of their regions, who encouraged or led to its creation, in order to identify and confront their different genesis.

1. Introduction

The first courses of Design in Brazil began in the mid-twentieth century, in line with the policy of modernization, developed by Juscelino Kubitschek and the cultural effervescence, then created by the maturation of the modernist artistic conceptions.

Over the past twenty years, the importance of design as an economic factor of development was gradually consolidated, which increased the demand for vocational training and led to an exponential growth of design courses in the country.

Recovering the pioneering initiatives of the Teaching of Design both in Minas Gerais and in Rio de Janeiro is not just to recognize the merit of those who supported the bold proposal at that time, but mainly, to create subsidies for future generations understand the history of design in our state and country¹.

The School of Design is one of the units of the State University of Minas Gerais and offers undergraduate courses in Interior Design, Graphic Design, Product Design and BA in Visual Arts. It also offers postgraduate courses in Jewellery Design, Furniture Design and Management Design for Micro and Small Enterprises and maintains, in partnership with UFOP and CETEC, the Masters/ Doctoral REDEMAT in Materials Engineering, as well as its own Master in Design. In addition to teaching activities, the School of Design develops research and extension activities through its Centers, Laboratories and workshops.

The School of Design/UEMG has a history closely related to the history and to the development of design in Brazil. Founded in 1955 as a School of Fine Arts, was attached to the existent School of Music of the U.M.A. - Art University of Minas Gerais, whose opening date is 1954. The U.M.A. was the result of asso-

¹ Brazil has now, according to data from INEP, 461 design courses spread over 23 states in the country, and features 36 courses in Minas Gerais and 24 courses in Rio de Janeiro.

ciation of the Choral Society, Artistic Culture and Symphonic Orchestra of Minas Gerais. In 1956 the School of Fine Arts installed a prep course and held its first admission tests, going into full operation in 1957 with its first students.

In 1963, through a state law, the U.M.A. was transformed into FUMA – Foundation Art University of Minas Gerais and certificated and recognized as a University one year after. But the whole process had only been effectively concluded in 1965 with the official decrees that recognized the courses.

The courses of FUMA, new at that time, were focused on the Fine Arts - Painting /Sculpture / Printmaking, and also on Industrial Design, Visual Communication, Decoration and Teaching Drawing.

In 1990, the FUMA made its choice of integrating the recently established State University of Minas Gerais². The presence of UEMG in Belo Horizonte incorporated traditional institutions of education such as the course of Pedagogy from the Education Institute of Minas Gerais, The Foundation Art University of Minas Gerais – FUMA and Guignard School. Incorporated into UEMG, these three institutions were divided into four schools denominated: School of Education (FAE/UEMG), School of Music (ESMU/UEMG), School of Design (ED/UEMG) and Guignard School.

A pioneer in design education, first in the state and second in the country, the School of Design was one of the most important initiatives that pointed the design in Minas Gerais. Known and respected nationally and internationally the School of Design has been adapting the teaching of design to the permanent changes of context and demands of the dynamic characteristics inherent to the discipline.

The School of Industrial Design (ESDI) of Rio de Janeiro is considered the first institution to offer a design course as a University level in Brazil. Inaugurated on July 10, 1963, by the governor at that time, Carlos Lacerda, the School has a history closely linked to political changes that Rio de Janeiro passed through in the 60s, especially the climate of cultural effervescence due to the economy growth of the 50s. For its creation, important personalities converged to the world of politics and culture of the country and abroad.

² The State University of Minas Gerais – UEMG, a public entity, was created by art. 81 of the Transitory Provisions of the Constitution of the State of Minas Gerais, in 1989, in the form of Local Authority, with the presidency in Belo Horizonte (capital city of MG) and Units located in different regions of Minas Gerais.

The school was designed in an well done plan by Alexandre Wollner and Karl Heinz Bergmiller from their previous experiences with projects like the Technical School of Creation designed by Tomas Maldonado for the Museum of Modern Art - MAM in the late 50s and the experimental graphic course by Aloisio Magalhães and Alexandre Wollner at MAM in 1961.

The history of Brazilian design is a matter of few publications, having been quoted only by Bardi (1986), Bomfim (1998), Bonsiepe (1997), Cardoso (2008), Lima (1995), Souza (2001). The design education in Brazil has been the subject of some publications, like Couto (2008), Dias (2004), Witter (1985) and Wollner (2002). It should also be noted further publications on design education in Latin America described by Fernandez.

Regarding the path followed by those two institutions studied, the School of Design-UEMG was only treated in Aguiar (2006), Laper (1991) and Teixeira (2004). On the other hand, the School of Industrial Design-UERJ was widely described in Niemeyer (2000) and Souza (2001).

The reason for this discrepancy may be caused by the lack of historical studies, promotion and publication of the institution of Minas Gerais. The creation of the ESDI by that time joined people with higher academic and cultural influences as the alumni from Ulm School (HFG), in Germany, the Royal College of Art in London and Brazilian intellectuals, such as Carl Heinz Bergmiller, Alexander Wollner, Aloisio Magalhães, Thomas Maldonado, Patrick Whitney, Carlos Lessa, Max Bill, Gui Bonsiepe and Lauro Cavalcanti.

2. Methodology

This research, by its nature, was characterized as an applied research, which, according to Silva (2005), aimed to bring forth knowledge for practical application and directed to the solution of specific problems involving truths and local interests.

As to the objectives, it was framed in the characteristics of descriptive and exploratory research. The first aimed to describe the characteristics of a particular phenomenon or the establishment of relationships between variables, and, according to Gil (1991), generally takes the form of survey. The second - exploratory research - aimed at providing greater acquaintance with the problem, in order to make it explicit.

Regarding the focus of the problem, the research was characterized as qualitative, by addressing the interpretation of phenomena and the assignment of meaning. In this case, it did not require the use of statistical techniques, but the collection of data sources in the "natural" phenomenon, which means, in the institutions studied.

The methodology adopted in this project was not restricted to isolated analysis of the phenomenon of the creation of both institutions surveyed. Specific information about the creation story of each of the institutions was confronted with many and

varied aspects of society at that time so that one can have the real dimension of their innovation.

To achieve the objective mentioned above, it was adopted as a technical procedure, according to Gil (1991), a literature review, document research and case study. The literature review was developed from previously published material, consisting mainly of books, journal articles and material available on the Internet. The document research included the collected material that has not received analytical treatment, such as historical records, statistics, photographs, documents, primary and secondary information relevant to the issues under study. In the case of this research it was necessary documentary research in both institutions studied in Belo Horizonte (MG) and in Rio de Janeiro (RJ). Finally, the project enabled the comparison of the factors that might explain differences and similarities in the experience of more than 50 years of the two institutions.

3. Beginning of design in Brazil – historical context

To understand how the teaching and the profession of design began in Brazil, it is necessary to provide historical background that announce and contextualize the actions which identified that time (Figure 1).

"Design is one of the few professions that were established more as an instruction, through schools, than as a practice", (SOUZA, 2001, p. 11). This particularity brings relevance to analyze how the Design course is taught. Understand how was the creation of the first schools and how the curriculums were developed and put into practice are relevant to understand the emergence of Brazilian design.

The euphoria of development

In Brazil, the 1950's is known as the "Golden Years". Such designation may be explained by the great economic and industrial growth occurred at that time. The term is directly related to the Kubitschek government, which pledged to bring development to Brazil, carrying 50 years of progress in just five of government, the famous "Fifty years in five".

In the years of Kubitschek presidency (1956-1961), the country had what can be called the "Euphoria of development", which means that Brazil was enjoying industrialization and cultural and economic progress. The population was eager for consumption, derived from capital accumulation and the increased purchasing power of the middle class.

During this period, Brazil went through a transition started before in the administration of Vargas, in which government policy encouraged industrialization to create conditions to consolidate the industry assumed as an important sector of the economy. The low quality of domestic products did not meet the new demands of the population and there was lack of knowledge of the Brazilian industrialists about Design. Part of the São Paulo elite

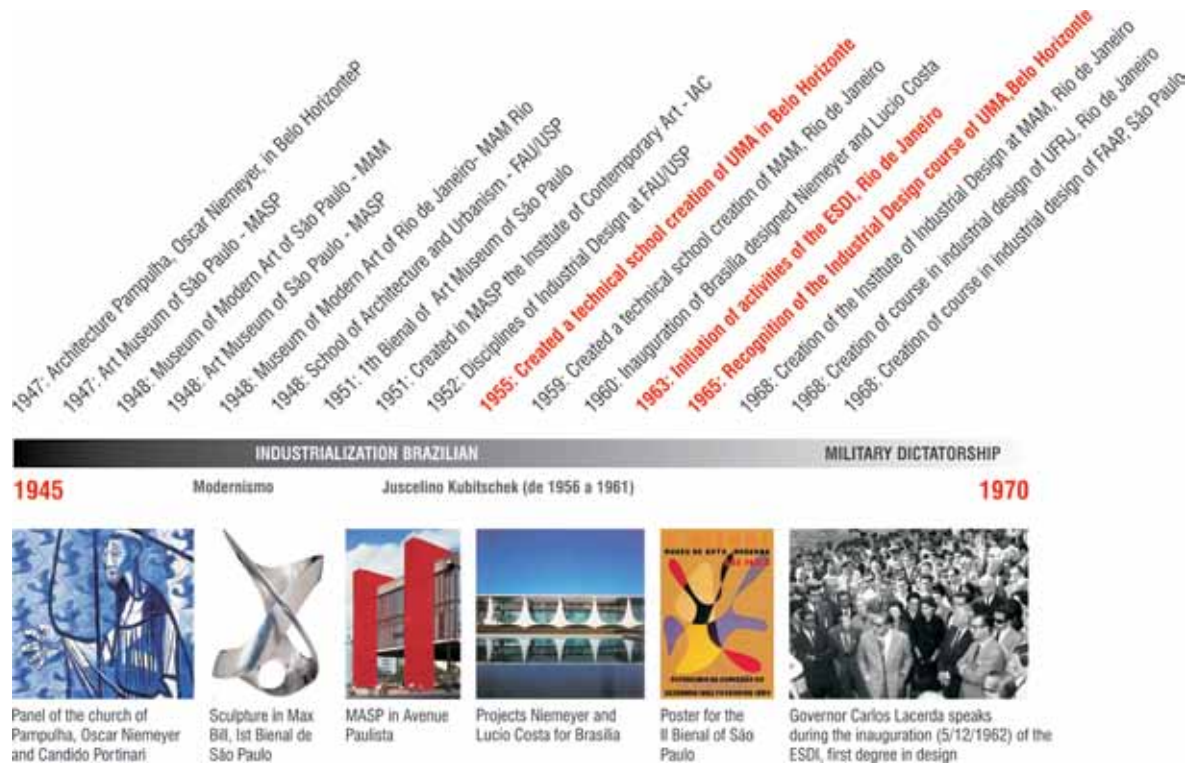


Figure 01. Chronological arrangement of manifestations which influenced the creation of the first design school in Brazil, from 1945 to 1970. Source: the authors.

foresaw the need for training professionals with appropriate qualifications to supply the demand for product design and visual communication, originated from increased economic activity and springing national industry (NIEMEYER, 2000).

The creation of the first schools was supported in the beginning by the idea of bringing national identity to the products. According to Niemeyer (2000, p. 93), "The orientation of the courses was basically pragmatic, market-oriented work".

The institutionalization of the academic education

The Law of Directives and Bases of National Education, number 4.024/61, in its art. 9 followed by the art. 26 of Law 5.540/1968 from the University Reform Law, has given the Federal Council of Education the authority to fix the curriculum of undergraduate courses. This measure resulted mandatory compliance of the "Minimum professionalization curriculum" from each of the undergraduate courses in the country or those which would be created from that date on, including their qualifications, regulated through resolutions of that Board, valid for any nationally educational system (BRASIL, Ministry of Education).

The Minimum Curriculum, according to Couto (2011), directed primarily to the professional practice and limited by strict structures, led to a fragmented academic education lacking in flexibility, which, in most cases, did not follow the social, technological and scientific development process of society. This context resulted in a widening gap of graduated students in relation to the competent performance required in post-academic activities.

According to the model of the Minimum Curriculum, innovation and creativity in the institutions were inhibited. There was no space or freedom to reformulations, since the curriculum mandatory components and content detail required by the resolution of the Federal Council of Education, was pre-established nationally.

4. ESDI/UFRJ X ED/UEMG

The teaching of Industrial Design in Brazil had as its beginning two isolated moments which were understood independently; one of them gave rise to the ESDI in Rio de Janeiro. The other took place in Minas Gerais, with the recognition of FUMA [actual School of design] by the state government.

Regarding the creation of the ESDI, it is evident that much happened more by the will of Rio de Janeiro's governor Carlos Lacerda than from a real need of that time, since the teaching of design was very convenient to his political project. The proposal of the ESDI had the intention of forming, with the first classes, an elite group that would be responsible for the implementation of the profession in Brazil. This task began to be accomplished within the course itself, which took on the process of endogenous formation of its professors. Students, after graduating, were hired as teachers making it possible to breed and crystallize the culture and knowledge developed there. At the same time, the endogeny opened space for the maintenance of power structures which would be highlighting and emphasizing certain knowledge, a favorable situation to the establishment of a hegemonic thinking.

The government's action behind the ESDI also caused failures, such as the political favoritism in the choice of some colleagues, in the place of better qualified teaching staff, which certainly produced injury to the school. Proof of this can be seen today, since almost a third part of teachers at ESDI has only under graduation and 57% of all teachers are graduated in the school. Another negative point during the creation of ESDI was the definition of a curriculum with bases directly related from Ulm School, which did not fit in the reality of the Brazilian production sector.

The pedagogical model adopted by the ESDI, based on the concept of learning by doing, according to Niemeyer (2000), would have weakened the theoretical dimension of education. By investing more in labor practice the school "[...] took a dogmatic character, not allowing to teach the students a critical view, neither from content view, nor from the education, or the role to be followed by the future designer," (NIEMEYER, 2000, p. 119).

In addition to this factor, the lack of teaching experience of teachers, coupled with the relationship between student and teacher based on the master, officer and apprentice system, legacy of the Bauhaus, by Ulm, mainly applied in the project teaching.

The School of Design opened in 1953 as the Art University of Minas Gerais and was the result of which, as told by Clovis Salgado, a 'nationalistic, romantic and idealizing idea at the time. Their creators were mostly young graduates in architecture, lacking of professional and cultural experiences. They were young and were enthusiastic about the experience, short but efficient of Bauhaus. They adopted, therefore, the original ideology of this movement as a guide.

It is important to point out that both the School of Design/UEMG and ESDI/UERJ present, along their respective paths, the same structural, educational and professional training problems, as well as the same kind of victories and successes. After all, ESDI and FUMA were created in distinct time and means, but communed of the same desire to build and institutionalize the design as a profession and effective activity that can add value and improve the quality of users lives, and also meet demands of the industrial sector.

Currently, as it can be seen, by studying the educational objectives and lines of ESDI and School of Design, only recently the theoretical knowledge of the design has been outstanding. In both institutions, teaching was for a long time developed the same way as the Bauhaus and Ulm. In this practice, a teacher assists the student project practices and the knowledge is grounded in large part, only in practice. This change can be seen in the fact that only recently both schools established master's degree in design.

5. Conclusion

The teaching of Design in Brazil was influenced directly by the School of Ulm, and indirectly by the Bauhaus. The process of installing an undergraduate degree in Design was not simple. De-

spite the efforts and planning, some other courses, which could have been pioneers, remained only on paper. Thus, the later curriculums were based on these models that were never put into practice and, in turn, were also influenced by the teaching of German schools.

It can be concluded that the culture of aesthetic repetition from the foreign practice has been enhanced in the implementation of design schools in Brazil. The poor adaptation of teaching standards and the presence of German teachers unwilling to teach in accordance with the historical reality of the country, led to an ingenuous acceptance of the first graduation students in Brazil to those styles. What could have been tools for creating a national identity became a hindrance to it.

It is still limited the effective participation and dialogue among students and graduates of the Universities of design together with the Brazilian production sectors, especially when considered in industrial parks and productive market. Only in the last two decades, design teaching in Brazil began to become more effective to the needs of the country. However, it is still far from determining the identity of Brazil on this issue, not only by foreign influences on design professionals, but also on the country's cultural diversity.

Observing the trajectory of two historic institutions reveals the need of changing the paradigms of the training of design professionals, stimulating the formation of not only individuals with technical and projectual skills, but mainly with critical skills that could contribute to the definition of the designer role and, hence, with the definition of the profession's position considering the market.

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Educational practice discourse on teaching project design in graduate design courses in Brazil

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Design education / Undergraduate design / Teaching project

This paper is based on a survey exploring educational experiences built up through teaching design courses in Brazil, analyzing the discourse built up in the pedagogical practices of a group of lecturers. This addresses the conceptualization of knowledge and education, as well as educational paradigms. The dynamics of doing and reflecting in practice and theory are examined as the foundations for actions focused on design and the formation of knowledge.

1. Introduction

One of the key points in discussions of design courses is related to design teaching and the field of knowledge related to the design process for configuring visual information systems or objects. In historical terms, the development of design has been viewed as a point of convergence and articulation for many the different tiers of knowledge acquired during the course, blending experiences, reflections, analyses, and practical actions. Due to these factors, it should play a structural core role, not only in terms of the curriculum, but especially in the pedagogical and cognitive sense. Nevertheless, it is well known that teaching models are still absorbed and replicated unquestioningly, according to the precepts of objective teaching, the concept of rationalistic teaching, transmitting knowledge and establishing standards (Silva T.T., 2003). Meanwhile, the field of design has been swept by massive changes during the past few decades, taking on new contours, extending its horizons and becoming more complex.

Within this context, this survey strives to map the issues emerging from the discourse of a group of lecturers in Design, as a contribution through reflection on the paths of design education.

The methodological detailing of the study complied with the basic principles of the Underlying Discourse Unveiling Method developed by Nicolaci-da-Costa (2007), particularly because it refers to discourse as a social construct, encompassing specific characteristics arising from social contexts, experience and autonomy, in order to articulate critical thinking in terms of a general discourse.

The profile of the lecturers recruited for the interviews stipulated a degree in Design, with graduate studies not necessarily in this field, who have lectured in Design subjects for at least five years. All the selected participants also had professional experience of project development.

Open-ended interviews were conducted with ten lecturers at six different institutions of higher education in Minas Gerais State, São Paulo and Rio de Janeiro States.¹ The resulting materials were analyzed through the discourse analysis method, in order to reveal indicators of what constitutes the opinions, ideas, beliefs and questions prompted by the experiences of the respondent lecturers. These findings were examined from the standpoint of educational experience, perceived as a political territory, a social construct resulting from a historical process. The key points noted were related to the conceptualization of knowledge and education, as well as views and stances towards educational models and paradigms.

In general terms, rather than stressing the central status of the subject in the curriculum, the discourses instead underscore the importance of design education for design pedagogy and thought, with regard to aspects related to cognition and the formation of specific knowledge. The analyses of the discourses confirmed the interest and concern of the lecturers in educational issues, with a questioning attitude prevailing, despite some lingering traces of a neutral stance, in addition to influences from the conceptualization of rationalist education.

2. Design education and the conceptualization of knowledge, education and teaching.

In design education, knowledge is still fragmented into autonomous blocks and territories that must be fought over and conquered, in contrast to the notion of knowledge and consequently learning as a social construct shared by a broad range of players. This trend towards the compartmentalization of knowledge has been strengthened through a curriculum organized by subjects, resulting in an accumulation of information that contributes little to professional quality of life. This criticism of the concept of an encyclopedic but segmented education that is still clearly apparent as a paradigm in curriculum structuring applied to design courses is stressed by Prof. E: '[...] The excess... it cannot be imagined that the school will reproduce the world, the school is the school, the world is the world. The school is part of the world! Really, they are trying to reproduce the world!' Prof. E

The problem does not only lie in the quantity and ordering of the content, but above all in the conceptualization of knowledge and learning that guides the way in which the courses are han-

¹ Each respondent received a code consisting of the abbreviation Prof. followed by a letter, in alphabetical order. Thus, in the analysis, the respondents are identified as Prof. A, Prof. B, and so on successively to Prof. J.

dled. Along these lines, it is important to stress that subject of Design does not function alone, as its essence lies exactly within the principle of articulation of knowledge. It is thus necessary to reflect on the principle of the core status of the design process, considering not only the structural and operating aspects of a course, but above all epistemological and methodological principles as the foundations for defining an approach that will be adopted in pedagogical terms. (Findelli, 2002)

In their discourse, some lecturers mention the integration of knowledge and initiatives, attempting to move beyond fragmentation and its effects. According to Fazenda (1991), integration works on the same points, with no possibility of reinventing them, in the quest for new combinations and greater depths, always within a single information group.

The development of a design project almost always requires the intermingling of expertise from many different fields. These boundaries tend to shift, expand and take on different contours, now not only in a diachronic manner, but to an increasing extent in a synchronous movement, requiring that the capabilities of professionals in this field be built up for dealing with multi-disciplinarity in positive and productive ways.

As a factor connected to this point, the statement given by Prof. A highlights the problem of the difference between the language of subjects outside the field of design that address specific contents with their own codes. The already complex communication process required for teaching design processes, which requires the construction of meanings or resignification, is joined by other languages that must be incorporated into the quest for convergence of meanings.

(...) during the seventh and eighth [semesters], there is also a very heavy load of engineering subjects. (...) there are no longer subjects that are specific to the design area, only the project design, and the others come from the fields of economy, materials resistance, fabrication theory & these classes are [taught by] other professionals from other departments, who might & not have the same language of design (...) Prof. A

Consideration must be given to the estrangement generated by differences in communication systems. It is appropriate to recall that design uses non-verbal means of reflection, thought and communication, and this factor may sometimes raise barriers between students and lecturers, particularly during the initial phase of the course. According to Schön, despite producing good, clear and simulating descriptions on the design process, the students, with their different understanding systems, probably consider them to be muddled and mysterious until they attain a convergence of meaning, through a reciprocal construction process. The educator must: 'challenge the student with whom he communicates and to whom he communicates, to produce his own understanding of what is being communicated'. (Freire, 1996: 38)

When specific contents are introduced in ways that incorporate them in design rationale, in order to ensure the integration with

other subjects, difficulties with differences in languages are surmounted: '[...] I can work with hand-operated planting devices. [...] and what is important, all the other subjects will be contributing, mainly in the mechanical systems area [...] and when necessary, the engineering lectures can provide support, through the fabrication of the specific system or element [...]]' Prof. A.

In a broader view, Prof. H criticizes the conventional education model applied to undergraduate studies, stressing the need for a review of these parameters, prompted by the technological progress that ensures easier access to information and communication. He mentions the introduction to science course as an essential supplement to these outdated undergraduate studies, as this offers students opportunities for discovery and reflexive investigation:

(...) undergraduate studies no longer have this, or rather, they continue with the same teaching role. (...) Transmission? (...) is very anti-productive. (...) Guiding yes, without a doubt - 'Look, here is the path, this is the way, that is the way'. (...) Because the student (...) will start to discover, (...) will start to link information together, slowly, and will have a tutor who will say 'No, no, this is not the path. Let's try this way. No, this didn't work out well, so I think that it is fundamental'..., so I think that this is the comparative advantage. Prof. H.

Consequently, what is under examination is the teaching paradigm for higher education. The basic idea presented by Prof. H., in contrast to teaching through transmission, is seamlessly aligned with the proposal of reflexive practical teaching (Schön, 2000) through which, applying the reflection-in-action system, students learned by doing and interacting with professionals who are more tutors than lecturers. The purpose is for them to perceive, with autonomy, the links between the means and methods used and the results achieved, thus being able to engage in the signification process.

When mentioning the difficulties shown by the students in making connections that are inherent to the learning process, Prof. D. turned to the ideas of Dewey on experience and education, in an attempt to diagnose the problem:

Why does this happen, that they fail to make connections? (...) between a certain type of work that is performed in a subject (...) that involves some type of basic research into the form. (...) they share the experience, experience in the sense of learning (...) in a watertight manner (...) what I think is that there is something very 'Deweyan', the idea that the learning process takes place through experience. If the professor does not underscore links with other things, the students run the risk - and this is quite clear among us - of keeping that experience separate from the others. Prof. D.

The line of thought explained by Prof. D. explains its conceptualization of education, inspired by the ideas formulated by Dewey. From this standpoint, the acts of thinking are linked to a personal experience, through which the student can systematically reflect on the relations involved in the object of study. (Cunha, 1994)

In his statement, this lecturer noted the difficulties encountered by students in establishing links between the knowledge built up during their basic studies and the experience of preparing a

design project. He suggests that distinguishing the approaches used by subjects, with a return to basic investigative studies, and another with demarcated objectives, leaves the student unable to perceive the possibilities of association. Consequently, the lecturer must create stimuli, with dynamic activities that foster these interactions, in parallel to questioning that prompts the student to seek out links with other experiences.

This leads to a fundamental issue for teaching design, related to the approach adopted for conducting the design process: whether this should be steered rigidly by pre-determined methods that sometimes mechanize thought, or be guided by reflection that blends doing and thinking in the construction of a line of thought and the definition of methodological guidelines.

Issues related to methodology, as a set of methods applied to the development of a project, are a permanent focus for attention, when analyzing or discussing design education. Nevertheless, a mistaken perception of this issue might result in distortions. As noted by Cross (2007), when the educational processes applied to this learning curve are poorly understood, they end up firmly anchored in the design method. A clear distinction must be made, as expressed by Naveiro and Medeiros (2008: 5): 'The paradigms and protocols of design education differ from those of design practice, and consequently, design methodologies do not necessarily coincide with design education methodologies'.

Ongoing stimulation is crucial for ensuring the quality of educational experiences. The 'experience continuum' (Dewey, 1976), defined by continuity, interaction and interpretation, is a necessary condition for an experience to become educational, endowing the individual with the capability of regulating, guiding and directing subsequent experiences.

'I think that this is very much an outcome of the belief, this non-connection [...] that knowledge is linear and is built up cumulatively [...] and that it really does not take place in this manner. Everything indicates that experiences are consolidated as they are repeated and reiterated in other contexts.' Prof. D.

Guidance from the lecturer, presented in appealing ways, may trigger questioning that retrieves knowledge already acquired, which may then be observed, analyzed and articulated from a different angle, in new contexts. Thus, encouragement for exploration in greater depth endows curiosity with a critical character, becoming epistemological curiosity insofar as it explores the object of study with methodical rigor (Freire, 1996).

The need for a critical look at design teaching, followed by a review of the current paradigms, was stressed by Prof. H. when talking about the demand for studies in the design teaching area: 'There is something wrong there... I don't know whether this is a mistake, but there is something missing, a supplement. I think that what is missing for this area is for someone to usher in innovation on how to train design students.' Prof. H.

The belief of this lecturer is supported by the statement from Cross (2007) that we need a better understanding of the specific nature of activity, behavior and cognition related to design in today's context. In the quest to reach the core issue for teaching design, Prof. D. focused his attention on the thinking process as the basis for a pedagogy focused on developing the capability of enunciation and reflection, in counterpart to the model targeting the establishment of thinking standards with methodological formulas:

What is thinking? I propose that we start thinking about this. [...] progressively, introducing new elements, concepts that will allow us to develop our capabilities of enunciation and reflection. [...] in general, the university must draw attention to the tools of thought [...] completely different from what we had at the start of the design course here, which was an outside-in methodology, where it was unimportant whether you thought - or not - in this way or that [...]. Prof. D.

In his remarks on pedagogical experience, Prof. E. offers a reflection on methodology as a tool for thinking, proposing the method in action concept:

[...] So, methodological prescriptions are a contradiction in terms, there are no methodological prescriptions, there are method resources. [...] They are systematizations. [...] there is a method, because there is a method, because there is a way of linking things into chains. [...] method is extremely important, now, method in action. [...] it is thinking about what is done and systematizing the way of doing it. Prof. E.

The learning curve for a methodology is built up through constructing a path that is defined according to an intellectual process. Students have the opportunity to observe the differences among the various routes, which highlights the reflexive nature of the process. In the words of Miller (1988: 2): 'What is actually important is the understanding that the thought process in design involves a wide variety of procedural structures and may thus not be limited to a single specific methodology.'

When offering advice on the autonomous discovery and construction of the methodological route, the curiosity of the students must be nudged into a questioning restlessness (Freire, 1996), encouraging them to try to construct and test meanings that they see and hear. In this learning process, they gain hands-on experience of the guidelines and descriptions of the tutor, applying to their work the meanings that they produce on what they have seen and heard, while reflecting on their personal experiences. (Schön, 2000)

Educational activities must always target the active process of organizing facts and ideas, according to a more intellectual and objective scheme of progressive organization, thus spotlighting the meaning and the importance of the problems being addressed. This principle formulated by Dewey (1976 and 1979) is clearly applicable to design education. If properly understood, this process is consolidated through means that can steer new quests and research projects, pursuing a flow of continuity in interpretation, of analyses and synthesis that characterize and intelligent activity whose goal is always to attain a specific intention or purpose.

Consequently, pedagogy applied to training designers must assign high priority to building up their capabilities for this brain-intensive activity, ensuring feasibility for the construction of thinking processes with autonomy and propriety.

3. Conclusion

In the field of design education, serious thought is required about the parameters and educational stance that we are adopting: what concept of education and knowledge is underpinning our actions, choices and discourse? We must replace a reactive attitude by a proactive approach. [Findelli, 2000] Above all, it is necessary to break away from the idea of objectivist teaching, through shaping processes and merely executive design projects, investing efforts in the intellectual, investigative and experimental nature of design, in order to encourage reflexive thought.

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Studies that focus on design from the perspective of identity and territorial issues, approaching topics such as micro history, collective identities, gender, internationalization, marginalization and globalization.

The island of Italian Design? Some notes for questioning a long-lived myth

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Italy / Historiography / Exceptionalism / Italianness

Within the historical discourse over Italian design, a persistent interpretive strand can be detected which has tended to depict the Italian case as an island, detached from the mainstream international developments. While it has helped reveal some features of Italian design, this exceptionalist reading has tended to leave in the shadow some other stories and aspects of the development of design in Italy that do not align with that image of singularity. In this paper we intend to bring into light some of these other issues, as suggestions for further investigation.

Almost invisible in the geography of modern design in the period before the Second World War, Italian design quickly gained a seemingly well identified position on the maps of international design over the course of the second half of the century. The territory and landscape formation process of Italian design was not only made possible by the actual appearance of products that were designed by Italian designers and manufactured in Italy, but it also owed much to the historical and critical discourse construed around such products, their authors and the entire design system of Made in Italy.

Having recently had the opportunity to conduct research on the historiographic literature concerning Italian design – for a forthcoming publication – we began considering the boundaries of Italian design, as they appear from within that historical discourse. It seems to us that within this discourse, and particularly within the Italian experience, a persistent and widely influential interpretive strand can be detected, one which has tended to depict Italian design as a special case of design, detached and isolated from the space and time of mainstream developments, or the idea of such, in modern international design. To quote from the catalogue of the renowned exhibition *Italy: The New Domestic Landscape*, held at MoMA in 1972 and curated by Emilio Ambasz, ‘one is constantly surprised to note how frequently the Italians compare conditions in their own country with those in “Europe”, as though they inhabited, not a peninsula, but an island quite separate from the continent’ (Ambasz 1972: 285).

In this sense the discursive shaping of Italian design can be described as a case of ‘exceptionalism.’ In political geography studies this term refers to the tendency to compare the evolution of national spaces with the conventionally assumed standard and dominant experience of other countries such as the UK, the USA or Germany. A part of this phenomenon is also the tendency, which has its roots in early modern times and the era of con-

quests, of ‘figuring spatial differences in temporal terms’ (Agnew 2002: 70) so that some regions may be judged not only different, but also ‘late’, compared to other civilizations. According to the political geographer John Agnew, a myth of this kind, i.e. the rhetorical idea of Italy’s backwardness in respect to other European countries, has played a significant role in defining Italy’s place in the arena of modern nation states (Agnew 2002: 59-76).

It can be argued that a similar vocabulary, focusing on backwardness/modernity, was also central to the discourse regarding Italian design. However, in this case the rhetoric of exceptionalism has been turned into a positive mythology, precisely by insisting on the peculiarities of Italian design in regards to foreign models or with respect to an ‘elsewhere’ which was probably, more often than not, imagined rather than real.

The idea of the specialty of Italian design can be traced back to the inter-war period, when under Fascism the notion of Italianness and of an Italian approach to architecture, arts and design was put forward – see Gio Ponti’s impassioned calls for the ‘Casa all’Italiana’ (Italian home) as opposed to the *machine à habiter* (see Casciato 2000), and for the innate excellence of Italian cultural, artistic and moral habits to be expressed in the manufacturing of products of modern taste.

In the post-war years – when Italy was committed to reconstruction and when ‘industrial design’ entered the vocabulary of Italian commentators, allowing them to directly and openly confront the international developments of architecture and design – there emerged the perception of a double register in the overall Italian situation. On the one hand the Italian situation seemed late or distant in comparison with other modern countries, and in many respects especially from the standpoint of the industrial production system, of design culture and professional organization and recognition. On the other hand, Italy appeared capable of conquering the international marketplace thanks to products of high aesthetic quality. In the words of the architect and designer Alberto Rosselli, who at the start of the 1950s traced a first chronicle of the ‘Linea Italiana,’ indeed the Italian situation looked very ‘special, strange, and paradoxical’ (Rosselli 1952: 54). As he reported, the ‘official’ profession of the industrial designer did not exist and yet the ‘vocation’ of Italian people to ‘create beauty’ made it possible for some personalities and products to gain international recognition.

Although this analysis was shared by many commentators, it was to be judged rather with ambivalent feelings in the following decades. In any case, the idea that an ‘official’ design had

developed elsewhere – namely in northern Europe and in the USA – was usually not questioned.

In the eyes of those who, however critically, looked to the Modern Movement's teaching and ideology as a model, Italian design culture and practice was already entering a period of crisis (cf. Fallan 2009), trapped as it was between serving the society of consumerism and of the the spectacle and the defeatist drift of anti-design. Architect and critic Vittorio Gregotti – who from the late 1960s until the 1980s was greatly devoted to defining the history of Italian industrial design – has repeatedly condemned Italian design as the mirror of both the virtues and vices of the Italian national character: improvisation, superficiality, bias for fashion, and uncritical passion for innovation (Gregotti 1968, 1982).

By the 1970s, however, along with the affirmation of new trends in design, the presupposed otherness of Italian design began to be valued as a quality, rather than blamed. The aforementioned MoMA exhibition and catalogue contributed to this turnaround, to spreading the image of Italian design as a 'dominant force' which was more capable of influencing other countries than of being influenced by them, as a model approach to bringing design beyond just style, objects, and good design. In the very same year, although from a different perspective, historian and art critic Paolo Fossati condemned as inadequate what he judged to be the still pervasive application of the interpretive grid of functionalism and rationalism to Italian design. In his book *Il Design in Italia 1945-1972* he retraced the history of the 'space of Italian design' as that of an outlaw and paradoxical design, one that owes more to art than to industry and technology; as a type of design that is always beyond function; as a critical space that a number of artists and designers – rather than professionals – had gained autonomously; a kind of design that is not suitable to institutionalization (Fossati 1972, 12-31).

And yet probably the strongest overturning of the idea of Italian design's anomaly, that which turned it into a celebratory myth, has come from those who committed to a postmodern conception of design with no specifications – i.e. not industrial. Engaged in advancing the new avant-garde, designers and theorists like Andrea Branzi, in particular, have proceeded to rewrite the history of Italian design in relation to the present time, interpreting its entire development – including the 1950s – as a clear anticipation and realization of a postmodern attitude. Texts such as *The Hot House* (Branzi 1984) and *Learning from Milan* (Branzi 1988, 31-35) thus present Italian design as a paradox, as an 'incomplete modernity' that contrasts the standard model of an idealized European modernity, as a 'cultural category' and an 'opposition movement' that has more to share with Dada, Surrealism and Metafisica, or with a vaguely postulated 'Latin identity,' than with the Modern Movement, Germany, Scandinavia or the USA. It is also a kind of design depicted as being deeply rooted in the Italian character and context, and in its system of production, wherein small and medium-sized enterprises mingle with craftsmanship.

In recent years the perspectives traced by Branzi and Fossati have been carried forward by authors such as Giampiero Bosoni and Manlio Brusatin who, although with different foci, have both insisted on the cultural-aesthetic features of Italian design and on the great humanistic tradition of Italy as keys to understanding it (see Bosoni 2001, Brusatin 2007).

Not surprisingly, despite the fact that great moments and figures of the Linea Italiana and New Design having already passed, Italian design exceptionalism still spreads and serves promotional and marketing needs well – as evidenced by publications like museum and exhibition catalogues or company communication (see for example Bosoni 2008a and 2008b; Annicchiarico, Alessi 2010).

Overall, the views which uphold Italian design as a distinct phenomenon has helped reveal some significant aspects of its very development. However, the emphasis placed on its peculiarities, or certain features, as being constitutively inherent to the entire history of Italian design – for instance its anti-institutional, non-professional, non-industrial, and domestic qualities – has often meant that other aspects not aligned with that image of exceptionality are left in the shadows, or even neglected.

In this paper we intend to bring into light some of these other aspects and issues. And we do so with particular reference to topics and areas of design which have had some space in the actual development and debate of design in Italy – and at some point have also been recorded in historical literature – but which were later forgotten or left aside due to their failure to lead to any commercial or media success, or simply out of the sheer fact that they were deemed irrelevant to the mainstream identity of Italian design. The themes that we aim to illuminate are meant as suggestions for further investigation.

1. International influence and exchange

Finding out and analysing the relations that have developed between the Italian design culture and community and the know-how, stylistic trends, institutions and organizations of other countries could mark a significant step towards the deconstruction of Italian design's exceptionalism. Instead of opposing the anomaly of the Italian case to an abstract 'other,' it might be interesting for instance to investigate the connections that linked Italian companies, designers, and critics to the design, marketing and corporate culture expressed by a country like the United States. There have already appeared studies on the promotion of Made in Italy in the USA and on the experience of single designers in the USA (see for example Sparke 1998, Carpenter 2006). The impact of the American model on Italian advertising, consumer attitudes, cinema and other areas of culture industry has been noted, while its influence on the formation of design culture and design profession in Italy still awaits substantial research.

Likewise, the actual impact of the Italian design model and approach on design communities and design practice in other countries is still to be assessed.

Of course a similar argument can be made with regards to other international experiences regarded as relevant within the Italian design community: the style and approach of Scandinavian design and the institutional organization of design in the UK, for instance. Still another important relationship deserving greater in-depth study is that of the Ulm school and its teachings throughout the 1960s and 1970s – due both to the Italian designers that attended the school or taught there and to the presence of key-exponents of the school in Italy (as concerns Tomás Maldonado see Riccini 2009).

2. Consumption and mediation

The exceptionalism of Italian design is construed on an almost exclusive focus on production, i.e. on designers, products, and product design. Expanding the study of design in Italy to include issues of consumption and mediation could certainly help in clearing the field of certain stereotypes (cf. Lees-Maffei 2009).

Hence, apart from very few exceptions, the real impact of design on Italian society remains an open question. The literature on Italian design shows rather discordant attitudes with regards to consumption: on one side, there is an underlining of the gap existing between the work of Italian designers and actual society, where Italian style is depicted as addressing mainly a foreign and elitist market; on the other, the portrayal of Italy as a country where design is an integral part of people's everyday lives. As is often the case, the truth can be found somewhere in the middle of these two pictures, or perhaps simply in the eyes of the beholder.

An occasionally highlighted phenomenon (Branzi 1999, 111), but which requires the specific attention of historians, is the existence of a market of products whose style and aesthetics are drawn from well-known design pieces but which are more accessible to the average consumer and therefore have entered into the homes of people and daily material culture. The trickle-down effect of Italian design await narration.

The study of consumption is also linked to the study of mediating channels and actors. Not only would it be of relevance to research the role played by showrooms, shops, magazines, and exhibitions in shaping and spreading Italian design products and image, but it would also be important to study those figures who have held strategic positions in the process of transferring, adapting and reinterpreting the know-how, methods and approaches of other countries.

3. Large industry and companies

As mentioned in the first part of this paper, since the 1970s-80s the rhetoric of Italian design has insisted on the pre-eminent role of small and medium enterprises emblematic of craftsmanship and passionate entrepreneurship. Despite the existence of a strand of research focused on the technical, industrial and engineering side of design in Italy, the role of large industry and industrial culture in the history of Italian design still deserves further reassessment.

One issue which has been underexamined is the connection between the neo-capitalist idea of modernity and the emerging culture of industrial design in the 1950s-60s. In other words, the influence exerted on the early formulation of the design profession in Italy, conducted/carried out primarily by the idea of a techno-industrial humanism, at the time shared by intellectuals, business executives, designers and art directors, and spread via corporate magazines by large industries of those decades (e.g. ENI, Finmeccanica, Italsider, Montecatini, Olivetti, Pirelli) (see *Comunicare l'Impresa* 2010, Bigatti, Vinti 2010).

In relation to this topic, another theme to consider is the construction of the corporate image of large companies through various forms of design intervention which ranged from displays and exhibitions, to the design of consumer facilities and services, as in the case of Agip/ENI.

4. Graphic design and design of systems

Italian graphic designers, have long since participated in the building of design culture in Italy. Despite this fact being underlined very early on by authors such as Alberto Rosselli and Gillo Dorfles, as well as being noted by various scholars, in general the histories of Italian design have only rarely, or marginally, included graphic design in their accounts.

The relationship between graphic designers and industrial designers in Italy from the post-war years to the 1980s, the occasional overlapping of their experiences, as well as the contrasts and the heated debate that has developed between the two professional communities, constitute a research topic of great interest, albeit still being underexplored.

During the period beginning from the late 1960s to the early 1980s, many Italian graphic designers – together with some colleagues from the field of industrial design – pursued ways of proceeding beyond the object-based and commodities-based focus and the complicity with mass consumption, which could be read as a late-modernist alternative to the kind of attitudes held by radical and anti-designers (see Gunetti, Dropallo 2011). Along with prefabrication, design for transport systems and for urban space, and design for the public community, the area of corporate identity, and more generally that of visual design, represented in those years a ground for interdisciplinary experimentation, for carrying out a design approach concerned with the idea of design systems. Certainly these types of experiences could hardly be assimilated to the most common image of the Italian style and it is precisely for this reason that they are all the more worthy of attention.

5. Professionalism, education, and institutions

A refrain that still seems to envelop the island of Italian design is that of the idea that for a long time its protagonists were mostly self-taught, and that this was due to an endemic incapability of establishing the required support structures for training designers and for sustaining their professional role within society. This is an idea that also extends to contemporary designers –

the other side of the coin being the praise of intuition and free creativity. As a matter of fact, most of those who have engaged in the field of design have not been totally devoid of some kind of education or practical training, whether in architecture, the arts, or engineering. Moreover, vocational training and higher-education programs related to, or focused on, design or its single areas, were established in various cities even before the 1990s, when design was eventually included into the university disciplinary system. At different times, the issue of design education has engaged the minds of the Italian community of design, and some historians have not failed to devote attention to this topic (Frateili 1989). And still a thorough and long-overdue study is needed concerning how the education and training of designers developed in Italy, and how this has related to the institutionalization of the profession – the early training programs, the relations and experiences that developed as a consequence, the legacy of such programs on the current educational system.

In April 2012, the cover story of *IL*, the monthly magazine of the Italian financial daily *Il Sole 24 Ore* published on the occasion of the Milan Design Week, reported that ‘Our [Italian] school of style no longer exists, and yet we are like America [i.e. dream land] for creative people from all over the world.’ The current situation, where the Italian manufacturing system continues to attract some foreign designers – while at the same time also looks abroad for more profitable conditions – and where young Italian designers go abroad in search of training and work opportunities, makes the risk of staying adhered to simplistic and stereotypical laudatory notions of Italian design, which may no longer correspond to any real territory, all the more apparent.

For historical studies, this consideration is just another stimulus to proceed in deconstructing the island of exceptionalism and in reconstructing a more detailed map and understanding of design in Italy.

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Design without borders: the nomadic journey towards sustainability

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Design for sustainability / Nomadic thinking / Nomadism / Portable buildings / Temporary constructions

This paper is based on a doctorate thesis about innovative design directions that considers contemporaries forms of nomadic life, respecting the environmental requirements. The aim of this paper is to discuss sustainability problems and nomadic behavior, under the optics of design. What is the relation between nomadism and sustainability? The hypothesis aims to confirm that nomadism and sustainability are closely related and tries to understand how designer can incorporate these principles in his work process.

1. The nomadic journey

Besides a contemporary situation where the necessity for dislocation has become more and more recurrent, an increasing number of environmental impacts are happening as a result of the excessive mobility. What can be done to change the inevitable catastrophic future that has been sowed?

Whereas nomads can teach us some lessons about how to recover the harmony with nature, antinomads do not respect nature rhythm and are causing environmental damages. This paper proposes a re-orientation in design procedures that can avoid an increase in environmental impacts. Sustainable design guidelines suggested by Ezio Manzini and Carlo Vezzoli (2002) are combined with nomadic behavior concepts to give a direction for ethical values that can help designers to project with responsibility.

The five parts of this paper are divided by theme in categories - To go away; To recognize the place, To know others; To catch resources; To define duration; To go back – providing a range of keys for interpretation of the nomadic journey.



Figure 1. Art Polonia: Yurt. (photo by Lara L. Barbosa at Dublin, 16th march 2008).

To go away

Move away from home

People who are always moving and going somewhere can understand better the meaning of "home". A French sociologist, Michel Maffesoli, uses the greek word apoika to express the archetype of exodus like "move away from home" (Maffesoli 2001: 157). The verb apoikéo means to emigrate, to live or settle away from your home. The experience of being a foreign, the dangerous that travels abroad represents at the same time that adventures could happen, is a kind of fulfillment of being yourself.

From this point of view, what we are carrying with us is what matters most. Not only material resources, but meanings: the cultural heritage, mother tongue, feelings for people who we left, the expectations about where we will go.

What to carry?

A mobility situation requires choose what to carry and what to leave behind. The boarding moment involves cutting everything that is not essential or will not be used during the travel.

The first revision that design must face is the difficulty of moving and sometimes carrying a home. Nowadays, design for disassemble is recurrent for commercial and institutional projects but not for habitation purposes. Is there any appropriated built model for contemporary nomadic way of life?

There are some contexts where the weight of movable equipments and shelters were drastically reduced. These examples are more compatible with nomadic life. The real nomad carry their home and households with them when they move. They do not build a new one, neither adapt another construction to use as a house. They have an easy to carry or disassemble home designed to last and resist to several moving. That is why some tools that make the transport easier are incorporated into the materiality of the home, like lightness.

Another type of mobile solution of dwellings found on this survey is the geodesic dome. Although the geodesic form is a strange thing inserted in a residential environment, among another context like an exhibition, it is very well accepted.

Vernacular procedures

It is a challenge to combine nomadism with local characteristics. As far as possible, the use of materials found at new location can avoid transport expenses and impacts. But this requires some knowledge about raw material and production techniques to preserve the biodiversity and the local identity. It is suggested to arrange a database for designers who want to interfere in local

communities. The information about non exhausting materials and renewable resources available locally is a good start for a project. Also, to take advantage of disposed products and recycled materials helps to minimize pollution for, a not so far, future generation.

2. To recognize the place, To know others

Refugees, immigrants and exiled people

Refugees and migrants diasporas usually have the idea that they would not come back home. Often, the circumstance of arrive in a new location causes discomfort and embarrassing situations. Nomads usually have a strong ability related with adaptation. They have strategies to create a friendly environment compatible with their mobility intentions.

This kind of mobility, where people move for necessity, is more related with poverty and material losses. There is a misleading sustainability because in social terms, this context that involves homeless and refugees is not a good reference for way of life. But, in environmental terms, they consume fewer resources, reusing and recycling wasted objects. Sometimes sustainable and nomadic solutions are used to satisfy necessities in a frugal way.

Who are those people?

There are nomadic people in different nations, such as Indians and Eskimos or Inuits in America; Ab-origines in Australia; Bedouins in Arabia; Somalis and Fulanis in Africa, they are universal people. Nowadays, it is possible to find geographical and psychological nomadisms amongst homelessness, nomadic workers, environmental or war refugees, gypsies and so on.



Figure 2. JCDcaux (concept) Patrick Jouin (designer): Velib', 2007. (Photo by Lara L. Barbosa at Paris, 7th april 2008).

Our ancestral is still alive inside us, we might recognize that there is a part of the other in everyone. Instead of leave the opposite out, it is better to admit that everybody has a part of this opposite too. What is important here is the displacement to the other, try not to focus just in yourself.

The survey of this research includes vehicles as design solutions because they are very valuable for nomads. Vehicles are essential for displacement to cross boundaries and go beyond limits. In fact, nomadic people did not accept borders; they are crossing the limits all the time. Due to such behavior, it is difficult for them to settle in one place, this makes them sick.

Integration processes

The impacts related with mobility, in the environmental sense and immigration, in the social sense could be mildly dropped through integration processes. According to Paul Zumthor, the word integration comes from the adjective entire. So, integration is the part in harmony with the whole (Zumthor 2005: 181). This concept means a relationship where there is an intense opening to the place, exposing it to contamination. Michel Maffesoli (2001) defines the function of wander as a way to take the foreigner in, to use it and to integrate it to everyday life. An exchange of experiences and values (such as currency, languages, goods) beyond groups from different countries is a way to allow integration.

In terms of design directions, new creations could be used any place and any time and could permit functions to improve communication and continuity. The future of mobility is related with integration because different transport solutions do not compete with each other, but they do complement each other. For example, to get to one place, it can be possible to go by bus or subway and to ride a bike in a stretch of the road.

Designers must be committed to select energy resources with low environmental impact and toxicity as a fuel to any kind of vehicle. This attention is required in pre-production, production, distribution, use and discard; since additives until any dangerous materials involved in design process.

3. To catch resources

Everyday life activities

How is it possible to satisfy everyday life necessities in mobility situations? The focus of the survey in this research is to find design answers for that question. After find some shelters, it is required to search for what are inside these mobile dwellings.

For each everyday life activity there are several equipments that can be used as support for it. These nomadic equipments are portable or retract furniture, collapsible structures, itinerants and temporary services and vehicles used as mobile marketing. Bearing in mind that those equipments are flexible, design might

be made with instruments adjustable or transportable, mountable and demountable. Nomadic equipments are those which give support to nomadic way of life, fulfilling daily basic activities. The challenge is to satisfy those who live in constant displacements.

How to satisfy necessities?

How can homeless people to sleep, eat, or practice any other basic activity on the streets? They solve this problem with resources that are at hand. They use sources of water, pipes, dams or rivers to wash clothes. With discarded materials they construct supports to sleep. A place to urinate and defecate is one of the main problems because cities do not have public bathrooms. Food is found in institutions that provide evening meals, restaurants with very low prices and food offering in exchange for work (cleaning and kitchen porters).

Homelessness, as contemporary nomads, are producing portable bathrooms, ephemeral plastic or cardboard shelters, retractable covers, carts made by reused products. Besides all this creativity there is a hard reality faced by those who cannot count on government support. Instead of it, hygienic policies of cities do not allow them to use public equipment to survive on the streets. Design details in urban furniture like iron divisions on park bench are instruments that induce them to keep away from the public space. Their shelters have to be easily constructed and re-constructed because homeless people are at risk of losing everything all the time.

Scarcity and simplicity

If everyone reflects on all the things consumed to construct a house, they could perceive the excess committed. Even in some nomadic groups, the furniture and the artifacts do not have mobility requirements that allow an easy moving. The frequent transport of heavy and great objects is a design problem.

Both scarcity and simplicity are challenges to get a nomadic life according to sustainability. We must deal with a reality where energy and material resources, from food to fuel, are reducing. This attitude of avoid overdesign is a basic criteria to optimize material efficiency consumption.

To be simple is a characteristic from material culture of nomadic communities. As they have an economy based on getting just what they need to subsist on temporary places and to carry what they have, they reduce their wealth.

To define duration

Nomadic aesthetics, the time of experience

Nomads have a different conception of time. This demands a review of the implications for design. According to relations of this way of life based on the time of experience, it is defined a nomadic aesthetic. Based on the essay of Teshome Gabriel (1988), some factors related with nomadic life defines a nomadic aesthetic, such as:



Figure 3. Darrick Borowski: *O2 Chill*, inside UK Millennium Experience Dome, 2006. (Photo by Lara L. Barbosa at Greenwich, 26th march 2008).

1. Space is relative to seeing, touching, feeling. The notion of nomadic space happens through introspection.
2. Time is seen, observed and experienced as subjective. The notion of nomadic time happens from life itself.
3. Memory is immediate. Communication is intense.
4. Language is symbolical, metaphorical, musical and performance.
5. Lifestyle is free. It is related with not glorify territories and resources.

Often, streets are places where hierarchies are contested, a nomad characteristic for excellence. Those territories are usually ruined spaces, leftovers of urban space as under viaducts, empty places submitted to deteriorating conditions.

How long does it persist?

To develop detailed specifications about a project that will change the address frequently, it is important to know how long it will stay in each place. The durability and validity relations have to be examined.

Some of this itinerant projects are pneumatics constructions, temporary structures, prefabricated and portable buildings. Portable buildings are defined as:

“those that are transported whole or intact. Sometimes they include the method for transport within their own structure (wheels, hull) and can be towed or carried- a few can be described as self-powered. However, the dividing line between building and vehicle then becomes blurred.” (Kronenburg 2002: 9)

Cyclical multiplicity

Nomads promote cyclical events and follow regular repetitions, according to the limits of its experience. This apparent only ephemeral circumstance is an efficient way to intensify and to

extend the situation. Through the same logical, demountable, relocatable and portable buildings are sustainable because they are flexible and can be reused several times.

Designers can work on this improvements facilitating adaptability, upgrading, maintenance, repair, reuse and re-manufacturing of the parts or the hole construction.

To live, nomads comprehend and respect natural cycles. The life-cycle design of a product or a building, as process through it is possible to manage sustainability, might be corresponding to the nature cycles. As far as possible, the time that the product or construction will last must be compatible with its degradation.

4. To go back

Nomadic strategies for surviving

An excellent way to act on relief in the field of architecture and design is designing shelter after disaster. Catastrophe scenarios like refugee camps require appropriate design to provide security, privacy and to protect from harsh weather conditions. Although this seems to be restricted to risky areas, some emergent solutions are required worldwide.

Nomads have strategies to survive that are often passed from father to son. One important strategy is the knowledge to get infra-structures wherever they go. Another strategy is the ability to protect themselves, using or not a type of armor. In both cases, the equipment must provide all the things necessary to survive.

What will happen?

In a scientific fiction inspiration, artists like Archigram and Lucy Orta have proposed alternatives and discussed some issues about mobility and surviving. The comfort is a recurrent point when it is a matter of carrying things and displacement using simple solutions. There are some survival suits, for example, that are so difficult to use and keep that becomes obsolete.



Figure 4. Lucy Orta: *Urban Life Guard*, 2005. View at installation with 23 Military stretcher beds [Photo by Lara L. Barbosa at Milan, 23th april 2008].

There are entire families living in the streets, immigrants, some of them become small communities to support each other. In a romantic vision, they are a kind of traveller that would like to feel independent of the urban infrastructure in a sustainable way of life. But, in what conditions do they practice this sustainability? Considering their unsafe, unhealthy and uncomfortable living conditions these are not social sustainable ways of living.

Government and designers do not know how to deal with this problem. The use of public space by this population is still prohibited until today. Some artists are worried about the homelessness phenomenon and are expressing some ideas in their works. It can be possible to propose better portable equipments to interfere in this process.

Collective interdependence

Instead of judge nature as guilty for earthquakes, floods, fire, gales or torrents, nomads have surviving strategies based on strong community relations between them and nature. The nomads' surviving depends on their interdependence because they are societies where everyone belongs and have to take care of the community. The group interdependence grows always that knowledge and experiences are verbally exchanged. Solidarity in a social arrangement organized as communities and constructed with collective activities is a consequence of the people proximity.

Projects for collective use can reduce environmental impacts by far. To minimize energy consumption during all design phases, it is more efficient to project a collective used product.

5. What can designers do?

The social function of architects or designers is to adapt spaces to answer human necessities socially defined. This contribution can interfere positively if each project decision was made with responsibility.

Considering the existing social and economical system, designers can offer more alternatives.

This work suggests applications and extensions based on nomadic lessons. The survey of design solutions shows that:

1. Portable or disassemble buildings have been more accepted in commercial than in residential purpose.
2. Vehicles only represent a good solution if they are economically viable and have a space for free traffic. It can demand changing on the urban planning. It must be capable of be developed with sustainable energy to make it move.
3. The advantage of retractable or folding furniture is to have more space when it is not used. However, a new product inside the house still contributes to the excess of consumer

goods. A better substitution is reusing the old objects with new functions guided to personal necessities. This transition is a kind of ready-made, and after this is easier to perceive the real exigencies.

4. Temporary installations require managing abilities. Space loans and the previous definition of durability must be considered to develop a project with good use.
5. Textile segment and chemistry ideas applied both construction and garment have been a fertile field. As lightweight and strong structures, membranes permits big advances, more than what metal and mechanical design can do.

Some opportunities can be proposed for designers to promote more sustainable ways of life. The main design directions founded on this research are:

- To improve the ability of assemble and disassemble.
- To promote a local adaptation.
- To facilitate the connectivity and exchanges between individuals.
- To develop and use alternative ways of providing shelter and security from natural elements.
- To enable users to repair or do the maintenance of the product.
- To avoid equipments that depends on fossil fuels.
- To develop the strategic use of lightweight materials and objects including recycled ones, such as cardboard and plastic.

We hope that this paper generates new paths and researches that work for regenerate the relation among design, nomadism and sustainability, without borders.

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Redesigning Turkish cult objects: from tradition to 'Modern'?

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Turkish design / Design Identity / Redesigning traditional products / Cult objects / Design criticism / Turkish design & politics

This paper investigates Turkish designers' search for design identity in terms of cultural values. Culture provides a basis for all political groups to express themselves through design, especially with cult objects and icons. Independent designers and design companies redesign cult objects for prestige and easy marketability. Consequently, cult objects are turned into a battlefield for various ideologies and aspirations.

1. Introduction: Some problems

At the opening speech of the 4T (Turkish Design History Association) conference in 2009, Jonathan Woodham set forth the question: 'Ewill Turkish products conform to aesthetic global markets or manage to retain some aspect of local, regional or national identity?' (Woodham, 2010:17). Although what Woodham indicates is perfectly legitimate, trends in the global market appear to encourage variety and diversity. In New York, the MoMA Store has introduced some Turkish products under the title of 'Destination Istanbul'¹ in May 2011. In a paragraph, the MoMA Store advertisement successfully manages to fill the text with cliché expressions such as 'east meets west' and undertakes a heavy orientalist discourse. Edward Said would be turning over in his grave if he were to see this: (Figure 1):



Figure 1. The MoMA Advertisement.

¹ Since the project of selling Turkish product is over, the MoMa Store does not publish the relevant web page anymore. Information was available on other web pages at the time this paper was written. See: Tore, 2011.

'[A]n amalgam of Byzantine and Ottoman influences' and 'distinctive lifestyle products.'! Here you are! This is what the global market has awaited from Turkish designers. The former stands for 'historical', (it means it has historical value) and the latter signifies 'exotic' (it means attractive and appealing to you). What salesman-like language! We shouldn't blame the MoMA Store for this though; they are not the only ones. Let's look into the latest incidence: The Telegraph published an essay concerning Turkish design on April 16th, 2012. The title reads: 'Modern Turkish design spreads across globe' (Cumming, 2012). What do we see on the cover page? The Blue Mosque! A mosque built 400 years ago. Although the text is about the work of Zeynep Fadillioglu, a woman designer, the author falls into the trap of old rhetoric and keeps mentioning Byzantines, Ottomans, the Grand Bazaar, sumptuous palaces, and Ciragan Kempinski Palace in the introduction of his essay. Therefore, answering the question of Woodham, one would say: whilst these orientalist approaches are still surviving, perhaps, even predominantly, designers from Turkey will always have the opportunity to satisfy these expectations with products reflecting "local, regional or national identity'. Nevertheless, this is not without its price; on the contrary, it is very costly. Seeking 'local, regional or national identity' is often a strategy employed by designers operating with agendas and intentions, which could have worrying political consequences as explained below.

2. The circumstances: Actors demanding design with identity

It is important to underline that the first debates on Global versus Local took place in the mid 1990's with a slightly different vocabulary but with great significance. 'Cultural identity' has been advanced and highly emphasised. It was recognised and proposed as a legitimate channel to deal with the objects of global markets as well as a vehicle of survival within globalization (BAYRAKCI, 1996; SEZGI, 1996). Actually, at that time, it was felt that globalization was forcing design towards the production of similar, mundane and monotonous objects, perhaps, valid and functional all around the world, universal in that sense but with no identity belonging to a place. The suggested solution was cultural diversity. Some designers had already begun to use, make reference to, or be inspired by the rich historical culture of Turkey. Since then, aspects of 'cultural identity' within globalization have been studied regularly.²

What interests us is the shift, which has occurred within Turk-

² In one of the studies, tendencies towards local, regional, national, traditional and cultural designs have been analysed, described and categorised as neological approach, morphological application, topographical execution, formal interpretations, allegorical interpretations and conceptual inspirations. (BALCIOGLU, 1999).

ish design in the last 10-15 years. A shift derived from a cultural approach and dispersed in many directions: Modernist, Islamist, Ottoman Revivalist, Nationalist and so on.

The Islamist right has flourished since 2000 and the Justice and Development Party (AKP), the religious party, won the 2002 and 2007 elections with almost 50 per cent of the vote, capturing a large majority in parliament. Thanks to the development of the economy, mostly based on measures taken by the previous government and money injected from abroad³, new rightist and religious middle class and high-income groups have emerged in Turkey. Some of these groups are called 'Anatolian Tigers', a term borrowed from the expression attributed to East Asian countries. Therefore, a young woman covered from top to toe, wearing Gucci & Prada and driving the latest model of Porsche at the high street of Istanbul is not an unusual thing anymore. If Italians have Armani, we have Armine in Turkey where one can buy latest fashion scarf perfectly in congruence with religious rituals (see <http://armine.com.tr/>). The contradiction is obvious. On the one hand modernization is equated to westernization and denied, on the other, the desire for becoming contemporaneous and civilized are expressed by manufactured Islamic fashion, and fashion – a phenomenon generated by the West – is accepted! As Kaya writes, the search for originality in neo-Islamic design has not gone further than becoming an inferior version of western material culture (Kaya, 2010: 102).

Naturally, the nouveau riche religious bourgeoisie were in need of a variety of designs representing their ideology and life style: from fashion to decoration, from art to architecture. They have found a suitable atmosphere and many tangible examples in the work of those professing 'cultural identity'. Turkish culture is so rich that it could provide a proper ground for all ideologies to formulate their own design styles, identity and iconographies. On the opposite side of the spectrum from political Islam, nationalists have also utilized Turkish culture.

'Since almost two years nationalism in Turkey is on the increase' says a report prepared in Heinrich-Böll Foundation (Dufner, 2008: 1). It reads: 'Nationalism can be functionalised: in Turkey there is Islamic nationalism, left-wing nationalism, Atatürk-nationalism, even a liberal wing of nationalism' (Dufner, 2008: 2). Of course, this is not a definitive list; for instance, Turkish right wing nationalists are not mentioned. Nonetheless, this gives us an idea about the level of complexity.

All these actors are seeking a design style which reflects their identities and positions, and reproduces and disseminates their ideologies. Some of them are in the process of training and educating young designers in accordance with their own ideologies. (As an example see Istanbul Design Centre, established through the support of Istanbul municipality: <http://www.istanbultasa->

³ The sources of money coming from abroad into Turkish economy have never been clearly identified and always been a matter of discussion. Some of this cash injection has been labelled as 'Green Money' in the book entitled 'The Rise of Political Islam in Turkey' (RABASA & LARRABEE, 2008).

rimmerkezi.org). Soon, we could witness a polarization and confrontation between designers representing various political and religious factions through their work and attitude.

Under these circumstances, to what degree could designers be autonomous? Jeremy Aynsley asked the same questions almost two decades ago:

Can design resist straightforward alliances with a political regime to construct its own autonomous identity? Most commentators agree with the view that design, like other cultural manifestations, has a relative autonomy. It is sufficiently independent to define its own languages, but nonetheless represent broad tendencies within a political economy. (Aynsley, 1993: 14)

The relative autonomy underlined above has a limited territory and this limited territory is becoming more limited than ever. It is not surprising then that various left wing designers who are committed to modernist principles and have applied them with integrity and success, in certain cases, have happened to find themselves commissioned by rightist, religious or nationalist businessman. As Kaygan implies, some of them may become the producers of a banal nationalist attitude, most likely within a context of orientalist prejudices (Kaygan, 2008).

3. Designers' dilemma

The designers' dilemma is evident. On the one hand there is an inclination and wish to benefit from a rich cultural heritage, on the other, there is the risk of being categorized as an Islamite, neo-Ottomanists or nationalists of any kind, based on the works they have created. Designers, so far, are the graduates of a modernist education strongly bearing the traces of Bauhaus. They are striving to define their own design character, identity and direction, and probably would not care how they are labelled as long as they feel they are consistent with their own philosophy. There is a sign of, but not yet a clear-cut political division of designers. Once each political group is able to educate and accommodate their own designers committed to a certain ideology, designers as well, may be split into opposing groups. At present, amongst others, designers are preoccupied with two vital issues concerning us as members of the global design community: design identity and direction. With these anxieties in mind, the last 20 years have witnessed an extensive increase of cultural references in the widest sense of the term, which are well explored and documented.⁴ The ways in which designers use traditional objects, historical symbols, architectural forms, and local values are innumerable. The recent trends illustrate a predisposition towards redesigning what I would like to call 'Turkish Cult Objects'.

4. Cult objects

Concepts such as fetish, cult, icon, ritual, vintage etc. began to appear in the literature of design after Karl Marx coined the term 'Commodity Fetishism' (Marx 1983: 77). In the field of design,

⁴ For further reading on Turkish Design, amongst many others, I suggest the works of Alpay & Ozlem Er, Gulay Hasdogan, Can Ozcan, Gokhan Karakus.

it is likely that Clive Dilnot is one of the earliest commentators relating the concept with mass produced objects. Dilnot associates design directly with fetish:

The effects of advertising and design styling combined to make “things” less things in themselves and more totems, or images or fetishes of other things. And the curious situation that has arisen now is that, amongst the values expressed or represented by the design things, are those of “design” and “style” themselves. Design itself gradually became a fetish or a value. (Dilnot 1984: 10).

John Walker makes a similar remark and criticizes design books since they ‘present industrial products as if they were precious works of art: isolated from people and the everyday environment, surrounded by a halo of light, the designed object becomes a fetish’ (Walker 1989: 58). He thinks that design history has also supported this scenario: ‘In design history too a fetish is made of the designed object as indicated by books such as One Hundred Great Product Designs and Cult Objects’ (Walker 1989: 58). Actually, Deyan Sudjic, the writer of *Cult Objects*, explores the notion, gives variety of examples in the context of product design. For instances, he describes the Jeep as a cult object and continues: ‘It belongs to a class of artifact which exercises a powerful, but mysterious fascination. By definition a cult depends on a group of insiders, tightly knit and linked by secret signs recognizable only to initiates’ (Sudjic 1985: 11). For Sudjic, the Jeep as well as the Barbour and the Mont Blanc are cult objects ‘appealing to small groups of aficionados’ (Sudjic 1985: 11). But there are cult objects accepted by almost all

people. Zippo, for example, like ‘Other cult objects have exerted an immediate mass appeal’. According to Sudjic, ‘in the nature of things, a cult object has to be a mass produced, or at least has to be suggested in its shape and finish that it is produced by a machine even if it isn’t’ (Sudjic 1985: 16). He makes remarks on fashion, an old product like Levis 501 is also a cult object because ‘[a] cult object is not necessarily a fashionable one’, (Sudjic 1985: 18).

5. Cult objects in Turkey: Going which direction?

The most typical and undisputed cult objects are widely used, some of the typical everyday items. These cult objects are an essential and indispensable part of Turkish tea, coffee and raki⁵ drinking, smoking habits, and social additions: teapots, tea cubs, tea trays, coffee pots, coffee cubs, raki bottles, raki glasses, water-pipes, and so on. They are used daily, consumed and enjoyed. They are visible, attractive and the subject of common parlance and mundane conversations. They have a similar status to the ‘Zippo’ lighter described by Sudjic. When people drink tea or coffee, they talk about it: its quality, how it is made, where to find the best one, etc. These are issues well studied and published by Turkish scholars.⁶ Yet there are issues that have been ignored, such as why cult objects are redesigned, the effect of market demands, and potential political motivation. Leading Turkish designers, design companies, and companies generating and selling designs are, one after the other, providing us with new products and new versions of cult objects. For the first time in history, Arcelik, one of the top white good brands in Turkey, has launched an electrical Turkish coffee machine. Soon after that, the typical traditional coffee pot, which is a simple pot with a handle placed on a hob to boil the water and coffee, was redesigned. The electric kettle technology turned it into a self-standing object. Kunter Sekercioglu, the designer of the Arzum Cezve, has remained faithful to the original form and added a modern touch, a touch that somehow reminds us of the curly lines found in Philip Stark’s works (Figure 2). Immediately, new versions emerged. Homend, Pottoman 1803 is one example (Figure 3). It looks very modern in line, shape, and color, as well as being nicely designed and made. It gives the feeling of a perfect German product; say one of those, remaining from the days of Dieter Rams, while being a Turkish product employing a very clever play of English words. Home and end, pot and Ottoman were combined: Homend, Pottoman. Despite its overruling modernist form, by referring to the Ottomans in its title, it claims its stake of tradition and history, as well as the status and power that comes with it. Strangely enough, it maintains a conventional yet superfluous handle. When sitting on the shelves of a superstore, it conveys the message that it is still a cezve as we know it.



Figure 2. Traditional coffee pot & Arzum Cezve designed by Kunter Sekercioglu

Figure 3. Homend Pottoman electrical coffee pot.

Figure 4. Glass coffee pot designed by Ali Bakova

⁵ Raki is a strong alcoholic spirit produced in Turkey. It is distilled from grape juice and flavored with anise. Raki, which tastes like French Pastis or Greek Ouzo, is considered as national Turkish alcoholic drink.

⁶ See the works of Sebnem Timut Ogut, Humanur Bagli, Bahar Emgin and Harun Kaygan

Ali Bakova appropriates a different perspective. He keeps almost everything the same but changes the material; the typical, traditionally copper coffee pot is now made of transparent glass. He respects the original form and adds a new value: visibility. It helps the person making coffee, to observe the process, to decide when it is the right time to remove the pot from the hob. Therefore, Bakova's contribution is an attempt to control and improve the quality of the coffee, whilst the other designs are trying to simplify coffee making process through elegant redesign.

6. Conclusion: Cult objects as an arena of design battleground

How could one elucidate the designers' propensity, aspiration and fondness for redesigning cult objects? Is this a challenge to history? Is this a desire to contribute to the modernization of the country? Knowing that the Republic of Turkey and the early



Figure 5. An old coin



Figure 6. A new coin

modernists cut the umbilical cord of the new state and moved it away from its Ottoman roots, are designers now settling their account with the past by revisiting cultural and local symbols, beliefs and canons? Or is this just another attempt to gain an identity and constitute differences in a world where diversity is more appreciated than ever? It is difficult to provide substantial evidence and respond to all of these questions within the limit of this paper. However, asking questions and making speculations could very revealing, especially at this particular stage of Turkish design development since these issues have not yet been explicitly discussed.

Although the scene is not well defined, one could feel that there is a kind of discreet and concealed struggle going on over the redesign of cult objects. There are various areas of interests in this battleground made up of cult objects. One of the hidden actors of this arena is the right wing religious government. It is mostly interested in iconographic aspects with which they are able to disseminate their ideologies whilst making their rule and presence strongly felt. Coins are cult objects. The government has altered the design of coins; the bunch of Daphne symbolizing victory (but belonging to the Greek and Roman civilizations) was substituted with a pattern resembling Islamic ornamentation. The rightest and religious stance is simply to force the forms away from modernist, minimalist and mainstream lines towards traditional configurations as we see in the designs of tea trays.

One of the characteristics of Turkish design circles is that many designers initiate their own projects: they identify a



Figure 7. Tea trays from left to right: A typical, ordinary tray, a design by Defne Koz, a design by Koray Ozgen, a design by Babur Kerim Incedayi, and the last two by Mesale Group.



Figure 8. Tea glasses, from left to right: An old one with an image of grapes on it (courtesy of Yilmaz Aysan). Others designed by, Pasabahce design team, Erdem Akan, Pasabahce design team entitled 'Heybeli', Alev Ebuzziya, Defne Koz, Can Yalman, Faruk Malhan.

niche, develop a project and try to get it manufactured and sold by known companies. If this does not work, the designer gets his own design made with his own means and capital –with limited editions in most cases. Once produced, they try to promote and sell it through fairs, exhibitions, websites and marketing agents. Since designers control what they want to materialize, they understandably select the most popular, extensively used, widely purchased goods to redesign, which are, inevitably, the cult objects. The economic aspect is not the only reason. Designing the most prevalent, commonly used things can quickly bring public recognition, even appreciation if the work is good enough. It is a prestigious thing to do. Wide publicity, respect, acknowledgement, and perhaps a good record of sale may follow an immediate success. It is also a defiant thing to do, a rebelliousness to the collective memory, norm, notion and practice. It is an intrusion and interference. Therefore, each new endeavour of redesigning of a cult object bears a great risk within itself. Simply because the result is –strangely enough–measurable! In other words, if your design does not sell well, you fail, you feel failed

or you are made to feel failed. Cult objects are in sight; they are known and followed by many. The risk is obvious.

The competition is obvious too. If many renowned designers design a tea glass one after the other, they do not only challenge tradition but also defy each other with or without their own knowledge, discretely and in disguise. A hidden rivalry is gradually surfacing. It is not easy to predict which side will prevail in the battle for mainstream design. However, design concepts, thought, and technologies are steadily maturing within this turmoil of variety and one hopes that the number of good works will continue to grow.

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Incubation in isolation: how distance creates the difference in New Zealand Product Design

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Product design / Isolation / Maori / New Zealand / New world.

Isolation informs design process in New Zealand. Models from the indigenous Maori culture are explored along with the outdoor lifestyle, a record of building on overseas concepts, a capacity for cross-disciplinary teamwork, clarity and a freshness born of detachment, and a desire for a small, distant country to be noticed. Research undertaken for the author's recent book (Smythe 2011) set out to identify drivers of New Zealand product design in relevant contextual circumstances. This paper extracts key findings with greater clarity and applies more academic rigour.

1. Isolation nation

Isolation has always been, and remains, a significant point of difference in the development of product design in New Zealand — “the last country in the world to be discovered settled by humankind” (King 2003: back cover). New Zealand's isolation was starkly illustrated by an image in a 2002 government Growth and Innovation Framework document. It showed a 2,200-km radius centred on Wellington capturing only 3.8 million New Zealanders while the same area centred on Helsinki encompassed 300 million people in 39 countries.

2. Maori modelling

Although radiocarbon dating suggests New Zealand's first settlers arrived around 1250, some Maori oral histories place the

first migrations at 800 CE. Either way the initial settlement was followed by a long period of uninterrupted development in isolation that allowed a unique design language to evolve.

Maori design deserves to be reclaimed from those who have labelled it ‘art’ — it represents the objects, apparel, environments and visual communications required for daily existence. When the British Museum exhibited Maori ‘art’ from its collection in 1998, Julian Harding wrote:

There is no Maori word for ‘art’. Whakairo, perhaps the closest equivalent, has a basic meaning of design, or as a transitive verb, to ornament with a pattern. The traditional *tohunga* (expert) in wood carving, weaving, painting, or tattoo did not set out to create a work of art in the European sense. In making a flute or *hei-tiki* or canoe, he simply provided the means by which the gods expressed themselves in material form. (Harding 1998).

Contemporary New Zealand organisations interested in the triple bottom-line of economic, social and environmental sustainability might find value in traditional Maori values. The forces that shape the Maori world are: **Mana atua**, the sacred power of the gods; **Mana whenua**, the power inherent in the land to allow all things to grow and develop; **Mana tupuna**, the power of wisdom handed down through the ancestors and the responsibilities of leadership, and **Mana tangata**, the power of people to develop skills and gain knowledge. (Marae Melbourne.)

The Maori leadership model supports leading edge twenty-first century ‘design thinking’ positioning design as a central concern

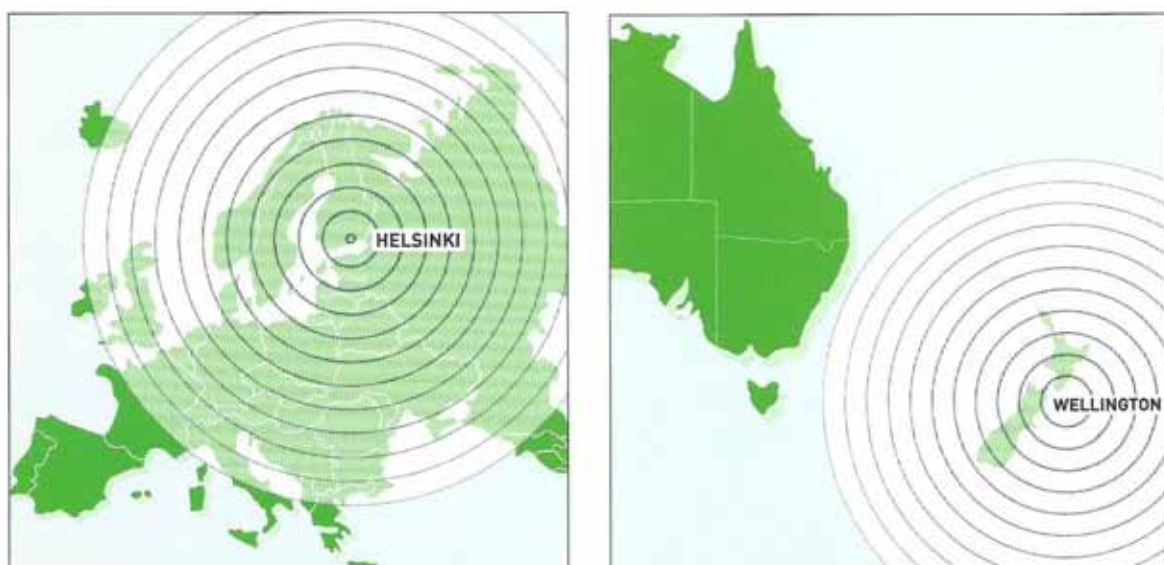


Figure 1. Comparing two countries with similar sized populations — Finland and New Zealand. (2002.)

of the boardroom and executive suite rather than a back room function. Ngati Awa chief Himiona Tikitu's documentation of the many roles of the tohunga (skilled person) included leadership in the making of artefacts and structures vital to the needs of the community. Te Arawa chief Wi Maihi Te Rangikaheke explained that the tohunga was expected, above all, to be accomplished in creative expression which might be expressed in oratory, composing and/or singing waiata [song], wielding the taiaha [long wooden ceremonial weapon], or designing and making meaningful objects. (Mead 1986: 190-191.)

Today's Western management style favours an 'if we can't measure it we can't manage it' approach. Maori creative practice offers the incalculable value of ihi, wehi and wana — aspects of which can be compared to charisma, emotional attraction, 'X-factor', 'je ne sais quoi' and/or the 'tingle up the spine'. **Ihi** [power/magnetism] describes a special vitality present in all life, a human quality which includes personality as well as psychological and spiritual attributes. **Wehi** [fear/awe] is the impact that this power or influence has on other people, and within ourselves, catching us by surprise when the experience exceeds our expectations. **Wana** [thrill/pride] is the physical sensation at the impact of ihi and wehi, the energy rush or thrill resulting from being in the presence of something that moves us. (Kruger 1984: 228-236.)

The measurement of quantitative consistency is the paradoxical purpose of Total Quality Management. New Zealand designers seeking validation for a more evaluative approach might find more inspiration from the Maori model which appears to honour each person in the value-chain — from designer to maker to trader to user — than they could from Japanese versions of the methods that American statistician Edwards Deming introduced in the 1950s.

3. Out front outdoors

New Zealanders' capacity to lead the way in the 'great outdoors' became world famous when Edmund Hillary 'conquered' Mount Everest in 1953. His self-effacing heroism is deeply etched in his country's sense of identity and informs continuing confidence in its ability to innovate outdoors. Hillary used his fame to initiate development projects for the people of Nepal. At least one New Zealander used Sir Edmund Hillary to support a product development project.

In 1964 motorcycle merchant turned maker, Johnny Callender, sent Hillary's team a prototype of the world's first purpose-designed farm bike to test on the Himalayan slopes. Hillary's mate Peter Mulgrew expressed his approval by calling it a mountain goat and the name was adopted. But the powers-that-were did not feel inclined to empower an innovative Kiwi with a unique product that farmers desperately wanted. Import licensing regulations were used to block the import of the Suzuki motors until a wake-up call came in the form of an external threat. Callender had sent a nice photograph of himself, Sir Ed, Peter and a Mountain Goat to Suzuki so they could share in the heroic affirmation. Suzuki was so impressed it had the photo blown up and used as a backdrop to its motorcycle display at the 1965 Tokyo Motor Show — a display that included an exact replica of the Kiwi bike! Bureaucrats realised Callender might be onto something and granted the licence. But when import restrictions were removed in 1970 the company that had bought the Mountain Goat business stopped production in favour of becoming the agent for Honda farm bikes. (Callender 2008.)

While the Mountain Goat stalled in the face of international competitors, the Mountain Buggy jogged relentlessly into global markets. Jogging for health and stamina had been invented by New



Figure 2. from left: Basalt tiki [axe] found at Makakihi, South Canterbury — possibly among the oldest made-made artefacts made in New Zealand. It is claimed to be from the early Kai Tahu (Waitaha) Nga Kakano period, 900–1200. (Mead 1984.) (Otago Museum collection, photo: Athol McCredie.) Hinaki [eel/tuna/lamprey traps] fabricated from mangemange, a climbing fern — cleverly designed to lure eels in but prevent them swimming out. (Auckland Museum collection 23518.) Kaitaka [flax cloak with border] — honouring the skill of the maker, the mana (prestige) of the intended wearer and the importance of the occasions at which it will be worn. (Auckland Museum collection ETH815, photo: Krzysztof Pfeiffer.)



Figure 3. from left: The Fairydown brand received a boost when Ed Hillary and Sherpa Tensing Norgay used their parkas and sleeping bags during the successful Everest assault. (Mouton Noir.) The 1000th Mountain Goat, a Model 104 made by Motor Components c.1970. (Laurie Callender.)

Zealand athletics coach Arthur Lydiard. When keen Kiwi fitness fanatic and new father Allan Croad saw advertisements for Phil Baechler's Baby Jogger in American fitness magazines he decided to develop an off-road version. Croad's Mountain Buggy was born in 1992 and progressed steadily to volume production over the following decade. Urban-friendly innovations made it easier to fold and fit in a car. Export markets took sales beyond 20,000 by 2000. Recognition of leadership came with British and Italian, Dutch and Belgian awards in 1998 and 1999. (Croad 2002.)

Phil & Ted's Most Excellent Buggy Company was established in 1993 and began to gain momentum three years later when a new owner initiated a design upgrade of its rather "agricultural looking" product. Its world-first innovations for three-wheeled buggies included a swivelling front wheel (considered dangerous by fast joggers), extendable handles, laid-back support for newborns and in-line seat attachments for siblings. A 2005 branding overhaul, credited with creating a tenfold increase in overseas sales delivered a communication strategy inviting beleaguered parents to 'adapt & survive'. Growth was driven by design while manufacturing was outsourced to China. Phil & Teds turned over US\$150 million in global sales in 2008 compared to Mountain Buggy's NZ\$30 million in 2007.

Meanwhile Mountain Buggy's owners were determined to keep manufacturing in New Zealand despite a rising dollar reducing

the margin on the 90% of production that was exported. In 2009 the heavily indebted company was placed in receivership then bought by Phil & Teds as a going concern.

Further faster

The preceding story demonstrates a New Zealand characteristic: a capacity to pick up new ideas and take them further faster — helped by being outward looking and isolated. Bill Gallagher read about electric fences and Bill Hamilton read about jet propulsion on water in Popular Mechanics magazine. Both Bills reckoned the state-of-the-art was inadequate. A number of New Zealand entrepreneurs developed technology for electrified pasture management. In 1990 this cluster was used as a case study in a New Zealand version of Professor Michael Porter's *The Competitive Advantage of Nations*. New Zealand's electric-fencing industry was used to exemplify the effect that innovation, ongoing development, clustering, sophisticated home demand, sector co-operation, intense rivalry and internationalisation had on creating world-leading businesses based on manufactured products. (Crocombe 1991.)

Although the Gallagher brand became the global leader it has not rested on its laurels since adding a 2009 business award for Best Commercialisation of Intellectual Property to its many accolades. Industrial design and brand building now play a much larger role in driving innovation and value. (Parker 2012.)



Figure 4. from left: Mountain Buggy evolution 1992-2002 (Allan Croad). Phil & Teds Vibe c.2010 accommodates two offspring while the Sub4 2011 updates the original Baechler concept (Phil & Teds).



Figure 5. from left: *Gallagher Electric Fence* immortalised on a postage stamp. (New Zealand Post.) *Gallagher Battery-powered Energizer* c.2006. *Gallagher Smartfence* (right) makes handling and relocation easy. (Gallagher Group.)

New Zealand is at the ends of the earth and Irishman's Creek is in the back of beyond in New Zealand's South Island. That extra level of isolation can be credited with amplifying the inventive energies of Bill Hamilton. Rather than wait for electricity to be reticulated to his remote family sheep farm he built his own hydro dam. Rather than import expensive earth-moving machinery he designed and built his own. His innovative Scoop and Loader Dozer attracted customers so he developed an earthmoving equipment business that soon outgrew the farm sheds and moved to Christchurch city in 1951. That left Bill financially and physically free to pursue his real passion — finding a way to travel upstream — fast — in the shallow braided rivers of Canterbury. (Hamilton 1969.)

His first attempt, using a centrifugal jet propulsion system described in *Popular Mechanics*, achieved only 17 km/h on his calm hydro lake. Trial and error involving many people with a range of knowledge and skills led to the development of the world-leading Hamilton Jet enterprise. Engineering design created the technological breakthroughs. The resulting experience of travelling through previously inaccessible scenic environments initiated New Zealand's leadership in adventure tourism. (Bloxham & Stark 1994.)

4. Egalitarian teamwork

New Zealand does not have any more brilliant designers per square metre than any other country. But it does demonstrate a capacity for interdisciplinary teamwork grounded in a heritage of egalitarian ideals, an essential versatility and its intimate

scale. It is present in New Zealand's world-class film industry where cross-disciplinary collaboration, grounded in versatility and innovation, is taken for granted by locals and promoted as a benefit. (Film NZ.)

With the help of the government-run Better by Design programme, established c.2003, integrative design thinking is enhancing the inclusion of rational and emotive criteria in the product development process as well as underpinning corporate cultures. While overseas models have been sought out, New Zealand examples of design-driven success have also been available to persuade the unconvinced. (Better by Design.)

In 1939 the unexpected introduction of import licensing regulations transformed the New Zealand importer of home appliances, Fisher & Paykel, into a manufacturing enterprise. Unlike many enjoying the benefits of protectionism, Fisher & Paykel has always seen value in investing in its own research and development. This was typically engineering based with industrial design used mainly to add aesthetic appeal. Design graduates' efforts to explain that their contribution could be more than skin deep were increasingly heard as the company expanded export markets and then confronted international competitors at home after protectionist policies were removed in the 1980s.

The brand-positioning breakthrough came with the DishDrawer, launched in 1997. The board had concluded that a European look-alike could not compete and only a paradigm shift would prevent the closure of the dishwasher line. The success of the SmartDrive washing machine had been grounded in advanced



Figure 6. from left: *Loader Dozer*, c.1943. *Early jet boat trial* in a shallow river, mid-1950s (Hamilton Jet). *Jet boating* as an adventure tourism experience (Lifestyle Publishing).



Figure 7. from left: Fisher & Paykel SmartDrive washing machine, (1991). Fisher & Paykel ActiveSmart refrigerator (1995). Fisher & Paykel DishDrawer (1997). (Fisher & Paykel).

engineering design. The Quantum Project had added elegantly articulated self-confidence to the hidden electronic ingenuity of the ActiveSmart refrigerator. But it was the DishDrawer that stopped customers in their tracks. It was the first project in which end-user interaction had initiated innovative engineering — and its point-of-difference was instantly apparent. (Davies 2004.)

In 1996 Formway Design Director Noel Brown had explained the company's approach to design-led growth: "There is no place at Formway for *prima donna* designers, autocratic managers or other inhibiting dinosaurs from the age of hierarchical management." (McDonald 1996.) After the Formway Free desk system won an unprecedented two gold medals at the NeoCon 99 World Trade Fair, for 'Alternative Office' and 'Computer Support', designer Mark Pennington explained how an unheard of company at the bottom of the world could lead the way:

Our approach to the design challenge is pure Kiwi — down home ingenuity and teamwork. We simply don't accept that a thing can't be done, just because it hasn't been! 'We've always done it this way' is no reason to accept it's the best way. (ProDesign 1999: 13.)

One of New Zealand's oldest companies — Methven, established in 1886 — demonstrated the benefits of design-driven cross-disciplinary teamwork when it shifted its focus from producing plumbing hardware to creating enhanced user experiences while saving water and energy. Its SatinJet shower technology, housed in increasingly well resolved fittings, attracted hotel chains seeking both cost-savings and improved customer service. A suite of international design and water efficiency awards gained between 2007 and 2009, as well as New Zealand's 2008 Design in Business Award, affirmed Methven's leadership and expanded the market for its core tap and mixer products. By 2009 exports were accounting for 73% of sales and financial results were withstanding the sudden global downturn. (Sneddon 2010.)



Figure 8. Formway Free designing system licensed in the US to Bretford. (Formway Design.)

5. Uncluttered clarity

New Zealand's isolation provides an environment of comparatively uncluttered clarity that enables fresh thinking. Evidence to support this proposition has come from a number of sources.

The shift from import replacement manufacturer to competitive global brand has required Fisher & Paykel to move manufacturing operations closer to markets. The question has been asked: Why continue designing in New Zealand? The company's Industrial Design Manager, Mark Elmore, sees great advantages in cross-disciplinary teams being able to immerse themselves in 'the state of the art' across global markets and then step back to take a fresh look at the core issues. He sees detachment from the mainstream as enhancing original thinking and enabling development 'under the radar' of curious competitors. (Elmore 2010.)

The success of the DishDrawer initiated a wide-ranging 'kitchen of the future' development which has evolved into the Social Kitchen concept where appliances align with living-space interactions rather than out-of-the-way chores. As well as being suited to varied locations in the home, the CoolDrawer will save energy because cold air does not fall out as it does from a front opening refrigerator. The CookSurface provides additional bench space between cooking functions. Its control knobs, burners and trivets rise silently from the surface at the press of each knob.

Formway workspace furniture has rapidly penetrated world markets through licensing distributors who are already established in target markets. Formway's transformation from local manufacturer to global design studio accelerated when Knoll International became the licensee for the Life chair (launched 2002) and the Generation chair (launched 2009). While walking to dinner in New York with Knoll CEO Andrew Cogan in February 2010, Formway chairman David Thompson thanked him for his patience and



Figure 9. from left: *Methven SatinJet* — patented colliding jetstream technology offering a gentle, soothing experience while using much less water. *The SatinJet flow* (left) compared to conventional shower head (right). *Kiri Ultra Low Flow* shower head using even less water. (Methven.)



Figure 10. from left: *Fisher & Paykel CoolDrawer* (2008) — a world-first with five temperature settings from chill to freeze. *Fisher & Paykel CookSurface* — ceramic cook top cleanliness with gas cooking performance. (Fisher & Paykel.)

apologised for being a small company from the back of beyond consuming too much of his time plaguing him with calls and questions. David recalls:

He stopped me on the sidewalk, looked me in the eye and told me that Formway was his most cherished relationship & As he saw it, a component of our value was that our distance from the large markets of North America and Europe produced a valuable perspective — always clear, visionary, and creative. (Formway Design 2010.)

More general affirmation came in January 2011 when the British Foreign Secretary Willaim Hague stated that New Zealand is “a hot-bed of innovation and is known as such in the UK”. (Young 2011.)

English immigrant David Trubridge’s internationally acclaimed lighting designs draw knowledgeably and respectfully on the environment and cultures of New Zealand and the Pacific. Concern about his distance from markets led to a kitset range that reduces his carbon footprint while allowing customers to participate in the joy of making. Trubridge says that distance enables him to experience, feel, think and create in a fresh way that would not be possible if he was immersed in the pressures, distractions, bureaucracy and historical baggage that clutters the world’s design capitals. (Trubridge 2011.)

The Yike Bike offers an example of a New Zealander taking a fresh look at an innovative product. Christchurch serial inventor and entrepreneurial engineer Grant Ryan began by evaluating Dean Ka-

men’s Segway, launched 2001. He assembled a team to develop a more compact personal transport device that could be carried on public transport and into buildings. The simplest device for forward motion — the unicycle — was considered. A small rear wheel provided stability while a simple folding mechanism collapsed it into a compact carry-pack form not much bigger than the main 50-cm wheel. The use of carbon fibre provided strength while keeping the weight below 10 kg. (Ryan 2010.)

The Yike Bike was launched at the August 2009 EuroBike trade show in Germany. Three months later it was included in *Time* magazine’s ‘50 Best Inventions of 2009’ — it was number 15. Back in New Zealand it won the supreme Purple Pin for product design at the 2010 Best Design Awards.

6. A need to be noticed

Finally, it must be admitted that New Zealand’s small size and isolation breeds attention-getting behaviour. This is reflected in the manufactured artefact that has risen to the status of Queen Bee of Kiwiana. Other countries may have iconic erections like Big Ben, the Eiffel Tower and the Statue of Liberty, but New Zealanders have reached for a friendly, gutsy, noisy little object that can make its presence felt despite its size — the Buzzy Bee, introduced c.1940 and still going strong. Isolation is a defining factor for New Zealand design. Designing at a distance creates the difference.



Figure 11. from left: The Formway *Life* chair won Gold at NeoCon2002 while its *Generation* chair won Gold at NeoCon 2009. [Formway Design.]



Figure 12. from left: David Trubridge *Body Raft* attracted attention at the 2000 Milan Furniture Fair. *Kina* is among the lamp shade designs now offered as kitsets – 52 kits fit the space needed to ship one assembled unit. [David Trubridge.]



Figure 13. from left: *The Yike Bike* in use, unfolded and folded. The handle bars wrap around behind the rider and accommodate headlamps at the front and break lights and indicators at the back. [Yike Bike.]



Figure 14. from left: *Buzzy Bee*, New Zealand, c.1940. [Art + Object]. *Fisher Price Buzzy Bee*, US 1950. [thisoldtoy.com] *NZL 84 keel bulb* on Emirates Team New Zealand boat competing in the 2007 America's Cup regatta — affirming Buzzy Bee's iconic status. [buzzybee.co.nz/news]

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* Refers to text drafted for the book — Smythe 2011.

About the author

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Design Promises: the case study of Bangchaocha Bamboo Basketry Community

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Cultural Identity / Design Intervening Craft Process / Co-Creation, Cultural Products

This paper is a study on how design improves local craft products of the Bangchaocha community in order to compete in market arenas. Based on the conceptual framework of the model of culture proposed by Spencer-Oatey (1999), a series of design interventions were conducted to help designers and locals investigate and identify Bangchaocha community's unique cultural identity. It is aimed to set up the environment and stimuli for local craftsmen to search for a totally new craft-breakthrough product. The local craftsmen, who teamed up with design students, were introduced to several hands-on design workshops that challenged and developed their creativity and artistic know-how. Another group of design students were paired up with the local children. The collaboration between these young imaginative minds and design students was intended to create an inspiring atmosphere for both participants. The design outcomes from the collaboration resulted in a series of new wicker products that not only express a strong cultural identity, but also created social participation and engagement among the community members. The design activities clearly strengthened the locals' confidence in utilizing their own cultural identity in creating unique craft products that open up new ways of looking for inspiration. The project ultimately encouraged the entire crafts community to explore a whole other set of options of product categories and forms.

1. Bangchaocha Community

1.1 Bangchaocha's Unique Artifacts

Bangchaocha community, a sub-district in Ang Thong province, was selected as the research study area. It is one of Thailand's historic craft communities recognized for its unique folk wisdom of their bamboo wicker products. During Thailand's Ayutthaya period, Bangchaocha's wicker works had reached its peak as a supreme bestowal for the royal court. Bangchaocha's well-known wicker artifacts are deeply rooted in the community's rice harvesting and fishing history- as demonstrated in products like the Kra-Bung - a rice container, Kra-Jad - a multipurpose container, and Ta-Kra - a common basket of old time. With their sophisticated forms and fine detail and craftsmanship, these unique utilitarian artifacts not only possess aesthetic value but also demonstrate practical functions, as seen in figure 1.

The Bangchaocha weaving artifacts are typically constructed with a rectangular or hexagonal bottom base. They all exhibit simple vertical-horizontal pattern, spliced with small vertical



Figure 1. Kra-Bung – a rice container, Kra-Jad – a multipurpose container, Ta-Kra – a common basket (photo by Woranooch Chuenrudeemol).

wood spine at the corners for rigidity, and finished at the opening with an intricate traditional rattan tightening technique called "Jung Nang".

Kra-Bung and Kra-Jad are both multipurpose containers of various sizes and shapes. The variety of shapes corresponds to their various intended functions. Kra-Bung, the container with the taller and convex shape, is used for storing small rice grain or other seeds and also doubles as a volume measurement vessel. With its inward-curved weaving structure, it allows some air ventilation to minimize moisture collection and to protect against weevil. While Kra-Jad, the basket with the wider and shorter bowl-like concave shape, is used as a vessel to store/display fruits or food in the short term before consumption. It can also be used for drying things under strong sunlight. With its bigger diameter and wider proportion, which can be comfortably braced against the hip/waist, local ladies can use them for carrying things to temple or market, as seen in figure 2 below. Cultural products also come with a story. In this case, local gentlemen would weave these bamboo artifacts in order to woo their mates, as these products symbolized a dexterity, skill, and ability to lead and support a family (Viboon 2010). More specifically, the rims

at the opening of the Kra-Bung basket is finished with an intricate rattan tightening technique called “Jung Nang”, which translates to “weaving the [bamboo] line that will lead her into love”. Thus, the more beautifully intricate this basket rim detail is, the more enticing the basket will be in leading the woman into his love.

In their construction, these Bangchaocha artifacts demonstrate strength, durability, and functionally unique forms derived from local wisdom – one with a deep understanding of material properties and creative form-making inherently linked to intended usage. Their execution and detail is also powerfully rooted in cultural and familial beliefs and attitudes.



Figure 2. Local ladies carrying their Kra-Jad to the temple (photo by Woranooch Chuenrudeemol).

1.2 Bangchaocha Craft Business

In the past, Bangchaocha villagers lived a completely self-sufficient economic life. People sustained families through multiple occupations, exchange, and sales. Artisans operated from a small workshop on a part-time basis. The villages were linked by markets, where people traded their crafted goods for items they could not themselves produce or not worth their time to make (Owen et al 2010). Once industrialization and international trade had permeated the region, imported goods had replaced most of the local craft products. Local consumers had developed new preferences for household and daily lifestyle products, which made Bangchaocha bamboo basketry business decline in its popularity.

However, in the year 2000, Thai government launched a series of policies to encourage sustainable economic development - one of which placed an importance on creating craft-based product manufacturing entrepreneur. One of the most outstanding of these schemes is called OTOP - One Tambon (subdistrict) One Product, inspired by Japanese original model called OVOP or One Village One Product concept, introduced in 2001. Its objective is to encourage local communities to be self-reliant -by using local resources, both natural and human, to develop their range of products, of which traditional craft-based item is one of the major categories. However, the scheme fell short of its objective as local product designs did not match market demand, mostly to lack of proper market research. Also the nature of craft-based produc-

tion, one that is based on the crafting of each individual product by hand, did not lend itself to the same speeds and uniformity of factory-made products, and thus, fell into another OTOP product category that needed, but did not receive, this special attention.

Therefore, during 2006-2007 campaign, a plan introduced by the Department of Industrial Promotion to raise the production standard, were introduced along with another significant scheme led by Department of Export Promotion, which focused encouraging manufacturers to produce global products based on thorough understanding in global consumers needs. The momentum of these key policies has still influenced craft-based product enterprise, as well as artisans' practices.

Similar to the other communities whose traditional heritage of craftsmanship have high commercial value, Bangchaocha community could not resist the temptation of being a part of global craft-as-commodity business scene. They enthusiastically play their role as OEM (Original Equipment Manufacturer) for exported craft products to quite a few parts of the world: South East Asia, Japan and North America. To do so, the local identity on crafts and design, including some indigenous knowledge are somehow neglected in order to increase the efficiency of their craft production line. As a result Bangchaocha producers increasingly were forced by necessity to neglect their historical vernacular craftwork. Their indigenous basketworks processes has necessarily evolved (and in many cases *de*-volved) due to material availability constraints, preferred usages/forms/techniques that needed to be streamlined for modern living and catered towards contemporary trends.

Recently, Bangchaocha has relied on export markets such as Japan, whose traders have ordered mainly un-original variations of colorful and refined ladies' handbags to be carried with kimono dress. Apart from that, they also supply much of the same products (but with less quality) to domestic markets for local consumers who fancy traditionally-inspired design. In comparison, unlike those fancy handicraft bags, the authentically vernacular bamboo craftworks, mostly utilitarian artifacts, such as Kra-bung or rice container are considered rare and not gaining popularity in the domestic mid-range market. The decreasing popularity of craft-based products among Thai consumers corresponds with the effects of globalization and capitalism. In other words, the phenomenon was a cultural evolution that has pushed the once dominant culture of domestic materialistic consumption into a residual culture, responding to the changing social, economic, technological, ideological and geographical contexts and conditions (Williams 2005).

As Bangchaocha craft business has faced adversity in many ways, thrive in sustaining their indigenous knowledge, while constantly developing their local craft identity, to keep up with the markets. They are also confronted with a significant drop in human capital and natural resources. The modernization phenomenon is common to most provincial areas in Thailand, including Bangchaocha. The consequential problems, including the relocation of the young generation to work in the bigger cit-

ies, the decline of agricultural profession, and the replacement of hand-made agricultural-related daily artifacts by mass-produced commodities, have contributed to drastic changes in the local craft production structure, eventually resulting in the loss of indigenous knowledge. With little demand from locals, the remaining Bangchaocha craftsmen have shifted to work for the outside marketers, who predetermine the types, styles, quality and price of “best-seller” products with little concern for preserving/developing indigenous craft knowledge. Consequently, this craft-making community has also adopted a labor-outsourcing strategy for their craft production line to increase efficiency, as well as time and quality control. They have been forced to do so, in part, due to the loss of a younger generation, disenchanted with traditional craft culture, who want to pursue more modern career paths in the big cities. As a result, the transfer of indigenous knowledge has been disrupted because it is too time-consuming to make craft in the old way and flight of the newer generation towards alternative career options (Poonpol 2004).

2. Understand Cultural Product and Its Value in Contemporary Market

In the unavoidable stream of globalization, cultural identity, especially tradition-related, is considered as precious assets of the nation. As Adhi Nugraha (2010) stated, tradition has become not only a ‘counter-culture’ tool against the dominant culture, but also a resource for value creation in today’s global competition geared towards creative economy. While the *economic* value of commercialized cultural products are simply measured by their business success and the dynamics of economic activities in the supply chain, (as in the case of Bangchaocha’s wicker products created for foreign market) the *cultural* value embedded in such products is more difficult to estimate. Looking at craft vs. industrial products, Nugraha (2010) stated that craft artifacts bring along the value that tie with social engagement, the cultural recognition and ‘human touch’. However, the low volume from its hand-made production probably makes its economic value unguaranteed. This assumption is reversely applied to industrial products.

Therefore, the concern for social engagement, cultural recognition and human touch become the significant design criteria that help establish the design directions for the design conceptualization process. The strategies set up in this project aim not only to sustain these social and cultural values within the community, but also to establish a good balance with their economic value. With these goals in mind, the researchers have designed the following research methodology:

3. The Cultural Product Design Process

The manifestations of culture at different levels of depth adapted by Helen Spencer-Oatey (1999) proposed that the holistic view of culture can be explained by a stratify layers of sphere.

As seen in Figure 3, Moving from the outer tangible layer to the

inner intangible core, we have: 1) artifacts, rituals & behaviors, 2) skills, institutions & systems, 3) beliefs, attitudes, and conventions, and 4) basic assumptions and values. With the aim to set up design activities that create unique and marketable Bangchaocha cultural craft products, this research attempts to map out Spencer-Oatey’s model of culture in the product design process, which itself is comprised of four phrases:

A) Initiation & Analysis – to understand the content, issues and goal, B) Conceptualization – to generate design direction and concept, C) Finalization – to elaborate design details, D) Evaluation – to analyze the design in terms of usage, production, and market feasibility.

Therefore the identification of Bangchaocha’s cultural elements activity is embedded in the first design process phase of Initiation & Analysis. With the initial concept of what and how to embed Bangchaocha’s cultural identity into a commercially successful product, the two groups of participants, both design students and the locals, were set up. The first group is comprised of university design students teamed up with 5th grade students (who themselves possess basic basket-weaving skills) from a lo-

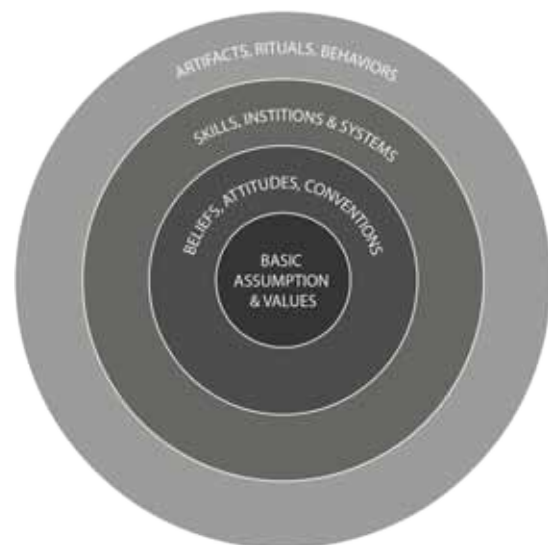


Figure 3. The Onion Diagram, the Manifestations of Culture at Different Layers of Depth adapted from Helen Spencer-Oatey Ed. (1999). Source: Adapted from G. Hofstede, *Cultures and Organizations*, New York: McGraw-Hill, 1991, and F. Trompenaars and C. Hampden-Turner, *Riding the Waves of Culture*, London: Nicholas Brealey, 1997.

cal Bangchaocha school. The groups worked together to contemplate, explore, and isolate the core concepts of the Bangchaocha community’s values, as seen through the eyes of the 5th grade students. In this case, the process allowed the children to see and value their own bamboo wicker products/tradition in the context of a modern world. With the researchers leading the way, both groups of participants were encouraged to transmit these newfound visions and attitudes into developing new products via a series of creative thinking and design activities. The resulting products of the collaboration are shown in figure 4 below.

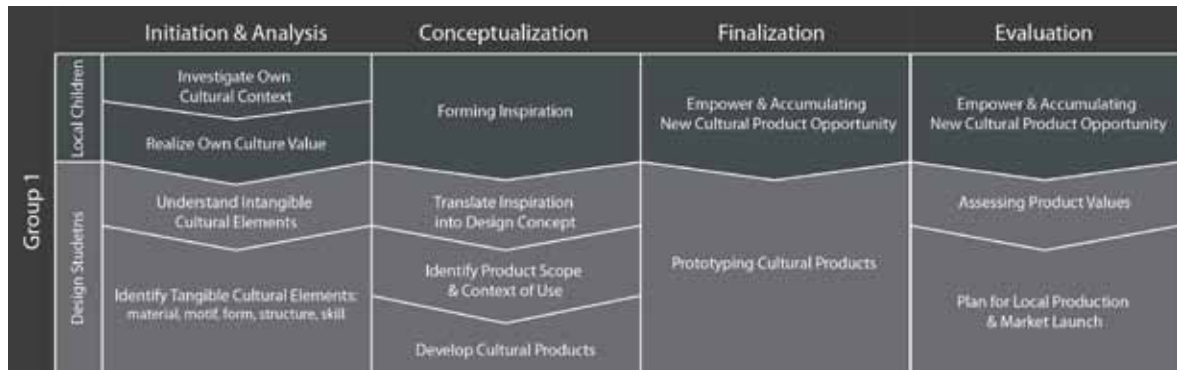


Figure 4. Design Activities For Group 1: Design Students and Local Children (Diagram by Woranooch Chuenrudeemol).

While the second group of design students and local craftsmen are participating in a workshop type of activity, mission to develop new bamboo craft products that convey tangible cultural elements of Bangchaocha community, for example, its creative weaving and structuring technique, its artistic and inventive form, its sophisticated details and memorable story, which matching with the contemporary domestic market. The second group of design students then imitated the role of apprentices, learning closely with the craft masters before set off to create their own designs as seen below in figure 5.

4. Design Outcomes, Evaluation & Discussion

4.1 Design Outcomes

The final design outcomes have apparently employed community's cultural value in both tangible and intangible forms. The collaboration designs between design students and local children are functional products with narration about local lifestyle. As seen in the figure 6 below, the fish-shaped pouch reflects local children's daily routine and relationship with water culture, while the robot piggy bank shows that even containers containing monetary units [coins] can be handmade and sustainable. Whereas the design student/5th grader collaboration resulted in functional products with narration, the collaboration works between design students and local craftsmen resulted in the series of purely *craft*

driven pieces. The designers and makers exemplified the well-known traditional artifacts such as Kra-Bung and Kra-Jad. They maintain the traditional form and its making technique, and reinterpret the new usage scenario, as seen in figure 7.

4.2 Design Process in Search For Cultural identity

Seeing design activities as a catalyst for stimulating perspective on crafts tradition, the most important stage of the collaboration is the investigation and realization stages. Those activities are crucial to the locals to help them in recognizing their own valuable culture and seeing their tradition in a different way. Via the design process, they also slowly understand how to reinterpret those cultural elements to create a more contemporary craft product.

The demonstration of how to transfer the intangible into tangible cultural elements lays in stage two of conceptualization phase, from intangible inspiration or design concept to two-dimensional sketch and finally to three-dimensional mock up, help enhance the locals' comprehension of the design process that deal with their cultural identity.

4.3 A Strategy to Build Self Reliance Community

A generation gap existed in the studied community where the older generation carried on the task of weaving and keeping the community economy running and none of the younger generation seemed interested in prolonging this indigenous knowledge. The older people feared that their knowledge would become eventu-

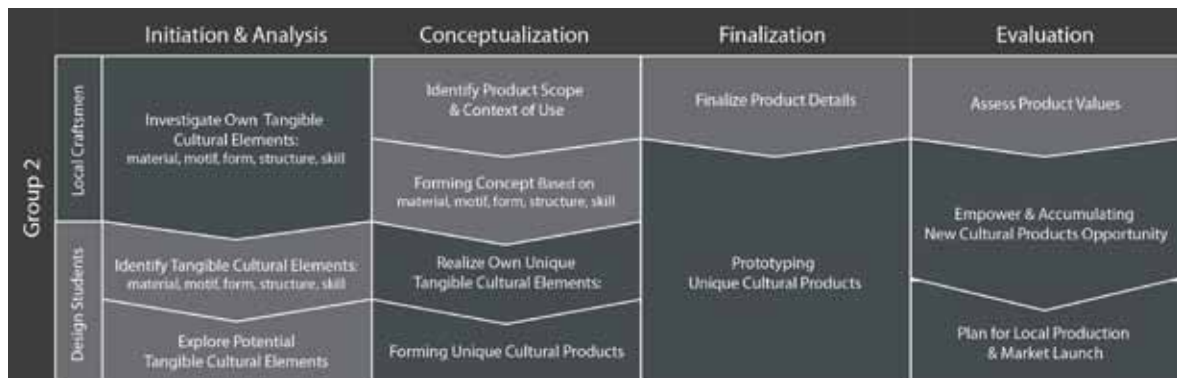


Figure 5. Design Activities For Group 2: Design Students and Local Craftsmen (Diagram by Woranooch Chuenrudeemol).

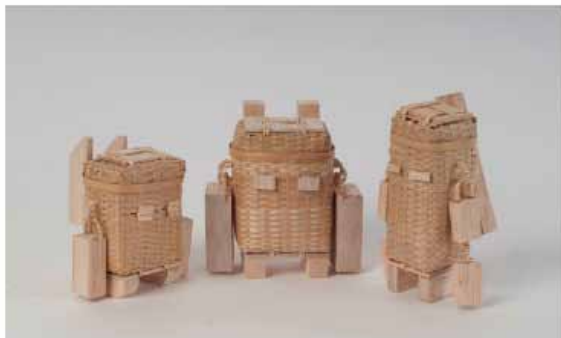


Figure 6. Design Outcomes from Group 1: Design Students and Local Children Group (Photo by Woranooch Chuenrudeemol).

ally extinct because of the younger generation's abandonment of a local village industry that promised low economic returns and little career excitement. In short, they underestimated their cultural intrinsic value. The designer acted as a bonding agent between these two generations in the community, as the indigenous knowledge retriever from the older generation and the inspiration of the local younger generation. They solely work as an outside mechanism to accelerate the process, and at a certain point when the community is ready, they should be replaced by the local younger generation who are trained to replace the outside designers' task.

Similar strategy has appeared with the case of 'Hub System' in Indonesia. A product designer, Joshua Simandjuntak has proposed the model of sustaining indigenous craft knowledge whilst embracing new design. In crafts villages in Indonesia, outside designers commonly come into the village with enthusiasm to produce their design with technical support of the local craftsmen. After their departure once the prototypes are made, there exists a 'vacuum' of a community's design inspiration. With such intermittent stimuli, it has resulted as in unsustainable progress among any stakeholders.

The 'Hub' is, therefore, created as the actual sharing place within the community where local craftsmen and visiting designers can share and exchange know-how and ideas on design utilizing indigenous crafts techniques. The knowledge acquiring facilities



Figure 7. Design Outcomes from Group 2: Design Students and Local Craftsmen Group (Photo by Woranooch Chuenrudeemol).

are equipped for craftsmen searching for knowledge from outside, while collaborative working space is also provided for designers to learn the hands-on techniques from craftsmen. The objectives of this system is to prompt local craftsmen to regularly practice and share their indigenous crafts know-how through interaction with outsiders, and in return, the new and fresh design creations of these 'Designers-in-residence' will trigger local design perspective and also be accumulatively archived. Even though the designers leave the community, the system and knowledge will remain to constantly drive the new cycle of learning (Simandjuntak 2010).

Furthermore, priority should be given to utilizing indigenous knowledge and local narratives and inspiration, rather than market demand if one wants to develop the local commerce sustainably. The proper marketing channels can be sought once the new cultural products are created. Knowledge transfer and accumulation are necessarily conducted in parallel with foreseeing and understanding potential markets.

5. Conclusion

Skill-based know-how can only be learned by practice. Learning in social and cultural context is almost as important as the indigenous craft knowledge itself as it is extensive learning towards real understanding of local wisdom. With a respectful approach to the locals, the research integrated all stakeholders from the community to partake in the learning, so as to achieve the mutual goal of retrieving the local identity and cultural asset.

Because in the ever-changing world economy, where the temptation of mass, fast-paced development and economic lure are hard to withstand by smaller societies, an indigenous society needs to adopt an effective modern mechanism. In this case such a mechanism was introduced by the outside source of young designers to balance a community's age-old cultural identity with modern marketing demands. In doing so, it shows how society can start to develop in a sustainable manner and how a culture's identity can be retrieved, respected, valued, and even elevated.

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Who's who in Brazilian design?

Notes on identity and the professional design field

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Design / Theory / History / Identity / Brazil

In which ways the notion of identity interacts within the design field? How can it provide a better understanding of controversial issues in modern Brazilian design? To deal critically with this history implies the identification of facts that interacted during its institutionalization from the fifties to the seventies. These are questions concerned to individual identities, collective identities and even institutional identities. This is the main concern of this article.

1. Introduction

Looking at modern design in Brazil throughout the period of consolidation that took place between 1950 and 1970 from a critical perspective, implies identifying facts and data that were interacting intensively at the time. Here I am referring to various considerations of identity: individual, collective or even institutional issues. In a brief and somewhat superficial approach, I have identified the following:

- The professional identity of the designer both as an individual and as a member of a group of individuals, taking as a model concepts imported from Germany, for the practice of the profession beginning in the 1960s;
- The professional identity derived from the institutional image of a designer, as a professional that designs goods for daily use;
- The identity of social groups organized in society during the period, and their demands for production and consumption qualities; and
- The emergence of a language, in the sense of aesthetics and all that this implies with regard to the user, from the ordinary citizen to members of the Brazilian elite.

Each of these categorizations suggests a bias in favor of a uncommonly broad examination about what was happening in Brazilian society with regard to their *modus vivendis*, which says as much about the relationship between and within different social classes, as well as the materiality of the environment, including the means of communication and the context in which these relations took place.

For the moment, my intention is merely to relate and attempt

to outline some ideas related to these issues. The categories to which I refer can be expressed this way:

1. the individual as a person, with his degree of ontological security, in other words, ideas about the basic unit in society – the human being. It is important to know how this figure is construed, and here I use the point of view expressed by Anthony Giddens; and
2. the individual as a political being: interaction of individuals with their peers and the creation of groups of individuals in a dialectic process, in other words, the ideas that articulate the view that individual identities do not exist in and of themselves, but always in relation to a context. Here I rely on the thinking of Norbert Elias, from a text by Stephen Menel, and also that of Fredrik Barth, with his observations with regard to the individual and social life.

My approach to the problem will be deliberately horizontal, more in an attempt to establish possible relationships between different fields of knowledge than to offer an analysis in greater depth. This paper therefore qualifies more as a theoretical exploration of these relationships and does not venture into a comparative analysis of the theories offered by several different authors. It is more like an essay, a format not often used by academicians, that combines reflections from the dialogue between some theoretical concepts of design and various authors from the social sciences.

2. The individual

In reflecting on human nature, Giddens starts from the premise that man, in order to be able to analyze the consequences of his actions and activities, gathers the information that he uses to justify his own behavior. Thus, in everyday activity, there exists a kind of reflexivity that is not exactly unconscious, but at the same time is not conscious of everything. By reacting in this apparently natural way to the environment, man operates with a conscious awareness and is constantly bombarded with chaos, “not only in the sense of disorganization, but also with a loss of a sense of the true reality of things and of other persons”.¹ An understanding and an acceptance of facts and events emerges from that which is shared with others. And this idea of sharing is confused with the very notion of reality – which does not need to be proved, nor does it even need to be provable. “Practical

¹ Giddens, 1991: 36.

consciousness is the cognitive and emotional anchor of feelings of 'ontological security', a characteristic of large segments of human activity in all cultures², says Giddens. These two notions – identity and reality – are intimately linked in a "natural" response to everyday facts, that suspends, or places in parenthesis, everything that might possibly cause us to question ourselves, or others or the objective world, so that the maintenance of everyday activity prevails as it unfolds. Thus, the small activities of our daily lives perform an essential role in the emotional stability of the individual, and personal existence is structured encased in a frame structured for and by life.

What then should be the role of objects in the establishment of these rituals of existence? What role should be assigned to its design, to the simple performance of its function? What kind of relationship can we establish between spaces, artifacts, all sorts of objects with which we come in contact throughout our existence? Faced with these questions, the notion of Giddens' "ontological security" may be able to help us.

One approach is offered by examining some of the concepts related to the creation of feelings that make it possible for the individual, at some point in the future, to manage his own life. For example, the notion of "a transitional object", an expression coined by Winnicott³ to describe objects that connect opposing forces – for example a child and his or her caretakers – which provides a kind of intermediation with reality. To a certain degree, these objects are part of the objective and concrete world and make it possible for the child to experience the transition from omnipotence to manipulation – in the words, change in the kind of power that the child exercises. From control by omnipotence to control by manipulation.⁴

All of these comments refer directly to still unresolved theoretical questions in the area of design. There have been so far no initial formulations to deal with the idea that there are meaningful ties established in the relations between individuals and objects, or even individuals and spaces, in the field of design.

How can the relationships between specific individuals and some of their belongings be explained? All of the products circulating in contemporary society that symbolize, or desire to symbolize, values associated with power, or the attribution of wealth and power, or any other possibility of differentiation, do not fulfil the same function related to basic trust of a child? In other words, a certain omnipotence that is often the direct result

² Idem.

³ Donald Woods Winnicott, the English psychoanalyst, describe studies about what he called "transitional objects", that link the created and governed, the internal and the external and which, somehow constitute a preparation for the future use of symbols.

⁴ [Giddens, 1991: 39] It should be pointed out, however, the origin of this reflection – the West, that was characterized throughout the 18th – Europe. Therefore the considerations of Giddens have to be placed in context, providing him with an origin, and keeping the area where these observations are valid in mind. It would be interesting to see, and compare, for example, if the references that are held between objects and individuals in the midst of, shall we say, bedoins, also hold for the kaxinawa or a hip-hop group from the suburbs of Rio.

of the confidence acquired in infancy, can be measured by an object, an action or even an activity that assumes a role similar to that of a transitional object, to use Winnicott's⁵ term.

The observations above, taken together with another concept described by Giddens, creativity, taken here to express the attribute or practice of review of the links formed with other persons or objects, suggest lines of inquiry to be taken to pursue a greater understanding of the impasse that designers face today relating to their publics and their own choices.

3. The social group

In the clash between two schools of thought regarding the construction of an individual identity – one teleological in nature, that sees human existence as a linear and sequential process of various stages of development and referring primarily with respect to individual processes, and the other referring to groups of individuals that, sharing a common identity, are given to the articulation of political demands – the Irish sociologist Stephen Mennel relates the latter to the idea of progress since there is not much consensus in sociology about sequential processes in the development of group identities.

Despite this lack of a consensus, he believes that it is reasonably implicit the notion that collective groups in general are constituted by beings that have their own individual identities. Therefore, a parallel can be established to teleological characteristic and theories about individual processes. But Mennel does not believe in this system that excludes opposites. Based on the principle of interrelationship, he argues that there are no individual processes in the formulation of an identity that are not connected to the collective groups to which they belong. Accepting the proposition that man is a species that is naturally gregarious, Mennel does not believe in random processes of identification with the other – for the individual or his group – but both are developed through a process of dialogue. He therefore rejects the idea of linear evolution.

The definitions of domestic and international design took for granted the notion of progress and, if this was not possible, re-treated into a kind of autophagia – designers creating designs mainly for other designers.

Mennel helps us in understanding the interactive processes and development of identities by opening the way for an inquiry into social practice, in other words an analysis of endogenous factors that are present in the changes occurred in society and societal relations. If, following the analysis of Giddens about the creation of an individual identity, we can approach certain processes of representation that occur in the relations between individuals and their objects or spaces, with the help of Mennel it is possible to move closer to a process through which social groups affect individuals and, in the same way, the configuration of their en-

⁵ Idem.

vironments.

4. Designers and their identity in Brazil

In the context of the institutionalization of modern design in Brazil throughout the early 1960s, there were questions of group identity to be examined. The figure of the “modern designer” during this first attempt at affirmation introduced a collective identity by means of a discourse that turned hegemonic. This started to crumble as specialized educational institutions began to multiply. The lack of a more well defined control of collective characteristics, that began to include new ideas influenced by new cultural territories gave rise to possible identities different from those originally established. All of this began gradually to be analyzed, although this analysis still lack a deeper awareness, even when surrounded by the conformity to standards of conduct taste and sentiment, as we were warned by Norbert Elias.

The process described by Elias, according to which superiority and pride are combined with representation and reality in the formation of social groups, a relationship in which representation tends to overlap reality, is interesting. Seen as a dynamic process in which threats and fears are never put aside, the evolution of social groups in the direction of a certain kind of fundamentalism becomes inevitable – “, beliefs are carried to the extremes of illusion and rigidity”.⁶

A similar process occurs in the classical construction of the modernist discussion of design, perhaps leading to the real reason why the notion of a complex and intrinsically functional project in design has not fully taken hold in Brazilian society.

Today, however, the opposite is occurring in the field of design. It's imprecise perception, sometimes tending to an abstraction without no very clear definition, leads us to other extreme. In midst of possible paroxysms of identity, new professional identities related to design emerged over time, sharply rejecting something that in the past was perceived to be one of its differentiating qualities. In the 1960s, the strategy was one of creating a “we-group”⁷ with sharply defined characteristics that have a decisive influence on the personal identities of its members. Today, this is no longer possible.

In his work *Ethnic Groups and Boundaries*, Fredrik Barth present some considerations about the formation and subsistence of ethnic groups. Some of these ideas promotes an extrapolation for the formation of professional identities. Another words, in the practice of certain professions, their sense of procedures, habits

6 The full citation of Elias and Scotson is the following in the text by Mennell: “By and large the more secure the members of a group feel in their superiority and their pride, the less great is the distortion, the gap between image and reality, likely to be; and the more threatened and insecure they feel, the more likely is it that internal pressure, and as part of it, internal competition, will drive common beliefs towards extremes of illusion and rigidity”. (Mennell, 1994: 181).

7 Based on the discussions proposed by Barth about the overlap of the apparent dichotomy between individual and group identities, I use the expression we-group to emphasize the prevalence of the collective identity over the individual in this precise context.

and means of congregation were able to define collective identities.⁸ Not all of the characteristics observed in the definition of ethnic groups correspond to those in the professions, but a larger number of them fulfill this role.

In an age in which the discussion about design boundaries has become systematic,⁹ Barth offers some useful concepts to better define what is happening with the design profession. The definitions of an ethnic group do not depend on the absence of mobility, contact and information, nor do they depend on the absence of interaction or social acceptance. On the contrary, these characteristics may be part of the foundation of broader social systems.¹⁰

However these are eternal questions in the specific field of design. Since the model adopted by design in Brazil was conceived in such an iconoclastic and assertive mode, the precepts for its configuration were based on the definition of differences and in how these differences came to constitute the group.

This is how hegemonies are created in different contexts of social life, including here various professional fields. The process of construction of subjectivities, and therefore individualized identities, based on the identity of social groups, creates and enhances the value of positions of power. In the field of design, at least during a certain time, this was possible. It is no longer totally so, but in a way it perpetuates a system of protection of individualities through their self identification with the group. The group assumes a kind of potential power that makes social life more feasible and even more possible. Belonging to a certain field names identifying oneself with your peers and constituting this power.

But while the definition of an ethnic group occurs through a process of biological reproduction, the same cannot be said of a group of human beings involved in the exercise of a profession. Even so, some of the features contained in anthropological literature can be used as standard elements in the constitution of a professional group, as shown in Barth's text, where he indicates what happens to a community that:

“(a) shares essential cultural values, manifest in the unity of cultural forms; (b) creates a field of communication and interaction; (c) has a self-identifying association, also identifiable by others, as consisting of a category different from other categories in the same order”¹¹

This being so, how can criticism regarding the creation of the group be dealt with? Since there is a total absence of critical thinking about design as practiced here, one can assume the fundament that in this case there is no founding, there is no

8 Barth, 1969: 9.

9 This was the topic of a conference in Sydney in 1999, a joint conference of the three international design organizations – ICSID/ International Council of Societies of Industrial Design, ICGRADA/ International Council of Graphic Design Associations and the IFI/ International Federation of Interior Architects.

10 “Cultural differences can persist despite inter-ethnic contact and interdependence.” (Barth, 1969:10)

11 Barth 1969: 11.

characterization of a "source", but rather a construction, simply a construction, is reinforced. The dogmas established by Swiss-German design as transferred to Brazil, originating in the Ulm Hochschule für Gestaltung without respecting accepted practice here led to the disqualification of this practice and of the professionals that were then responsible for this kind of project, were immediately challenged. On the other hand, we adopted here the relativity as proposed by Barth, who reiterated the necessity of not confusing the collective identity with no kind of essentialistic identity, to the point of suggesting that any a priori judgment should be avoided and that the elements referring to time and place which determine the material expression of one's culture should be deeply investigated.¹²

This means that designers whose origins were rooted in the Swiss-German model saw themselves as enablers and carriers of a particular set of visual, as well as moral values that were beyond question, and taking upon themselves the notion that their activity could only be realized at a determined level – one of accuracy and property – stripping away all such activity conceived according to another standard. This meant that there was no "good" or "bad" design, but simply design, with no adjective – superior, and dogmatic because it is unchallengeable. In other words, this device was used to establish a kind of ethnic dichotomy: those who are included cannot get out, and those who are excluded cannot get in. Barth notes both the nature and the cultural content of this device, in other words the signs of auto recognition of these groups:

"[i] signs or manifest signals – the diacritical characteristics that people look for or exhibit to show their identity, characteristics such as dress, language, home or lifestyles, and [ii] basic guidelines to value – the standards of morality and excellence according to which performance is evaluated."¹³

In truth, the maintenance of a profile of identity of the group with these characteristics – mainly that one which requires its members to recognize themselves as such – depends on the maintenance of its borders.¹⁴

To the degree to which the usual borders of design are being changed in what is an extremely dynamic and contemporary movement, caused by the assault of a wide and diverse set of circumstances, the designer's professional identity also requires this movement of change, while on the other hand these changes require, imperatively, a constant critical review.

¹² [E]the sharing of a common culture is given central importance. In my view, much can be gained by regarding this very important feature as an implication or result, rather than a primary and definitional characteristic of ethnic group organization. If one chooses to regard the culture-bearing aspect of ethnic groups as their primary characteristic, [E] one is led to identify and distinguish groups by the morphological characteristics of the cultures of which they are bearers. This entails a prejudged view-point both on [1] the nature of continuity in time of such units, and [2] the locus of factors which determine the form of the units." (Barth, 1969: 12)

¹³ Barth 1969: 14.

¹⁴ "E]the fact of continuing dichotomization between members and outsiders allows us to specify the nature of continuity, and investigate the changing cultural form and content". (Barth 1969: 14)

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Territories of practice: convergence and divergence between Design and Architecture in postwar Japan

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Paradise identity, between projection and protection: César Manrique's lessons for current challenges in territorial innovation

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Local development / Design education / Ecodesign / Craft / Canary Islands

the tendency to provoke negative changes in what used to be the attraction of a place. (Ruiz 2006: 2)

This paper analyzes the validity of design principles seeded by Manrique in Lanzarote Island (1968-1992) to face current challenges in territorial innovation. Such period comprehended a radical shift from subsistence agriculture towards a massive tourism industry, where local resources and collective identity had to be both projected and protected to look appealing for globalized leisure. Roles, methodologies, ecodesign strategies and success indicators are briefly identified to serve as a didactic tool for future designers.

1. Welcome to the Paradise: myth and reality from a 'Cinderella' island

Contemporary Lanzarote Island's identity can't be properly analyzed under a local development approach without considering the decisive influence exerted by artist and designer Cesar Manrique along three decades (1968-1992). This territory has been for long considered the Canary Islands' *Cinderella* due to its historical poorness, probably derived from unfavorable conditions, such as a hot desert climate¹, besides the fact that much of its length is blanketed with volcanic rock resulting from considerable seismic activity in the 18th century.

Nevertheless, landscape and environmental values stand out against the rest of Spanish regions, due to the fact that the Canary Network of Natural Protected Spaces represents the 47% of Archipelago's area, including four National Parks and four islands as Biosphere Reserve –Lanzarote included-, among other interesting protection figures.

Travellers and tourists from everywhere and every time have been captivated by them as we can deduce from the names given to the Canary Islands through History; Atlantis, Hesperia Garden or Fortunate Islands. These myths linked to health, eternal spring, typical, or human-nature harmony still work as brand attractors in advance. But nowadays, the amount of tourists is increasing worryingly, with more than twelve million last 2011. According to Ruiz,

The tourist image of the Canaries is a model of how the most important industry in the world can sell a landscape as a metaphor of Paradise far closer to the advertising concept associated to the destination than to its true reality. [and quoting Baudrillard] This is something that happens to all the tourist industry, which has

¹ It has an area of 846 Km² and a population of just over 140.000 in 2012 (plus an estimation of 50.000 tourists) with maximum temperatures in summer ranging between 22°C and 25°C. Winters are mild, with a minimum temperature of 12°C. Rainfall is scarce, reaching an annual total of 160 litres per m².

From a subsistence agriculture towards a massive tourism industry in a blink

At the end of the fifties, the increasing of the tourism phenomenon comprehended a radical shift from subsistence agriculture towards a massive tourism industry, where local resources and collective identity had to be both projected and protected to look appealing for the emerging globalized leisure. Cesar Manrique took a relevant role in creating a collective imaginary where, until then, there was only desert and scarcity. He worked on the weak and imprecise line that distinguishes the 'disneylandization' simulacrum from endogenous strategies, with the confidence of having an honest true in his hands; that of improving quality of local conditions through the international promotion of Lanzarote's own heritage. He was an interdisciplinary artist who simultaneously painted, sculpted, designed, or created work for public spaces and in natural environments. Born in Lanzarote in 1919, he was early got attracted to the particular nature present in his volcanic island. After studying Fine Arts in Madrid and becoming an international recognized artist -living and working in USA between 1964/66-, he decided to return and settle down permanently in Lanzarote in 1968. For him, this definitive return after accumulating experience in a place as different as New York City brought the rediscovery of some of the island's autochthonous values, such as the landscape and vernacular architecture. In his own words: 'When I returned from New York I was determined to help turning my native island into one of the most beautiful places in the world and enlisted the help of Pepin Ramirez, President of the Island Council, who enthusiastically supported me right from the start' (Gómez Aguilera 2001)

At that time, under the Franquist regime, the Spanish west coast and the bigger islands like Tenerife and Gran Canaria, began to be aggressively urbanized in order to host the incipient mass tourism attracted by 'sun and beach' promises. Local authorities from Lanzarote saw this as an opportunity to reach the so desired welfare state in an island scourged by famine and emigration for centuries, with a subsistence farming and agriculture trying to make their way through a volcanic ground, and a handicraft fishing sector in deep decline. The crucial difference respect to the rest of the Spanish coast, it was the assumption of a model of development with nothing to do with the experiences described above. The Insular Government, commitment to intervention in the territory was guided mainly by ethical and sustainability parameters (which it could sound ingenuous to today's ears) in order to extend welfare conditions to the insular population while safeguarding the natural and cultural herit-

age. Manrique was an active part of this first group as supervisor, elaborating a new aesthetic ideology called 'Art-Environment/Environment-Art' concreted on the singular interventions that took place in different landscapes worthy to be visited, not only to enjoy them but to acquire an environmental consciousness. As we see, Manrique assumes for Art an educational function near to religion, through which it will be possible to restore harmony to the human being.

The Centres for Art, Culture and Tourism. The reinvented heritage as the local economy's main force

Most of these environmental interventions will be shape the 'Centres for Art, Culture and Tourism' (CACT), which together with Cesar Manrique's Foundation are the main reclaims for tourists these days. It's important to highlight here that this model of intervention was a determinant aspect for Lanzarote to be declared Reserve of the Biosphere by UNESCO's Man And Biosphere Program (MAB) in 1993. The island differs from other Biosphere Reserves due to both the strong interaction of its inhabitants with the physical environment and an economy strongly dependent on tourism. Thus, Lanzarote appeared as a place with conflicts of interests, with great beauty and nature richness. For that reason Lanzarote is an experimental territory regarding sustainable tourism to the MAB program. The design principles explored by César Manrique to make nature and art coexist can be experienced in his own home -latter restructured to host his Foundation-, and also in the majority² of the so called CACT. The seven of them are publicly owned, depending upon the Insular Government. They were created to outline and protect the natural and cultural heritage, an endogenous resource both for locals and tourists. In some ways they have inherited the tradition of environmental concern that permeates the culture of this Island. Nowadays, the CACT are the main economic motor of the island, destining a great portion of the benefits to island's social actions. Due to the nature of this paper, we'll limit here to study the samples from these locations.

2. Manrique's Design principles for territorial development

The author's hypothesis considers that Manrique's design principles, implemented mainly through the CACTS between 1968 and 1992, still generates an up to date corpus to learn from, in order to face some current challenges in design for sustainable local development and territorial innovation. He avoided writing manifestoes, but some of his abundant verbal itinerary related to his actions, can be synthesized and retraced here in at least the following 10 points:

1. Interdisciplinary teamwork. Despite his strong artistic personality, most of the solutions provided came from a diverse group, working together to face the complexity of planning the island's development, thus involving stakeholders such as insular presidency, technical and artistic assessors, architects and citizens.
2. Art-Nature-Man integration. From a holistic perception, Manrique pretended nature conservation through its cultural valorization. He created respectful meeting spaces, deserving the subsequent aesthetic fruition as a transformational agent in citizens' conduct.
3. Learning from Nature's wisdom. He affirmed that life energy provides us with marvelous design concepts, myriad aesthetic forms, a vast creative intelligence capable of constructing complex yet perfect machines which can design infinite programs to be adopted by human-being.
4. Education and Culture. For him, a nation without neither culture nor tradition was destined to disappear. Education –a country's biggest business- should foster the knowledge of the own heritage as a means to inculcate respect for the environment through aesthetic sensibility. An artist had to be forced to communicate; simply, to teach how to see.
5. Learning from vernacular design. Manrique projected taking into account the functionality and cultural identity from the existing popular typologies or archetypes. He used them as a base to develop innovative proposals but still acceptable by community.
6. Using natural and local resources. The employment of endogenous materials and technologies could empower autonomy, reducing environmental impact and external dependence. Water, plants, soil, rocks, wind, sun and volcanic energy became constructive elements to generate human-harmony settlements, connected to the context.
7. Global-local dialogue. Manrique rehearsed integrating links for different geographies, cultures and aesthetic trends, through architecture, products and graphic, embracing regional and international features. As an assiduous traveller, he was very aware of the need to find common points lying within diversity, but yet understandable and pleasant by everyone.
8. Creativity. He conceived it as the capacity to problem solving in imaginative ways, to adventure and intuit new aesthetic concepts, relational scenarios and ways of perceiving reality. But also creativity understood as a means to fulfill oneself creatively.
9. Process culture, intuition and permanent research. The results from more than 20 years working on the territory evidenced the need to project with solid but flexible principles, avoiding preconceived closed plans and learning from the process. In words of Manrique, 'turning life as an exploratory game in the face of something so unknown and fascinating as our own existence' (Gómez Aguilera 2001: 53). In this sense, intuition was also at the core of his design process, being able to detect new options or assume unexpected de-

² Except the first of them, *La Cueva de los Verdes*, which dates back to 1964.

cisions straight on the field. A virtue probably extrapolated from his skills as a professional painter.

10. Adopting a permanent social activist position. As citizens, injustices have to be denounced and condemned. For him, the struggle for survival and environmental conservation can't be abandoned, reminding that future can't be taken for granted, but it has to be shaped from the present with our actions.

3. Some ecodesign strategies evidenced from the paradise lab

Manrique extended his principles to a wide range of practices and disciplines. Product design under the current perspective is one of the less researched areas in his vast work. That's why in these pages we'll limit to highlight and illustrate these samples. He was a contemporary pioneer in the application of ecodesign principles and strategies, such as the vision of products as systems, the concept of life cycle, or the integration of all stakeholders. Apart from working in decreasing their impact, he tried to communicate other qualitative features, such as their inner beauty and poetics, thus making a whole capable of arousing environmental concern.

Related to materials and production impacts, we find several examples of reutilization and recycling, such as the wooden beams from telephonic posts, due to the lack of trees in Lanzarote (fig.1a) or that of glass wine bottles to create a lamp (fig.1b), as there wasn't any plant for its treatment in the Island. The Peasant Monument is also made of recycled water tanks from old fishing boats (fig.1c). Dematerialization strategies and use of local available materials, such as the Jameos del Agua Auditorium (Fig.2a), a cultural infrastructure using the existing volcanic tube, thus saving energy and materials transport. Also the Cactus Garden (Fig. 2b) is an excellent example of how to recover a deteriorated space –an old quarry and dump- with minimum intervention.

Besides, he created clean energy devices, like the Timanfaya's oven (fig.3a), where food is cooked by the heat that comes up from the depths of Earth, and the wind-toys sculptures, where the movement is provided by the abundant wind existing in the island.

Low impact in transport and maintenance, long durability and non-problematic end of life strategies can be observed in many



Figure 1. a) Wooden beams. b) lamp using old glass bottles. c) Peasant Monument.



Figure 2. a) Jameos del Agua Auditorium. b) Cactus Garden.

examples of public furniture, like the stone benches in Mirador del Río (fig.4a), able to host life forms such as lichen, and stone tools in Jameos del Agua (fig.4b).



Figure 3. a) Volcanic oven at Timanfaya National Park. b) Wind-toys sculptures.



Figure 4. a) Stone bench in Mirador del Río. b) Stone tools in Jameos del Agua.

4. Preliminary sketches towards design for territorial innovation in the Canary Islands after César

As we've seen, Manrique proposed a pioneer action model for tourism-based regional government, where the Arts had a core role either in projecting and protecting the utopic paradise. Different conclusions can be pointed out to meet our aims.

Some critical considerations

A work and personality as intense as Manrique's, is easy to provoke diverse and opposite reactions on people and critics. On the one hand, according to some authors (Allen 1994), Manrique's interventions are not valid to solve the problems of overpopulated areas, one of the main issues in the Canary Islands nowadays. He recovered pre-industrial and rural ideals to project them against technocracy and city chaos, setting up as

a symbol of a utopian social future, capable of integrating art, space and leisure. This extreme is also reflected on his product design, frequently hand crafted, forming limited series for specific places, closer to Arts & Crafts movement. Besides this, authenticity canons imposed by Manrique in aspects such as vernacular architecture, fit, in some occasions, more with nostalgia and spectacle patterns imposed by tourism industry at a worldwide level, and less with the real contemporary needs for the inhabitants of those places. The results -often perverted by speculators- sometimes bring serial and filed built up houses, maintaining just a surface aesthetics, an empty wrapper, so typical of Postmodernism.

The multiple roles and methods from a total art practitioner

On the other hand, Manrique can be seen as an inflection point, a lighthouse to show that other ways of development are feasible. He was able to make a good use of his chance to convert something which others might see as a barren and worthless piece of land, the result of a volcanic eruption, into something of beauty. Lanzarote landscape was perceived before him as a desolated place, an arid volcanic desert very far from the stereotype of paradise. Education and concern to population took a major relevance in this shift of perception. He was able to communicate and convince through his word, attitude and facts, as far as he maintained an ethical and coherent position that let him to be courageous to denounce injustices against territory and, by extension, the local society. In synthesis, he performed some of the roles required in design for public services, such as facilitator, researcher, co-creator, communicator, strategist, trainer and entrepreneur. Due to his artistic reputation, he also played the role of brand image of the island.

At the methodological level, maybe it's time to claim here for the importance of the creative genius –in the sense of Zambrano's poetic reason-, intuition, surprise and maneuverability on the fly, such as César did. But all this, based on a thorough knowledge of realities to intervene, constraints and possibilities of the environment.

Education and lessons for today's designers

This didactical approach can be seen through the samples presented above; he faced the necessary challenge of adopting an interdisciplinary logic and holistic point of view of the product. As a designer, Manrique acted not only on the nature of the product and materials, but also on its communicative dimension, being able to communicate the ecological nature of products, and doing so, defined an aesthetics to let understand and revalorize humble or discarded objects and materials. This is not an unknown task at all for a region with a rooted handcraft tradition, such as the Canaries.

Moreover, it seems that until recent years, higher design education in the Canary Islands has been looking far beyond its own context. That is, trying to adopt and to teach, blindly, trendy international principles, knowledge and techniques that maybe they

didn't suit enough to local conditions. It's time to re-contextualize the future designers' capabilities to encourage them as positive transformation agents, beginning from their own territories.

Indicators of success in Manrique's territorial interventions

It should be clarified that current sustainability indicators for Lanzarote are far from desirable scenarios. Much remains to be done in all areas. The purpose of this section is just to identify both quantitative and qualitative indicators that allow us to better assess the involvement of Manrique and his team in that region over the years. We have listed here the main international recognitions at a territorial and community level. These included the declaration of Timanfaya National Park in 1974, the Plan of the Insular Territory (PIOT) in 1991 and recognition of Lanzarote in 1993 as a 'Biosphere Reserve' by UNESCO –recently endangered due to corruption cases involving several politicians and businessmen in 2009-.

Weaving organized networks as custodians of the territory

Nowadays Cesar Manrique Foundation is going on in the struggle, becoming one of the main convergence points for civil society, in order to look after the so esteemed achievements, but to watch over the always attempts to speculate with a valuable territory and heritage. This hard and tenacious labour promoting a local-global dialog and education, is called to become a consistent democratic 'foundation' (in the sense of construction), or a fertilized soil on top of which it will be possible to grow the seed of culture, the first and unavoidable step for a worthy design.

As a corollary, the personal terrene utopia cultivated by Manrique, was allowed to be projected as a paradise identity. Then it was shared, shaped and spread enthusiastically. This led to the awareness and protection. And later, often derived in corruption. But as a process approach, it's not an ending project. Efforts should be made on maintenance and keeping hope alive.

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Politics of fragility in Catalonia: radical austerity in postwar context, its origins and continuity until nowadays

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Catalonia / Post-war / Micro-politics / Fragility / Mediterranean / Ethics / Design / Crafts / Crisis

In the adverse conditions of the Spanish post-war, a group of creators tried to connect with the Mediterranean avant-garde and moved towards a radical austerity marked by realist pragmatism. This policy of fragility was characterised by an adaptation to precariousness and an inspiration in craft together with a desire for modernity. Today, this movement seems to have re-emerged, introducing concerns such as sustainability and the negotiation between nostalgia and irony.

1. The inheritance of the G.A.T.C.P.A.C.: a rationalist and Mediterranean utopia.

It was in the context of republican optimism and reformism that the Groups of Catalan Architects and Technicians for Progress in Contemporary Architecture (G.A.C.T.P.A.C.) drew up the principles of rationalist architecture inspired by popular Mediterranean tradition (Pizza, 2001). Social and political concern to improve living conditions for the working classes joined with modernity and rural compensation for urban aggression. The small, prefabricated Collapsible Beach House in 1932 and the Weekend House of 1935 exemplified these aspirations and the corresponding aesthetic: simple, economical, contact with nature combined with a secluded interior, concern for the health of the user, local and traditional solutions (e.g. the Catalan vault), light, traditional furnishings and decoration (rush furniture and traditional ceramics). These projects were accompanied by theoretical and academic articles in the group's journal, A.C. which highlight the importance of discovering the traditional architecture of the island of Ibiza. One of those involved was the artist Raoul Hausmann, founder of Berlin Dadaism and a radical critic of the conservative institutions of the west. Josep Lluís Sert established a set of principles in which rationality depended on human scale, pragmatism and flexibility. The furniture for this architecture answered to the same criteria, possible with a small dose of archaism in the use of cottage industry and craft materials. The best example of this is the armchair by Josep Torres-Clavé in 1934, which was inspired in traditional Ibizan chairs known as "cadiretes". The "Catalan chair" by German Rodríguez-Arias, exiled to Chile in 1942, already marked by certain nostalgia, is the stylised version of a popular lounge, using light, simple materials: pine and rush.

In the post-war period one of the essential factors for the conservation of these projects, vary discreet and subtle as a result of the repression of any legacy of the Republic by the Franco re-

gime, was already Joan Miró, who acted as a master and model for the Dau al Set group (1948) and led the recovery of avant-garde art. Miró not only acted as an artistic reference but also as a broader moral and aesthetic example. In that sense the daring and refined book *Atmosfera Miró* (SWEENEY, 1959) is revealing. The book presented a visual report on Miró's working environment and the objects and landscapes that formed part of his daily life and his poetics, in which one can appreciate his love of small, natural and popular things. Using them together he created an image of the Mediterranean as a close and modest world, but also one that is primitive and charged with meaning. The artist's commission for a new studio in Palma de Mallorca in 1956, designed by Sert, was the opportunity for international modernity and Mediterranean localism to meet up once again as a foundation for a renewal that once again linked to the principles of the G.A.T.C.P.A.C. with Miró's strong, expressive poetics.

2. The post-war period: from militant Franciscanism to a fashionable tendency.

One of the leaders of the R Group, founded in 1951 for the renewal of architecture (which became active again after the dismantling of the G.A.T.C.P.A.C) was Antoni de Moragas i Gallisà. Like the rest of the group, his interest in design was fundamental. On the suggestion of Gio Ponti, in 1957 Moragas proposed the creation of an Institute of Industrial Design and he would end up being the catalyst for the crucial and prosperous ADI-FAD (the Association for Industrial Design and Promotion of the Decorative Arts). Before looking at other more ambitious works, it is interesting to analyse a small work that he produced very early on in his career: the boundary cross that he made in the small town of Argentona in 1945. In the face of the pretentious, spectacular and triumphant nature of religious symbols (since the manipulation of the Franco government), Moragas proposed a barbaric primitivism that seemed to even assume a certain degree of ugliness. The cross is stuck onto a wooden beam, like a telegraph or light pole with a strident and very simple protective cover. It is decorated with a series of Romanic-inspired stone relief sculptures, attached like ex-votos. In the Parish of Sant Jaume (1957), in the working class city of Badalona, he took an existing warehouse and turned it into a place of worship with just a modest investment (fig. 1).

Moragas doesn't hide the building's origin, maintaining its impoverished character and even accentuating it by adding basic industrial materials: brick, glass blocks, breeze blocks, cement and wood. The result of both these works is a primitive and in-



Figure 1. Antoni de Moragas i Gallisà: Parroquia de Sant Jaume, Badalona (photos by Francesc Català Roca).

dustrial savageness that was surprising in Spain at the time, but it had a certain continuity in modern circles which either aspired to Christian practice that had been purged of the conservatism of the official church, or were looking for an alternative and more authentic form of spirituality, with the implicit desire to criticize the status quo. Religious echoes, understood from radical revisionism, expressed a rejection of established values and the importance of the ethical dimension. We can link Moragas's cross with the early collages by Antoni Tàpies ["Newspaper cross", 1946 or "Collage of crosses", 1947]. Tàpies had mentioned on some occasions that for him at the beginning Franciscanism appears recurrently in the art reviews of the time in Catalonia, although it is not exclusively to there: in 1950 Roberto Rossellini had made his film entitled "Francesco, giullare di Dio". Saint Francis represented the spirit of impoverishment that highlighted the vanity and hypocrisy of the official church. In 1954, jeweller Manuel Capdevila made the Kolbe Crown, dedicated to an Auschwitz martyr, using river stones, tin and wood to make it completely austere and archaic. In Catalonia, Franciscanism was associated with the important influence Romanic art, which was taken as a local – and national – form of renewing primitivism. In fact, Sert was already responsible for the design of the museum exhibition on Romanic art in the Gran Palais in Paris in 1937. The artists of the post-war generation adopted this medieval model as an alternative to the banality of the commercial art of the time: the art that was being bought by the Franco's *nouveaux riches* at a time known as the "estraperlo" period, referring to illegal or corrupt businesses.

Together with Moragas, the other main character in the R Group was José Antonio Coderch, who best represented the continuity of the Sert's Mediterranean model of modernity. He was responsible for the Spanish pavilion in the 9th Milan Triennial in 1951, which is a clear example of how the Franco regime tried to assimilate the contributions of modern creations as a medium of propaganda. The avant-garde that he defined, associated with the recovery of works of craft, was the only one possible in a country that was still barely industrialized: Max Bill visited the pavilion with interest, surprised by the absence of industrial projects (ARRESTO, 2008). Displayed was a collection of craft objects combined with works by avant-garde artists associated with primitivism among which was Miró, and accompanied by a Romanic altarpiece. For one of

the walls Coderch used the peculiar straw covering that was used in Mallorca for the backs of pack animals. Coderch pitched the craftsmen and engineers against the architects. He rejected the artistic brilliance of the architects and opposed them in both economic and other senses. It is revealing that he held the craftsman up as a kind of pure model. Sometimes this essential pragmatism as a way of cleaning the excess rhetoric of Franco's neoclassicism could be tolerated, paradoxically, from reactionary or nostalgic stances. Throughout the 50s Coderch would develop the principles of craft inspiration oriented towards a rigorous and purified conception of form and function, in which figurative elements (a reference to the traditional and recognized typologies) and the abstract language of rationalism are combined. In a cheap block of flats in the Barceloneta neighbourhood (1951-1955), the façade was resolved using the visual prominence of a louvered or Majorcan-type shutter, making the curtain wall more modern by using a traditional resource that is better adapted to the local climate. The famous 1957 Coderch lamp ("the most beautiful lamp in the world" according to Picasso) is of almost ethereal lightness but at the same time it is textured; it has the warmth of natural material and a craft-like appearance, united in a projection-concealment effect that brings to mind the shutter effect and lends itself to the metaphors that are so typical of the Mediterranean of intimacy and sun. All these solutions appear again in the house-studio that Coderch designed for Antoni Tàpies in 1960-61. In the interior decoration of his own family house in the village of Espolla (1964), Coderch achieved monastic austerity and seclusion. For the interior of the Barceloneta block, whose show home they was decorating with reproductions of Romanic paintings and craft objects in terra cotta and rush, Alfonso Milà and Federico Correa designed a light wooden and fabric chair that is very reminiscent of Rodríguez-Arias's Catalan Chair.

The contributions of the R Group have immediate continuity in the works of Miguel Milà, Alfonso Milà's brother. Miguel Milà was a pioneer in product design in Catalonia. He began by taking on family orders. The humorous name of his company, Tramo, which is a play on the combination of the words "tabajos molestos" or irritating jobs, reflected those domestic beginnings. His standing lamp of 1956, TN, "Tía Núria" (Aunt Núria), was made using a simple iron tube and some motor car bearings, giving it a plain and linear modern look, with an almost immaterial and even elegant presence, departing from the brutal effect that could have been achieved with raw industrial materials. His strategy of self-commissioning and small formats in which he worked as a model maker or inventor meant that he was considered in a way as a "bricoleur". Despite the refinement and his clientele which mainly came from a minority of sophisticated taste, Miguel Milà worked in the context of a country defined by precariousness and that is why he said, "I am making from scarcity" and "I am a pre-industrial designer" (PIBERNAT, 2003). Tramo packaging was unusual at the time for its austerity, using ordinary cardboard with the staples visible. Milà worked with the craft sector. Among the accessories in the Manila series made out of Manila cane, which could be combined with new materials such as plastic, was the successful Basket Lamp (1962) which offered a new portability and non-conventional use

whether on a table top or on the floor (fig. 2).

Throughout the 60s the Franco government promoted a controlled opening up to foreign countries allowing certain economic progress for the country which was known as “developmentism”. With it there came certain material wellbeing, parallel to that in Europe although much more modest, and one of the clearest developments was the tourist boom. In this new context, with a change in habits and the progressive emergence of domestic consumption and the pop aesthetic, the initial rigor that had marked the avant-garde in the 50s lost its meaning and became less attractive, also bearing in mind that it hadn’t been formulated or formulated promoted strongly enough. The radical nature of the Mediterranean started to look like a style stripped of its militant and social content to become part of the world of fashion and luxury: Specifically, in the case of architecture and design, it moved towards the second homes of the comfortable, educated classes. Renouncing or perhaps simply tired of primitivist sobriety but also logically seduced by a new situation in which progress was through industrialization and new materials, Spain, which in short wanted to let go of the burden of rural life, produced an aestheticisation of Mediterranean austerity, although the products were of very high quality. This is the very particular case of the population growth on the coast at Cadaqués and certain parts of the Balearic Islands. In Ibiza Sert built the “Punta Martinet” development, which despite respect for the countryside and tradition, had lost the utopian sense of the 30s. Naturally, some of the values of ethics and modernity associated with tradition and even the good of the country were maintained over time by the Catalan intellectual classes. The creation of the Miró Foundation and its building, also by Sert, would be the proof of that, but it was no longer a dominant trend. An interesting experience, albeit less innovative, was the La Cantonada group, established in 1960, which took on architecture, furniture, jewellery and ceramics. Its members were linked to progressive Catalan Christian sectors. Jordi Vilanova’s child’s stool (1966) was one of the best of their products. They were very simple designs but were accompanied by a certain sentimental anecdote type feel; they could not be a socially reformist alternative as they would have liked (one of their initial objectives was the renovation of poor people’s housing), and they ended up selling in the smaller sector of middle-class holiday homes and children’s furniture (VÉLEZ, 1999). Faced with this drift, a new figure in Catalan design appeared during those years: André Ricard (who followed the model of Raymond Loewy, who he had known). Ricard created a successful design – the “Agua Brava” perfume bottle, which reflected the poetics of the Mediterranean but with a commercial side.

3. The new critical austerity

Just when it seemed to have disappeared or become a style with no fixed line, some of the main values and intentions associated with the post-war policy of fragility, with its utopian roots of the 30s, reappeared at the end of the 90s. Artists such as Antoni Lle-

na, the creator of a unique arte-povera, Ignasi Aballí, who reflects on the need to reduce artistic intervention to the minimum and Oscar Abril Ascaso, with his Low Tech Music, are clear examples. In the video entitled “Actions at home” (2006) by the Bestué-Vives partnership, one of the actions consists in turning a common, ordinary armchair into one of Mies van der Rohe’s “Barcelona” chairs by absurdly bending the legs of it. In their Clota House (1997), architects Enric Miralles and Carme Pinós flagrantly used perforated bricks and left patches of cement visible, a resource that rings of self-build and the most modest, even improvised architecture of the developmentism years.

Martí Guixé immaterialism and his utopian and conceptual attitude have been highly influential in the artistic sector. Perhaps the most visible in the renewal of design since the policy of fragility are Curro Claret and Martín Azúa. We can find in Claret the ugliness and ethical desires of Moragas. In Azúa is the natural, craft-like approach of Milà. But in both there is a new value – that of irony. There is a lightness that is not only formal but also acts as a type of liquid resistance to the excesses and material and aesthetic waste of globalised consumerism. In the face of a notion of strong authority, Claret proposes the activation and participation of the neediest sectors not only in production but also in design. His “300 stool” (fig. 3) is the result of a creation and production project by the homeless through an NGO (Arrels).

Claret proposed the idea and created the piece which enables the assembly of the stools using recycled materials. “For the Love of God” is a church pew that can be turned into a bed. Martín Azúa (Gasteiz, 1965), turned the typical Spanish terra cotta water jug, the *botijo*, into the “Rebotijo” which is a hybrid with a tetra-brik. In different pieces and workshops, Azúa is recovering the craft of using esparto grass. Significantly, Azúa has mentioned a phrase by Enzo Manzini in several interviews: “the role of the designer in the future will be to make poverty attractive”. For that reason the tradition of Catalan modernity is very useful to him.

After the luxury and euphoria of the 80s and the Barcelona Olympic period, these designers have rejected grandiloquent rhetoric and eclectic cosmopolitanism in favour of fragile proposals that are modestly presented and use materials that are modest but



Figure 2. Miguel Milà: Cesta (photo by A.M.).

Figure 3. Curro Claret: Taburet 300 (photo by Joan Lemus).

charged with ethical and critical intention. They are aware that the grand discourse of the avant-garde is not effective and that the problems should be tackled from so-called micro-politics: from local, real and pragmatic but incisive actions that are corrected by ironic intelligence. The provisional, the light, the recycled, the austere and the pragmatic provide the answer to new forms of precariousness. So when they are adapted to the new determinants of a new context, they connect with inventiveness, the ability to adapt, the militant and activist modesty of their historical precedents and enable us to identify a genealogy whose meaning, in the light of the current crisis, has taken on new relevance.

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Designing 'The House of Man': Franco Albini and the place of Neorealism in Italian Design, 1930-1960

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Italian Design / Neorealism / Modernism

Generally characterized as Neorealist, a term derived from the work of such filmmakers and writers as Roberto Rossellini and Italo Calvino, postwar Italian culture is typically believed to have diverged significantly from Fascist culture in both its subjects and its techniques. Contrary to this story, this paper will argue that Italian design, and Neorealism more broadly, is more accurately understood as the product of existing lines of research and debate.

1. 'The House of Man'

In late 1945, the architect Ernesto Rogers began what would prove to be a relatively short term as the editor of *Domus*, the famed journal of architecture and design that Gio Ponti had founded in 1928. Under Ponti's direction, *Domus* had become one of the premier design magazines in Italy, aimed at the growing urban middle-class and functioning very much as a guide to modern good taste. Rogers, however, imagined an entirely different role for the magazine. In his first editorial in January 1946, in the first issue of *Domus* published since 1941 when Ponti had stepped down, Rogers announced a new set of concerns:

On every side the house of man is cracked (if it were a boat we would say it leaks). On every side the voices of the wind enter and the laments of women and children go out. A house is no house if it is not warm in winter, cool in summer, and serene in every season to receive the family in harmonious spaces. A house is no house if it does not contain a corner for reading poetry, an alcove, a bathtub, a kitchen. This is the house of man. And a man is no man if he does not possess such a house.¹ [Rogers 1993]

These lines hint at the broad cultural concerns that Rogers aimed to engage with the magazine, concerns that he made explicit in his concluding sentences:

The house is a problem of limits (like, for that matter, almost every other problem of existence). But the definition of these limits is a problem of culture, and this is precisely what the house is in the end (like, indeed, the other problems of existence)ε. It is a matter of forming a style, a technique, a morality as terms of a single function. It is a matter of building a society.² [Rogers 1993]

1 The original Italian reads: 'Da ogni parte la casa dell'uomo è incrinata (fosse un vascello diremmo che fa acqua). Da ogni parte entrano le voci del vento e n'escono piante di donne e di bimbi. Una casa non è casa se non è calda d'inverno, fresca d'estate, serena in ogni stagioni per accogliere in armoniosi spazi la famiglia. Una casa non è casa se non racchiude un angolo per leggere poesie, un'alcova, una vasca da bagno, una cucina. Questa è la casa dell'uomo. E un uomo non è veramente uomo finché non possiede una simile casa.'

2 The original Italian reads: 'La casa è un problema di limiti (come del resto quasi ogni altro dell'esistenza). Ma la definizione dei limiti è un problema di cultura e proprio ad esso si riconduce la casa (come, infatti, gli altri dell'esistenza)ε. Si tratta di formare un gusto, una tecnica e una morale, come termini di una stessa funzione. Si tratta di costruire una società.'

With this brief editorial, barely 2 pages long, Rogers defined the damage caused by both Fascism and the war in simple poetic terms that resonated widely across Italian culture. At the same time, he articulated the central role that the home would play in the work of Italian architects and designers in the decade or so that followed the war. This engagement with the domestic sphere was necessitated by the need to address the extensive damage caused by the war and to confront the severe housing shortage that had plagued the country since long before the war. But, this concern for the home was more than purely utilitarian and after the war the 'casa' became the subject of intense scrutiny as a space essential to the formation of a democratic culture. As Roger's himself recognized, the home, what he called "The House of Man," was not just a matter of shelter, but a matter of building a society.

2. Defining Neorealism

Italian architects' focus on the home, and the life that occurred therein, coincided with the rise of a broader language of cultural expression after the war known as Neorealism. Exemplified by films such as Rossellini's *Roma, Open City* and De Sica's *The Bicycle Thieves*, as well as novels such as *The Path to the Spiders' Nests* by Italo Calvino, Neorealism was defined by the rejection of grand historical narratives, elaborate settings, and sophisticated editing techniques, in favor of the direct and continuous narration of stories taken from the everyday life of ordinary Italians.³ Through these new subjects and new techniques, Rossellini, Calvino, and their peers aimed to engage the difficult reality of postwar Italy directly as both an escape from the myths of Fascism and a contribution to the construction of a new society.

Like most such terms, Neorealism was the invention of critics, who already by 1947 were using it to describe the films and novels made in the aftermath of the war. The term quickly gained popularity, however, and was soon adopted widely to describe the culture of postwar, post-fascist Italy. By the mid-1950s Neorealism was even being used to describe the architecture and design work that followed in the wake of Rogers's 1946 editorial. Writing in 1956, for instance, the young Aldo Rossi and Guido Canella described the postwar work of their mentor Mario Ridolfi as 'immersed in that atmosphere of modern Rome that Neorealist cinema and literature had so well penetrated,'⁴ [Canella and Rossi 1956: 55] and in 1958 the architect Paolo Portoghesi

3 The films are Roberto Rossellini, *Roma, città aperta* of 1945 and Vittorio De Sica, *I ladri di biciclette* of 1947. The novel is Italo Calvino *Il sentiero dei nidi di ragno*, first published in 1947.

4 The original Italian reads: 'Questi edifici [The blocks at viale Etiopia] portano nel colore gli accenti drammatici della tavolozza di un Guttuso e sono immersi in quella atmosfera della Roma moderna che cinema e letteratura neo-realista hanno così ben penetrato.'

published a brief survey of postwar Italian architecture and design entitled 'From Neorealism to Neoliberty.' [Portoghesi 1958]

The popularity of Neorealism as a descriptor for postwar Italian culture lay in the way that it neatly demarcated that culture from the culture of Fascism across a broad spectrum of issues. Within the Italian design discourse, Neorealism is also significant for the way in which it was deployed by figures such as Rossi and Portoghesi to historicize their immediate predecessors. For these designers, who came of age professionally after the war, the label 'Neorealism' served to cordon off postwar design as a distinct practice no longer valid and applicable in the era of the Economic Miracle, that period of remarkable prosperity that began in the mid-1950s. For both its proponents and those who followed them, Neorealism served to quarantine the work of the postwar years from both the Fascist culture that came before it and the consumer culture that came after it. In this light, Rogers's call for architects and designers to contribute to the construction of a new society is widely seen as inaugurating a new era.

Contrary to this view, this paper will show that Rogers's editorial is better understood not as the start of a new movement in Italian design but rather as a reorientation of already existing lines of research and debate. Between 1930 and 1960, Italian designers devised a language of modern design that focused on defining a precise balance between the culture and traditions historically distinct to Italy and the possibilities and challenges of modernity. Although they tied this language explicitly to Fascism during the 1930s, after the war these designers proposed an alternative language based on a revised understanding of the conditions of Italian modernity. What changed after war was not their commitment to modernity but rather their vision of the society in which they worked, a change that demanded they re-evaluate the cultural foundations and intended audience of their practices. In this sense, Neorealism should be understood as the embrace of a new subject, the ordinary Italian, and a new tradition, the vernacular, and not, as it is widely held, the complete rejection of the materials, forms, and techniques of modernism.

3. Franco Albini

That Rogers's editorial marked a reorientation of existing practices rather than the inauguration of a new mode of working is well demonstrated by the work of Franco Albini. One of the best known Italian designers of the twentieth century, Albini began his career under the Fascist regime in the early 1930s and worked well into the 1970s. In both the breadth and intensity of his work, which ranged in scale from furniture and domestic appliances to large corporate and governmental complexes, Albini made a remarkable contribution to the formation of modern Italian culture. At the same time, he was also a vital contributor to the architectural and design discourse both in Italy and abroad, participating in numerous competitions, conferences, organizations, and even serving as editor of *Casabella*, the other great Italian design journal, for a short stretch immediately after the war.

After graduating in architecture from the Milan Polytechnic in 1929, Albini made a name for himself, like most Italian architects of his generation, through his participation in competitions for public buildings such as train stations and courthouses, as well as by designing pavilions and displays for the numerous exhibitions organized by the regime and its subsidiaries. The 'Stanza per un uomo' ['Room for a Man'] that Albini designed in 1936 for the sixth design Triennale in Milan is typical of his work during this period. Spartan, almost severe, in its provisions, the room displays a limited palette of colors and materials and a highly ordered configuration of functional zones that Albini articulated with a series of discrete parallel planes defined by precise material and formal distinctions.

From the start of his career, Albini affiliated himself with the Rationalists, a loosely-connected group of mostly young architects who advocated for a concept of modern Italian design along the lines of that being developed by Walter Gropius and Marcel Breuer at the Bauhaus in Germany and by Le Corbusier in France. At first glance, the 'Stanza' seems quite typical of work from the 1920s and 1930s by such designers, who celebrated the machine as an essential fact of modern life. For Le Corbusier and his peers, the machine did not simply offer a new means of production, but in fact presaged an entirely new way of living that in turn demanded a new language of material and form, a language that they derived from the machine itself. A closer look at Albini's 'Stanza,' however, reveals some important differences between the Italian Rationalists and their peers in northern Europe. Although the room deployed modern materials and demonstrated an economy of organization and emphasis on hygiene clearly inspired by the modern factory, it was also crafted carefully by hand to provide the occupant an ideal space for the cultivation of a life beyond labor, full of physical and intellectual pursuits. As such, the room illustrates Albini and the Rationalists' distinct conception of modernity, which prized industry only inasmuch as it enabled the resurgence of culture, a conception that was deeply indebted to Fascist ideology.

4. Fascism and Modern Design

Indeed, Rationalism was immersed in Fascism from the start. It was in late 1926 that a small group of recent graduates from the Milan Polytechnic issued the first call for a distinctly Italian variant of modern architecture that they described as 'architettura razionale' ['rational architecture']. Calling themselves the Gruppo Sette, the Group of Seven, these architects, including Adalberto Libera and Giuseppe Terragni, celebrated the emergence across Europe of an approach to architecture and design that embraced the new spirit of the industrial age. They also called for their peers in Italy to join this movement in order to introduce into it the principles of logic and order that they believed were uniquely rooted in Italian culture. Only then, argued the Gruppo Sette, would the world see a new language of architecture and design equal to the classical tradition in its grandeur and influence.

Although the Gruppo Sette never made explicit reference to Mus-

solini's regime, its view of modernity was clearly aligned with that of the regime, and by the early 1930s, Libera, Terragni, and other adherents of Rationalism were calling for Mussolini to recognize it as the architecture of Fascism. The deep accord that these men saw between the ideology of the regime and their work is exemplified by Giuseppe Terragni's 'Casa del fascio' in Como, designed between 1933 and 1936. With its rigorously ordered and transparent façade, situated at one end of a large piazza, this 'House of Fascism' literally gives form to the modern mass public envisioned by the regime, a public that comprises discrete but indistinguishable individuals who are connected to one another not through their union in assembly but rather through their relationship to the Fascist hierarchy, with Mussolini at its pinnacle. Similarly, Albin's 'Stanza' offers a vision of the modern home that is distinctly Fascist. Resolutely modern, the room is designed to facilitate the cultivation of the ideal Fascist man: relatively anonymous and indistinguishable from his peers, highly organized, extremely fit, both physically and mentally, and committed to living in a modern, healthy and efficient way that would maximize his contribution to the state.

At the same Triennale, however, another display offered a radically different vision of the home, one that challenged the link between modern design and Fascism embraced by the Rationalists. Entitled 'Functionality of the Rural House,' and organized by Giuseppe Pagano and Werner Daniel, this exhibition comprised a series of vertical panels, each containing a dense grid of photographs of rural farmhouses across Italy. With these photographs, Pagano and Daniel proposed a lineage for modern Italian design rooted not in the classical tradition but in vernacular culture instead. As the editor of *Casabella*, Pagano promoted this viewpoint tirelessly throughout the late 1930s and into the early 1940s, as he relentlessly criticized the grandiose projects sponsored by the regime for failing to address the challenges that confronted ordinary Italians. Although, Pagano's celebration of vernacular culture as the true inspiration for modern design was not widely accepted at the time, it would become one of the primary points of reference for designers after the war as they turned away from the "House of Fascism" and towards the "House of Man."

5. Neorealism and Postwar Design

Like many of his colleagues, Albin slowly grew disenchanted with the regime over the course of the 1930s as the accuracy of Pagano's critique became increasingly apparent. Although this disenchantment failed to motivate him to take any substantive action against the regime until the early 1940s, Albin's discontent can be seen in several of his projects from the late 1930s and early 1940s. The most revealing of these is the 'Stanza di soggiorno per una villa' ('Living Room for a Villa') that he designed for the Triennale in Milan that year. Displaying the same palette of colors and materials as his earlier 'Stanza per un uomo,' the 'Soggiorno' shows a remarkably different attitude towards the home. In dramatic contrast to the rigid order and stark efficiency of the 'Stanza,' the 'Soggiorno' proposes a much more

informal life; every aspect of the design, from the blossoming tree to the swinging chairs, is imbued with a palpable sense of cultivated leisure that is perhaps most prominent in the consistently relaxed posture of the assorted chairs.

Indeed, the contrast between the chairs of the 'Soggiorno' and those in the 'Stanza' points to the ways in which Albin modulated his approach to design over the course of the 1930s, initiating a process that would continue into the 1960s. The shift from the relatively rigid, upright, and determining geometry of the early chairs to the softer, more open and accommodating forms of the later chairs was not a purely formal maneuver but rather reflects Albin's commitment to evaluating modernity itself as the necessary first act of modern design. Faced with the failure of the Fascist regime to resolve the challenges of industrialization and modernization, Albin, like many Italians, began to re-imagine the shape of modern Italy.

This process is well illustrated by two chairs that Albin designed about 1950. At first glance, Albin's 'Margherita' and 'Luisa' chairs seem to embody opposing, almost mutually exclusive, approaches to design. The 'Margherita' chair is defined by the roughness of the woven cane, attached to the underlying bent-wood structure with thick, heavy knots, and its ample, open curves. With its celebration of natural materials and handicraft techniques, the chair seems to turn its back on the modern world. In contrast, the 'Luisa' chair is made entirely of neatly machined lengths of wood, seamlessly attached to one another in a precise configuration of straight lines and sharp angles that supports a spare, inflexible seat and back lined only with a thin layer of rubber padding. Although also made of wood and not polished steel, that iconic material of the machine age, the chair presents a strict, unyielding form imbued with the rigid geometry characteristic of modern industrialized life.

Considered in the light of Neorealism, however, these chairs work in a dramatically different way. Rather than presenting a decisive embrace or emphatic rejection of modernity, they demonstrate an ambitious effort to define and sustain in material, technical, and formal terms a radical balance between the present and the past. Albin's commitment to articulating such a balance did not emerge suddenly after the war but was integral to his development as a designer over the course of the middle decades of the twentieth century. It is precisely the course of that development that illustrates the real value of Neorealism as a critical concept for understanding modern Italian architecture and design.

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Designing 'The House of Man'

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'Swedish Modern' meets international high politics: the 1959 New Delhi embassy and Ambassador Alva Myrdal

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Identity / History / Diplomacy / Gender

This paper contests the prevailing narrow conceptions of Swedish modernity and received notions of the homogenous and stereotypical image of Swedish Modernism and posits an inflected historicist-traditionalist form of Swedish Modern. By revealing alternative histories, my study provides a new perspective on Swedish 'welfare nationalism'. Using primary sources, my investigative strategy is also underpinned by a broad multi-disciplinary range of recent Scandinavian research on nationalism, nation-building and nation-formation.

1. Introduction

Using the New Delhi embassy as a focus, my study investigates the design culture and material framework of the official projection of Sweden internationally.¹ Current knowledge of Swedish embassies is very superficial, despite an ongoing reassessment of Sweden's national design legacy. Using primary sources and a broad multi-disciplinary range of recent Scandinavian research on nationalism and nation-building to examine both the embassy exterior and interior, this paper will argue that, despite the fact that the approach adopted was in essence experimental, and materialised the very zenith of High Modernism and Swedish Folkhem modernity, a set of quite different and contrasting identities was also nonetheless expressed and materialised.

The New Delhi embassy case is remarkable for the fact that Alva Myrdal was the first incumbent (posted to New Delhi from 1957 to 1962): she was an iconic pioneering social democratic debater, writer and reformer of social politics, housing and women's rights, and widely regarded as one of the founders of the Swedish welfare state. She was also Sweden's first female ambassador, and the first female diplomat to serve in India. Prior to New Delhi, she was director of UNESCO's Social Science section in Paris.

Swedish embassies and residences have been the responsibility of the Swedish National Property Board since 1949, and before that, the Foreign Ministry. The Swedish government itself has only been actively engaged in renting or building property abroad since the 1900s. Previously, ambassadors were expected to make their own arrangements using their own funds.

2. The residence exterior: adapting to local climate

The 40,000 square metres acquired by Sweden was part of the

¹ Hagströmer (2011).

new diplomatic enclave at Chana Kyapuri (named after an Indian diplomat), 364 acres (147 hectares) designated by Prime Minister Nehru as part of a southward extension of Edwin Lutyens' original city plan (1914).

Jöran Curman (who had worked on other National Property Board projects) was consultant architect, but delegated most of the work to his former contemporary at the Royal Institute of Technology, Sune Lindström (according to Lindström's widow, Malene Björn²). No competition was held, and Myrdal was not involved, it seems, in the selection process. Before completing his architecture degree in 1931, Lindström studied under Gropius and Meyer at the Bauhaus, Dessau in 1928.³

Curman and Lindström wrote that the basis of architectural composition, in this case, was to an unusually large extent 'climate, construction techniques, and the general function of the buildings in its widest sense'.⁴ Measures to exclude direct sun included siting all buildings towards the south, with east and west facades protected by vegetation. Furthermore, 'the single floor solution'⁵ was chosen in order to benefit from the coolness the earth provided, giving an even temperature within the buildings. Lawns were planted in front of the southfacing facades to reduce reflected glare, with the additional benefit when irrigated of cooling through evaporation. A further reason for choosing the 'single floor solution' was a need to avoid complex construction techniques as 'the local culture of building was primitive and lacked precision; there were no sawmills and few manufacturers of building materials'.⁶ This is apparent in archive photographs showing, for instance, vast numbers of hand made sun-dried bricks being made by the many itinerant bricklayers from Rajasthan who camped on site with their families.⁷

The entrance opens onto a courtyard, with the wing-roofed State Reception building opposite linked by covered walkway to the Chancery and Ambassador's Residence to the right and left respectively. The State Reception Building's wing-roof is the only exception to a universal low-rise bungalow style with colonnaded arcades. The architects describe the compound as being in three parts: the official buildings, embassy staff and domestic staff accommodation, including chauffeurs, gardeners and technicians, for 80-100 people including their families.

² Interview, Malene Björn, 1st February 2008.

³ Jöran Curman and Sune Lindström, *Arkitektur* no.1, 1961, p. 13. The local architect was a Mr. Kothari of Master, Sathe and Kothari, a New Delhi practice.

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

⁷ National Board of Public Building archive, National archives.

The New Delhi embassy exterior is an example of internationalism and 'migrational architecture', the concept of the bungalow returning to its country of origin via Europe and the US. In his book on the bungalow,⁸ sociologist Anthony D. King defines the bungalow as, originally, the peasant hut of rural Bengal.⁹ In India: 'the bungalow was a product of cultures in contact, an indigenous mode of shelter adopted and adapted for Europeans living in India'.¹⁰ In *Arkitektur* monthly and other Swedish sources, however, the word bungalow is never used. When interviewed, Lindström's son, architect Joe Lindström, revealed that his father was a great admirer of American modernist domestic architecture, citing Richard Neutra as an example.¹¹

While the architectural strategy for the Indian embassy exterior was based on accommodating the local socio-cultural climate, the interior told a different story; but before we hear that story, I will discuss another aspect of Swedish identity at the time as revealed by analysis of the inaugural ceremony.

3. The inaugural ceremony: blending rhetoric with architectural environment

National identity usually remains mostly dormant, and is chiefly activated in certain situations in confrontation with other identities, or in meeting other cultures (Ehn, Frykman and Löfgren: 1993). The implications and actualities of 'meeting other cultures' and how nationalism works in everyday practice in Swedish embassies are examples of practical application of Ehn, Frykman and Löfgren's theory, as demonstrated here in the embassy's inaugural ceremony.

The New Delhi mission's inaugural ceremony started at 9:30 am on the 6th November 1959¹², and was attended by 300 guests, including Prime Minister Nehru and Swedish Cabinet Minister Kling. Archival sources contain Myrdal's report from this 'simple ceremony', as she called it, alongside a transcript of her opening speech, also useful in that it spells out the official Swedish agenda for the new building. Myrdal opened by referring to the new embassy as 'a little Sweden in the midst of your great country, a Swedish building in the ancient city of Delhi', and praising Nehru for his 'interpretation of wise statesmanship in trying times for his country'.¹³ There then followed an example of typically Swedish self-consciousness: 'In a way, modesty is a trait we in Sweden think befits us, not only because we are a small country but also because we are accustomed to a very equalitarian [sic] way of life'.¹⁴ Therefore, Myrdal continued, the buildings should represent 'that simplicity', declaring 'If I may say so, a refined simplicity, a calculated presentation in the exteriorised form of buildings, installations and furnishings of an environment, which we think of as specifically Swedish'.¹⁵

8 King (1984).

9 Ibid, p. 1.

10 Ibid, p. 14.

11 Interview: Joe Lindström, 5 August, 2005.

12 To Swedes, this date signifies Gustav Adolf Day, commemorating the Battle of Lützen in 1632, where the king died but Sweden won the battle.

13 National Board of Public Building archive: F1D:150.

14 Ibid.

15 Ibid.

According to her, the intention was to provide for what she called a 'smooth functioning' of the work to be done, a 'pleasing atmosphere' for those who were to work and live there 'and for their families as well'.¹⁶ The obligatory roll call of thanks to all involved in the building process includes, significantly, the labourers: 'the scores of working men and women' (a point also noted in the Indian press). Finally, the high-point of this very brief event was reached: Cabinet Minister Kling hoisted the flag, at which PM Nehru and his entourage were shown around the building.¹⁷

This ceremony was more than just the diplomatic intersection of two cultural identities. This low-key ceremony expresses an 'undercommunication' of Swedishness, at a time when Swedish national identity was extraordinarily strong.¹⁸ In this carefully-staged 'simple ceremony' Myrdal's rhetoric blends with the architectural environment. This ceremony can be read as having expressed the enactment of Swedish welfare nationalism in the arena of international high politics. The key words used by Myrdal here, in respect of both Swedish society and its architecture are 'simplicity', 'modesty' and 'equality', codes implying folkhem classlessness. This was the rhetoric of Sweden 'the moral superpower', a nation that had become 'a world conscience' through international engagement on behalf of poor countries'.¹⁹

4. The persistence of history in the residence interior

Inside, New Delhi was a unique and pioneering interior design project, largely directed and coordinated by Malene Bjørn, a largely overlooked Danish architect-designer and interior decorator. The layout of the residence in the architects' description²⁰ consisted of an "entrance hall, salon, and dining room" with an adjoining kitchen. These three spaces were divided only by lines of sheer white curtains with (according to Bjørn's instructions) frequent wide gaps. This open plan interior encouraged free-flowing movement and open views for both visitors and staff throughout interior and exterior space. The 'covered courtyard' was perhaps the most remarkable of the spaces. A sense of an open courtyard was conveyed by the very sparse furniture, rooflights and checkerboard marble floor, the latter possibly in homage to Swedish Carolingian style (an austere form of late Baroque). Danish architect-designers Jörgen and Nana Ditzel's model 114 light armchairs in red, orange, green and black were placed ('as a bouquet of tulips,' as Bjørn puts it)²¹ at Eero Saarinen's pedestal table by Knoll, the latter 'contributing' as design critic Marianne Höök wrote 'to the cooling effect'.²² The salon²³ colour scheme was predominantly "cool turquoise", with elements of lemon yellow, light blue, green and grey. Sofas designed by Viennese architect Josef Frank for Estrid Ericsson's Svenskt Tenn company (in English cretonnes) and

16 Ibid.

17 Ibid.

18 A.W. Johansson (2001).

19 Bo Stråth (2001).

20 Curman and Lindström, (1961).

21 Interview, 2nd September, 2008, Copenhagen.

22 Vi, no 1, 1960, pp. 27-32.

23 The salon is referred to in the designs as the Banquet hall.

specially commissioned armchairs by Bjørn, with Empire lines, formed groups of furniture. A particularly 'Swedish atmosphere' was created, according to the architects' manual 'by a contemporary application of the Carolingian, Gustavian and Carl Larsson'.²⁴ This "manual", possibly a press release, was no doubt intended to further national public relations. The Lindström-Bjørn conception of Swedish Modernism did not mean omitting the communication of national continuity (as exemplified by the late Gustavian, or Neo-Classical style seating), but rather was intended to demonstrate that Swedish domestic design culture was not lacking in tradition, and was certainly not without its own history.²⁵ This triumvirate of historical sources, defined at the time as expressions of Swedish identity,²⁶ marks an ideological use of history.²⁷

The ambassador's wife's duties are officially identified in the 1959 Foreign Ministry handbook for embassies and consulates, *Svenska Beskickningar och Konsulat*: 'It is assumed that the wife makes a not insignificant contribution.' Briefly, this means maintenance and care of all objects, planning of entertaining, controlling purchasing, supervising the household staff's work and being a cook/chef.

Ambassador Myrdal was a progressive amateur interior co-creator. Despite the pressures of her professional role (having introduced the term 'the professional woman' or 'yrkeskvinnan' to 1930s Sweden),²⁸ Myrdal's keen interest in the planning, design and furnishing of her material environment, along with her acute awareness of the value and significance of design is noteworthy.²⁹ This is testified to by a series of notebooks containing numerous room plans, comments and sketches, filled out prior to the move to her temporary accommodation in New Delhi.³⁰ Bjørn recalls that one of Myrdal's priorities was that the state-rooms should facilitate discussion.³¹ As Höök put it, Myrdal 'is an extremely ambitious guest-combiner who collects and eagerly brings together people of all colours'.³²

24 Carolingian: during the reign of the Kings Karl X, Karl XI and Karl XII (1654-1718), Gustavian: during the reign of King Gustav III (1746-1792) and Carl Larsson: The rural fin-de-siècle home of artists Carl and Karin Larsson was the strongest influence on Swedish 20th century domestic style, and a perennial source of inspiration for artists, designers and producers.

25 Zander (2001).

26 Edman (2008), Ehn, Frykman, Löfgren (1993).

27 Aronsson (2004), Karlsson (1999).

28 in Kris i befolkningsfrågan (1934, Crisis in the population question), with Gunnar Myrdal. See also Alva Myrdal, *Stadsbarn: en bok om deras fostran i storbarnkammare* (Stockholm: Kooperativa förbundet, 1935) (title translates City children and their upbringing in large-scale nurseries) and Alva Myrdal, *Nation and family: the Swedish experiment in democratic family and population policy* (New York: Harper, 1941), 2nd ed. Cambridge: MIT Press, 1965. The communal kollektivhus, or serviced house, was a flagship modernist project, a concept suggested in the early 1930s by the Professional Women's Association, with Alva Myrdal at the forefront. She involved the progressive architect Sven Markelius, who designed the first kollektivhus in Stockholm in 1935, with a professionally supervised nursery (staffed day and night) as its ideological core.

29 In 1956 Myrdal wrote *Womens' Two Roles: home and work with future* London School of Economics economist Viola Klein (rev. edn, London: Routledge & Kegan Paul, 1956).

30 Held at the Workers' Movement Archives, (Arbetsrörelsens arkiv), Stockholm.

31 Interview, Copenhagen, 3rd April, 2008.

32 Höök, Svenska Dagbladet, 18th January 1960, Malene Bjørn private archive, Copenhagen.

According to ambassador Håkan Berggren, she sought to 'influence and simplify diplomatic etiquette, reacting strongly against the tradition in many societies that decreed that women and men should assemble separately, for instance after a dinner'.³³ Myrdal sought not only international communication, but by this 'degendering of space',³⁴ communication (and thereby access to knowledge and information) between the sexes.

The ambassador's residence constitutes a set of spaces that encourage semi-structured interaction. There is an intimate connection between the process of diplomacy and the spaces in which it is conducted. Despite its superficially Modernist appearance, the interior, discussed above, was part of a set of historical spaces: the 'salon-dining-room-library triumvirate'. In other words, the tenacity of an institutional domestic model and its habitus operate as key forces in the persistence of history.

5. Conclusion

At the New Delhi embassy, besides Myrdal's inaugural rhetoric blending with the architectural environment, other identities were expressed and materialised. Whereas the embassy exterior manifested an accommodation to local socio-cultural climate, in the interior, on the other hand (and despite the fact that the approach adopted for New Delhi during this period was in essence experimental, and materialised the zenith of High Modernism and Swedish Folkhem modernity), historical and historicist design references were nonetheless evident; a nostalgic reflection of a society in a state of continual change. In conclusion, this paper provides a new perspective on the design and material culture of Swedish 'welfare nationalism' and Swedish international identity.

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Malene Bjørn, Copenhagen, 1st February 2008.

Malene Bjørn, Copenhagen, 3rd April, 2008.

Malene Bjørn, Copenhagen, 2nd September, 2008.

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Imported design ideas and its spreading in Latin America: a historiographical critique

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Historiography / Design exhibitions / Context

Foreign ideas have created the predominant logic that shapes the way design spreads through exhibitions in Latin America. It is necessary to understand how design practices and their cultural influence have been constructed in these events. Historiographical deconstruction aids to reveal what has been imposed within a framework of alien thought and will make possible to achieve a new meaning of region, hence create congruent design solutions with the context.

1. History as a social construction

Edmundo O'Gorman's line of thinking perceives history as a production of interpretations in constant change through which we observe ourselves. Its dialectic relationship with events drives humanity to a constant revision of self conception. (O'Gorman 1995)

In the book "La invención de América"¹ O'Gorman explains that the arrival to our continent was signified through a long process of invention, where European preconceptions manipulated in regards to their own point of view. Some such as Columbus did not leave behind these narrow conceptions to explain the existence of America, while others, such as Amerigo Vespucci, were transformed when faced with the evidence of an unimagined new continent. History is a human interpretation process in constant change, and the construction of Latin America has been a product of the collision of views and a result of the tensions derived from it.

2. The Deconstruction of Derridá

Derridá says that deconstruction is not a method, but a philosophical strategy (Guervós 1995) that assumes that the contingency of the structure must be dismantled, not destroyed, to reveal what has been "naturalized", the origin structures with its own historical contingency and the impossibility to assume universal truths. The strategy proposes to achieve this operation through the transformation of the structure assumed as "obvious" (Derridá J. 1967). It's not about inverting the relation of hierarchical dichotomies², but the establishment of a new structure that escapes the initial logic.

¹ "The invention of America"

² Often found in the Eurocentric thought. For example: good/bad vs. bad/good.

3. A Historical Tour under a Strategy of Deconstruction

The word "tour" is not interpreted here as a list of consecutive facts. To tour implies to interpret, and to interpret always involves a particular point of view done under existing cognitive schemes, that lead us to build a reality in our mind as well as a "deconstruction", specifically, these ways of conceiving allow to realize that there is a possibility to articulate and rebuild under a new perspective (Derridá J. 1967). Let us begin the tour

4. Art in everyday life, 1952: towards modernization, from country to city

In 1952 Clara Porset performed the first design exhibition in Mexico "Art in Everyday Life", and after 17 years of residence in Mexico (Salinas 2001), due her opposition to the dictatorship of Fulgencio Batista (Weinberg & Palacios 2008), her work began to be recognized among members of the intellectual elite. This exhibit of commodities of "good design" made in Mexico was inspired, although in certain measure and in a different context, by the one that was held in The Crystal Palace in 1851, or maybe by a more recent one: The Paris Exhibition of 1889. Clara's goal was to show the designed objects meant for industry, as well as those made by craftsmen under a logic where the craftsman's work is equally important as the designer's and the producer's work.

By that time, a revolution was coming in Cuba along with the end of WWII³. There was a growing tension between U.S.A. and the U.S.S.R. which, in the following years, would lead to the Cold War. Socialist model and capitalist model where in dispute, while a conflict that initially was subtly evident, became obvious in less than a decade: The confrontation of the modern world, the centric dialogue and external or peripheral cultures (Touraine, 2002).

Since economic powers were caught up in war and its production capacity was diminished, México was favored and began to flourish economically. The country started to elaborate products that in early years were brought from outside and Mexico found itself in a phase known as "El Milagro Mexicano"⁴ (1940-1970) (Bolivar, 2004). The cities were growing and consequently begun an important migration to the countryside in order to address

³ World War Two.

⁴ "Milagro Mexicano". The "Mexican Miracle" was divided in two periods: from 1940 to 1958, and from 1958 to 1970. In 1952, the last year of Miguel Alemán Valdés government, the foreign investment was returned and promoted, especially from U.S.A.

the increasing labor demands of the emergent industries. Clara Porset's worry would respond to this transition, from countryside to city, from the craftsman's perspective, a very basic foundation in Mexico until that time, to the industries logic. It was necessary to respond needs from the new inhabitants of the cities under a progress scheme "Go forward"⁵.

In the second phase of the "Milagro Mexicano", the "stabilizing development" of the economic policy in which agriculture was subordinated by industry was applied, and the Country was opened to foreign capital with some limitations. The State assumed an active role in the economy, giving way to a series of parastatal businesses and generating benefits of health, education, etc.; all this to counteract the unfair distribution of wealth that favored entrepreneurs and halt foreign dependency in science and technology matters.

Towards the 60's, as a result of the general inconformity, the social protest movements were becoming very common, also because of the triumph of the Cuban Revolution of 1959 that originated the anti-imperialistic freedom movements, whose counterweight by U.S.A. was done through the "alianza para el progreso", which consisted in funds for Latin American countries to invest in education, wealth and living conditions.

At the same time, the education and cultural development of Mexico bloomed in a spectacular way. It was the Golden Age of Mexican Cinema, many institutions were created: the "Fondo de Cultura Económica", the INBA, Churubusco Studios, The National Anthropological and History Museum, "CU" and the Mexican television that will become an indoctrination apparatus of unsuspected reaches.

5. Shows in the 70's: The Industry

The stabilizing development model of Mexico was drained. The Country was coming from a social discontent that had spanned for over a decade, a result of the State authoritarianism and the insufficient concentration of wealth, compensated with the policies of the social well-being. In the economic frame, the Country had stagnated in its growth due to an international crisis particularly with the U.S.A. Faced with this critical panorama, President Luis Echeverría (1970 – 1976) would launch a domestic alternative model: "shared development" consistent with the redistribution of wealth that was accompanied by a moderate leftwing approach of the time.

The model sought to excuse the mistakes of the stabilizing development model, serving equally to the countryside and stimulating the modernization of industry to reach better productivity, increasing the amount of exports and diminishing imports.

"First Mexican Design Showroom"⁶, 1971

In 1971, the first Mexican design showroom event was held at the

5 It was necessary to develop an object industry for modern everyday life, availing to the resources at hand in that period of time.

6 MAM, Exhibition's catalog of "Primer salón mexicano de diseño", 1971.

MAM⁷, and it was the start of a series of exhibitions of Industrial Design, assumed as a discipline derived from industrialization. These exhibitions, in which Academia had a notable influence on the conception, had intended to integrate craftsmen's talent to industrial practices aimed to enhance mass production of objects. The bases to create the "Consejo Nacional del Diseño"⁸ were established too.

"Design in Mexico, Prospective-Retrospective"⁹, 1975

Modernity in means of communication and transportation were a clear example of progress. There was a clear articulation between academia, government institutions and industry, and it was possible to talk about an institutionalization of Mexican Industrial Design. The exhibition "Diseño en México, Retrospectiva-Prospectiva" made evident the interest in taking the beauty of arts and crafts to utilitarian objects of mass production. It was trying to add an own aesthetic value and promote exportation, and that's why the Mexican Institute of Foreign Commerce joins the committee.

"Craftsmen Designers"¹⁰, 1978

In 1978, the MAM hosted the exhibition "Diseñadores artesanales", in which a new aesthetic or, in Fernando Gamboa's¹¹ words, a "good design", pretended to incise in the general public. The intention was that a group of artists with individual expressions in relation to arts and crafts would establish the aesthetic foundations in modern design. Interest for design began to move from a fundamental instrument of social action to a question of aesthetic, but still directed to the local market.

6. Towards a hypermodern world of neoliberal gestation: Design as a Decorative Art

The 80's started with great conflicts; it was a large tension between the U.S.S.R. and the U.S.A. created by the "Cold War". In Latin America many dictatorships were overthrown as is the case in Peru, Argentina and Chile in the beginnings of the nineties. The A.I.D.S. epidemic claims the lives of victims across the world. Technological achievements are even more impressive: the space shuttle Columbia takes off in 1981 (ONU).

In a cultural context, many styles of music and artistic expressions emerge. Mobility is one of the adjectives that best define a decade where designed drugs take place and the synthetic is incorporated not only to everyday life but into the human body.

In Mexico the decade starts with the government of José López Portillo, followed by Miguel de la Madrid giving way to Carlos Salinas de Gortari (Bolívar 2004). It is a decade that is characterized by the gradual establishment of the neoliberal model that still persists today. The main features of this model are: a restraint of

7 "Museo de Arte Moderno" (Museum of Modern Art).

8 "National Design Council".

9 MAM, Exhibition's catalog of Diseño en México, retrospectiva-prospectiva, 1975.

10 MAM, Exhibition's catalog of Diseñadores artesanales Salon 78, 1978.

11 Technical sub-Director of the INBA (National Institute of Fine Arts) that year.

the intrusion of the State in economy¹², openness to investment and foreign products through international trade treaties, the disappearance of barriers for a growth oriented “out”, eliminating the budget deficit of the State and the limitation of social spending by the state in education, housing, security, medical care, transportation, culture, etc.

In line with the principles of the neoliberal conception model, the design submitted by the new official line is other. The design worthy of exhibit doesn't seem to be intended for everyday life or the “internal market”, but projected outward and subordinated to the global discourses of high capitalism and its flags. The design is now routed to the foreign market and becomes a luxury item, of aesthetic contemplation, fulfillment of desire for those who have been included in global citizenship, and leaving out those who do not practice the new game “competition, efficiency and excellence”.

The Franz Mayer Museum, decorative arts and design

In line with the privatization of activities previously managed by the State, private institutions arise for educational and cultural work. Franz Mayer Museum was finally opened in 1986, after a management that began in 1963 through a trust in conjunction with the Bank of Mexico. Franz Mayer was a German immigrant whose passion for the acquisition of decorative objects led him to donate his collection to the museum. He died in 1975, before he could see the museum in activity.

For design, the relevance of this museum lies in the constant dissemination of the work of industrial and artisanal designers, both national and international. It is home of two biennial contests: “The utilitarian ceramics biennial” and design award “Clara Porset.” In addition, there are regular exhibitions of objects that have a particular profile of craftsmanship. It is noteworthy that the museum keeps in constant contact with private and public universities for the organization of events aimed mainly to the dissemination of design.

Mexican Factory Design¹³

By 2011, thirty years have elapsed since the first Mexican Design salon in the MAM. The Museum, now under the direction of a neoliberal state, allied with the Design week (DESIGN-WEEK-MEXICO) and created the exhibition “Mexican Design Factory”, where is exposed a definition of Mexican design through the discourse of some recognized authors in the middle. This time, there is a strong emphasis on issues such as sustainability, locality, globalization, inclusion, desire: the great themes of the era of information. What is displayed is made up mostly of proposals aimed at high-income markets, and in relation to issues of inclusion and location, these are actually geared more to give the office a paper-based labor, far from considering as a design proposals receiver as they are generally luxury items that match lifestyles globally. The craftsmanship

¹² The disappearance of parastatal and non-intervention gives way to the free Market.

¹³ MAM, News bulletin “Fabrica mexicana. Diseño industrial contemporáneo”, 2011.

is integrated as a competitive distinction for insertion into the international market for its strength, but overall plastic dislocated idiosyncrasy that has given rise. The product design is understood and thus appears as a piece of art, an element of distinction between a “designer” piece and a regular piece. This time, the academy is not part of the organization; most of the sponsorship comes from private companies.

7. Discussion

Throughout this discussion it has been revealing that the transformation of the notion of design in modern Mexico is closely related to the purposes of the institutions involved in the development and dissemination of it. We further understand that these structures are the foundation on which to build the feasibility of projects. We know we face a turning point, and that the neoliberal model is in check, but the models that preceded it will not return. In the manner of Derrida, we seek to give voice to what has been occluded by the dominant models imposed from outside, we give voice to the design that is done day by day, from and for the Latin American region. The possibilities that are opened up at this work of deconstruction, lead us to the assessment of what the experience of its own history is, to develop adaptive skills to meet our circumstance (Julier, 2002): the design from and for Latinamerica. Design finds its richness and diversity in an evolutionary process, as Artemis Yagou would say (Yagou, 2005).

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Political Toys: Perón's gifts for children, 1946-55

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Argentina / Peronism / Children / Toys

With the intention of attracting Argentinean children, the Peronist government gave away 36 million toys during its nine years in power. Looking both at the objects given away, and at the system of distribution, this paper makes a historical reconstruction of a series of events that were instrumental for the creation of a Peronist mythology and the consequent gaining of political support.

1. The only privileged ones

One morning in December 1950, a postman knocked on the door of Ramón's house in a remote provincial town in Argentina. Ramón, six years old, lived with his seven brothers and his mother, an illiterate factory worker. The postman gave Ramón a card illustrated with the faces of Perón and Evita, and explained that some days later he would be able to exchange the card for a gift at the local post office, courtesy of the *Fundación Eva Perón*. A few days later, Ramón ran to the post office and found a long queue of children waiting their turn, card in hand. Excited, he joined them. Fifty-eight years later, Ramón told me:

I got a plane made of wood. It was white, of some twenty inches of length (€) The national flag was painted on the wings, with a sun in the middle. It was my first toy ever.

The supply of material resources for the poor and underprivileged was one of the mechanisms employed by the government of Juan Domingo Perón (1946-1955) as part of its ambitious scheme of provision of social welfare and redistribution of wealth. The regime gave away an enormous amount of goods amongst the deprived population, including clothes, shoes, sewing machines and food. For the children, there were toys: dolls, tea sets, trains, bicycles, footballs – a total of 36 million toys were given away in the nine years that Perón was in power.

Children were of great importance to Perón. His emblematic slogan, 'In Perón's Argentina, children are the only privileged ones' shows the significant place the youngest occupied within his priorities. The regime established a series of mechanisms for the attraction and mobilisation of children, such as the politisation of the educational system, the organization of sport competitions, and the production of children publications with a strong propagandistic content. Although this political approach to the younger generations has started to be examined by scholars, they have mostly overlooked Perón's giving of toys – it has always been considered a minor phenomenon in the wider scheme of the regime's social assistance policies.

This paper sets to examine the giving of toys as one of Perón's key mechanisms to appeal to children – as toys, the most significant

artifacts in the material culture of childhood, 'represent a medium for symbolic communication between adults and children, and among children as they negotiate status and identity within their peer groups' (Wilkie 2000: 106). Looking both at the objects given away, and the system of distribution, the aim is to assess the political intentions carried on those objects as well as the repercussion they had on a generation of Argentinean children. Ramón was surely pleased with the white wood plane he got from Perón, yet what was the impact of this object in his everyday life and his future political identity?

In order to find out, this paper draws in oral testimonies from people who received toys from Perón as well as people who worked on their distribution.¹ This original material, together with documents, press articles and Peronist literature from the period, was employed to historically reconstruct the distribution of toys, both from the perspective of the government, the giver, and the children, the receiver.

2. Every day is Christmas day

Mundo Peronista ('Peronist World'), a partisan magazine, once stated that being a child in Perón's Argentina was 'like living in a country where every day is Christmas.'² As pompous as this statement sounds, the following story suggests that it was rather accurate:

One day in 1953, I was sat in the entrance of my house (€) when a truck full of bicycles stopped in the corner. Two men descended from the truck and started unloading bikes. A few minutes later, dozens of children surrounded the truck: they just had to extend their hands to receive a brand new bicycle.

Even more theatrical was the distribution of toys that Evita used to carry out herself, traveling around the country on a train decorated with images of the leaders. With the intention to reach remote towns and isolated rural areas, the train passed slowly by each station so that Evita could hand in toys, clothes and other objects. Evita's train soon became part of the Peronist mythology as this testimony shows:

One of my most precious memories is having seen her, beautiful like an angel, smiling in the last carriage of a train that moved slowly, and giving me a rag doll with a porcelain head (€) Many times I thought it was not a memory but a dream or a hallucination.

The mystical connotations of this story are in tune with the image that the regime devised for the *Fundación Eva Perón* (FEP), the institution in charge of the distribution of toys. The FEP, created by Perón in 1946 to provide social assistance to those outside

¹ Testimonies were gathered between 2007 and 2008. Most of them will remain anonymous.

² *Mundo Peronista*, January 1952, Issue 13, Year 1, p.50.

the scope of the welfare apparatus, was presented as a sort of semi-magical institution capable of immediately solving the problems of those in need – with Eva, called the ‘fairy of the poor’, as the leader of the organisation. Yet the toy distribution must be examined as a carefully planned, ambitious affair – there was no magic there.

Under Perón's principle that there should not be a child without a Christmas gift in Argentina, the FEP put together a nation-wide system by which all children would get a toy. To ensure physical presence in the entire territory, the Foundation employed the infrastructure and staff of the General Bureau of Mail and Telecommunications (DGCT) – the FEP would send toys to post offices, from where children would pick them up. The first distribution of toys took place in Christmas 1946 and it became an annual tradition that, growing in size every year, went on until 1955 when Perón was removed from power.

3. Displacing the Magi

In 1940s Argentina, children used to receive their Christmas gifts on the occasion of the Day of the Magi. Celebrated every 6th of January, this Christian tradition commemorates the arrival of the Magi in Bethlehem, bringing presents for baby Jesus. Just like Christmas day of present times, the gift giving ritual on the Day of the Magi was a private, family affair that took place in the domestic realm.

Following this tradition, 6th of January was the day in which the regime's toys were given away at the post offices. Waiting their turn on the streets, children formed queues that, according to Alberto, a post officer at the time, would sometimes last for the entire day (figure 1). One testimony have described the scenes:

There was a huge expectation until the Day of the Magi, I couldn't even sleep the previous days (€) To pick up the toy from the post office had for me a level of emotion unequalled to anything to this day (€) There were queues of 200 to 300 metres, but our happiness exceeded any obstacles – nobody had ever imagined that a president would give things to the poor. That experience deeply marked two or three generations.

The national press covered the events – in 1948 a newspaper reported: ‘scenes of deep emotion were seen when thousands of



Figure 1. Queues in front of a post office, *El Mundo*, 6th January 1951

children went to the post office to get a gift (€) they were all cheering Perón and Eva'.³ As Alberto remembers, ‘it was a social event’.

Yet it was more than that. By giving away toys at the post offices, Perón was mobilizing children out of their houses and into the public sphere, simultaneously and all around the nation, to participate in what can be considered a political rally for children. In this way, the regime appropriated the religious celebration of the Day of the Magi and progressively transformed it into a Peronist tradition. By 1955 the Magi were virtually replaced, at least according to the regime's discourse: ‘This is the miracle of the ancient saddlebags transformed into the trucks of the *Fundación Eva Perón* (€) Perón and Eva are the Magi of the New Argentina.’⁴

The device of this event was crucial in the relationship that Perón established with the Argentinean children. Mirroring the employment of rituals of communion between Perón and the people to regularly legitimate his leadership – such as the celebration of the Loyalty Day (Plotkin 2002) – the now public and politically charged gift giving ritual of the Day of the Magi operated as the annual renovation of the bond between Perón and the children. Toys were the materialization of that bond.

4. Peronist Toys

Sociologist Beatriz Sarlo has recalled her frustrating experience with the Peronist toys, as she was forbidden to accept them by her anti-Peronist parents. At that time, she remembers, she would have preferred to get one of the ‘splendid dolls’ that her friends got in the post office instead of the books, watercolour sets, or magic games she used to receive from her middle class, ‘full of teachers’ family. Later on, Sarlo tells, she understood the toys she was given were ‘supported by an educational ideology that [her family] considered rational and progressive’ (Sarlo 2005).

Indeed, toys ‘represent attempts, made by adults, to suggest and enforce certain norms of behaviour for children based upon their gender, age, socio-economic class and even socio-cultural ideals of beauty’ (Wilkie 2000: 101). The toys the FEP distributed must be therefore examined as objects that embodied a Peronist ideological package. But what kind of toys was the regime giving away and in which way these objects represented the ideals of Peronism?

Toys distributed by the FEP were manufactured in Argentina, but were not commissioned or designed by the regime. Instead, the Foundation regularly purchased from various suppliers a great amount and variety of toys: only in 1955, 6.5 million toys were given away, including 1.8 million wood toys, half a million board games, 800,000 dolls, and thousands of bicycles, tea sets, footballs and skateboards, amongst many other items.⁵

³ *La Razón*, 6 January 1948, p.5.

⁴ *Democracia*, 6 January 1955, p.5.

⁵ *El Mundo*, 5 January 1955, p.3. Perón's policies of import substitution had already boosted the Argentinean toy industry, but the impact of the FEP's ever-increasing demand made this period ‘the golden years’ of the national toy industry (Lascano and Sudalsky 2005: 18)

Although these were conventional toys available at most toyshops, their distinctive quality was their monetary value: the Peronist toys were expensive items, some of them, such as bicycles, pedal-driven cars and large articulated dolls, even luxurious. As one testimony observed, 'that was the period when the toys of the poor were better than the toys of the rich'. Likewise, toys like tea sets and Caucasian-featured dolls referred to traditions and characteristics of the upper strands of society that were far from representing the realities of the children that were to play with them (figure 2).

Both the conventionality and the expensiveness of the toys had political connotations. Architecture historian Anahí Ballent observed that within the FEP's architecture production there was no interest in aesthetic innovation – instead the Foundation appropriated pre-existent styles associated to the middle and upper classes, and utilized them on buildings destined to the lower sectors. By doing so, the FEP was symbolically mirroring Perón's policies of redistribution of wealth (Ballent 2005: 155). This analysis can be extrapolated to the giving of toys, where instead of designing a new Peronist toy, the Foundation took the most expensive items on the market and made them available to working class children.



Figure 2. *Mundo Peronista*, January 1952, Issue 12, Year 1

Figure 3. Day of the Magi at the Post Office, *Democracia*, 6th January 1949

Those articulated dolls and bicycles were objects recognizable as upper class, luxury items, and functioned within the Peronist material culture as the embodiment of ideals, not just of class aspiration, but of reinvigoration of the poor from decades of humiliation and injustice – as Eva once stated, she wanted 'the poor to get used to live like the rich' (Perón 1952). Hence luxury was a sort of 'trade mark' of the Foundation, and it was displayed not only through the expensiveness of the toys, but also by way of the disproportionate amount of toys given away. Images of endless rows of toy prams, and mountains of dollhouse furniture sets were a regular feature on the press coverage of the Day of the Magi, showing the FEP as a sort of 'cornucopia of luxury available to the poor' (Ballent 2005: 167) (figure 3). The impact this material excessiveness had on children is illustrated by the following testimony:

There were so many toys into the bag, I thought the man wanted me to take one and return the bag. I remember him saying: 'No, girl, all the bag is for you.' I thought I was going to die. I had never seen so many toys all together before, and they were all for me!

By the time each child received its gift, the conventionality of the object was replaced for uniqueness by way of the stamp the FEP applied on all Peronist toys (figures 4 and 5). Reading 'gift for our dear *descamisaditos*' and illustrated with the ubiquitous portraits of Perón and Eva – the cult of personality was one of the central components of the Peronist imagery – this small, subtle piece of branding was intended to be seen first by the new owner of the toy.⁶ The stamp completed a process by which regular objects were transformed into unique, incomparable gifts – and hence into Peronist toys.

5. Your gift

In the story at the beginning of this paper, Ramón is grateful for he receives a toy from the FEP that his parents would have never been able to give him. But considering that every gift implies a counter-gift, what exactly did Perón want in return?

This double page from a Peronist textbook seems to offer an answer (figure 6). It features a verse called *Tu Obsequio* ('Your Gift') and an illustration that stands out due to its open reference to the consequent connection between gifts and votes. This illustration summarises the main argument of this paper: that by giving away toys to the children, Perón was intending to gather political support.

However, this image suggests two interpretations. In the first one, the girl on the left is receiving a gift from the FEP while simultaneously her mother is voting for Perón. This relates to a possible short-term intention in Perón's political approach to children, in which children were seen as 'domestic missionaries' – a means for the introduction of Peronism into the Argentinean home (Plotkin 2002). In the second interpretation, the image on the left takes place in the present, the girl receives a doll from the regime, but the image on the right depicts the future, the girl has become a woman and is voting for Perón. This mirrors a long-term motivation in Perón's appeal to children, in which they were seen as the continuation of the regime, guarantors of the Peronist future (Cosse 2006).



Figures 4 and 5. Stamp and dollhouse furniture set, both from a private collection.

⁶ The *Descamisado* (literally 'the shirtless one') was the mythical figure of the Peronist man. *Descamisadito* can be translated as 'the little Peronist'.



Figure 6. Page from *La Argentina de Perón*, 1954

Considering the latter, this paper concludes that Perón's gifts had an impact on the political identity of those children who received them. As testimonies revealed, many of them have kept the Peronist toys to this day – perhaps indeed as markers of their political identity. The act of keeping the toys can thus be considered as reciprocation to the gifts from Perón.

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The identity and design of the modern British home under the influence of the 'feminine territory' and Japanese Art

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Domestic Interior / Feminine Territory / Japanese Art / Nineteenth-century Britain

The home is a place for the family. In nineteenth century Britain, however, the models for middle class houses were the country houses of the aristocracy, which at that time were places primarily for the reception of visitors. In establishing the modern identity of the house as a family home, a territorial 'feminine' principle and the great influence of Japanese art can be seen as a very significant element. This is the perspectives from which this paper examines the process and establishment of the modern family house.

1. Introduction

Studies of domestic interiors in Britain clearly indicate that "the private interior of the nineteenth century middle-class home was defined as feminine territory" and "the key rooms tended to be further grouped together on either side of a male-female divide." This was reflected in contemporary literature which emphasised "the importance of masculinity" in the dining room and "feminine delicacy" in the drawing room. Meanwhile the present writer's study of the nineteenth century British enthusiasm for Japanese Art in the domestic sphere finds a clear tendency for Japanese objects and style to be adopted into the drawing room, boudoir and bower, in other words the 'feminine territory' of houses. This can be easily understood from stereotyped codes or associations: exotic objects – informality – femininity.

Beyond this view, however, the feminine or Japanese style can be seen as a significant element in establishing the modern identity of the house as a family home. Clearly, the house is a place for family. But in the second half of the nineteenth century, the model for the middle class house was still the country house of the aristocracy, which would not be a dwelling simply for a family but a place primarily for the reception of visitors. The middle-class houses tended towards designs based on the plan of the country house. Towards the end of the century, however, the social function of the house came under much criticism and scrutiny, and primary consideration began to be given far more to the daily routine of its occupants. In this process, what was required was 'homely comfort.' The living environments developed through the application of the feminine or Japanese style were always associated with 'comfort,' which is the central image of the modern house today. Therefore it is certainly worth examining the growth and influence of the feminine territory, particularly the influence of the Japanese style, from the perspective of the modern family house.

This paper first examines 'feminine' and 'masculine' territories in the nineteenth century home and their relation to Japanese Art. It then analyzes those elements as a key inspiration in the development of the modern family house and discusses the design values created through them at the end of the nineteenth century.

2. 'Feminine' and 'Masculine' Rooms

In the nineteenth century middle class house the key central area of space was created to impress ones neighbours and peers, as the house was entirely linked with the symbolism of worldly success. The 'nouveau riche' middle classes, particularly the industrialists and the professional classes, were wealthier than they had ever been, and imitated the style of their social superiors. They followed the style of the houses of the aristocracy and the life and customs of the country house. Observing the purpose of each room, we see that the hall, the dining room, and the drawing room were designed for receiving outsiders; the bedrooms were for family; the kitchen and the scullery were for servants.

The study on the domestic interior¹ as mentioned above clearly indicates that the hall, dining room and billiard room etc. were 'masculine' rooms. They were serious, substantial, dignified (but not ostentatious) and always dark-toned, while the drawing room, boudoir, bower and the bedroom as 'feminine' rooms, were lighter, colorful, refined, delicate and decorative to quote contemporary literature²;

[in the dining room] the style of finish both for the apartment itself and the furniture, is always somewhat massive and simple [ε] the whole appearance of the room ought to be that of masculine importance. The character to be always aimed at in a Drawing-room is especial cheerfulness, refinement of elegance, and what is called lightness as opposed to massiveness. Decoration and furniture ought therefore to be comparatively delicate; in short the rule is – if the expression may be used – to be entirely ladylike. The comparison of Dining room and Drawing room, therefore is in almost every way one of contrast. [Kerr 1871:107].

After the Industrial Revolution, the more productive work was transferred to factories, offices and shops, and the house became a refuge, a place apart from commercial life with different morals, rules and guidelines to protect the soul from the rigors of the workplace. To answer this desire, a vast amount of handbooks and periodicals were published to suggest or advise on the 'ideal home.' In order to represent the ideal, especially the interior, the furnishings had to be seriously considered. And the best known book on this subject is Charles Eastlake's *Hints on*

1 Juliet Kinchin, "Interiors: nineteenth-century essays on the 'masculine' and the 'feminine' room," *The Gendered Object*, 1996.

2 Robert Kerr, *The Gentleman's house*, (London, 1871), p.107.



Figure 1. View of Dining Room



Figure 2. Drawing Room



Figure 3. 'Cozy Corner' in drawing room

Household Taste (1868), following the publication of Robert's Kerr's *The Gentleman's House* quoted above. The 1870s and 80s marked the peak of publication on this subject, and the names of the authors - W. J. Lofite, Robert Edith, Mrs. Haws, Mrs. Drin-smith etc., and of course the legendary Mrs. Beeton gained their wide audience. Similar multivolume books to Mrs. Beeton's like *the Book of the Home* were published at the turn of the century, they featured far more space to advise on interior decoration and included numerous illustrations and color plates. In the chapter on house furnishings from those publications, we can still find similar 'feminine' and 'masculine' tendencies as found in Kerr's descriptions. Furthermore, as the authors' names suggest, many 'lady advisors' now appeared, as they were mainly writing for an entirely female readership. This clearly shows the growth of the female oriented tendency in the domestic sphere.

3. Rooms Japanese objects were placed in

Coincidentally, the period of the middle class housing boom with its new importance as a shelter from any external force, is precisely the time when more Oriental objects flowed into the West than ever before. Immediately after Japan ended its long period of national isolation in 1868, it began to open itself to import from the West, equally, numerous Japanese pieces and objects started to appear in the West. These became not only an enormous source of inspiration for artists and designers in Britain but also achieved instant success and popularity as stylish chic and decorative household items for the home.

Countless numbers of researchers and publications have discussed and analysed what is known as the 'Japonism' of both the public and domestic spheres. Design History has particularly concerned itself with the domestic scene. But broadly speaking it has focussed primarily on matters relating to the house itself, and there has been little or no analysis or discussion regarding the rooms and environments in which the Japanese style, objects or items were more influential or predominant. Focusing on a specific room has great significance, because the establishment of modern living seems to have specifically developed from certain rooms. Once again we must for this purpose, observe the contemporary literature available as mentioned above. We find

articles on Japan or 'the Japanese style' in the drawing room, boudoir and bower, in other words, 'feminine' rooms, and rarely find them referred to in the context of the hall or dining room – 'masculine' rooms. Seeing the illustrations from *the Book of the Home*³ for example [fig.1-3], it is clearly shown that each room has an entirely different atmosphere; the dining room generally has massive, solid furniture in almost fixed position, whereas the drawing room is lighter and more delicate looking with easily movable tea-tables and easy-chairs, well-padded couch and an inviting 'cozy corner.' And it is in the latter, where we clearly see the Japanese articles.

The difference in style between dining room and drawing room came partly from the traditional/ceremonial way of using the rooms. Both were regarded as important reception-rooms. From the observation by Herman Muthesius⁴, we see that the custom was for both guests and occupants of the house to assemble in the drawing-room before dinner, and then in a formal ritualized manner, they are summoned to table, the company in its ceremonial attire moves towards the dining room two by two. Therefore those rooms were designed for reception. After dinner, men would normally stay in the dining room and women withdrew from the dining room to the drawing room (it was originally called withdrawing room). The dining room was the most formal space. Of course it is an eating place, but for a formal dinner for invited guests not for the families' daily meal. Therefore the interior decoration tended to be in an established historical style as in fig 1 which shows the solid Elizabethan style. By contrast however, before or after a formal dinner, the drawing room although it is still a reception-room, is used as a less formal space, for having tea or chattering, and is often used for women's afternoon gatherings like Afternoon Tea which became a recognized event in around the 1830s or 40s. Due to these customs, men spent more time in the dining room and for formal events the interior reflected the established style, while women would more often use the drawing room, therefore a non-established style evolved to fit these more informal events. This provoked the development of a clear separation between the 'masculine' and 'feminine' tendencies. And it is as a direct result of this that Japanese arti-

³ *The Book of the Home*, 8 vols., Gresham Publishing Company, 1900-1902.

⁴ Herman Muthesius, *Das englische Haus*, 1904.

cles were adopted for the drawing room or 'feminine' space rather than in the dining room/ 'masculine' space.

In addition to the heavy/light, formal/informal, or established/non-established contrasts between the rooms, Japanese articles were also adopted positively into the drawing room to show the occupant's taste, particularly woman's taste, as the contemporary literature says, 'in the drawing-room the housewife has the best opportunity for showing her good taste and individuality.'⁵ The distinguished style of Japanese objects effectively symbolized that taste. And of course, the light and delicate features of the objects match the interior decoration in the drawing room as the books advised.

4. The atmosphere of rooms for women and Japanese objects

Another example which shows the relation between rooms and Japanese objects is in contemporary painting. This was effectively a whole new style of painting, expressing as it did, the women at home. Of course there had previously been paintings showing women at home, but in almost all cases they showed a specific woman or they were family portraits such as 'Conversation Piece.' In other cases, they were genre paintings having a narrative story. By contrast, the new paintings are unlikely to show a specific woman or story. And in many of those paintings we can also find Japanese objects and 'style' heavily featured. From the title of the pictures, some specify which room in the house they are. For example, a widely known painting by D. G. Rossetti in 1865 shows a lady surrounded by Blue and White tiles in a Japanese style with the title 'the Blue Bower.' A Bower is a woman's private room, normally adjoining the bed room – 'feminine' territory. Although not many of the titles of the paintings indicate which room in the house they are in as they can naturally be an imaginary space from the mind of the painter, it can

be said that they are almost all set in a drawing room like space. Because easy movable furniture or a well-padded sofa can be seen, this being a typical element of the room (fig.4) (fig.5) (fig.6). Here again, Japanese objects appear in these paintings or rooms. Once again, there is a clear link between Japanese objects and feminine territory.

It is worth mentioning that the women in those paintings always sit or stand at ease in the room or space along with Japanese items. The point in common in these paintings is not only to show women and Japanese objects in the feminine territory but also to create the atmosphere and symbolism of comfort at home. Indeed, one of the titles of the paintings is 'At Home (fig.5).' What the painter wishes to express is not exotic items or specific women but the atmosphere and sense of comfort. This then, is the new social, emotional landscape pursued in the house at the end of the nineteenth century. Therefore what was developed in the feminine territory was not only to express their personality and taste but this atmosphere of comfort. The illustrations in the above handbooks and paintings, always suggest the daily domestic scene at home. Even if people as a motif do not appear in such paintings and illustrations, the atmosphere is created of someone having been there a while ago, like the picture fig.6 showing the chair with partly sunken cushion facing the fireplace and the violin beside the pile of books one of which is left open. People at ease or objects placed irregularly or sometimes disorderly suggest people or family are using the space for their daily life, in a homely atmosphere place of warmth of and comfort. Japanese objects have simple but delicate features, and sometimes having an asymmetrical irregular form, which not only matches and compliments the light and delicate 'feminine' room but also serves to express the atmosphere of comfort. This is in all probability why the 'feminine territory' generally adopted Japanese items rather than other oriental items. Homely comfort was a significant issue for middle-



Figure 4. George Groegaert, LA LISEUSE, 1888.



Figure 5. Walter Crane, AT HOME, 1872.



Figure 6. Jessey Fairfax Bates, AN AESTHETIC INTERIOR, 1892.

⁵The Book of the Home, vol.1, p.136.

class houses. Again it can be said to be embodied far more in the feminine territory like the drawing room, rather than in the formal space such as the the dining room.

5. Conclusion : Homely Comfort as a symbol and signature of identity in the modern family home

As we have seen, the atmosphere which was created and developed in the feminine territory formed the basis of the concept of homely comfort. It will also be clear when we see the plans of houses designed by an architect in pursuit of this expression of comfort. For example, M. H. Baillie Scott, one of the leading architects of the time, was highly critical of the social function of houses which used the central area as the reception, and then gave primary consideration to the daily routine of its occupants. Based on this idea, Scot transformed the hall, which had formerly been used only for formal assembly or just a passage, into an interactive space for the family group, connecting the drawing room and merging the dining room. In the process to express the concept and sense of homely comfort, he retained

the ample feature of the hall and diminished the space of the dining room by creating a 'dining recess' and the drawing room was connected to the hall. Sometimes a bower or boudoir was planned to occupy the place of the drawing room (fig.7)(fig.8). Bower and boudoir are also 'feminine' territories, and formerly convention ruled that they would always be found on the upper floor or near to the bedrooms as a lady's sitting room. However those rooms now came into to the central space of the house. This is certainly because those 'feminine' territories possessed warmth and homely comfort, as we have seen in the previous sections of this paper. Therefore these informal or feminine rooms came to be the central element in embodying Scot's idea for the family home, and in doing so diminishing the importance of the more formal dining room. Eventually during the development of this process the name 'living room' appeared in his architectural plan, in place of the hall connected to the drawing room and boudoir. From this perspective, the 'feminine space' must be regarded as a significant element in the development of the concept of the living room.

In the second half of the nineteenth century, the image of 'the home' is a space far removed from reality. At the same time, the choice of domestic decoration and furnishings became an accepted and even expected activity for middle-class women and the advice in the handbooks on home decoration emphasized that furnishings indicate personality and individuality, forming their identity as much in opposition to the aristocracy as in imitation of it by the end of the century. This was happening in houses and more specifically in the drawing room and boudoir or bower – all 'feminine' territories. Japanese objects were adopted in these rooms and spaces, partly because these 'exotic' objects indicated and symbolized 'taste' and 'individuality.' In addition to this, this paper makes it clear that those elements in the 'feminine' territories also formed the model of homely comfort, which is still the central element of the modern family home right up to the present day.

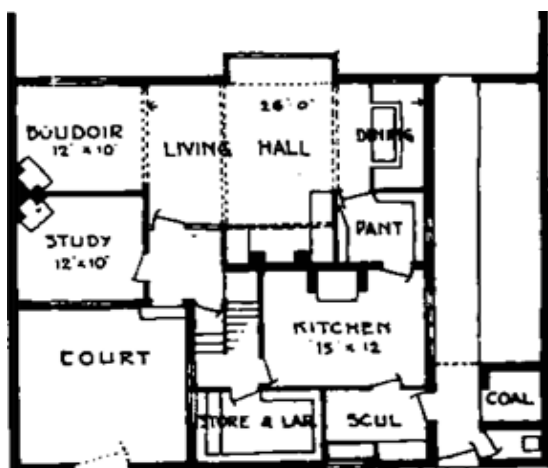


Figure 7. M. H. Baillie Scott, White Nights, c.1900.

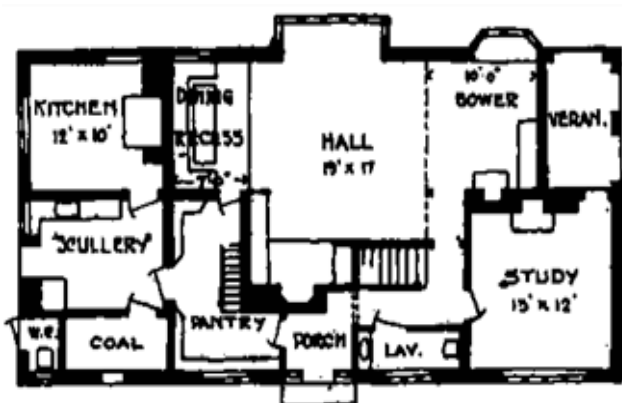


Figure 8. M. H. Baillie Scott, The Crossways, c.1900.

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Lira Popular, Chilean broadsheets from the late nineteenth century: a graphic referent and its relation with sheets from Brazil and México

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Graphic identity / Latin American / Broadsheets / Broadsides / Identity boundaries

Lira Popular is a group of broadsheets printed in Chile between the years 1880 to 1930, written in ten-line stanza by working-class poets from the countryside to the city. The following paper will describe, firstly, the print's origin and context for then to focus in the relation with other prints of the region, particularly in Brazil and Mexico, emphasizing the fact that it would be a graphic considered 'local' and 'identitary', despite clear references would remain within the continent, without excluding the European background.

1. Lira Popular, Chilean broadsheets

By 'Lira Popular' is known the group of broadsheets printed and published in Chile between 1870 to 1940 approx. Also known as 'Cordel literature', they were verses written in ten-line stanza. Over the time it was evolving to a journalistic-type content, giving more attention to the sensationalist press.

In the Lira Popular profusion years, 1860-1910 circa, it was settled a recognizable visuality (fig. 1 and 2) where frequently in the high part of the sheet could be found an engraved illustration of the most 'important' news; the white part was generally filled by clichés which mostly didn't have relation with the content in the sheet. In the central part a title possibly flamboyant, with a big-sized font showing the most sensationalists facts. Here were often mixed different typographic styles, according to the late nineteenth century usage. Finally, in the bottom half-part of the sheet, were the ten-line stanzas, 5 to 6 depending on the format of the sheet.

Generally, compositions were published at one poet per sheet, who used to print his name at the end of the sheet (Millar 1989: 18). Even though there was no date of printing, sometimes were included the address or the printer's mark acting as a point of sale. The poets besides being authors were the editors and manager of their own work publishing sheets when the news required it.

Usually they were working class poets coming from the countryside to work into the city, most of them were illiterate, from a culture of oral tradition, which prioritized the sung popular poetry. In a rural context they would be singers and rhyme-singers¹ but when they entered to the metropolis, decided to print the verses that before were just spread in an oral way. This is how the Lira

¹ In Spanish: payadores.

Popular tends to be a 'link' between a culture quite rural of its public and the 'modern' represented by the printing press. It will constitute in a contribution to the transition that was carried by the peasant on having moved to the metropolis in a constant process of modernization, once it vested the oral tradition with the printing.

Most of the Lira Popular's public were illiterate, having in 1875 a rate of 77.1% of illiteracy (Labarca 1938: 275-280), which reinforces the print's closeness to the oral tradition through the use of the tenth-line stanza and the image.

In a context where the poorest layers of the population to whom the sheets were directed, were basically not considered into the cultural circle, the sheets were the counterpart of the newspapers that avoided the tabloid's news, being a sort of escape for this kind of events (Uribe Echevarría 1973: 15-18).

Taking account the period where the Lira was born, where the precedent of different wars in Chile influenced on its publication (war against Spain in 1865, and the Pacific War between 1879 to 1884) it promotes an identification with the message issued, where the popular culture is settled as a subject for the construction of national identities, of an imaginary, creating a flag-up for and by its audience. The main topics of the Lira are part of the image and collective unconscious of a social body in action.

Thanks to the Lira Popular, the audience could access to a concrete way of expression that allowed them to be a part of the city through their own language. According to Sunkel:

To the popular reader this press is relevant as it connects essentially with their own reality (€) A first connection is with the events that happen in the local-popular range, because this press speaks to their readers from and about them (Sunkel 2001: 153).

The public identifies with the Lira Popular, because the facts are portrayed closely to their reality and happens in their daily life. Are directly related to "the urban peasant" lifestyle, as the worker that enters to the city leaving behind the countryside, and this is also why it connects with a sense of 'origin' on the Chilean imaginary. This has meant that over the time Lira Popular has been settled as a depositary phenomenon of Chilean identity: It is from the heavy identity burden attributed to the sheets, and considering the high rate of illiterate public, that, further the content in *decimas*, the appearance of the image becomes relevant. Thus, through the engraving will be enhanced a visuality associated to an 'identity imaginary'.

Finally, this has made that the Lira Popular had been established as an important visual reference in Chile, where nowadays is quoted constantly in disciplines closely linked to the use of the image –accurately in graphic design– as an example for ‘local’ graphic design, constituting in an important link in the history of Chilean graphic design.

2. Lira Popular: The origins of a print considered a referent of ‘local’ graphic.

Everything indicates that the poetic tradition arrived to our continent through the colonization both by Spanish as Portuguese in Brazil. According to that, would arrive to Chile some copies of Spanish *pliegos sueltos* which probably would be the direct predecessor of the Lira Popular. The origin of these broadsheets would be in the Hispanic minstrel authors, creators of the lyric poetry and the *Romancero*, which combines the sung poetry (verse) with the recited poetry (prose), using mostly the *Espinela*² to gloss.

Together with the epic culture, Spain developed a popular poetry settled in short verses along the fourteenth century to the fifteenth century (Ávila Martel 1973: 3), characterizing around 1450, by preferring daily life issues (Mellado 1995: 54-56). In the late sixteenth century, this genre of poetry got his peak spreading to the Latin American continent, by the mouths of soldiers, colonists and conquerors (Muñoz 1954: 31-32).

The broadsheets ‘born with the appearance and the development of the printing press, in the late fifteenth century (E) remaining in Spain to 70’s of the late twentieth century’ (Carro y Sánchez 2008: 81-82). It were usually booklets with two to sixteen pages, the result of a regular sheet folded two or three times; also was considered as a *pliegos sueltos* the flyer printed in one side, or both. They were exposed in a row hanging to a string what had named them “Cordel literature”.

Another format that may influenced the printings in Latin America would be the *hoja volante* (flyer format³), it was completely fringed, with a small engraving in the middle of the high part of the sheet, and the text was usually distributed in three columns. This flyer has origin and develops in the late Middle Ages (Schulze 1992: 53) -between the eleventh and fifteenth century- from the announcements that the ‘news merchants’ should write in wartime to inform the people before to go on board, spreading in this way, from Venice to the rest of Europe. At the beginning without a title or signature, later, they included handmade illustrations or woodcuts, for the illiterate public who received easily the graphic message.

In the fifteenth and sixteenth century a ‘classic’ way of presentation of the broadsheets was taking place (fig. 3): First the title followed by the engraving. Under this, the text printed in two or three columns. Along the seventeenth century, the title is going to be

2 The *Espinela* was a metric of verse widely used in Spain and in Latin American. Was an octosyllabic ten-line stanza, known as the *décima espinela*.

3 Also known as *hoja volandera*.

more important: gives place to the front pages; the first page is taken by what was before used to be just the headline of the sheet (García de Enterría 1973: 64-65). This last will be the closest conformation to the Lira Popular.

As influence for the *pliegos sueltos* in the Latin American continent, is important to add the strong role that poetry had as a mnemonic system to teach the catholic doctrine. From the Jesuit influence, the teaching concerns short verses easy to memorize using ten-line stanza. This is linked to the subsequent use of the poetry in ten-line stanza to other purposes beyond religious, leading to the development of the popular poetry in Chile. Thus, with the conquest and the consequent ‘cultural decant’ plus an oral tradition found in the past Latin American indigenous cultures, traditional popular poetry proliferates, settling mostly in rural areas.

As for the Lira Popular, although it is recognized as a graphic demonstration ‘typical’ to a specific area, is clear the graphical relation that remains of the Spanish and European precedents where the visuality is quite similar, linked to the *pliegos sueltos* as publications. There are certain rules of graphic composition maintained over the time allowing ‘validate’ the Lira Popular as prints as it recognized visually as a means and as a urban phenomenon, where the imprinted allowed to give materiality to the oral tradition of its authors and audience, from the countryside and from an illiterate context.

Finally, it is important that while recognizing the strong foreign influence in the Lira Popular from colonization, the phenomenon is understood like something ‘Chilean’ where the very fact of being holder of a ‘chilean identity’ would have an important relation with a fact of our identity: the crossbreeding. In that way, the Lira Popular, besides being a link between the countryside and the cities, the oral and the written, it is set like a benchmark of visual identity while would be a ‘crossbred object’ which would mix the precedent with the ‘local’.

3. Something ‘regional’: Cordel Literature and Broadsides, cases of Brazil and Mexico

While the *pliegos sueltos* or the ‘Cordel literature’ were an extended phenomenon in Europe⁴, is through the Conquest how is widespread throughout Latin America, showing an influence rather peninsular. Proliferated in almost all the Latin American Continent⁵, perhaps one of the most emblematic cases would have been Brazil.

Known as ‘Cordel literature’, ‘leaflet literature’ or *folhas soltas*, reaches an important profusion particularly in the North East of Brazil, where this manifestation still valid until today (fig. 4). They are traditionally small leaflets of 12 by 16 centimetres derived from a legal size sheet folded (Franklin 2002: 16). The number of

4 In France, the phenomenon was called *litterature de calportage*.

5 In Argentina they was known as *hojas* or *pliegos sueltos*; in Nicaragua and Perú, as *folletos populares*; in Mexico as *hojas volanderas*, *pliegos sueltos* o *literatura popular*.

pages had been strictly related to its content: a serial of 8 to 16 pages would have housed counterpoints and sensationalist news; from 24 to 56, have been reserved for narrative or fiction.

It is said that the first popular poet responsible for the systematic production of the leaflets would have been Leandro Gomes de Barros since 1893 (Abreu 2006: 92-105), giving rise to a process that in 1920, were consolidated the graphic standards including the use of engraving, rules of composition, editing and marketing. The authors, as in the case of the Lira popular, had left the countryside to settle in large cities, devoted to compose, edit and sell their artwork as a source of work.

The *folhos soltos* have appeared even before the traditional local newspaper, being initially, the only way to inform about the facts of concern to the Brazilian people. In the words of Júnior Diégues:

Before the newspaper spreads, the Cordel literature was the source of information [Ε] Clearly the Romancer that came to us from Portugal, was not exclusively Portuguese; had come from various sources. It was then, peninsular [Ε]. (Diégues 1975: 3-5)

Surely the reason that in this region of Brazil the 'Cordel literature' had appeared before the newspapers would be due to the demonstration, in an inverse sense, from the 'popular' to the urban; it is not coincidence that is the most rural region of Brazil and with the highest levels of poverty where even today they live with a strong oral tradition. This would be a phenomenon that probably starts in the "inner cities" of the country and not from large urban centres.

In reference to the graphic, draws attention the pregnancy of the covers illustrated with woodcuts. On this is necessary stress that at the beginning, the covers just brought written information to the public (Alves de Melo 2010: 106). Then, from a work rather editorial, were illustrated with clichés. Finally, although it is said that the first xylography in leaflets would have appeared in 1907 (Franklin 2007: 15), just by 1925 the use of xylography would have been established as a characteristic of the leaflets like an option to reduce the costs in the production of places far from big cities (Santos 1997: 87).

Another important exponent of the "broadsheets" within the continent is Mexico, expressed on its highest level through the work of the editorial of Antonio Vanegas Arroyo, who opened his printer-editorial in 1880.

As background, after the Independence in Mexico the production of leaflets was abundant, although rarely included illustrations. However, 'from the 1830 to 1850, printers increasingly resorted to the engraving' (Bonilla 2005: 416). Also, 'in the first half of the century the leaflets were distributed with political content or even about sensational crimes and incidents' (Speckman 2005: 395). This development prior to the broadsheets is linked to a context of a strong political and cultural situation, similar to the previous scene to the Lira Popular in Chile, rising as in Mexico, the resulting proliferation of these printings.

In this 'previous scene' prints were generally of 'simple composition and rough execution, its heterogeneous nature indicates a constant improvisation and recycling. Often the relationship between text and image was lax or nonexistent' (Bonilla 2005: 417). This determined the success of the editorial of Vanegas Arroyo, where most of the formats were broadsheets, sheets or small notebooks, of coloured paper, all with pictures, illustrated first by Manuel Manilla and later by José Guadalupe Posada⁶ who went above the work of previous illustrators that only used to decorate; taking advantage of the use of the striking fonts (Díaz de León 1968: 57-58) that were popular in that period, approaching the reading to the illiterate.

The sheets recounted the events in prose, sometimes closing with a *corrido*⁷. They could be purchased at the outlets of the printer, or peddlers who recounted the text to the audience. Also were sent to other cities reaching to several regions. The editorial of Vanegas Arroyo started to decline in 1913 after Posada's death; locating its peak between 1880 and 1920 (coinciding with the peak period of the Lira Popular in Chile).

About Posada's work is said that collects in the best way the prints that unfolded the Mexican people (fig. 5 and 6). The people and the public of the sheets that are represented in the work of Posada, according to Murillo where established:

a spiritual community which was fuelled by many years the fight for liberation. And the reason [Ε] was Mexico before the Mexican revolution, had up to 90% illiterate, hence the graphic [Ε] was the way of dissemination of ideas, protests and popular demands. With its engraved, Posada said it all. (Murillo 1963: 74).

In addition to a strong political and revolutionary interest, the broadsheets or 'popular sheets' from the editorial of Vanegas Arroyo constitute a referent on the Mexican graphics and belongs, as the Lira Popular, to a visual imaginary associated to the people. This is enhanced by the subsequent creation of the *Taller de Gráfica Popular*⁸ in 1937, an association of engraving that assumes itself as the historical heir of Posada (Murillo 1963: 82) and reinforces the imaginary identity associated to the use of engravings.

4. Something 'regional': Cordel Literature and Broadsides, cases of Brazil and Mexico

From the studied cases, it can be reflected that if the broadsheets will constitute in a transversal way to the region. While it is recognized the same origins from the Iberian peninsula, would be interesting to note certain features that separate them from their European background. These features could denote a common identity, in terms of visual codes and publishing formats, as ways of expressing the content repeating certain topics. Is

6 Posada arrives in 1888 to the City of Mexico, after gained extensive experience in the José Trinidad Pedroza's workshops, firstly in Aguascalientes, than in the city of .

7 The 'corrido' can be characterized as a tragic-epical-lyric poem that assumes all poetic metrics, and uses all combinations of rhyme, extended in the Latin American region.

8 Popular Graphic Workshop, a mexican collective founded by the artist Leopoldo Mendez, among other persons.

about a means that could demonstrate, one way or another, an imaginary associated to the Latin American, while is holder of an expression related to the popular sectors in each country, where the sense of 'popular' would be linked with a sense of origin and identity. This is related to another common point concerning the public –mostly illiterate– from the poorest parts of the population relying almost no purchasing power to buy books, and thus away from the prevailing cultural circuits. Considering the high levels of illiteracy in the region, is likely that the use of images had have as the primary motivation to facilitate the understanding of texts to people who could not read, or just a way to make more attractive the sheets. It is interesting the relevance that acquires the engraving, providing an 'identity' burden to the prints, or the identity burden founded in the sheets is transferred to the image that illustrates it. This has resulted, nowadays, in the use of prints as graphic referent where becomes more important the 'visual-identity' sense related to the image. These prints would be settled as a platform of identity related to the European origin where the identity would pass through a content of popular tradition associated to the 'local identitary': would be a graphic identity's constitution from the popular culture.

Far from closing the issue would be appropriate to extend the discussion and emphasize on the graphic similarity in these prints, where in each country, are considered part of the graphic 'local identity' heritage. While is recognized the same root, they are crossbred objects, cultural and graphically speaking, where the idea of "identity" exceeds the imaginary boundaries, mutating when it finds other local manifestations.



Figure 3. First page of the *pliego suelto* 'Romance a las virtudes de la noche, con lindo estilo', Anonymus, ca. 1700. Museo Internacional del Estudiante, Roberto Martínez Collection.



Figure 1. Lira Popular broadsheet. Poet: José Hipólito Cordero. No date. Alamiro de Avila's Collection, Biblioteca Nacional de Chile.

Figure 2. Lira Popular broadsheet. Poet: José Hipólito Casas Cordero. September 1899, aprox. Lenz Collection, Biblioteca Nacional de Chile



Figure 4. Two examples of current Brazilian *folhos soltos*. Academia Brasileira de Literatura de Cordel, 2006. Author's collection.



Figure 5. 'Calaveras from the heap, Number 1'. Antonio Vanegas Arroyo print, Posada's engrave, Mexico City, 1910. Library og Congress Prints and Photographs Division.

Figure 6. 'The bloody occurrences in the city of Puebla'. Antonio Vanegas Arroyo print, Posada's engrave, Mexico City, 1910. Library og Congress Prints and Photographs Division.

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The signature of Portuguese posters from 17th Century to 20th Century: one history of identities

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Portuguese poster / Design / Authorship / Signature

This paper presents the history of the identification of Portuguese poster authors from the 17th century until the end of the 20th century. While this information is presented in a micro scale in the artefact, the paper refers to the reasons for its relevance, either due to their presence or absence, explaining how the authors identified themselves in the public sphere, during that period.

1. Introduction

The use of the terms “design” referring to a specific professional discipline in the modern sense, and “designer” referring to a professional who creates or is the author of designs did not exist in the Portuguese context until the first half of the 20th century. This lack of articulation between the specific field and the profession was linked to the lack of specific professional education of the designer¹. Concomitantly, this paper addresses the identity issues pertaining to each century, privileging authorship as a cultural interpreter of the available technology and of the programmes proposed in the production of posters, which were partly responsible for the shift in the representation of the signature. In turn, the different typologies are analysed in terms of drawing, typography, colour, composition, location and through a set of designations associated with authorship that sprang up in different periods. For that purpose, the paper offers a selection of posters² over a timeline, zooming in on the information pertaining to the representation of the signature in order to illustrate the history of four centuries. The paper also refers cases that go beyond the single author, providing examples in which the author is unknown or in which there is some form of collective authorship.

2. Identification of posters from the 17th century

The identification of authorship in the field of artefact conception is not always simple or even possible. In fact, even in the so-called greater arts, the practice of signing works was slowly established as a result of the progressive social valorisation of art and of the artist, serving as a quality seal. In the case of the so-called lesser arts, this process took even longer.

In the 17th century no single-authorship posters were found; instead, only anonymous posters. The references to the *Sancto Officio*, on all posters, as part of the text message contents, provide

1 The first school IADE [1969].

2 From the archives of BNP – Portuguese National Library, ML/UA- Madeira Luis/ University of Aveiro.

an indication as to the origin of the order and arouse suspicion on the involvement of some of the elements of this ecclesiastical court in their conception. However, it seems more likely that, conceptually, they were the work of typographers, in a direct answer to the programme, without aesthetic concerns of differentiation, aiming to render the poster noted among their peers. For these reasons, it is considered that the poster output of this period reflects an author’s intervention with little poetic concern. One of the elements that seems to characterise this type of poster is related to the presence of identification, through the signature, of a group of persons, which results from the need of validation of the artefact rather than any sense of authorship. Such is the situation of the posters from 1665 and 1694, whose elements were printed and handwritten, and are in both cases centred at the bottom part of the page. (fig. 1, fig. 2).



Figure 1. Anonymous. 1665. Typography and woodcut. BNP.



Figure 2. Anonymous. 1694. Typography and woodcut. BNP.

3. Identification of posters from the 18th century

This century became famous for the inauguration of the teaching of *drawing*. Although this process was implemented in a sporadic

manner and had little impact, it was enough to nourish a latent desire to create an artistic academy, which ultimately did not take place in the Portuguese territory. If, on the one hand, *drawing* was linked to architecture as a means to provide answers to the needs of the building activity carried out by the kingdom, on the other hand, it was necessary to create a kind of teaching associated with artistic disciplines, as was the case of the Academia Portuguesa das Artes (Portuguese Academy of the Arts) located in Rome and founded upon order of D. João V (Lisbon 2007:14).

A significant amount of the artefacts from this period was produced by people who worked with *design* on a daily basis, but who, nonetheless, had never received specific training. Hand-made production was the result of not only the experience acquired in a working environment, with more or less talent for the production of artefacts, but also of the technical and design expertise capable of ensuring their quality. The designations *painter and artist* stood out during these periods as interveners who achieved distinction for their quality of representation, for being committed to the art of drawing in a more artistic sense, i.e. to the *art*-related production.

As regards posters, authorship remained anonymous, and the lessons taught during this century trained many draftsmen, typographers and engravers who became experts in their fields, but whose universe of identification concerning the posters produced remains unknown. Similarly to what had happened in the previous century, for cultural reasons the poster was still not honoured with the identification of authorship or that of the printer, perhaps due to the lack of relevance assigned to the artefact itself. The only possible identification is to be found in the text message contents of the posters featuring the *Santo Officio*, but this information does not fit the goal in question. At best, it would only be possible to establish that identification of visual discourse typology, which to some extent heralds a style that could be associated with this institution, but whose drawing was certainly the responsibility of the person who produced the poster in terms of visual communication, rather than the person who commissioned it.

4. Identification of posters from the 19th century

The anonymous poster remained the hallmark of poster production throughout the 19th century, possibly as a consequence of the lack of acknowledgement given to this professional practice at that time. The sporadic emergence of institutions related to the printing shops sought to counteract that situation, although their interests were mostly focused on labour issues rather than on the issues pertaining to copyright.

The posters of this century possibly kept on being produced by those more closely involved in their reproduction, the drawing being the responsibility of the printer or of someone who worked at the printing shops and was known to possess some creative sensibility. The posters were the reflection of individual knowledge and experience. An empirical universe about the rep-

resentation of the visual communication of the text and image message and which in all likelihood remained unchanged up to the artists' participation. It is perhaps for this reason that 19th century posters, similarly to the previous centuries, have been characterised by their anonymity. Only two records of identification have been detected. The first was found on the trade poster of 1880, conceived to market an edition of "Os Lusíadas", whose author identifies himself with the name Casanova (fig. 3). The representation of the identification was achieved through the author's signature, which is located on the bottom left-hand part.



Figure 3. Casanova. 1880. Lithography. BNP.

The second was discovered on the cultural poster of 1892, produced to announce an event promoted by a commission as a tribute to the Associação Typographica Lisbonense e Artes Correlativas (Lisbon Association of Typography and Related Arts). The integration of the composer's identification thus corroborated the importance of the professional practice developed at that shop. The visual communication of the poster reflects that intention, symbolising a rupture in the representation of the poster when compared to its peers. In addition, this poster has a superior printing quality compared with the rest. The identification of the respective author is also located at the left-hand foot of the poster and was produced in typography with the following description: "Composition of Ernesto Justino Cordeiro" (fig. 4).

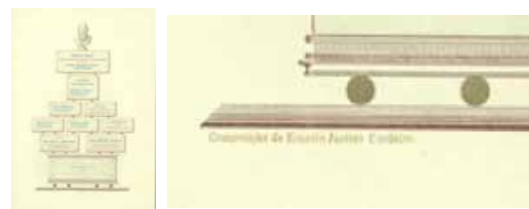


Figure 4. Ernesto Justino Cordeiro. 1892. Typography and engraving. BNP.

The fact that there are two forms of representation for the purpose of identification, one through drawing and the other through

typography, indicates that the author of the first poster was possibly connected to the artistic disciplines, unlike the second author who, for working in the graphic arts, did not reveal his identification by means of a signature. At international level, the first author who sought to regularly include identification on the posters he produced was Adolphe Lalancette, since 1830 (Collins 2000: 18). But his example was not followed by other poster-makers, and there are no identifications available, especially until the decade of 1840 (2000: 18). The need to reveal authorship was felt mostly by authors who were recognised and considered influential (2000: 18).

5. Identification of posters from the 20th century

The practice of graphic design was perhaps a kind of ‘professional’ accomplishment for those who, for a number of reasons, did not garner the status of ‘artists’. Simultaneously, artists devoted themselves to graphic design as a means of livelihood. In parallel, the experience bought by direct contact with the graphic arts in terms of printing led to the emergence of other professionals with greater knowledge of the reproduction technologies who made drawings for the posters, as well as draftsmen employed by graphic shops who normally did not identify their work. The identified poster gained a novel *status* as an artefact, as did its author, who was deserving of identification, simultaneously adding value to the contents of the poster announcement and the graphic shop. Consequently, this process of identification represented, to some extent, an invaluable asset for all those involved in the process of conceptualising, printing and publicising the information irrespective of it being a political, cultural or commercial poster.

In the first decade, the identification of authorship is characterised by the use of the author’s signature, which is usually located at the bottom part of the representation - and exceptionally on the poster of 1904 the drawing itself offers the indication of authorship, which is also placed on the lower part of the representation -, and of the atelier, which is represented by means of typography and placed on the bottom right-hand part of the poster (fig.5).



Figure 5. R. Perez; Atelier Jorge Colaco. 1904. Lithography and typography. BNP.

In the 1910s, the identification of the posters by Diogo de Macedo is normally placed according to the composition of the poster, aiming to maintain balance between both. However, unlike the posters identified thus far, Diogo de Macedo is the first author to create a brand for his identification (fig. 6). An identical situation is that of the ETP

[Technical Advertising Agency] of Raul de Caldevilla, who, in addition to the brand, used to include the identification of his authorship on the bottom part of the posters (Barbosa, Calvera, Branco 2009).

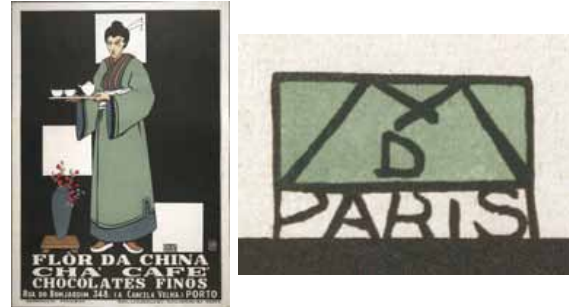


Figure 6. Diogo de Macedo. [1916] . Lithography. BNP.

In the decade of 1920, the identification continued to be placed below the lower-middle section of the poster, as was the case of Ten. Alberto Baptista and the poster by Eduardo Romero (fig. 7) are both identified with the signature of the artists revealing that in the 20's the calligraphic signature was regarded as a record of great importance, as was the case with the works of art.



Figure 7. Eduardo Romero. 1928 . Lithography. BNP

The identification of posters in the 1930s continues to be characterised by the presence of a handwritten signature (calligraphic), with the exception of Fred Kradolfer (fig. 8), who created a hand-drawn brand that characterises his identification, and José Rocha. The latter author draws his identification but it comes forth as a novel concept, whose representation consists in using capital letters, resembling the typographical drawing. Meanwhile, Stuart Carvalhais chose to place his signature on the upper part of the image, alternating between left and right according to the representations featured on the poster.



Figure 8. Fred Kradolfer. 1931. Lithography. BNP.

In the 1940s, the handwritten signature still predominates

among authors. It was possible to verify that the identification of Paulo Ferreira's posters was generally placed on the upper left-hand corner of the poster, using only the first name with a simplified calligraphy and a full stop. Bernardo Marques signed his family name in cursive, and as a rule he did not have a fixed place for it. Its integration in the poster depended upon the drawing. Carlos Botelho, on the other hand, placed his identification at the top of the poster. His signature was a drawing in capital letters, featuring an enhancement of the 'B' by prolonging the middle stem of the letter, thereby creating a kind of brand (fig.9).

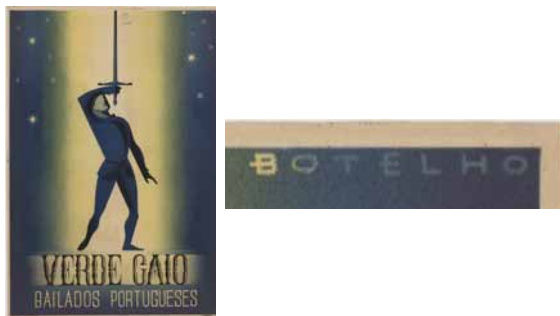


Figure 9. Carlos Botelho. 1942. Lithography. BNP.

As for the identification of 1950s posters, the authors chose to identify their work mostly through the calligraphic signature, and a significant amount of these posters were printed in lithography. From a drawing perspective, the identification of Cândido is simplified, containing the acronym "cp", whose meaning is unknown. In turn, during that decade Sebastião Rodrigues signed his posters in the same manner, both in terms of drawing and in terms of placement, indicating his first name and using an acronym for his family name. With the emergence of the offset, as a reprographic system used in printing shops, new posters slowly came out featuring the typographic typeface. This situation occurred with Studio Tom, where the identification is placed at the bottom right-hand side of the poster aligned with the other information, seemingly downgrading its relevance as an authorship element in comparison to the aforementioned examples (fig. 10).



Figure 10. Studio Tom. 1959. Offset. BNP.

The 1960s are mostly characterised by the presence of the calligraphic and typographic signature. Several authors such as António Alfredo continued to use the calligraphic signature, whereas in that period Sebastião Rodrigues started to rely on ty-

pography to identify his posters, as did also the atelier of Rogério Ribeiro (fig. 11). The typographic signature is characterised by its placement at the bottom part of the poster, close to the limit of the paper.



Figure 11. Atelier Rogério Ribeiro and collaboration of Orlando Domingues. 1969. Offset. BNP.

The presence of typographic identification in the 1970s posters increases, and the term 'design' is used for the first time. Despite this innovation, many authors still preserved the calligraphic signature as a means of identification, as was the case of Câmara Leme. The poster by Ernesto Neves was possibly one of the first posters that used the author's identification as a designer, with the representation executed by means of typography (fig. 12). It was possible to observe that the presence of this word on the posters is prior to the public teaching of design undergraduate degrees in Portugal (1975).



Figure 12. Ernesto Neves. 1972. Offset. BNP.

Although Vitor Manaças began his career at the Calouste Gulbenkian Foundation in the 1960s, it was not until the 70s that he used the term "design" to refer to the identification of posters through typography. In this regard he tells the following story: "in the beginning they didn't let us put it on (...) but at some point we had that intention", simultaneously the situation was frowned upon "[...] take that out!, We can't have that! [...] From a certain moment onwards, I don't even think it was me. It was Américo Silva that started to put it on. We have to start to put it on! And so we did" (Barbosa 2009). In fact, the term became widespread and from this decade onwards its use gradually increased. However, new terms emerged to name the poster-maker as: "graphic layout", "drawing", "graphic design" and "graphism".

In the 1980s, the identification of authorship is generally placed



Figure 13. João Machado. 1988. Offset. ML/UA.

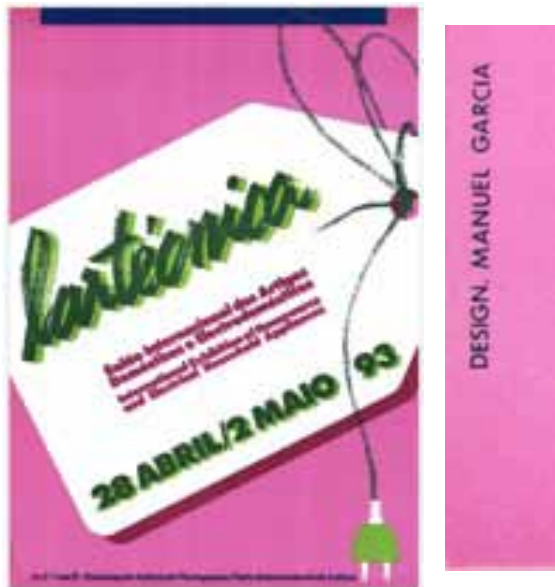


Figure 14. Manuel Garcia. 1993. Offset. ML/UA.

close to the margins (top or bottom), especially at the bottom part of the poster, with typography as a means of representation of the signature. As regards professional acknowledgement, the authors' work was coined as: "graphic layout", "artistic conception", "drawing", "graphic drawing", "design", "graphic design" and "graphism". However, the (non) use of these terms also characterises the authors, such as, for instance, Vítor Manaças, who chose to use the term 'design' on his posters, as did João Machado (fig.13), whereas A Zenoficinas of Armando Alves and Marcelino Vespeira chose not to use these denominations, preferring instead to use "graphic arts" and "symbol".

In the last decade of the 20th century, there were no significant changes in terms of the identification of authorship, which continued to rely on typography, using some of the terms of the previous decade such as "graphic drawing", "design", "graphic

design" and "graphism", while introducing a new designation, i.e. "graphic conception". Similarly to the 1980s, most authors from the 1990s used the term 'design' more frequently (fig. 14). However, Henrique Cayatte introduced an exception when he used the word "poster" to refer to his production.

6. Conclusion

Despite the absence of the denominations 'design' or 'designer' in the Portuguese context, this does not mean that the designer-as-author or artist was necessarily absent from production, particularly in the graphic arts and especially in relation to the poster. It does mean however that the question of authorship, especially before the 19th century, is very complex, carried out in different ways over time and varying from anonymity to signature. The manner in which authorship was identified in posters changed over the centuries in terms of representation and placement on the poster, and also in terms of indication of the status ascribed to the professional activity. It was verified that technology influenced the representation of identifications, and aesthetic influences were further observed. The knowledge about the signature on the poster allows for a deeper understanding of the identity of the Portuguese poster designers and, consequently, of the history of design in Portugal. The set of topics presented provide a more specific overview of the practice of design based on the details of the signature to tell a (hi)story spanning from the 17th century to the 20th century, thus contributing to the construction of Portuguese Design History.

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From the improvisation to the solution: the Design in the casual market of the city of Rio de Janeiro

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Design / Casual market / Street vendor / Rio de Janeiro / Brazil

This paper deals with the design in other areas using the example of street vendors for this approach. Here are some examples of production of artifacts by these professionals, which lack training in design. We believe that such vendors, trying to solve the problems of their own business are doing a design. And so we propose a reflection of an informal design in the informal market.

1. Introduction

Corporate design is used as a way to make businesses more viable economically, socially and environmentally. In the so-called casual market such solutions are most often what make the business viable. Rio de Janeiro, which is a city that attracts a large number of people, coming from peripheral cities and states, is a place you can find good examples of this casual market.

Being a street vendor is one of the few opportunities for these people to insure the livelihood. From the periphery to the center, along the sidewalks and city streets, this is indeed a bleak reality, without the glamour of the design world. Far from the reality of universities and design agencies, the casual worker is creative in finding alternatives to make his routine less arduous, his products more attractive and his business sustainable. From the improvisation to the solution, away from methods and theories, the street vendors create their own design artifacts, so as to use them in their everyday work life. They give it new uses and new meanings. In this article we attempt to analyze this resignification phenomenon of single artifacts of daily life as a way to make design.

2. An informal design

According to the press room of the Foreign Ministry, in 2009, the turnover of informal economy was R\$ 578 billion (about US\$ 306 billion), an amount equivalent to 18.4% of Brazilian Gross Domestic Product. If this informal economy has a significant influence over government budgets, it certainly affects other areas, like those of a cultural and project nature. We can see that the relevance of the casual market is already clear to the government, but is the design world aware of this? If we start from the premise that design should be a project to be reproduced on an industrial scale, we certainly could not include the informal production in this category. But, taking into account that design is a language that is 'expressed by shape, color, texture and image of an object' (SUDJIC, 2010) it would not be absurd to consider those the artifacts, produced by street vendors, as design artifacts.

It is common practice in design research to include design artifacts produced before the formalization of the profession in Brazil as part of design history. Furthermore, it is also common to find professionals from different backgrounds working in the field of design. Therefore, we can go further and accept the fact that it is possible to make design without having a professional training in the field. Considering that design is related to conceiving an artifact or an idea and make it feasible, in order to solve a given problem. Any person capable of making it would be making design. In a sense, he would be making a design deprived of academic rigor, but still a design.

Thus, we proceed with the proposal that there is an informal design practice in the casual market. However, unlike the practice of informal trade, which affects the government due to nonpayment of taxes, this kind of informal design has nothing illegal. With efficient solutions, the absence of a formal method to design does not result in artifacts less significant than those we see on the businesses market. It is just a different way of making design. At least we assume so. All in all, once solved the problem, we should have a good design.

3. New uses, new meanings: the practice of design from street sellers in Rio de Janeiro

Styrofoam®, barbecue sticks, tin of food, can of olive oil, aluminum dairy, bicycle and sunshade are just some examples of artifacts that gain new uses and meanings in the hands of creative and autonomous informal workers. What CARDOSO said in 'Design for a complex world' confirms what is seen on the streets, either the periphery or the center of the city: 'the power to reframe the artifact is in the hands of those who use and, from the moment it is socially agreed to accept the new meaning, this can be extended to an entire community of users' (CARDOSO, 2012:153).

A Styrofoam® box, at the same time that packages and keeps beverages chilled, serves as a display for them. It is common to see cans and bottles display on the box cover. Some street vendors use the package full of drink others prefer to put them empty. For such empty cans and bottles, the vendors use barbecue sticks which are stuck in Styrofoam® covers. The bottles are docked upside down by the neck, and then the packages stay more stable. The success of the idea is observed in the recurrence of its use by different street vendors. Another interference that can be seen in the Styrofoam® is the reinforcement of its

structure with an adhesive tape. When money is not enough to purchase a cooler more resistant, it is improvised with what they have. That adhesive tape which in the industry is used for sealing shipping boxes is used there to create a protective layer on Styrofoam® box.

While the street vendors who sell beverages establish a fixed place to stay during their working hours, there are those who move through the city in search of a customer. As an example we have the peanut sellers. Eating a roasted peanuts is one of the options to stave off hunger in streets of Rio. If the peanut is hot it is even better. But what to expect from a product that is far from the ovens of a fixed establishment as a bakery or a coffee shop for instance? Those vendors know the importance

to provide a quality product and satisfy consumer's needs. Thus, they not just solve the problem of keeping the peanuts heated but take it to various places on the streets where there are few options of other appetizers. This kind of itinerant street vendor carries an artifact that is both support and stove.

A simple and economical option is to support the use of a food can. For the stove, a small can of oil serves to the purpose (Fig. 1). An example of this can be found with a seller that sometimes settles into a fixed place of Lapa's neighborhood. To get around the neighborhood he only needs to hold the wire loop attached to the support. To steady his point of sale, two wooden boxes - those used to transport fruits or vegetables - are sufficient to serve as a seat for the seller and as basis to display the peanuts. Some may argue that the solution is good, but unfinished or that looks dirty. So, we bring another example that can demystify the idea that street vendors do not care about the visual of their business.

Francisco is a peanut street vendor who walks every day from the neighborhood of Madureira to Del Castilho, both located in the north zone of Rio de Janeiro. He wears a white coat and carries his goods on an artifact he built by himself using an aluminum dairy. Surface clean and smooth, with devices for bracket on the floor and handle well finished, besides a small pot serving as a stove. We could even suppose that he had purchased the artifact ready for its purpose (Fig. 2). But not, Francisco is just another example of those anonymous people as the designers who also does design.

So far we do not talk about how these sellers move to their local of work. It may seem that we are turning aside the matter, but design also has an impact on this aspect. Let's see. With regard to locomotion, the reality of the street vendors is adverse to the employees who use the transportation benefits provided by their employer. A great amount of street vendors, which is responsible for its own profits and expenses, avoids the expense with transportation. Some asks the bus driver for a ride, others go on their foot and there are those who use their own means of transportation. Not motorized means of transportation, but a bicycle. This vehicle, free of fuel costs, is a good alternative to some street vendors. Not only as a means of transportation, but as its point of sale.

At a quick walk around the outskirts of 'Norte Shopping', one of the largest malls in the city, located in the north zone, you can find some examples of street vendors who use bicycles as an important device for their business. We present here two of them: José Alves Pereira and Ananias. José is an itinerant that migrated from Ceará to Rio de Janeiro. Nowadays, he lives in the neighborhood of his working place. José sells beverages and snacks at a fixed place near to the mall. His customers are people who work around there as taxi drivers. The beverages he stores in two flasks. As for the snacks he uses a Styrofoam® box customized by himself: brown adhesive tape to protect the out-



Figure 1. Support for peanuts, Lapa's neighborhood, Rio de Janeiro (photo by Camila Peres).



Figure 2. Support for peanuts, North Zone, Rio de Janeiro (photo by Camila Peres).

side of the box, and inside a plastic box for easy cleaning and storage. All this is mounted on a bicycle. In an improvised way, José, ties a sunshade on the bicycle with elastic. That artifact originally designed to be used in the sands of the beaches, over there, with José, also gains an umbrella function [Fig. 3]. It not only protect him in the sunny days, but when is raining. Ananias, Joseph's competitor, also uses a sunshade for the same purposes. However he adds that one function of the object is to call the attention of customers.

As well as Francisco, the peanuts street vendor, Ananias has invested a little more in his business. Like José he also sells snacks and beverages, but in greater variety and with a better presentation. Aware of his creative solution, the vendor did not allow us to take pictures of his point of sale. Here we will try to translate some of the resourcefulness of Ananias. Unlike José, who bought a ready-made bicycle, Ananias created his own, which is a mix of bicycle and tricycle. Joining three parts of different origins, the vehicle carries a cooler box and a plastic trash in front, in the middle of the vehicle a sunshade is attached, and finally, at the back it carries the snacks and another cooler box. It is important though to highlight the aspects of the back of this vehicle: occupying more than one third of total length, a structure of glass and aluminum is placed as showcase for the snacks. Ananias' vehicle has a device, responsible for leaving the vehicle stand still, similar to the one we can see in the front of José's bicycle [fig. 3]. In addition to this, there are two rear wheels that provide balance. The colors and the materials used by Ananias leave an evidence of preoccupation with the visual. Except for the sunshade, everything on his point of sale is red and white: the vehicle, the coolers, and even a fabric that decorates the snacks showcase. Be the harmony of colors, the way to expose the goods, the careful choice of materials, it seems fair to say that this is another example of making design.



Figure 3. Itinerant point of sale, North Zone, Rio de Janeiro (photo by Camila Peres).

4. Final considerations

Through the examples shown here, this article sought to identify design practices in territories other than those we are accustomed to. Such practices, which devoid of formal rigor, we proposed to call informal design. If it worth or not, the proposal of looking at the material production on the streets of Rio de Janeiro, at least it brings us the following reflection. The success of a seller, at the same time creator and customer, probably lies in the fact that he knows exactly what he needs. What therefore makes us think that good designs are those that can solve a given problem.

Finally, another consideration that we can draw from this study is that the design should not be reduced to an in-house activity. It must include research in the field and the contact with the prospective customers. Creative solutions found in the streets can serve as support for generating new ideas. After all, it is in everyday experience, observing the environment around them that designers will build their own visual repertoire and therefore increase their chances in succeed in the projects.

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From the improvisation to the solution: the Design in the casual market of the city of Rio de Janeiro

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Design of dissent: the multimodal discourse in Guerrilla Girls and DASPU

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Design of Dissent / Multimodal Discourse / Gender / Micropolitics / Identity

This is a visual-verbal analysis about happenings in contemporary Design, present in the social corpus. The concept of Design of Dissent, as coined by Milton Glaser, is considered as theoretical presupposition. The objects on stage are outdoor posters and T-shirts, produced respectively by GUERRILLA GIRLS and DASPU. Multimodal Discourse is used as a methodology.

1. Introduction

In 1977 the New York State Department of Commerce, asked for Milton Glaser's contribution on a campaign to help stimulate the tourism in the city. At that time, New York was tarnished by the criminality in its streets, seen as a non-welcoming and hostile city. Aiming to change these perceptions, the designer proposed the logo I Love NY.

Glaser, when describing the process of creating this image, the most appropriated around the world, says that considers the result of this logo a mystery. The option of doing it pro bono was based on the will of encouraging its reproduction, and that it could really affect the New Yorkers. Although Glaser feels bothered by the banality of some mentions related to the original idea, he also states that does not regret the option for its democratization.

As to his project attitude, Glaser always considers the collective, the surroundings, and the possibilities of the effects of visual result in his projects. To Glaser, Design means a visceral act, a necessary act of dissent against what was previously established. That is, something capable of messing up.

Thereof the category of Design of Dissent might be considered. Even though there still aren't deep reflections upon this idea, the fundamental concepts, as proposed by Glaser and investigated by Steven Heller, have too much in common both visually and in terms of project, with DASPU and Guerrilla Girls.

Milton Glaser, despite his well-known maturity and irrefutable professional experience, doesn't state any definitive positions nor has attitudes with predictable effects. He approaches the possible uncertainties that are likely to happen when visual results are incorporated to the social interstices. Thus, when Heller considers that the Design of Dissent might be seen as subversive as a crime, though with a positive attitude, Glaser refutes it, questioning the meaning of positive concept.

The designer contextualizes the term dissent in the American soci-

ety, having been largely used by religious leaders, such as Martin Luther King and Malcolm X, in the sense of destabilizing, of questioning what was previously established by a supposedly stable social organization. With no certainties, even when questioning whether to dissent or not, he prefers dissention as a transparent attitude facing the structures of power.

The multimodal discourse, as a tool, such as proposed by Gunther Kress and Theo Van Leeuwen, fits itself, as a methodology, into the widening of reflections about the possibilities in Design.

The good humor, the dealing with facts, and the double meaning are part of the discourses articulated by the GUERRILLA GIRLS and DASPU.

2. "Do women have to be naked to get into the Metropolitan Museum?"

Nem toda feiticeira é corcunda.
Nem toda brasileira é bunda.
Meu peito não é de silicone.
Sou mais macho que muito homem. (LEE:2008)

*Not all witches are hunchbacks
Not all Brazilian girls are booties
My tits are not silicone
I am more macho than many men.*

In 1989, this visual-verbal discourse was printed on outdoor posters, designed by a group of women artists self-called Guerrilla Girls. In the mid-eighties, this collective, who would wear gorilla masks to maintain their anonymity, reproduced in one of their posters, since Jean Louis Ingres, a reclining female nude, with the woman's head replaced by a gorilla's and accompanied by such sentence, stating that less than 5% of the artists in the Modern Art Sections are women, but 85% of the nudes are female.

Differently than what happened in 1914, when Mary Richardson, a feminist activist, attacked the Venus and Cupid, by Velasquez, exhibited at the National Gallery, as way of provoking the British Parliament to vote for the feminine vote, the GUERRILLA GIRLS [GG] chose another way of denouncing the discrimination of women in the Art World: the use of graphic toolssupports.

The first posters, signed as Conscience of the Art World, were displayed on kiosks, walls, and construction sites in Manhattan in 1985. There were rumours in the media that the group might be composed of renowned artists.



Figure 1. Guerrilla Girls outdoor in New York (GG:1995).

The GG, then, started showing on stage, always in a group, allowing photographs and interviews. Adopting nicknames of famous women, such as Frida Khalo, Georgia O'Keefe, Romaine Broks and Käthe Kollwitz (examples), they have never shown their real faces.

Their public actions, including demonstrations at exhibitions opening nights and graphic material posted inside theaters' toilets, arouses the question that it might be the return of the feminist movement performing a crucial role in the insertion of women artists in the market.

The posters, postcards, and t-shirts distributed and commercialized by the GG start to be published in art magazines and in the big newspapers. GG starts to offer lectures in schools and museums. In 1987, organizes a parallel exhibition to the Whitney Museum's Arts Biennial, when they showed statistics of exhibitors at new-yorker art galleries, revealing the way too low (or null) percentages of women participation.

The anonymity is understood by them as a way of protecting their personal careers, besides being a way of resistance to the fact that women must always be adequate to the world of apperances. The creation of a collective identity bestowed the group on the desired visibility (or undesired?).

GG is only an example of women artists' actions facing questions such as gender and micropolitics in Design. It's taken into consideration that, in 1919, there was a march of 2 million women members of the National American Woman Suffrage Association, for the right to vote. In the same year, soviet artists published

political messages in posters and folders displayed urban spaces, using the public ways of transportation as toolsupport. And in 1968, Faith Ringgold, avant garde black woman artist, protested to the absence of non-white women artists at the same Whitney Museum.

The action by the GG reinterprets the feminist movements using the mass communication and the consumption society media and techniques.

The practice of intervening in public spaces, through their performances at some events, roused the media interest about such strange group of women.

1. "Shameful is Daslu"

Luz na passarela que lá vem ela. (É O TCHAN: 2005)

Lights on the runway: there she comes.

The sentence Shameful is Daslu was printed in a Brazilian newspaper, as an expression by Gabriela Leite as a response to the law suit filed by the high end multi-brand store Daslu when the brand DASPU was to be launched.

Created in 2005 by the NGO Davida, as a way of achieving self-sustainability, DASPU proposes ways of visibility to human and civil rights, as well as questions about sexual health, and the regulation of prostitutes as professionals.

Such origin DASPU can be considered as a promising misunderstanding, a concept coined by the Belgian psychologist Vinciane Despret, from the thought of the french sociologist Bruno Latour. That is, a misunderstanding "that produces new versions of what the other may happen to create (...). The promising misunderstanding is, in other terms, a proposition that, the way it proposes itself, creates the occasion for a new possible version of the happening (...)."(DESPRET: 2005)

Throughout the years, the demonstration runways by DASPU, revealed in fashion shows, has attracted the interest of both national and international media. The sharing of headlines between the prostitutes' brand and internationally acclaimed top-models is a fact for multiple analyses.

Making T-shirts as a canvas has been the pièce-de-résistance by DASPU. Created and produced by the designer Sylvio de Oliveira since 2005, the T-shirts state, verbally and visually, DASPU/Davida's ideas and principles. For example, I love PU, based on Milton Glaser's I Love NY, and Garoto DASPU (created by a group of Design students), which, suppressing the image of the kid who buys the Garoto chocolate bar, makes the body into it.

The use of garments as a way of communicating ideas is not new. The possibility of establishing a dialogue of imagery between who wears it and who sees it is perceived. It concerns the



Figure 2/3 Guerrilla Girls in New York (GG: 2012/1997).



invisibility and visibility. Invisibility with attitude as an intention of DASPU parades. Visibility for who receives and perceives, in the body and in the sight.

States the researcher Elaine Bortolanza:

The image of the hooker parading on the off fashion runways provokes a shuffle on the feminine sexuality models, so that there's no way to identifying who the real hooker is. More than that, there's an intense shuffle of spaces that, until then, were recognized as a place for political fights. It's the power of resistance infiltrating the gaps of contemporary capitalism, provoking tortions and distortions in the ways social activism has been performing. (BORTOLANZA: 2009)

Figure 6/7/8/9. Glaser: 1997, Oliveira:2005 / Anonimous: undated, 0 Rodo Coletivo:2009).

DASPU means wearing Fashion to change. It's a shameless Fashion Design with no frontiers. It's attitude with class.

3. Conclusion

The proposition of making visible whatever affects us is in line with what GUERRILLA GIRLS and DASPU are putting on stage.

Nowadays the technological advancements generated substantive changes in the communication media. From a monomodal communication, in which the oral or written language was central, we went onto a multimodal situation in which the visual aspects - color and image – began to be more prominent.

In the definition by Gunther Kress and Theo Van Leeuwen:

Multimodality is the combined use of a diversity of semiotic modalities in the design of a product or event. That is, common semiotic principles operating in different modalities (KRESS and VAN LEEUWEN: 2001).

Therefore, the tradition where the discourse is shown in diverse modalities, and is realized by varied media, was breached. On the contrary: What is thought and seen is that the discourse action becomes effective and articulated in a multiplicity of practices and modalities, among them the human social action.

In that sense, Mary Jane Spink state:

The challenge, therefore, is to adequate the discourse analysis to the description of multimodal products, taking in consideration the production processes of fundament meanings, concurrently, in the physiology of humans, taken as embodied beings, in the semiotic potential of the used materials, and in humans taken as social actors. (SPINK: 2000)

The multimodal discourse has an address. It is part of a chain of communication that is intrinsically dialogical. Thus they are products within themselves, and therefore don't finish at the end of the production processes, even though they possess uses and affect that extrapolate the intentions of the products.

The discourse analysis, though misconfigured by the multimodal perspective, is eventually restricted to the product and the understanding of the potential intentional - and not compositional - effects, resulting from multiple associated semiotic modalities.



Figure 4/5. February,14/2006.

The multimodality gives up on the exclusive focus on the verbal, beginning to consider, as a whole, image and word. That is, the visual-verbal language..

The gathering of these distinct groups, both geographically and in terms of their proposed goals, contributes to imbrications of questions such as territoriality, timelessness, and globalization.

In a world where only one way of thinking is predominant, there happen to be alternatives in Design. Enacting? Thrilling? Affecting? Don't know. These are some aspects to be considered in order to expanding boundaries and frontiers.

Simply putting these questions in the agenda, though, certainly

hasn't brought us precise answers or helped finish the puzzle.

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Design and the street

GEIGER, Noni / PhD / ESDI - UERJ / Brazil

Rio de Janeiro / Wall / Urban landscape / Intervention / Cultural heritage

“Design and the street” aims to contribute to the widening of the notion of the field of design, still viewed by many as an activity that consists just in conceiving and inserting objects in the world. Pointing towards the direction of its overlooked role as an information agent, it intends to present an original and expanded panorama of the field, where Rio de Janeiro is the site of action.

1. Introduction

This article aims to contribute to the widening of the notion of the field of design that is still viewed by many as an activity that consists just in conceiving, developing, producing and inserting objects in the world.

It points towards the direction of its overlooked role as an information agent, including the analysis and critics in design. Thus, the article “Design and the street” intends to present an original and expanded panorama of the field, having as its site of action the scenario of the urban space of Rio de Janeiro.

The starting point of “Design and the street” lies on three individual academic works of experimental nature developed by ESDI - Escola Superior de Desenho Industrial¹ students as their final course project. These highlighted projects, among many others of interest, introduce new ways of approaching design to the talent of Rio as a city of distinguished cultural heritage – local, national and global – in its multiple aspects.

Since the beginning of its regular activities, in 1963, ESDI maintains a curricular structure on a serial scheme, and one of its pedagogical fundamentals implies on the engagement of the student, throughout his last academical year (two semesters comprised), on a design project of relevance, stated by himself. Relevance meaning an effective contribution to the field of theoretical and/ or practical research in Design.

We shall, though, make clear that “Design and the street” does not put in perspective or addresses to a discussion about design teaching methods, but, rather, to contextualizing the circumstances where these projects took place. That also means that our assumption is that the university, as an institution, must

¹ ESDI [Superior School of Industrial Design]: established in December 1962, it is a public school and free of tuition, considered the first institution in Brazil to offer a design course of superior (university) level. Since 1975, it has been integrated to the faculty units of UERJ - Universidade do Estado do Rio de Janeiro [State University of Rio de Janeiro], though remaining in the same address, in Lapa, downtown Rio. The emphasis in this information concerns to our belief of the influence of its location on the very mentality of the School. But this is another matter...

represent a fundamental agent that contributes to a society that desires to install a public policy – or policies – that recognizes the importance of its cultural heritage.

“*Muro cotidiano*” [Daily Wall], by Clarissa de Oliveira (2011); “2011, Praça Mauá”, by Rafael de Vasconcelos Barboza (2011); and “7” [Seven], by Guilherme Schneider (2001), feature unique strategies of understanding and intervening in the urban space of Rio de Janeiro.

2. Space/ time

Once it is the use that qualifies the space and the Earth environment, there is only distance and, therefore “quantity” (geophysics) to travel thanks to a movement (physical) more or less durable, the fatigue of a path where the vacuum only exists through the action intended to trespass it. (VIRILIO 1993: 118)

“Muro cotidiano” [Daily Wall] originates from the observation of an urban space that belongs to the student daily journey, which awareness was triggered by a proposed academic exercise consisting in the description of certain aspects of her ride from home to the university: ‘among several locations and boroughs through which I fare daily, no doubt that Avenida Brasil² is the most significant of all’.

Every day, more than 250 thousand vehicles of all sizes run through this highway. People of all social classes, but mostly C and D, commute towards Downtown and the South Zone of the city, to work. In Geography, this movement could resemble the pendulous movement: simple population flows that do not actually correspond to migrations, since they are not accomplished aiming at a final shift, being implied in the departure of the individual the concrete perspective of his return to the place of origin. In other words, every day, thousands of people travel around 50 kilometers, the equivalent to one hour and a half to three hours, depending on the traffic outflow, to arrive at their work location and similarly to get back home.

According to Lynch, routes are, to many people, the predominant elements in their image of the city. As they move through avenues, streets, viaducts, railways, the other environmental elements get organized and connected.

Paradoxically, it is the vision and experience of the same inhospitable

² Avenida [Avenue] Brasil is one of the most important urban sites in Rio de Janeiro and the longest avenue in Brazil. It comprises 58 kilometers of extension and crosses 27 boroughs of the city of Rio de Janeiro: São Cristóvão, Caju, Benfica, Manguinhos, Bonsucesso, Ramos, Olaria, Penha, Cordovil, Vigário Geral, Parada de Lucas, Jardim América, Irajá, Acari, Coelho Neto, Barros Filho, Guadalupe, Deodoro, Ricardo de Albuquerque, Realengo, Padre Miguel, Bangu, Vila Kennedy, Santíssimo, Campo Grande, Paciência and Santa Cruz.



Figure 1. View of the wall from Avenida Brasil, before and during the intervention.

pitabile landscape ‘degraded, ugly and dirty’ that will stimulate this user of public transit transportation that spends great part of her daily time in this ride, to cogitate developing a project which main objective is the intervening on a wall along Avenida Brasil, providing the spectator with a different experience, unusual and submitted to the ephemerality of time.

Starting from a thorough mapping of the Avenue, photographic recordings, and prospecting of the most suitable sections to work on, one wall located in Irajá seemed to be interesting under many circumstances – it was the exterior wall of a municipal public school, at the corner of Molière street, and there was a bus stop right in front of it (at the side of Avenida Brasil). These features proved to be very positive to the project: as a school wall, a qualifying and reflexive agent might be enhanced to both, teachers and students.

‘[...] the strength of the image increases when the mark coincides with a concentration of associations.’ (LYNCH 1997: 113)

The school has 730 students, 36 teachers and 18 staff members, ranging from the 6th to the 9th series of the Fundamental Course, operating on the first and second turns. It also functions at night, offering the Secondary Course. Many communities of low income as Amarelinho, Acari, Coelho Neto, Fazenda Botafogo, Pedreira e Bairro Araújo are attended by the school.

Attentive to the relation space/ time, some kind of intervention was considered, without endowing an aestheticizing function a priori. The wall that surrounds the school has an extension of 50 meters and is 2.10 meters high.

The project was developed with the idea of creating visual patterns that, when applied on large extension surfaces could be viewed, mostly by people in transit (fig.1). The concept of patterning, that carries in itself the possibility of modularity and programming is a resource that, allied to the chosen stencil technique, can be very effective, allowing the production of elements of easy and fast repetition.

There are also objectives of this work: trigger a discussion within the public sphere about the condition of these walls and of Avenida Brasil itself; constitute on means for reflexion also in social networks; bring up a debate on art at the school where the intervention on the wall was made, both to students and teachers and clerks.

The posterior validation of this project, accomplished with the school community – comprised students, teachers, employees and relatives – and passers-by, beyond the transformation of this wall in a sort of communication interface between the author of the project and her spectators, brings up amazing clues that repropose new thoughts and further ideas.

3. Time/ space

“2011, Praça Mauá” is a book-record of Praça Mauá³ and its surroundings, also comprising Saúde⁴, and what was there to be viewed in that year of 2011. What will be there tomorrow, no one knows – this book is an invitation to whoever reads it, to venture in this area and find out what is there now, or can be tomorrow, or even find out traces of what have been. Space is mutant and will always display novelties to whom seeks for them.

The designer can compose this space by its formatting, informing, shaping. He can not just insert objects on a site, but make himself present by reinterpreting it, utilizing tools to assemble what is not gathered at first, to link what is not connected and propose new readings. Instead of placing things, the designer can remove things, or rearrange them, giving new use and new meaning. Space, though, is the example of a living object, that does not have an end – its present shape is the limit of time updating, it is the shape that it has now, in this very moment. Mutation is constant and it is not the effect of one single person’s action, but of all that are there.

There seems to be a public image of any city that is the overlapping of many individual images. Or maybe there is a series of public images, each one created by a significant number of citizens. These group images are necessary whenever it is expected that an individual successfully acts in his environment and cooperates with his fellow citizens. (LYNCH, 1997: 51)

This area is a unique region of urban intersection, where converge many elements that state other ideas of Rio de Janeiro, existing in different times. Besides that, the building of Porto

³ Area mainly defined by the Praça [Square] itself, the waterfront and the harbor, built between 1904 and 1910.

⁴ The researched site is inscribed within the virtual polygon defined by the avenues Presidente Vargas, Rio Branco, Rodrigues Alves and Barão de Tefé; and Camerino street. These streets are frontiers between urban regions – Camerino and Barão de Tefé, actually one single street, divides Saúde from Gamboa; Rodrigues Alves borders the continent to the sea; Rio Branco originates the Square contour; and Presidente Vargas separates all this region from the great commercial zone of the city.



Figure 2. Some spreads of “2011, Praça Mauá”.

Maravilha [Marvel Harbor], a government project that aims to transform the harbor area will, once more, generate changes which target consists in reformulating the idea of city that the official ruling wants for Rio.

In this urban site ‘threatened by progress’, from architectural and design references, also in vernacular scopes, layers of meanings and its aura are registered on a publishing (fig. 2) conducted by the literature of Charles Baudelaire, Hélio Oiticica, Ítalo Calvino, João do Rio, Lima Barreto, Walter Benjamin, among other ‘anonyms’, residents of this set.

It is, then, an occasion for us to think about issues of evolution and permanence in the urban space, of elements that reach us, derived from other times, that show us that little remained as it was, and that years from now, the present constructions will not stay even to their original planning. As tells us Argan, these objects, constructions, manners, activities would be as ‘holes’ in the current layer of the city, that let us glimpse at lower layers that were there and today are on a permanent recontextualizing process, as everything new that may be inserted in that place.

Avoid saying that sometimes different cities succeed in the same ground, and with the same name, burning and dying without knowing each other, incommunicable to each other. Sometimes, the names of the inhabitants remain the same, as the voices accent, and even the face lines; but the gods that live under their names and in the soils left without warning and strange gods settled down in their places. It is useless wondering whether these are better than the former ones, since there is no relation between them, in the same way that the old postcards do not portray Maurília from the past, but another town, that, by chance, was also called Maurília. [CALVINO 1997: 30-31]

From the architectonic point of view, all periods are also depicted in this polygon. The colonial constructions from the beginning of the occupation in the surrounding hills; the eighteenth century houses at Morro da Conceição; the eclecticism of Pereira Passos’ renovations, inspired in Paris and typified by the Palace D. João VI; the repercussion of the American architecture in the building of the first city skyscraper – the landmark A Noite [The Night]; the rough and oppressive style of the Federal Police building, constructed during Vargas’ government; the modernism of Mariano Procópio bus terminal; the ‘contemporary’ glazed structure of the RB1⁵.

The book-record “2011, Praça Mauá” restores the idea and the possibility of flanerie in Rio de Janeiro and proposes to the

⁵ Building located at numeral 1, Avenida Rio Branco.

reader reframings of this prototypical space, also revealing pulsations and vocations distinguished along 24 hours and the days of the week. Yet, above all, it encourages each of us to the reviewing and sharpening of our perception before passages where we became indifferent.

4. Times/ spaces

“7” [Seven] is the emblematic title of a work that deals with multiples of this matrix number. Over seven weeks, different at each, sets of seven posters are affixed on the walls of seven public locations of intense traffic at the city of Rio.

These series of posters, glued ‘helter-skelter’ during the night, call the attention of the pedestrians for their graphic characteristics and their semantic content, so distinct from the recurrent and familiar patterns. Almost exclusively typographic, these posters display meta-messages that puzzle their spectators. A variety of quite diverse testimonies are captured in the very site specific and edited on a documentary video that becomes, itself, the project.

“7” subverts and explores concepts of communication in design by deconstructing language codes. Street posters – graphic pieces that for long convey advertisement, political campaigns, pamphleteering – become weird to the medium when the message does not fit into familiar categories.

Noticing the permanence and the integrating/ disguising of ‘common’ posters in the landscape of the city – in places, walls, or sidings, this project did not intend to become novel by means of disclosing a new space, still unowned, safeguarded, but producing a fact on those undifferentiated environments⁶.

Another decision regarding the nature of the project consisted in determining the variable “time” as constant, both as the day of the week for its ‘onset’ in the spot, as the exclusive period⁷ of one single week of permanence for each of these posters’ series, rescuing ‘the esthetics of the arising of objects or of people that detach in the apparent horizon of time and place units of the classical perspective [...]’. [VIRILIO 1993: 102]

⁶ Jardim Botânico street, at Lopes Quintas street; Muniz Barreto street, in front of FACHA; Nelson Mandela street, near Botafogo subway station; Laranjeiras street, near Santa Bárbara tunnel; Evaristo da Veiga street, close to Cinelândia; Passeio street, at ESDI’s rear gate; and Pareto street, near Praça [Square] Saens Peña.

⁷ The couple of artists Christo and Jeanne-Claude adopted the two weeks constant for the lasting of their installation projects.

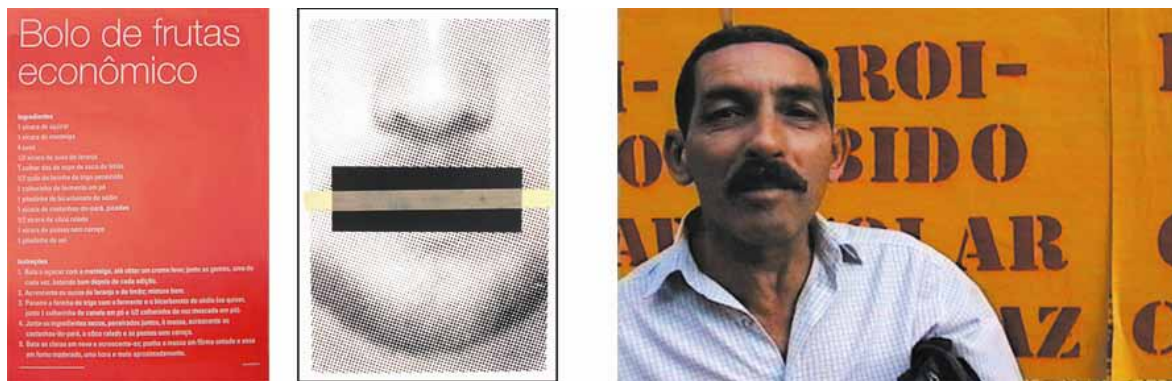


Figure 3. Poster 1 and poster 2 of seven, and frame of the documentary video “7” [Seven].

The characteristics of its regular frequency and the deliberate dissonance between the medium and the message eventually created a kind of pact with the spectator.

In all posters of the series, the printing in silkscreen consists of one single paint color. The use of this technique and limited graphic resources integrate the very concept of the project, contributing to the desired aspects of its ephemeral feature and production agility, corroborated by the industrial and commercial size of the 2B sheets of paper, measuring 66 x 96cm, that prescind cutting and finishing.

As an example, the first poster exhibits a culinary recipe, white type on red paper, reference to a known historical fact: during the military dictatorship in Brazil, when newspaper articles were censored, the editors published recipes instead to occupy the space, on an ingenious way of telling their readers that something important had been prohibited⁸. Here, the “Economic fruit cake” recipe was selected for its dubious meaning.

On the second poster, printed in black paint on white paper, a very enlarged photographic face which image boundaries exceed the limits of the field, in open and big screen dots, may suggest technical restraint. This face, graphically turned unrecognizable and anonymous, is differently perceived when the observer is at 30 centimeters or at one meter or at ten meters distant. However, this is a trick that hides a paradox, because it is not there, on a gestalt approach, that lays the designer control over the reception of the message. In this poster, another physical dimension is added: a muzzle made of black paper is fixed with adhesive tape over the correspondent area of the mouth [fig. 3]. At the end of this poster cycle, all paper stripes had been removed. September 11th 2001 had happened exactly one week before.

To this, followed five more series.

8 In 1970, the artist Cildo Meireles used the classified advertisements newspaper pages to produce some works of his “Inserções em circuitos ideológicos” [“Insertions in ideological circuits”] series.

5. Conclusion

These three works have in common the final goal of inciting in the citizen the role of observer, stimulating the looking at his city, heightening his attention, enhancing his experience, refining his senses, constituting a critical audience.

In conclusion, “Design and the street”, by these case studies, considers fomenting and increasing the debate on the outlook of relevant design’s functions, notably in its relationship and insertion in the environment, and the transformation of the contact surfaces and friction of Design with Art and Architecture.

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Designing new tattoos: relations about technology and tattoo design

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New Tattoos (NTs) / Dynamic tattoos Technology / Design

The development of new technologies allows the design of responsive dynamic tattoos. What we call *New Tattoos* (NTs) anticipate novel methods of communication, transforming the skin into a new source for interactive interfaces. Our purpose is to present a preliminary approach of some materials and technologies to be used in near future to design and produce the NTs emphasizing how the design of tattoos is affected by the development of new technologies.

1. Introduction

The exploration of tattoo as a language is related with the possibilities allowed by the current technologies used by the tattoo artist and his ability in manipulating these technologies. In this context, what we call here “New Tattoos” (NTs) is made possible by a range of emerging biotechnologies (nano sensors, inorganic LEDs, flexible displays etc.) that enable ways of exploring tattoo designs. These new epithelial artifacts (responsive dynamic tattoos) have been designed, anticipating novel methods of communication, and transforming the skin into a new source for interactive interfaces. NTs acts as a motion tattoo reacting to organic changes (heart beat, glucose range, emotional changes etc.), mechanical (touch on the skin) and environmental (temperature and light changes etc.).

The dynamics of the NTs generated on the skin act as indicators of emotional and endocrinal conditions of its users. The combination of external factors (environment) and internal factors (organism) will be crucial, since the aesthetic results will be governed by the interaction between subject/NT/environment.

In this context, it is essential to reflect about the design of the NTs and the relations between tattoo, design and technology.

2. Tattoo technologies and the process of tattooing

Tattooing is an invasive intervention performed in the skin through micro perforations made by sharp objects. The low variation of materials and methods related to the practice makes it clear that the insertion of the ink into the skin remains virtually the same since its inception. There is an alternation among the use of animal bones, pieces of wood and sharp pieces of metal. With its invention, changes in the characteristics and design of the tattoo practice were made.

The first electric tattoo machine was created by Samuel O'Reilly and inspired by the autographic printing, an engraving machine invented by Thomas Edison in 1876. It consisted of a rotative electric motor that moves a shaft with needle in a brass tube up and down so as to record an image on the surface of the metal plate (GILBERT 2000; SCHIFFMACHER 2005). In 1891, O'Reilly patented the adaptation of Edison's invention being possible to record images on the skin. The patent of the first electric tattoo machine showed that it was possible to use electricity in the process of tattooing. Concerns regarding to the provision of the machine components and their implications in terms of adjustment of the apparatus resulted in the patent generated by Percy Waters in 1929. The invention of Waters and his concerns regarding the geometry of the components of the machine resulted in “what would become the first modern tattoo machine, in terms of frame geometry” (ROE in: *The Tattoo Machine*).

However, for more than one hundred years the device to perform tattoos remain basically the same (AITCHISON 2009). Despite some variations, nowadays tattoo machines have minimum changes compared with the device developed by O'Reilly (SCHIFFMACHER 2005). The current mechanism acts as an electro magnet in which two electromagnetic coils trigger or interrupt the circuit so as to move the needle up and down to deposit ink in the skin.

The images on the skin are static and the reversibility of the process difficult (or impossible). To modify some of the inherent properties of the tattoo practice, it is necessary to plan new epithelial interfaces. This static nature of the tattoo is the main factor to be modified in the planning of new forms of this intervention.

3. New technologies for New Tattoos (NTs)

The development of new biomaterials (e.g., materials that are developed to be inserted in the human body without harming the health) and developments in the areas of design, art, health and engineering, through biosensors, carbon nanotubes and nanotransistors, among others, allow the development of technological artifacts that can be inserted in and applied to the human body. Researches in the field of electronics focused on printing silicon transistors on flexible materials and the design of electronic ink (e-ink) has enabled advances in building new extremely thin and flexible displays. To propose new explorations of tattoo art it is necessary to develop and analyze new interfaces developed in multi-or interdisciplinary research teams involving knowledge from the fields of design, art, science and

technology. This “new interface”, made possible through the development of biocompatible materials, if coupled to the human body, might inaugurate a new range of experimentations of non-verbal languages and multi-sensory expressions. The body will become a source of dynamic and reversible interventions, temporally regulated or oriented randomly. Based on man/machine hybridization research groups develop epithelial interfaces that enable the design of what is considered the *New Tattoo* (BITARELLO et al. 2011).

Electronic ink

Electronic ink (<http://www.eink.com/technology/howitworks.html>) (Figure 1) is a material developed through research conducted in the fields of chemistry, physics and electronics. It is composed of millions of microspheres with the diameter of a human hair, each one containing positive and negative charges, suspended in translucent liquid and that are attracted by electrical fields to generate images in a given area.

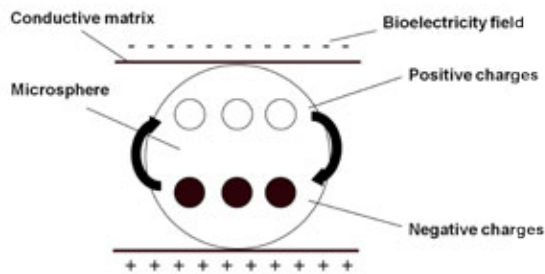


Figure 1. Electronic ink.

The electronic display with e-ink is formed due to the fact that the ink is printed on a sheet of plastic film that is composed of a layer of circuits that form patterns of pixels that can be manipulated. The appropriation and use of electronic or digital inks for the development of NTs is due to their possible application in many areas, allowing the development of biocompatible electronic interfaces for image generation.

Levy and Cherry (2001) described a concept similar to electronic e-ink, composed of biocompatible materials. It is inserted into the body through the conventional tattoo procedure (micro-perforations by needles). The technology can be described as follows: microspheres containing charges (colored particles) suspended in clear liquid are inserted into the skin in their proper positions by specific needles or through microsurgery. The structural integrity of the interface is guaranteed because a biomaterial support (e.g., a rigid film, to be deposited in the body during the first stage of the intervention), which allows the insertion of the microspheres in the skin to form a continuous surface.

The electronic pigment is activated due to the fact that the charges of the spheres are attracted to or repelled by the electric fields generated by the body itself. The response to electric fields generates the images in the skin.

Electronic tattoo (<http://tinyurl.com/6rp9oo5>) (Figure 2) is an interactive tattoo that is triggered by touch. It is a concept from Philips Design’s research area called Design Probes. Electronic tattoos are a type of Skin Probes, which have evolved from research focusing on “particular functions of the skin” (Seymour 2008).



Figure 2. Electronic tattoo.

The production of e-tattoos is made possible by flexible arrays of pixels generated on the skin. Through a small surgical incision, encapsulated microspheres with colored charges suspended in a translucent liquid are inserted into the skin between two bio-electrically conductive arrays (<http://tinyurl.com/jr9ad>).

As the body is both an electricity producer and conductor, the charges can be attracted or repelled by the bioelectric field, generating images in the skin. The energy consumption of these inks is very low, and it should be possible to keep these tattoos in operation solely by the body’s own bioelectricity.

LED (light emitting diode) tattoos

LED tattoos are produced by ultrathin LEDs and biocompatible substrates and can act as photonic tattoos. Researchers (KIM et al. 2009, KIM et al. 2010) described the construction of inorganic light-emitting diodes (ILEDs) and photo detectors (PDs) that can lead to the development of LED tattoos. This group has developed nano-ILEDs and PDs, which are essential for the development of these tattoos due to their small size, which allows the use of extremely thin materials to optimize mechanical devices and interconnections.

Dattoo

Dattoo (<http://tinyurl.com/8x7g6c7>) is activated by reading the user’s DNA. The concept was developed by the designer Hartmut Esslinger, who states: “The idea of DNA tattoos (Dattoos) is to use the body itself as hardware and interaction platform, through the use of minimally-invasive, recyclable materials” (<http://tinyurl.com/8x7g6c7>).

This technological interface is printed by the user. All hardware is designed and created on demand on the web. Users build, test and choose the product according to their aesthetic and functional options. The printed interface is added to the body and its period of use is chosen during the virtual planning. When the period is over, the user simply washes the body region to which the interface was added to remove it.

Digital tattoo interface

Digital tattoo (<http://tinyurl.com/2rbkeh>) interface is a concept of a dynamic image of a cell phone on the skin. The prosthesis has Blue-

tooth and wireless systems to communicate with other devices. After the use of the device, the image disappears from the user's skin.

4. Questions about the NTs

NTs should inaugurate the exploration of a new range of nonverbal language and multi-sensory expressions. Through new technologies, the skin becomes support, and the organism source of dynamic and reversible interventions, temporally regulated or randomly oriented.

Sensors of body and environmental variations are at the core of these projects, read the necessary data to generate the epithelial output. Relying on the electrical conductance of the skin, patterns of organic changes are established. These values are measured by galvanic skin response (GSR), small variations in the conductance of the skin, caused by the sympathetic nervous system are used as an indication of psychological or physiological arousal (MADAM 2004). Based on wireless networks, these technologies enable the interconnection between a wide range of small sensors in, on or around the individual's body and its interface, the skin (LIOLIOS et al. 2010). They pick up organic and environmental changes and send the data through wireless body area networks (WBANs) and body area networks (BANs) to the NTs (LIOLIOS et al. 2010; PANTELOPOULOS and BOURBAKIS 2010; CHERUKURI et al. 2003; POST et al. 1997).

The organic and environmental variations such as pressure, light, temperature and movement etc., are captured by the sensor as input data which are translated and sent to the epithelial interfaces to generate the dynamic and interactive images on the skin (NTs) as output data (Bitarello et al. 2011).

The path of the designer/tattoo artist when designing the NTs

New technologies change the steps of the design of tattoos. In this context, tattoo artists will not handle traditional tattoo machines and inks but will start to use computers wherever they are so as to program the NTs that will be generated through the interfaces that will be inserted in the body of the user in surgical clinics. The tattoo artist who was concerned with the project of static images in the skin will be concerned with the manipulation of computer codes in the search for alternative languages for the tattoo that becomes dynamic and programmable. Moreover, even if the tattoo artist accompanies the surgical process, the professional acting in this step of the procedure must be the doctor.

In visual terms NTs differ from traditional tattoos because of their dynamics. One may speculate that a tattoo which was static, could be animated and generated in the skin (a static heart could be presented as a beating heart). Opposed to traditional static pattern of the tattoo, they will behave dynamically in correlation to organic and environmental conditions.

It is worth noting that this is not a matter of judgment in terms of

better or worse, or if a technology and its results are better than the other. It is, rather, the possibility of exploring new ways of tattooing. See these interventions as abstract images (e. g. points and lines, or non-figurative areas of color) reacting to touches and organic variations. Generating randomic patterns the NTs will be opened to present unexpected results to its users and those who observe them. In this case, the properties of the NTs would be highlighted i. e. the speed with which they will be generated in the skin and movements they will present. Fast movements will be correlated with an increased metabolism and slow movements in response to a decrease in metabolism, for example.

For a better visualization of the differences between the traditional tattoo and NTs we present the table below (Table 1):

	Traditional tattoo	New Tattoo (NT)
Technology for application	Bones, animal teeth, pieces of wood, needles etc. Conventional procedure of tattooing.	Biotechnology, biocompatible nano electronics. Biocompatible substrates, carbon nanotubes. Conventional tattoo procedure using specific needle for the insertion of the electronic ink in the skin or micro surgery.
Patterns (characteristics and properties)	Static images characterized by design based on two-dimensional images. Restriction in terms of interventions after the first due to the difficulty of removing it.	Dynamic images that can be programmed to react to touch, organic and environmental variations. Characterized by design based on two-dimensional images associated with the factor space / time related to the dynamics of the images in the skin.

Table 1. Differences between traditional tattoo and NTs.

The design of the new tattoo requires skills and strategies which differ than those used in traditional tattoo. In this context, the tattoo artist needs to have new knowledge from the fields of material science, skin physiology and computer engineering or computer science. The domain of these fields are necessary due to the fact that the interfaces are made of biocompatible materials and because it is necessary programming skills in the design of NTs. The interfaces are inserted in the skin and the NTs generated on its surface, so it is essential that the artist understands the processes acting on the skin caused by the insertion of interfaces and the generation of NTs on their surface.

This knowledge require skills like: understanding the variables involved in biocompatible interfaces (sensors used, composition of materials used for the generation of NTs in the skin), response of the body to these materials, manipulation of mathematical algorithms focusing the programming of NTs. In the whole process is expected an integrating approach of the tattoo artist who should act as the professional responsible for coordinating the other professionals involved in the project focusing on results expected by the user or in a critical and reflective exploration of the tattoo as a form of language.

5. Conclusion

This work showed how the technological development influences the design of tattoos. Our goal was to map how some new technologies allow the development of what we call a *New Tattoo* (NT) i. e. dynamic and interactive tattoos that react to environmental and organic changes. Moreover, we speculated about the role of the tattoo artist in the design of the NTs. This is primarily a source of aesthetic explorations into the field of tattooing.

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Outside looking in: foreign perceptions of Brazilian Design culture

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International design / Brazil / Culture / Social / Education

This paper assesses the perceptions of Brazilian design and culture among foreign designers as revealed through analysis of creative works communicating the designers' experience in Brazil. By examining their personal visions of Brazil, this paper provides unique insight into the designers' perceptions and interpretations of Brazilian life and culture.

1. Introduction

Outside of Brazil, stereotypical cultural icons such as Carnival, Cristo Redentor and the Garota de Ipanema have frequently influenced foreign perceptions of Brazilian culture. Naturally, such icons clearly fail to communicate a nuanced vision of Brazilian culture. However, those who directly experience Brazilian culture may provide a more accurate reflection of how Brazilian Design is perceived by outsiders.

To understand the effects of first-hand exposure to Brazilian culture on designers' perceptions, this paper examines the personal design statements of two groups of design students that participated in Brazilian foreign study programs sponsored by a US university. Each of the groups also worked on a project to assist local not-for-profit organizations with their promotional needs. The project required these groups to work closely with local not-for-profit clients to create brochures, websites, posters and a wide range of design applications to assist the not-for-profits with business related activities.

Each of the program participants also created a personal design concept specifically intended to reflect their experiences while in Brazil. These design concepts are the primary subject of the visual analysis used in this paper and reflect the profound impact of Brazil on the students' design sensibility. The mediums used to describe these transformational experiences include a wide range of design mediums, such as digital, print and mixed media. The personal design concepts also reflect diversity in terms of subjects, with daily life, graffiti, color and design sensibility among other subjects being treated in a variety of styles. By examining their personal visions of Brazil, this paper provides unique insight into the designers' perceptions and interpretations of Brazilian life and culture (e.g. Arnould and Thompson, 2005).

As first-time visitors to Brazil, the members of this group may also be perceived as first-time consumers of Brazilian culture. Thus, this study draws on theories of design, Consumer Culture Theory (e.g. Arnould and Thompson, 2005,) and theories of cultural differences (e.g. Hall, 1959, Hofstede, 1991, Trompenaars

1996) to offer insights into the idiosyncratic character of Brazilian Design.

2. Conceptual Development

Culture has been defined as a set of learned behaviors that help the members of a society to function in that society (e.g. Hall, 1959, Hofstede, 1991, Trompenaars 1996). Anthropologists and social psychologists have characterized culture as goal-seeking behavior that helps individuals to successfully navigate complex societal norms and behaviors to achieve desired goals (e.g. Hofstede, 1991). Cultural knowledge is defined as the widely shared and highly schematic mental structures that influence a particular individual's perceptions and actions (DiMaggio, 1997). So, individual members of a society learn over time how to behave to be able to survive and to thrive as members of a society, that is, they develop the cultural knowledge appropriate to the society in which they live. Cultural knowledge is seen as specific to a particular society and a characteristic that distinguishes one society from another (e.g. Hofstede, 1991).

Culture is thought to be a unifying system of collectively shared meanings and values (Hofstede, 1991). For example, when perspectives on what is beautiful are widely shared, a common perspective on aesthetics or notions of beauty develops (Hofstede, 1991). Over time, differences in the shared values and meanings between different societies are thought to distinguish one culture from another. Over the years, scholars have developed many perspectives on what distinguishes one culture from another (e.g. Hall, 1959, Hofstede, 1991, Trompenaars, 1996). For example, Hall (1959) describes such distinguishing characteristics in terms of cultural context, where high context cultures are contrasted with low context cultures. Hofstede (1991) asserts that there are five dimensions of culture that account for differences between cultures. Others, such as Trompenaars (1996) and Schwartz (1994) have also articulated similar approaches that identify and articulate various dimensions of culture that serve to distinguish one culture from another. While culture, cultural knowledge and cultural differences are tacit characteristics of societies, deeply embedded in the behaviors and values of individual members of a society, they have been widely researched and patterns associated with culture have been stable over time (e.g. Hofstede, 1991)

One particular aspect of culture, consumer culture reflects the values and shared meanings of a society as mediated by consumer markets (Arnould and Thompson, 2005). Thus, consumer culture reflects the shared symbols and meanings of a society as they appear in commercial produced images and texts, for example, in

advertising graphics (Arnould and Thompson, 2005). In the field of consumer culture theory, consumers are thought to be active agents interpreting culture rather than passive receivers of advertising messages (Arnould and Thompson, 2005). Thus, consumers employ complex strategies when interpreting the images, text and music that may create an advertisement.

As first-time visitors to Brazil, each of the program participants was a first-time consumer of Brazilian culture. That is, they lacked the cultural knowledge that would permit them to understand Brazilian culture as a Brazilian might, and in particular, the norms and values Brazilian designers would employ when creating visual communications. However, when each of the designers were given the task of creating a design statement reflective of their experiences with Brazilian design, the results were reflective of the rich traditions of Brazilian design and consumer culture.

3. Methodology

Each of the program participants also created a personal design concept specifically intended to reflect their experiences while in Brazil. Students had to produce one self-authored piece (i.e. paper, journal, booklet, poster, film, sculpture, painting, poems, etc) that focus on a specific aspect of their overall experience. These design concepts are the primary subject of the visual analysis used in this paper and reflect the profound impact of Brazil on the students' design sensibility.

The analytical methods were qualitative in nature as qualitative methods are preferred for exploratory purposes (e.g. Glazer and Strauss, 1967). In particular, the technique of content analysis was used to analysis the visual content of the student's work

(Krippendorf, 2004). Content analysis was conducted by two researchers with experience in both content analysis and consumer culture (Krippendorf, 2004). A primary research hypothesis was developed, that is: *Student creative self-expression piece would be reflective of student observations of Brazilian design culture.*

Students used mediums such as paintings, drawings, collages, film, posters, type design, booklets, boxes, poetry, blogs, photography, and woodcut print. As the pieces were analyzed, the researchers consulted frequently and whenever there were questions about how a particular work should be analyzed. As a result inter-rater reliability was calculated as high and the high level of agreement between coders was indicative of high reliability (Krippendorf, 2004). The content analysis found a set of categories useful for qualitative analysis of the content of the works of creative self expression, the students intent and subsequent analysis. (Krippendorf, 2004). The criteria identified are are: use of colors, textures, typographic choice and subject matter.

4. Results

The frequency of each specific criteria was counted as shown on the tables below and associated with region where the students visited. Colors such as yellow, orange, red, pink, blue, purple, green, beige, black and white were categorized by lightness, from light, medium to dark and saturation, from intense, medium to dull. Distinct differences were found on the frequency of reds, blues, greens, and beiges. The Salvador group used more reds, blues, greens, while São Paulo group used more beiges. The other difference was found on the lightness and saturation. The Salvador group used light and medium hues, while São Paulo

Colors	São Paulo, São Paulo						Salvador, Bahia					
	Lightness			Saturation			Lightness			Saturation		
	Light	Med.	Dark	Intense	Med.	Dull	Light	Med.	Dark	Intense	Med.	Dull
Yellow	1	1	1	3		1		3	1	1		1
Orange			1	3			1			1		1
Red				2				2		2	1	
Pink				2				1		2		
Blue	2	2	1	3			4	3	2	4	1	
Purple		1						1	1			
Green		1	1	3		1	3	3	2	1		
Beige		3			1			2				
B&W		4		4				6		1	1	

Table 1. Color Criteria

Design Approach	São Paulo, São Paulo	Salvador, Bahia
Geometric patterns	5	1
Organic patterns		4
Silhouette	2	2
Organic shapes	1	1
Gestural, hand drawing	3	3
Rough textures	2	3
Photography, and photographic collages	7	4
Painting	1	2
Illustration	2	3
Type Design		1

Table 2. Design Approach Criteria

Typography	São Paulo, São Paulo	Salvador, Bahia
Sans serif	7	4
Slab serif		1
Display		2
Handwriting	1	1
Script	1	
Old Style, Transitional, Modern		1

Table 3. Typographic Criteria

Subject Matter	São Paulo, São Paulo	Salvador, Bahia
People	4	5
Nature	2	4
Food	5	2
Urban Architecture	6	4
Historical Architecture	0	5
Local Art (graffiti)	4 (graffiti)	5
Festival, music, dance, sport	3	2
Transportation	3	0

Table 4. Subject Matter Criteria

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used intense saturated hues, contrasted with dull colors. Since one composition can use a whole array of colors, some being more dominant than others, Table 1 identifies the color or colors that were most dominant in each piece.

The next set of criteria, shown on Table 2, relates to design approaches. Geometric patterns, organic patterns, silhouette, or organic shapes, gestural and hand drawing, and rough textures. The main difference was found between the patterns. While the São Paulo group used only geometric patterns, the Salvador group used mostly organic patterns.

The next set of criteria, shown on Table 3, relates to typography. When type was used, it was classified as sans serif, slab serif, display, handwriting, script, old style, transitional and modern. While the majority of type found on the São Paulo group's projects were sans serif, the Salvador group varied in their choice more homogeneous.

The final set of criteria focus on subject matter presented on Table 4. Themes such as people, nature, food, urban architecture, historical architecture, local art, graffiti, music, dance, sport, and transportation seemed to be some of the common topics most used. While nature and historical architecture were widely found on the Salvador's group, food, urban architecture and transportation were São Paulo's group main topic.

5. Discussion

The results clearly reflect the exposure each group had with their surrounded environment. In São Paulo, students went to many museums, parks, graffiti "villas" commercial centers and a variety of restaurants. They also visited design studios and a non-profit organization. While there, they stayed in a hotel near Paulista Avenue, a central place which allow students to mainly walk to the sites; however, using a van service, subway and public bus. The intense colors, geometric patterns, modern typography (sans serif), found on commercial centers, museums, and restaurants were visually translated into students' creative self-expression pieces. Figure 1 portrays a subway station in São Paulo. The dark hues of an underground environment contrast with the vibrant yellow circle and red arrows signifying the fast pace of the Paulistas. Figure 2 features the variety of sites visited. The overlapping of the rectangular photographs and the vibrant colors used reflect the energy of São Paulo.

In contrast, in Salvador, students visited many churches, historical and commercial centers, print shops, a design studio, 3 non-profit organizations, and stayed at a hotel at the beach. They experienced the local food, music and dance. The variety of blues, greens, reds and yellows, organic patterns, and a diverse selection of typography were evident on the local architecture; clothes, art and nature surrounding them. The illustration, shown in figure 3, portrays the contrast among the historical center, the modern architecture and the calm beach life. In addition, organic pattern found in traditional Afro-Brazilian dresses, the iconic "good luck"

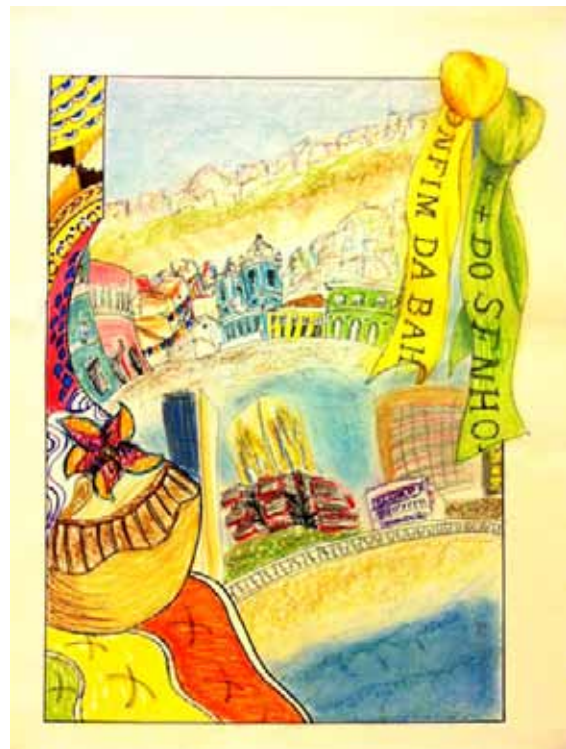


Figure 1. Poster by Bryan Nelson



Figure 2. Poster by Erin Weifenbach

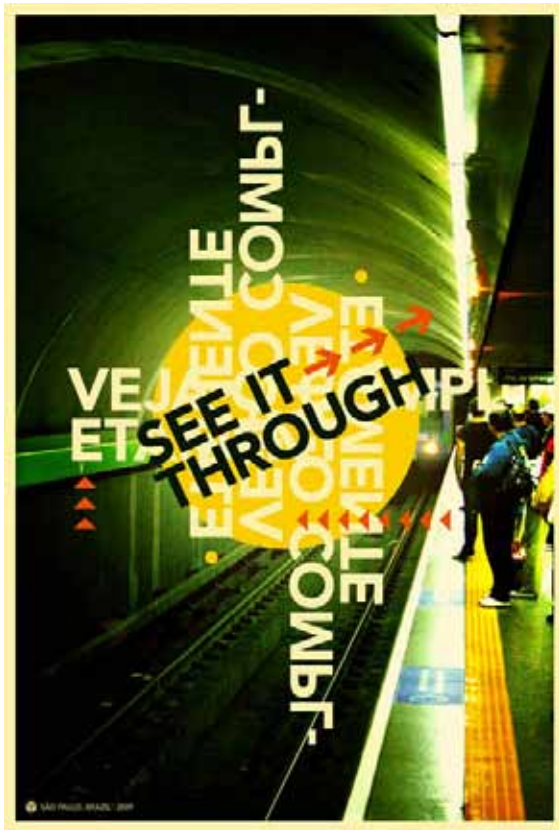


Figure 3. Poster by Grecia Valenz



Figure 4. Back cover of a booklet by Barbara Georges

bracelet—*fitinha do Nosso Senhor do Bonfim da Bahia*—and part of a coconut, a common drink which is sold like water, are portrayed using a variety of blues and contrasted with vibrant colors. Figure 4 shows a digital collage that was used as the the back cover of a booklet. People, local artifacts, textures, churches, windows, and doors are featured in this design.

6. Conclusion

Exposure to Brazilian culture gave students the opportunity to experiment with new color pallets, design approaches and subjects. Their creative self-expression was clearly motivated by the new environment they experienced. As designers, the new environment expanded the horizons of conceivable feelings and thoughts, making certain combinations of color, pattern and subject more likely than others. While the network of global connections is ever more tightly woven, making novelty and innovation in design more difficult than ever, the local design culture of Brazil found its way into their modes of self-expression.

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Corporate identity in a global market: the challenge of the Jotun company

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Corporate identity / Globalization / Jotun / Dubai / China / Branding / Akzo Nobel

Globalization is creating universality, but also estimation of difference. This is a challenge to firms that are working globally. A corporate identity should be comprehensible universally, but also attractive in various countries. The branding of the Norwegian firm Jotun is an example of this schism. The study shows that Jotun's competitiveness would be improved by communicating its origin and making culture based local adaptations to its products.

1. Identity in the era of globalization

The prevalent process of globalization has led to a certain uniformity and sameness all over the world. This fact has been given much attention, and adaptations to the situation have become common practice. Gradually it has become evident that the process has also created a contrary tendency, a cultivation of the regional, local and individual. In this way it contains its own opposite. One might also say that it consists of two poles. According to the view of the sociologist Scott Lury, contemporary culture is continuously expanding and is becoming more extensive, leading to universalization. At the same time, and at a corresponding pace, it is becoming increasingly intensive as regards relations, media and pace of life. This has caused an opposite effect: the creation of difference, and a higher estimation of it.¹ The phenomenon is closely related to that of so called glocalization with its slogan "think globally and act locally". The term stands for an ambition to combine the idea of globalization with that of local considerations.² It is getting increasing support, and has led to a greater appreciation of local culture.

In a world where everything seems to become more alike, it has become of increasing value to be able to stand out as different from others and to display a unique identity. The identity is regularly constructed on the basis of local, regional or national cultural traditions. The phenomenon comprises all entities, like nations, groups, persons and business enterprises. It constitutes a great challenge to firms that are working globally. A corporate identity that fulfills the requirements of the era has to be comprehensible at a universal level and at the same time attractive in several countries and to different cultures. This has become a key success factor. It seems to be of particular relevance for the private market segment, which is the most intimately related to the construction of personal identity based on cultural variations.

1 LASH 2010.

2 ROBERTSON 1992.

The branding of the Norwegian firm Jotun is an example of this schism, which the following study aims to demonstrate. It consists of a comparison between Jotun's engagements in two different countries, The Arab Emirate of Dubai and The People's Republic of China (PRC). The former was established when globalization was at its initial stage, the latter when it had become more mature. To throw light on the characteristics of Jotun's branding policy, a description of the corporate identity of its major competitor Akzo Nobel is included. The logo is regarded as the main element of a firm's visual identity, and therefore constitutes the core object of the investigation. It is based on literature, archival studies and interviews in Norway, Dubai and China.

2. The corporate identity of Jotun

The still mainly family owned group of firms Jotun has its head office in the city of Sandefjord, situated by the Oslo Fjord. It is one of the world's leading manufacturers of paints and other protective coatings and powders. The group has 8000 employees, 70 companies and 38 production facilities on all continents and is represented in more than 80 countries. Its operations cover development, production, marketing and sales of products for the shipping, industrial and residential markets.

The characteristics of Jotun's identity have their origin in its history. The company was founded by Odd Gleditsch in 1926 as a personal enterprise, characterized by inventiveness, strong family ties and international ambitions. The site was the small city of Sandefjord, at that time the centre of the thriving Norwegian whaling industry. The name Jotun was inherited from a company that had been taken over and used as a starting point for the new enterprise. The term derives from Old Norse mythology and means giant. An illustration of this fantasy creature was initially used as a logo. In 1942, after many trials and failures, a penguin inscribed in a circle was finally chosen as motif. While the circle symbolised the world, the bird's qualifications for the choice has been told to be its tolerance to wind and bad weather, like good paints.³ The founder's experience with these animals at whaling expeditions in the Antarctic might also have been of importance. Additionally, the great resemblance with the logo of the recently founded British publishing house Penguin makes it an obvious model.

In 1976 the logo was given a more professional design, and the penguin's wings made spanning the globe. The work was done by Jotun's Marketing Manager Arne Langnes.⁴ The choice of the lively and strong colours yellow, red and dark blue seem to have been a matter of habit, but the multinational firm Shell's colour

3 BRYN 1998.

4 Ibid.

scheme might also have had influence on the decision.⁵ Dark blue may have been preferred to black because of the negative associations that colour evoked in the Arab world, or because of its reference to the sea, the home of the penguin. Since then a visual identity program has been developed, with the penguin as the core element. In 2010 it was updated and the penguin made slightly more stylised. The job was done by Metro Design, a small studio situated in Sandefjord.

The slogan "Jotun protects property" has been used on a stand-alone basis during the last couple of decades. It points at the firm's customer orientation and its offer to take care of their assets.

Whenever presenting the firm the motif of the penguin is extensively used, mostly in the form of photographs that underline its resemblance with human beings. Even Jotun's set of values, loyalty, care, respect and boldness, is put forward as if derived from the animal. This gives the impression of care for human life and accordance with nature. This almost naïve approach appeals directly to people's feelings and creates personal identification with the firm and its products.

Since the turn of the century, when globalization had become the buzz word for most business development, Jotun has been presenting itself solely as a global firm. No reference to its local or national origin is being made. The global engagement and competence is seen as a value in itself and sufficient to meet the needs of all market segments.

In spite of the global outward identity, the firm is still deeply rooted in the city where it was founded. The penguin motif constitutes a parallel to that of the whale, which was often used in connection with the whaling industry. Also the penguin had been used in that connection. The colour of blue was frequently chosen, since the city is situated by the sea. It is also nicknamed "The blue city by the Oslo Fjord", with reference to its political conservativeness. Consequently, property, and the protection of it, is a major priority, which is reflected in Jotun's slogan. The use of internal or local staff for the highly professional task of designing logo and visual identity program points at a certain local preference. Many of the board of directors have their origin in the region, and the Gleditsch family is still playing a major role in the management, now represented by its third generation. These facts are not put forward when the firm is presenting itself. It seems to be regarded as something that could stand in the way for branding itself as a global firm.

3. The corporate identity of Akzo Nobel

Jotun's probably greatest competitor, Akzo Nobel, is the world's biggest firm in the field of protective coatings. It has 60.000 employees in all parts of the world and covers all product categories and market segments. It has defined a corporate identity that is quite different from that of Jotun. It is clearly related to the firm's history, as well as to its ambitions for the future. Having its origin

⁵ ALMESTRAND 2010.

in the Netherlands in the 18th century, Akzo Nobel has gradually developed into a huge conglomerate of firms by purchasing other companies in various parts of the world. It is therefore a global firm in a literal way that Jotun is not.

The name contains a reference to its founding company as well as to the famous scientific researcher Alfred Nobel, who had ties to two of the purchased companies. The present logo was originally designed in 1988 by the legendary Grand Old Man of visual corporate identity, Wally Olins. In 2010 it was redesigned by one of his former studios, the world spanning Saffron bureau, in collaboration with Pentagram and the illustrator Martin Rijven. The rebrand was awarded with a placement on the shortlist of the Transform Award for rebranding and brand transformation that year.⁶ It consists of the torso of a man with his arms stretched out. It is a modern paraphrase of the classic Greek "Metric relief", symbolising metric systems based on the human body. The only colour is blue in various shades.⁷ In this way the logo demonstrates an emphasis on scientific research and rational thinking, as opposed to Jotun's more customer oriented and sentimental approach. The slogan "Tomorrow's answers today" supplies the identity with a dynamic drive and the ambition to be in the forefront of solutions for the future. The identity contains subdivisions by country, with separate sets of values etc. The subdivisions make it easy to implement national adaptations to the products.

Compared with Jotun, Akzo Nobel has a more flexible, but also a more complex identity than Jotun. For a firm of this size it is quite natural. But even more important is the fact that it reflects the firm's factual identity to a higher degree than that of Jotun, where there is a weaker correspondence between communicated and factual identity. This probably constitutes a competitive advantage.

4. The success of Dubai

International expansion has been on Jotun's agenda since the post war era. Its first foreign production plant was put up in Libya in 1962. In 1975 it was replaced by an enterprise in Dubai.⁸ The young nation had recently discovered oil and opened for foreign investments. Simultaneously it had started a modernization process and created a market for Western goods. Consequently, Jotun was given exceptionally good conditions for its work. Since the start it has been a success, both as regards production and sales. Jotun has even been chosen as the supplier of paint for several of Dubai's iconic landmarks, among others the Burj Dubai and the Burj Khalifa, the world's tallest building.

The favourable climate for foreign enterprise is not the only reason for the good results. Since the start the involvement has been built on personal relations and cultural empathy. When initiating the engagement Jotun hired former representatives

⁶ www.identityworks.com/reviews/2008.

⁷ www.akzonobel.com/uk/aboutus [2012].

⁸ BRYN 1998.

of the UK protectorate of Dubai, who had intimate experience with the political and cultural conditions.⁹ The emir, who according to tradition governed the country like a family firm, was approached by Jotun's managing director Odd Gleditsch Jr, son of the company's founder.¹⁰ There was a certain parallel between the roles of the two, both being heads of family run enterprises. They also shared an interest in hunting and birds, and spent time together where these interests were cultivated. This added to the success and to the popularity of the logo, and probably made the Antarctic penguin more familiar to the desert people.

While today business relations have become less personal, they have continued to be built on knowledge with the local culture. This has made it easy to identify needs for adaptations of Jotun's products.

The engagement comprises all product categories and market segments. Adaptations have been particularly extensive in the lucrative private market, comprising coatings for people's homes. In addition to physical protection, these products have a decorative function. Based on the firm's general multi-colour system and product range it has developed goods that are tailored for these customers' culture and tastes.¹¹ They consist of bright and often gleaming pastels in shades that are seldom used in the Scandinavian countries. They are marketed accordingly, and are addressed directly to their target groups.¹² So called Inspiration Centers have also been set up.¹³

5. The challenge of China

As a major world power, China plays a leading role in the globalization process. The nation is characterized by long dynastic traditions and a highly renowned culture. It is undergoing a vast industrialization process by ways of Western technological standards and its citizens have become slightly "westernized". A consumer market for Western brand goods has emerged.¹⁴ During the last years the country has become increasingly aware of the values of own national traditions. At the same time there is an emerging openness towards ideas from foreign national or regional cultures.

Jotun's engagement in PRC is among its biggest and strategically most important. It started in 1993 and belongs to a later stage in its history, when it had established itself as a global enterprise. The engagement in the country was handled accordingly. It was caused by the fact that since the opening of its borders to business with the foreign world in 1979, many European industrial undertakings and thereby many of Jotun's customers had been transferred to PRC.¹⁵ It started a cooperation project with the state

9 BRYN 1998.

10 HERMANSEN 2006.

11 HERMANSEN 2006.

12 JOTUN UAE 2006.

13 www.coatingsworld.com/2007-09-19.

14 JACOB 2011.

15 ALMESTRAND 2008.

owned firm Cosco in building a production plant. The engagement comprises production units, research and development and the whole range of products.¹⁶ It has also achieved the contract for the paints of the Taizhou Yangtze Bridge, the world's biggest and one of China's most prestigious building projects.¹⁷ The sales of all its product categories for industrial use have shown a substantial growth. As regards coatings for private consumers, which constitutes China's biggest and most competitive of the product segments, the sales have as yet been moderate.¹⁸

According to its status as a global enterprise Jotun's strategy is to treat all national engagements in a universal way. Local adaptations are supposed to occur by hiring mostly local staff.¹⁹ This has led to technical adaptations according to climactic requirements, but little focus on national culture and private consumption. Decorative products are marketed and sold without adaptations to national preferences. This is even the case with one of its major products in the category, the interior paint Lady, originally developed for the Scandinavian market and its tastes.²⁰ In comparison, in the UAE the paint as well as its name and wrapping has been carefully redesigned to meet local preferences.²¹ Neither does Jotun take advantage of the Chinese people's preference for the colours of red and yellow, which fits with the colour scheme of the firm's visual identity.

In this way Jotun makes itself stand out without any national or local characteristics, while the inhabitants of GPR are treated as global citizens. This was the case with Jotun's engagement at the World Expo in Shanghai in 2010. While other Norwegian business interests showcased themselves in a national or Scandinavian frame of reference, Jotun's contribution was a concert that praised cultural diversity, without giving any indication of its own cultural belonging.²² This demonstrates braveness, self-confidence and creativity. But by not placing itself on the map in the world of cultural diversity it missed the opportunity to give its identity a historical foundation and make it unique.

6. From global to glocal identity

In 2011 Jotun made its best financial results ever, and they continued to grow in 2011.²³ This means that the group of firm's corporate identity is successful and fits well into the globalized world. However, Jotun has as yet not taken into account the rapidly growing phenomenon of glocalization and the increasing importance of displaying difference. It has kept its identity as global only.

To optimize its results and secure its competitive edge for the

16 LARSEN 2010.

17 www.coatingsworld.com/2010.

18 JOTUN 2010.

19 ALMESTRAND 2010.

20 LARSEN 2010.

21 www.coatingsworld.com/2010.

22 QUIDE 2010.

23 JOTUN 2011 and 2012.

future, Jotun needs to create a more clearly visible identity by indicating its local origin. This is what Akzo Nobel has done. It should also put stronger emphasis on making product adaptations according to local tastes. This is not achieved only by hiring local staff, but needs a more active approach. It requires strategic measurements and product development of a cultural kind. Jotun has surely got what it takes: an interesting local origin, an engaging history and experience from around the world.

The engagements in Dubai and China are different with respect to time of initiation, size, business conditions and culture. But they also have similarities, dealing with monopoly states recently opened to foreign investments, and representing cultures radically different from those of Norway. As the globalization process has taken a turn towards higher estimation of the glocal perspective, the case of Dubai has gained a renewed relevance. The approach towards the giant and proud republic of China has to be another than the one used in tiny Dubai. But what the case of Dubai demonstrates is that knowledge of the local culture constitutes a great potentiality for and necessary ingredient in product development and strategic branding. Jotun should make use of this experience in its work in China as well as the rest of the world.

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Mapping and analysis possibilities to vernacular typography design attributes use for mobile design interfaces and applications

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Research new ways to increase the social use of mobile devices services like a tool for digital inclusion in Brazil, this article presents the study focused on the typography design attributes for mobile interfaces and applications. In this sense, it provides a mapping possibility for the application to some design elements from characteristic manifestation of Brazilian vernacular typography in the proposition of new interfaces as a strategy to enhance of the symbolic relationship between technological devices with the regional culture.

1. Introducing the Context

Over the last years, the mobile technology became an important communication tool to the digital content for the all fields of Brazilian society.

Under the quantitative aspect of this importance can be checked in the latest report from ANATEL (National Telecommunication Agency), this showed that on the total amount of mobile in operation reached 197 million of equipment in 2010, over than number of people own the country, according to the IBGE (Brazilian Institute of Geography and Statistics) reached 185 million inhabitants in the same year.

Regarding the qualitative aspects of the movement of digital information, according to the same agency, it was recorded an increase of 250% access the internet via 3G bandwidth in 2010 compared to the year before. This significant increase should be consolidated as a trend for the coming years due to the introduction of next 4G bandwidth that multiplies approximately over 10 times the speed connection.

For the design field, the massive use of cell phones also means a cultural influence for the users because this technology brings to local user, lots of symbols, signs and visual structures developed from global principles of usability.

2. Objective

In order to research new ways to increase the social use of mobile devices services like a tool for digital inclusion in Brazil, this article presents the study focused on the typography design attributes for mobile interfaces and applications.

In this sense, it provides a visualizing possibility for the application to some design elements from characteristic manifestation

of Brazilian vernacular typography in the proposition of new interfaces as a strategy to enhance of the symbolic relationship between technological devices with the regional culture.

This mapping and analysis possibilities to vernacular typography design attributes use for mobile design interfaces and applications, was divided into three main fields: Technical Aspects, Cultural and Regional Aspects and Digital Inclusion Aspects.

3. Technical Aspects

This part of this research was about the addressing issues of type design to very particular constraints: different mobile screen sizes, user environment, readability and legibility.

As a recent event that several experts met to discuss the issue, share perspectives on the state of the type on mobile devices and identify parameters for future development, "The Typography Session" held on November 25, 2009 in London (England) under the sponsorship company Nokia.

This forum presented as a result, the current challenges to the design of typography as a reference the specific application on mobile devices and also showed of recommendations for the development of typography for optimal use in interface design for mobile phones.

The Challenges:

1. The choice of Typography: resolution, color availability, type and variations in contrast and reproduction of variations in size and is the main concern of legibility within the context of the user.
2. The technology challenges: Most mobile devices are still limited resource type selection, general issues of storage on the device, the current memory, download times and cost of network access, limit the availability of the type for design of mobile applications.
3. Usability Challenges: Must meet all types of users, in the broadest possible range of environmental conditions. The typical mobile user is working with the device in a highly interruptible manner, looking at the screen for much time of their interaction. The elements of the type should be immediately findable, readable and understandable.

Normally, the design interface project for mobile devices uses

one font family with the possibility to set size only. Part of the restriction to addressing different types was low screen resolution, the unsatisfactory appearance of the source was cause to more incidence of “font hinting” problems.

“Hints (tips or instructions) digital are especially important to define how the type will appear on the screen. [...] In general, two types of hints: generic, which are applied to the entire fonts and specific, which are applied only to individual characters.” (Bringhurst 2005: 226)

Nowadays, the smartphone technology advances, high-resolution screens and the ability to include fonts that are not preloaded on the device in different models, platforms and applications that allow more robust possibilities to use fonts for this interface application.

In this sense:

The most important role of typography in mobile design is to provide the user with excellent readability, or the ability to clearly follow lines of text with the eye and not lose one's place or become disoriented. This can be done by following these six simple rules:

1. Use a high-contrast typeface - Remember that mobile devices are usually used outside. Having a high-contrast typeface with regard to the background will increase visibility and readability.
2. Use the right typeface - The type of typeface you use tells the user what to expect. For example, a sans-serif font is common in navigation or compact areas, whereas serif typefaces come in handy for lengthy or dense content areas.
3. Provide decent leading (rhymes with “heading”) or line spacing - Mobile screens are often held 10–12” away from the eye, which can make tracking each line difficult. Increase the leading to avoid having the users lose their place.
4. Leave space on the right and left of each line; don't crowd the screen - Most mobile frameworks give you full access to the screen, meaning that you normally need to provide some spacing between the right and left side of the screen's edge and your text—not much, typically about three to four character widths.
5. Generously utilize headings - Break the content up in the screen, using text-based headings to indicate to the user what is to come. Using different typefaces, color, and emphasis in headings can also help create a readable page.
6. Use short paragraphs - Like on the Web, keep paragraphs short, using no more than two to three sentences per paragraph. (Fling 2009: 133)

Example to high-resolution screens information and dimensions for some mobile devices.

Mobile device	Diagonal Pixels	PPI
Nokia N95	2.6” 240×320	153
Apple iPhone 3G	3.5” 320×480	163
Amazon Kindle	6.0” 600×800	167
HTC Dream	3.2” 320×480	181
Sony Ericsson W880i	1.8” 240×320	222
Nokia N80	2.1” 352×416	256

Figure 1. Dimensions and PPI - “Pixels per Inch” is a measure of the number of pixels displayed in a digital image (Fling 2009)

Case 01

As an example project already developed in accordance to the parameters presented above, the new font used by the native system Nokia called “Nokia Pure” fonts designed by Bruno Maag from Dalton Maag British Design Office.

Formal concept has origin in distant ancestor typography realistic that originated in the late 19th century, representing the fountain designed in Germany “Akzidenz Grotesk”(Berthold Foundry, 1898), for its contemporary “Franklin Gothic” (Morris Benton, 1903), then the “Helvetica” (Haas Foundry, 1957), most recently by “Nokia Sans” (Erik Spiekermann, 2002)

The conceptual origin analysis of the form of “Nokia Pure” was based on Bringhurst 2005 study made by ancestors of the Helvetica font which was first used by Nokia on their mobile phones when the technology allowed the screens as well.

Case 02

As an example of applications, the Tweegram designed by De Natrobot S.r.l. for IOS or Android System for mobiles that can show fonts that are not preloaded on the device. The main feature of this is the possibility to choose fonts and motives to the same text and post it like an image format in many social networks.

4. Cultural and Regional Aspects

To enhance of the symbolic relationship between technological devices with the regional culture, this point presented a reflective analysis about the ethics, the impacts of this kind of vernacular manifestation as cultural tokenism for the technological benefits, or vice-versa.

Twenty years ago, the graphical interface looked like a toy, wheels virtual learning for computer novices. Today we accept without hesitation as necessary for serious computing; functional and easy to use, an essential tool both for neophytes and seasoned users. But to go beyond this model of efficiency and see the graphical interface as a means of communication as complex and vital as the novel, the cathedral or the cinema this is a proposal that still need to get used to. (Johnson 1997: 192)

According to the affirmation, the technology interface provides an important conceptual connection between cultural aspects, in this sense, is important:

Encourage recognition of the qualities and values associated with a local product (€), resources, knowledge embedded in their production and their importance to the community producer - is one way of contributing to society to make visible the history behind a product. Telling this story means to communicate cultural and social elements (€), enabling the consumer to evaluate it and enjoy it properly. It means a development from the favorable image of the territory and the product originated. (Krucken 2009: p22)

In order to contribute on the perception of design as a cultural manifestation of regional types and permeability of the design concepts in Brazilian society, this study is initially concentrated on aesthetically attributes manifested by vernacular typog-

raphy and also a reflection on the paradigms of design as a regional agent.

The design, as discourse, reflects this cultural phenomenon while also collaborating to build and constant transformation of this paradigm. As a visual message encoder, graphic designer establishes a continuous dialogue between the symbols of the dominant culture and peripheral culture that is outside the official system. (Finizola 2010: 27)

In this sense:

Graphic designers are inspired by popular culture as a way to rescue the origins of symbolic identities that pervade certain groups of people, cities or regions. (...) Able to



Figure 2. "Nokia Pure" font introduced in January 2011. (<http://www.daltonmaag.com/news>)



Figure 3. Metric Typographic relations presented as ideal for use as native on mobile devices by Forum Nokia.

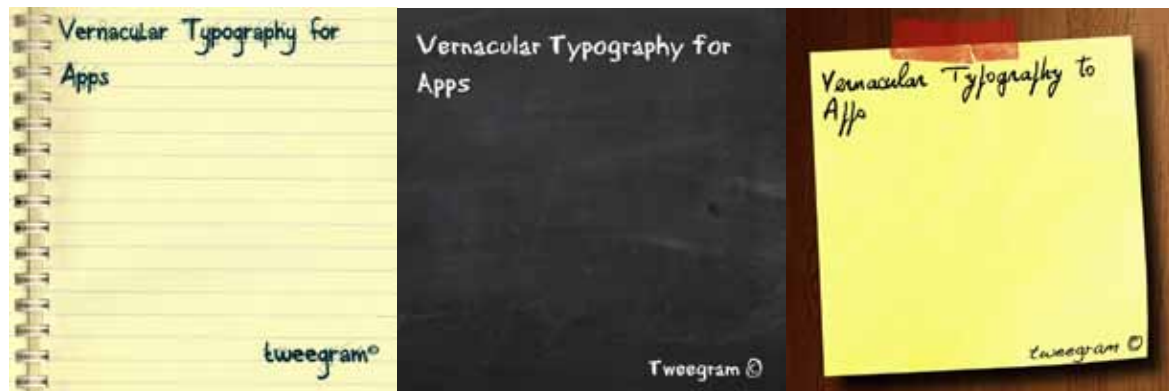


Figure 4. Tweekram images (photo by Fabiano Pereira).

observe the essence of the visual language of the anonymous streets, communities, as well as what is most authentic in the four corners of Brazil, which transposes and translates this visual richness to the practice of formal design, connecting new production technologies and new aesthetics of design (Finizola 2010: 26)

According to Farias 2010, with the study of such patterns was possible to identify five strategies for incorporating elements of vernacular design types that can be used as a parameter to the development of fonts that have a target value, restore and preserve the local graphics memory.

The main features of the formal aspects from the vernacular fonts are:

- Predominance of uppercase fonts.
- Mixture of alternation in the same sentence, the variations in style, and body weight.
- Proportions of letters tailored to the specific circumstances of each bracket.
- Apparent Texture tool (brush).
- Characters defined key in accordance with the stroke of each specific artist.
- Preference for sans serif and low incidence of cursive.
- Use features in the decorative typography: shadows, outlines, hatches and volume simulation.
- Preference for centered or justified alignment.
- Layout of text in a curve, vertically or inclined.
- Elements schematic applicants to the joint text, wires, balloons, boxes, asterisks, frames and arrows. (Finizola 2010: 62)

Case 03

Based on the characteristics listed above, these examples of type families developed by Brazilians designers, with reference to the systematization of the elements found in the manifestation of popular fonts:

Vernacular typography has formal concept origin in the symbolic expression of the dominant culture is often produced by non-specialists, peripheral manifestation of the culture that lies outside the official system. Anonymous representative of the visual language of the streets, communities, which can be found in almost all Brazilian cities, and that translates this visual richness to the practice of formal design. (Finizola 2010)

5. Digital Inclusion Aspects

This part of study was based at typography relationship with the



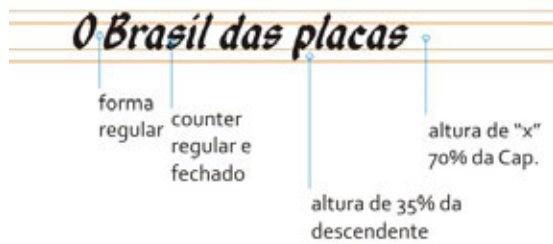
Figure 5. 1Rial / Designed by Fátima Finizola - Font letters based in fonts stamped in the walls of the city of Recife in Brazil.



Figure 6. Original Olinda Style / Designed by João Paulo Angelim – Display Font inspired by lettering style found in the city of Olinda in Brazil.



Figure 7. Higiênica / Designed by Damião Santana - Experimental semi-calligraphic font inspired in a "roll of toilet paper".



Filezín
 ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz
 1234567890
 .,?! &

Figure 8. Filezím / Designed by Vinicius Guimarães - Font-based refinement with calligraphic works done by people without formal education in typography.



CABEÇA
 ABCDEFGHIJKLLMNOPpQRSTUUVXZWWY
 ABCDEFGHIJKLLMNOPpQRSTUUVXZWWY
 1234567890
 ..?! &

Figure 9. Cabeça / Designed by Vinicius Guimarães - Some fonts have as main objective to make an impact in the fight for attention that occurs in cities and resort in the exaggerated form of the upper part of the characters.



CONTEXTO
 ABCDEFGHIJKLLMNOPpQRSTUUVXZWWY
 1234567890
 .,?! &

Figure 10. Contexto / Designed by Vinicius Guimarães - Larger text normally uses rapid implementation fonts, with a few strokes, there are letters whose slope appears to reflect the speed with which they were made.

seven strategic dimensions to digital inclusion in Brazil presented by Guerreiro 2006 and how that dimensions could be used to provide new design services by the mobile devices.

Plan to include digitally means organizing the production of digital content from the culture and information related to local economic vocation. (Guerreiro 2006: 185)

The strategic lines of actions must following conceptual dimensions:

1. Info-Education: production oriented to stimulate the ability of self and the collective knowledge of cognitive and emotional;
2. Info-Culture: appreciation of cultural identity and traditions of the local community, producing and dealing with information from the talents, customs, habits and characteristics of the community;
3. Learning technology: conducting computer courses and qualification of the user to browse the Internet as a global information highway of knowledge and collective intelligence in addition to its professional training in the field of new information technologies and communications;
4. Management of social demand: suitability of investments in information technology and communications to the interests and needs of the local community, innovating as demand for local development and vocation;
5. Digital Citizenship: developing initiatives for the dissemination of activities and local services on the Internet through the formation of virtual communities;
6. Social Technology: promotion and encouragement of innovative solutions to community problems, generated by and for the community, with collective use;
7. Network of digital inclusion: deployment environments and access to the Internet and digital media centers, the community network connecting local and global; (Guerreiro 2006: 183)

6. Conclusion

For the design field, over than a lot of information experiences provided by devices to the Brazilian society also means a cultural influence for the users because this technology brings to local user, lots of symbols, signs and visual structures developed from global culture and interests.

The design approach seeks to produce coherence and its success criteria is the satisfaction of society. In this way, their results can be characterized as a socio-cultural innovation. (Bonsiepe 1997: 37)

The important part of these issues should respect the global principles of viability. Usability, legibility and readability qualities and characteristics are not brings by vernacular typography and these are very necessary to addressing issues of type design no native interface system to mobile devices.

On other hand, the use of some design elements from characteristic manifestation of Brazilian vernacular typography in the

proposition to mobile devices applications (APPs) for strategic dimensions number two and number four presented by Gerreiro 2006 to digital inclusion:

Info-Culture: appreciation of cultural identity and traditions of the local community, producing and dealing with information from the talents, customs, habits and characteristics of the community;

Management of social demand: suitability of investments in information technology and communications to the interests and needs of the local community, innovating as demand for local development and vocation; [Guerreiro 2006: 183]

In this sense, the vernacular typography can be used like a tool to provide the representative connection between regional culture and the information technology. For the dimensions presented above, it's can be part of major success criteria, the ethic alternative of what might be construed as cultural tokenism for the benefit of increasing digital devices by the contextualization thinking and vice versa.

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Graphic narratives of the domestic landscape: a case study of the back pages of telephone directories, Medellín from 1956 to 2012

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Domestic Landscape / Graphics narratives / Home / Household appliances / Consumption

This paper explores the notion of domestic landscape from the back pages of telephone directories of the city of Medellín, which for more than 56 years have advertised the household appliances from HACEB, a pioneering brand of these products in the Colombian market. When reading all these graphic pieces as a whole, some narratives that link aspects related to the notion of home can be identified as well as landscapes that describe the emotional situation of the house's territory.

1. Context

Slowly the landscape concept begins to be recognized beyond the limits imposed by geography. Gone is the imaginary that this is limited to the study of the dynamics of the territory, urban intervention, the architectural and the territorial, and at the same time it stops to be linked only with the design of public space, environment, management or control of agroforestry natural resources. To overcome the idea that the landscape is a quality of the territory is the first step to understand it in a broad aesthetic dimension. From this idea it is possible to interpret, decipher, narrate and describe landscapes which combine exceptional experience, empirical knowledge and intuition, as with the landscape of home.

We understand the home's landscape as an aesthetic reflection of territory, dynamic and topological, holder of an interactive nature, essentially changeable and evolutionary that claims the right for aesthetic pleasure and empirical beauty and protects the individual and collective memory. Beyond the notion of geographical space, the landscape of the home is supported on the fact it promotes aesthetic reactions, produces emotions, awakens feelings generates magnetisms and passions that are induced by taste, touch, smell, sight and hearing. It is a territory that is lived at home. This place is humanized, conquered and tamed through the paces, symbolic networks and senses given to the place and to the everyday objects (Gourhan, 1971: 305-316).

The aesthetic dimension of a territory with these characteristics has been the subject of interest in a collective psychology that as in Wilhelm Wundt is close to social aesthetics and the form theory. Despite the focus on relationships that are woven into the city, one and other provide some key ideas to address the sensitive network at home. One of them is that society, rather than being a text is a form involuntary in which the cus-

toms, habits, movements and spaces prevail (Simmel, 1908). Whether it is the ample space of the city or the intimate space of home, that notion of form links the places, uses, colors, intensities, noises, textures, and situations among others. As clearly has been demonstrated by the sociology of the twentieth century, shape is the whole unity that is presented to the subject, away from the logical and rational knowledge, which has no components and that cannot be described or explained according to feelings and emotions.

Territorializing the home is synonymous as to inhabit the home, to discover its shape to perceive and feel the subsidiary condition with the intimate world surrounding the individual. An integral part of that world is the objects of daily use. The significant value that the objects of the house have in relation to territory can be traced in the works of Benjamin (1996), Echavarría (1995) and Pardo (1992). From the philosophical perspective, the emotional value that man establishes with space and objects has been the reference to show how that value is manifested through them. Hence, the subsidiary has a prominent value at the moment it reveals an expressive or sensitive character enabling to talk about habits and specific practices but also how the deterioration, damage, loss or absence of objects in the house ends up ousting habits "[Benjamin, 1996: 159-160]. Benjamin's, Prado's and Echavarría's philosophy, attend the trace to make visible the territory of the home. Through which it enhances the uses of the object and defines the spaces of living itself, hence the importance that the functional relationships have in relation to being. Moreover, the organization of objects in space is seen as an exclusive symbolic expression of the human being. Making visible social, mental and technical customs is the way man has to organize the territory and leave traces on it. This necessarily involves an aesthetic attitude of pledge (Mandoki 2001: 17) in other words is the sensitive relationship that man establishes with the object and which involves an aesthetic experience that becomes visible. Not in vain a notion such as *estetograma* formulated by Pardo, is defined as an expressive fragment that allows the being to inhabit space by using some techniques and poetics of spatialization that are built from habits (Pardo 1992: 38).

To recognize from the sensitivity the value of the functional relationships, the practical relations and the providing meanings to the object of use, is an important step to make visible an alive and functional territorial system as it is home. These philosophical tenets proposed around the sensitive territory, the home landscape and everyday objects have put in foreground the manifestation of common values and glimpse the fear that the



Figure 1. Telephone directory back page, Medellín city, 1973-1974. [photo by Augusto Solórzano]



Figure 2. Telephone directory back page, Medellín city, 1976-1977. [photo by Augusto Solórzano]



Figure 3. Telephone directory back page, Medellín city, 1980-1981. [photo by Augusto Solórzano]

private sphere is distorted into its privacy because of the new interaction forms proposed by technology (Echavarría 1995).

On the other hand, the notion of domestic landscape can also be inferred from the sociological and historical fields in the works of Baudrillard (1971 and 2010) and De Vries (2009). Here the notion of consumption serves as a category of analysis for both authors to unveil from different perspectives on how the nuances of the production of objects of contemporary society shape the domestic landscape. The route that traces Baudrillard in *El Sistema de los Objetos* (2010) and on *La Moral de los Objetos* (1971) glimpse a dramatic change in material culture and the impoverishment of the aesthetic experience derived from industrialization but mostly a change in which basic needs are subordinated to comfort, luxury and leisure. This depletion is related to the fact that the industrial objects no longer produce in the being the same degrees of involvement of yesteryear. The reason for this is that when changing the primary needs of the object, what really changes is the very history that man establishes with the object and therefore its involvement modes and sensitivity that affect the way we understand, build and inhabit the home landscape. Intending to find more details of this change, De Vries proposes that beyond the paradigms of conspicuous consumption, luxury and comfort that determined the course of production of modern societies, there is a reallocation of roles in the home from which can be inferred the construction of a new domestic landscape proposed from new consumption targets and developing strategies to achieve them. To explain this phenomenon De Vries proposes the concept of industrious revolution that rather than a revolution can be understood as an evolution of consumption that occurs when the peasants work is intensified, sales are increased and marketing of goods before the integration of markets and markedly increases the consumption of goods. Each of these factors eventually led households to gradually redirect their resources and landscape of the home was built from consumer desire.

2. Case of study

As a case study in which we can identify visible features of the home landscape of the back pages of the telephone directories of Medellín city would be analyzed. These graphic elements are renewed year after year and are a kind of showcase that advertises household appliances for the past 50 years. Although, it should be noted that in Colombia that renewal varies according to the city to which the phone belongs, Medellín's case is paradigmatic because since 1956, when Public Enterprises of Medellín emit their first telephone directory, the appliance company Hacebi colonizes this advertising space and since then it becomes an integral part of this data book. In this sense, reading together of the back pages of the directories becomes a historical document from which it is possible to identify forms of organization and experimentation of home territory that record relationships of age, gender, class, ethnicity, power among others (Figures 1, 2 and 3). The description and analysis of the landscape of the home through the back pages, is interested in the ephemeral way in which the house objects are renewed, while seeking to make visible the way in which through the advertising speech constructs a notion of home, but also that this notion is the reference for building the advertising account.

This story-territory relationship raises the question of how distant is the imagined the vivid landscape. Similarly this relationship questions about the elements and values that go unnoticed for those that are involved in thinking and arranging home advertising. While it is clear that the social content of graphic design embraces a vast territory whose minutiae is impossible to portray in detail, it should be noted that through his territories can be identified camouflaged by invisibility. From the infinite advertising system to the impersonally printed propaganda that impersonally is spread on the street, they both constitute a horizon of meaning that has a clear ideological function that can be identified and that realizes symbolic territories of everyday cartographies of hidden landscapes in which intertwines the vis-

ible and the invisible. In such a system there are recorded much of the imaginaries, history and above all, the way to understand and inhabit the world. There are inscribed the details of those landscapes are socially constructed but are on the margin and not seen, in accordance to what happens with the landscape of home.

From the following can be deduced the need to make visible that part of reality that hides in plain sight. Among them is worth to mention the links that between the directory, the target audience and advertising are obvious. Since this is a graphic piece that is intended to be put in the heart of the home for a year, the promotion of household appliances finds there its best place, ensuring that each time the directory is consulted, there will be direct and indirect references to the acquisition or renewal of the equipment that modern life requires. So, finding a phone of a person or a company or extract a discount coupon also implies giving a new look at the appliances, to our needs and desires and, above all, ends up associating an infinite chain of connotations about the home. This can be considered as a kind of tactics which advertising capitalizes on its advantages and makes us reconsider our goals. As such, this advertising tactic is driven in unison with the events of the common man, is activated at the right time and ends combining heterogeneous elements as links insignificant data and mixes them with small utopias referred to the change of scenery at home, the possibilities of credit to purchase goods and time optimization that household appliances promise, among others.

Clearly, this graphic rhetoric is based on a argumentative and discursive basis which makes it personal life of indistinguishable from advertising. However, this truism must be overcome. This involves seeing the whole back covers as a repository of our own images of truth and path to the possible infinitude of experience (Álvarez 2006: 38). Similarly, means recognizing that the social, ideological and political landscape of the home is based on an aesthetic of the trust that places us on the threshold of feeling actors and spectators at the same time.

As indicated above, Simmel's notion of form, which constitutes the support of his theory of culture, the landscape allows pointing out that, in this case the domestic landscape transcends its mere appearance as physical trait or outside that purchases the perceptual ability of a territory. Now the shape of the landscape transcends beyond its spatial configuration into a conjugation between the content and the form as ordering and structuring principles of diverse experiences. The contents themselves do not keep a sense, but only after their appearance in the mold of a form of the sensibility that allows us to organize our understanding of the world (Simmel, 1986). That is to say, the sensitivity is molded through the elements that enable our experience. The form is a synthesis of the world's sensible experience, beyond its mere materiality.

At home, we often see this conditioner of the experience as sensible knowledge of the world in the form it takes our ordering of routine that expresses the tempo of everyday life in relation to certain household objects for certain activities. This is where there are established the foundations of our concrete experience. Everyday life is also in this sense, a compendium of experiences at home that are structured in the manner of estetogramas, setting the pace of the habits that in turn give sensible form to the homes landscape.

But this experience of home, can be said now, to be conditioned or pre-produced by a discourse that seeks through predisposition an ideologically oriented, trace a path whose purpose is established on the basis of both economic, social and aesthetic relations. For example, the headings that appear as recurring messages in the back pages: "A life of service in your home," "Marry for life with Haceb", "With Haceb life is better" (Figures 4, 5 and 6) to name a few, that point to the decisive interest of the industry to determine a motivation to the imperative of consumption, while indicating the dependence of the home landscape in relation to household appliances to be consumed.

The speech that stands out for the graphic narratives that are



Figure 4. Telephone directory back page, Medellín city, 1974-1975. (photo by Augusto Solórzano)



Figure 5. Telephone directory back page, Medellín city, 1991-1992. (photo by Augusto Solórzano)



Figure 6. Telephone directory back page, Medellín city, 1992-1993. (photo by Augusto Solórzano)



Figure 9. Telephone directory back page, Medellín city, 1966-1967. (photo by Augusto Solórzano)



Figure 10. Telephone directory back page, Medellín city, 1967-1968. (photo by Augusto Solórzano)



Figure 11. Telephone directory back page, Medellín city, 1968-1969. (photo by Augusto Solórzano)

put as a model case, is the organization of the home landscape through the experience of consumption. Here, the household appliances constitute devices that provide elements to form a home layout as a shape of the sensibility that transcends its physical character. In this case the graphic form takes an effective role embodying a sales pitch that gives life to the cycle of the economic system. This is how as a speech makes sense to guide our view of the home in everyday life, as form and content of our experience, an experience of home, in this case determined by the logic of production, the circulation and the consumption. We can see the ideological strength of the graphical form.

In this context, the domestic landscape acquires an ontological status that we could say is influenced by graphic systems through advertising intention that manages to be so strong in our organization of the world, as can be the cultural form of religion, art, or politics. All of them provide a particular form that allows giving order to what would otherwise be inaccessible: the world of everyday life. The world of everyday life only can only be accessed for its understanding through the organization of experience. Everyday life is clearly an effective way to order the experience of the world and facilitate its understanding. Meanwhile the domestic landscape here framed is a particular language of ordering through which is expressed the understanding of that experience resting on particular objects marked by consumer action.

In the example we are pursuing, this particular way pre-producing the experience of home and its perception can be discovered in the visible features bearing the graphic forms of the back pages. The form varies according to the historical moment but has a solid structure according to the same discourse, ie, as a single aim on the basis of which the perceptual experience of the domestic landscape is intended to be ordered. In short, if we take an overall look at these images we soon find the homogeneity of a sales speech that underlies the intentionality of the Haceb

Company, assuming this space, the telephone directory as a promoter of an expeditious way to ensure the consumption of their products. Moreover, we find a way in which that form of domestic landscape acquires meaning beyond the representation of a specific topology of the home that is evidenced explicitly, in other words, in the back pages stands a particular narrative that seeks to locate the household appliances as the epicenter of the relationships through which our experience of the home acquires a sense. The landscape is drawn in the symbolic content of the images and not, at least in principle, the specific geography of the home. The landscape is prefigured by the discourse behind the images. We see that as the consumption of appliances emerges as a systematic way to shape the domestic landscape and with it, this act of everyday life takes on a certain typical form with which is valued and perceived the experience of the home.

In the images that appear on the back pages is put in evidence some characteristic features by which - and the reiteration of the message- the domestic landscape begins to take form as posed by the logic of consumption. In most of the images produced since 1956, is common to find that the absence of an iconic representation of the home is replaced by a simulated landscape that conceives the household appliance itself as the homes epicenter. The protagonist is neither the home as a complex of social relations nor the home as space, but the home as the arrangement of the objects that conform it, for that matter, the house objects that have to be acquired to complete the cycle, while they acquire their character as elements inserted in the system of consumption.

As an example we could mention the way in which the appliances are presented towards an aesthetic home landscape order. Here the domestic landscape is sensed by a chromatic scale drawn in pastels that show the balance of what that Baudrillard traces called a functional heat [Baudrillard 2010: 39]. In this case, the



Figure 7. Telephone directory back page, Medellín city, 1986-1987. (photo by Augusto Solórzano)

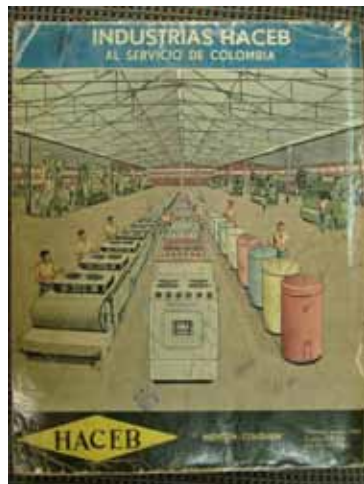


Figure 8. Telephone directory back page, Medellín city, 1987-1988. (photo by Augusto Solórzano)

shape of the domestic landscape [Figures 7 and 8], in terms of color, it rests in a sort of “calculated balance from the warm tones and cool tones” [Baudrillard 2010: 39] setting a trend of that which shall be consumed.

In this same sense, as a common characteristic is evident in another set of images a structure where the household appliances are arranged in a circle which center is set by the symbolic relation respect to the idea of home, which is preset from the design and that is suggested presumably by the distributor of household appliances of the time (Electrosol)¹. The images show how the appliances orbit around a center that is deliberately analogous to the form of the solar system, where the sun is at the epicenter of heat, which shows an intention to characterize the home in its original sense, ie, as a center of heat [fire]. But here [Figures 9, 10 and 11], the epicenter, as a safe refuge, is consolidated from a “heat meaning that is never achieved”² [Baudrillard 2010: 39].

Thus, we see that the home does not appear suggested as a typical form to be embodied in a social institution with a specific geographical location, but as a suggestion for action conditioned to consume, in this case, the household appliances that are offered. This demonstrates that the domestic landscape according to the graphic narratives present in the back pages, take form based on a simulation of the home as a place conditioned by the objects that are advertised, and its actual function is guaranteed by the very act of consuming.

3. Conclusions

The household appliances are confined within a wide range of objects which were there could be inferred meanings belonging to the history of consumer society. Through its evolution is pos-

¹ Electrosol: official distributor shop of household appliances Haceb in Medellín, closed today.

² In the spanish version: “Un calor significado y, por eso mismo, no se realiza”.

sible to trace the dramatic change in eating habits, cleanliness, changes in the home space generated from the introduction of new technologies, the anthropological tastes. Similarly the advertising in the back pages reveals a history of the production of print, fashion paradigms embodied in models, photographic techniques, among other things. When doing a reading of the back pages as a whole it becomes evident the history and evolution of the Colombian home from the last 50 years characterized by a strong presence of women that, together with the household appliances, sets a new domestic setting that emphasizes on comfort and the sociability, two determining factors for the development of private sphere and individual forms of consumption. The set of interpretations that arises here is located between a semiotics that deals with the sense of a structured theoretical scaffolding and a hermeneutic that opens to sense.

Consolidating a design history for which human experience is a priority requires the contributions offered by the explanatory model of semiotics to understand the systemic relationships of different languages, but also of a hermeneutics that links the language to experience and the symbol to life. Explore the figurative system of advertising of household appliances allows us to think the aesthetic and sociological significance of these devices in a wider dimension. Like the visual and ideological graphic rhetoric of advertising design, the status of the object integrates crucial mediations that link everyday habits, aesthetic values, different visions of culture, social norms, and the formulation of new rules and others.

Finally, to approach the notion of form, concept so dear to the design as to sociology, reveals a picture that opens to give the possibility of maintaining a broad perspective of the home. From this perspective, the home does not occur exclusively as the result of the family relationships that have provided it a crucial place as a social institution, the home is not the only space available for family privacy. Rather, the home appears as an inexhaustible condensation of relationships woven around forms derived from society as a whole. The home appears as a setting for mediation with the objects that comprise it, in the home are synthesized both the rhythms of everyday life and the aesthetic values associated with taste criteria ideologically prefigured.

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Place branding: graphic design's participation in strategic management and brand identity of the cities

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Place branding / Graphics design / Brand management

With the effects of globalization that has emerged in recent decades, occurred a high level of competitiveness between cities. This article presents a study on the participation of graphic design in the strategic management of the visual identity of brands of cities. This is a global issue because, at present, the tourist cities of any country compete identity and an international positioning as well as compete in regional and national environments.

1. Introduction

In the increasingly competitive world, technology offers a universal communication network construction full of opportunities and exposure of globalized brands. This explains the concern of governments to improve the reputation and prestige of countries, regions or cities, to the international community. As the field of enterprise and business, these places must also compete with each other. The competition aims to win foreign investment, market for exports and tourist interest. Thus, besides the political and economic measures, the management of the place is aimed at promoting their identity, culture and history, among other values, trying to compose a distinct identity in the global market.

Places strive to develop an intelligent management of their brand image. Countries or cities that traditionally enjoy a positive image such as regions of Italy, France or Portugal, have competitive advantages in different spheres of economic activity. Architecture, art and, especially, aspects of French cuisine, Italian or Portuguese, among others, enjoy a good international reputation. Place branding is a specific area of branding that aims to build brand awareness and a place: country, region or city. The places are treated as companies and the work of branding is to build them a brand and manage it with negotiating purposes. For this, one must consider aspects tangible or intangible, or functional and symbolic aspects related to the history and culture of the places. Branding or brand management necessarily requires instruments of action, such as graphic design combined with strategies of communication and marketing. The multidisciplinary activities and products of the design proposes a holistic approach to branding that addresses the problem of communication, decipher it and generate creative strategies for branding. This is the theme of this study, which deals with the strategic management of graphic design applied to the branding of places, like countries, regions and cities.

The research that was conducted is qualitative, descriptive and

interpretive. Here is presented an outline of the participation of graphic design in the strategic management of the visual identity of brands cities. This is a global issue because, at the present time, tourist cities of every country are competing for identity and international positioning, and compete in regional and national environments.

2. Place Branding

With the effects of globalization that has emerged in recent decades we have also witnessed a high level of competitiveness between cities, regions and countries. Factors such as size, location, economy, politics and management strategies are crucial in determining the level of competitiveness of these places.

Thus, it is essential for the appearance of this place to define an identity in order to strengthen its position before the rest of the world. Thus Arising the concept of place branding, under which the places are seen and treated as brands, in order to win customers around the world. So the target market of place branding is global and competitive.

Place Branding combines communication and marketing techniques to promote the destination. As the hallmark of commercial products and services, specific rules governing the positioning of the brand, how its reputation is built, such as customer preferences are addressed and loyalty is achieved, and how the brand is gerenciada. Countries, regions, cities, towns and large real estate development projects are currently being processed into products branded with the planet, serving as a global showcase. [Marazza 2010]

Territorial Marketing has been used by some cities to rebuild and redefine its identity, with a strategy rooted in local activities, which reflects and reinforces this same identity as the image in front of the public [Moreira 2010].

Many of the actions of place branding are adopted by countries, cities and regions, and those directly involved in the design and development of an identity, which appear unique and differentiated relative to other places, serving as a reference to leverage the investment and capture tourists, and can extend this brand to export products.

In the process of branding is necessary that all involved are committed to achieving the common goal of recovery of the place. So this is not the sole responsibility of governments or official institutions, also requiring the involvement of the entire population.

The population of a place builds a positive local image through

their behavior. Consistent attitudes and habits, cultivated public, are more effective in building a positive image than words or speeches do. Thus, there are different attitudes that influence the good image of a place [Anholt 2009]:

- Policies economic, environmental and external;
- Dynamic development of tourism, foreign investment and exports;
- Cultural events, sports and political;
- Improved relations with other countries;
- Focus on strategic commitment to poverty reduction;
- A long-term visionary approach to innovation, investment and education.

The most famous cities of the world have built their own identity from its history and character of its natural beauty and its cultural icons. This geographical and cultural heritage is summarized in symbols as well: Paris is romance, Milan is style, Washington is power, London is Vanguard, Tokyo is modernity, culture and Barcelona is New York's Energy. [D2B, 2007]. The synthesized image of the symbol comes in two ways: (1) by direct interaction with the city that promotes the respect of territorial identity or (2) the relationship arising from the indirect figurations communication issued by the territory. In general terms, the image of a city tends to be influenced by [Gaio and Gouveia 2007]:

- Characteristics and population size and space;
- Their status or political power;
- Its crime rate;
- His ability to host national and international institutions;
- Its location;
- His track record;
- Its value and cultural tourism
- His appeal as a backdrop for movies and series: product-placement;
- His nature and volume of media coverage;
- Its natural beauty and heritage.

It is the heritage and urban dynamics that allow the synthesis of symbolic words such as "novel", "power" and "energy" among others. This also allows and requires graphic symbols representing synthetic so visually the identity of the cities.

3. Graphic design and branding

The activities of graphic design deal with planning and composition of the graphic information and its consequent potential for visual communication. Part of these activities are devoted to planning and composition of graphic elements that express the visual identity of brands.

The identity allows the brand to be recognized as unique along time, because their distinction is expressed by the elements individually [Aaker 2001]. Thus, identification of graphic signs are more relevant in the visual advertising brand. This characterizes its strategic role in positioning the brand as a synthesis of the visual graphic broad collection of symbolic brand. The visual identity systems must be memorable, authentic, meaningful, differentiated, sustainable and flexible, offering distinction and adding aesthetic and symbolic value to the brand.

After the proposal and approval of graphic and visual elements of brand identification, types, figures, shapes and colors proposals serve to identify all materials related to the brand. Among these are the graphics products, printed or digital, which act directly on brand awareness, characterizing the direct performance of the design in the context of branding [Silva et. Al. 2010].

There are products that are directly related to the dynamics of brand management: (1) graphics products signaling, (2) printed media, (3) environments, digital graphics and messages for internal and external relationship, (4) visual communication projects uniforms and equipment, vehicles and architectural surfaces, among others.

There are also specific to the graphic designs of brand products: (1) labels and tags (2) visual programming packaging and displays, among others.

There are also graphic products projects or messages intended for communication and advertising: (1) brand magazines and newspapers, (2) outdoors, (3) direct mail, (4) brochures, (5) graphic designs for television commercials and internet, among others.

The graphic designer's work is multidisciplinary and interdisciplinary. For this activity it is required mastery of methodology and language of design and graphic media, which allows its integration in multidisciplinary teams. But in addition, the planning of visual information requires interaction with content from different disciplines such as: Visual Perception, Psychology of Form, Colour Theory, Semiotics, Marketing, Branding and other related areas, demarcating the disciplinary bias.

Graphic designers are experts at creating elements that allow a specific identification and differentiation of the visual aspects of the company (brand), contributing, through these, for policy and communication strategy of the same [Centro de design português 1997]. However, his specialty depends on a wide network

of technological and conceptual relationships.

Besides the use language and design technology, design and print or scan graphic pieces, the conceptual domain interdisciplinary allows graphic designers the critical capacity to guide its work. So he is able to adopt and develop a strategic approach that is consistent and complementary to the integrated process of branding.

Graphic Design is an area of knowledge and practice that plan information as part reproducible graphics to visually communicate a message, using text, images or symbols composed of shapes and colors. The goal is to serve functional purposes, symbolic and aesthetic, in a methodical and strategic, as a solution to a problem or need communicative previously prospected (Villas-Boas 1999).

The products of Graphic Design, especially those arising from the process of creating the visual identity of the brand, make, synthesize and mean, officially, the public face of the corporation or the products and services they represent. Thus, the graphics products part of branding strategies, dealing with the creation, construction and management of brands, to manage the relationship between the brand and the public.

Brand managers believe that the intangible or symbolic aspects of brands shall be controlled by stimulation and responses tangible or visible. Tangible and significant events are all perceived that, intentionally or casual, are related to the brand. The graphics of the visual brand identity, especially the trademark, make up the synthesis intentional and official visible expression of the brand.

The term branding strategy means a larger systemic approach, which seeks to predict and manage inter-subjective and objective relations between expressions and values of the brand and the various partners, competitors and public that directly or indirectly relate to the brand. On a global scale, this approach should consider the international and intercultural relations.

Branding is the set of actions related to the administration of brands. These actions, taken with the knowledge and competence, leading brands in addition to their economic nature, becoming part of the culture, and influence people's lives. Actions with the ability to simplify and enrich our lives in a world increasingly confusing and complex (Martins 2006: 8).

The prospective processes allows composition of a plan that directs brand positioning strategies and actions of branding. Firstly, the relevant part of this plan focuses on communication, whose success also depends on the informational efficiency of the graphic-visual identity.

The expressiveness of the graphics should promote sensations, feelings and meanings consistent with building a positive brand image, positioning focused on what was planned. From the expression of the brand, get the friendly relationship, which is advantageous for gaining the trust and loyalty of the consumer public.

The branding is focused on mental structures, aiming at the organization and management of knowledge about the brand, its

products and services, offering subsidies for the consumer public to make better-informed decisions. This occurs to the extent that, before the consumer, the brand reputation can take responsibility for ensuring the quality of what is and offers.

4. The graphic identity of the tourist brands of cities in the context of place branding

For centuries, the records of the heraldic tradition are full of examples coats of arms that identify cities. Some of these coat of arms are still used today. Over time, cities presented also other brand which sometimes are related to municipal institutions or political mandate and administrative. However, the global market led to the creation, dissemination and processing of large graphic marks tourist towns, along with other brands of places, such as countries or regions.

The graphic brand of the city represents the center part of the set of identity-visual graphic. Therefore, it is designed to synthesize the entire collection of the brand's symbolic place and express it in accordance with the interests of the tourism sector and its public.

The graphic design of the brand aims to: (1) representing visual graph language the semantic content of the mark, (2) provide technical and aesthetic-syntactic, which are indicative of quality and technical accuracy, ergonomic and aesthetic, (3) facilitating the suitability of different graphic design and digital print media. Thus, the brand is able to identify the various communication products and advertising or use. Brochures, billboards, T-shirts and others are identified by the city and also serve as support for the dissemination and propagation of this brand.

The example presented in this paper is the brand of the city of Melbourne (fig. 1), in Australia, which summarizes the values and participates in the promotion strategies of the city, which is positioned as a competitive tourist destination. The brand positioning is focused on presenting Melbourne as a place of endless possibilities, encouraging the visitor to find their values.

According to their issuers, the brand as a whole represents a vibrant, energetic, colorful therefore exciting the curiosity of tourists in order for them to feel like an explorer. The graphic brand of Melbourne (fig. 1) was based on the design of the letter "M", composed with a suggestion of depth and tonal and chromatic effects and proposing overlay transparencies. Overall, the visual aesthetics proposes directions related to multidirectional lights, geometry, and digital technology.



Figure 1. Touristic trademark City of Melbourne. (photo by <http://www.ergus.com.br>).



Figure 2. Brands of cities: Cancun, Melbourne, Belo Horizonte, Estoril. (Assembly of the authors).

The visual-graphic symbol, and represents the letter “M”, which is the first letter of Melbourne, represents a more urban and technological universe and night, when it is presented in shades and colors in the image above (fig. 1). The design of the typography used in the composition of text below the image, “City of Melbourne,” also reinforces the sense of urbanity and technology, by its dark appearance and its vertical configuration, geometric, predominantly rectilinear and visually clean, ie without serifs , without thickness variations, without decorations.

The visual treatment of the form that sets the letter “M” points out several directions and suggests the viewer’s eye movements. There are rhythms and tonal variation due to color and also the approach and figures of the distance to the internal composition of the letter. The emphasis is on the left eye of the observer spreading smoothly downwardly and the right. Technically, the gradients are applied to the design of the brand that promote sense of volume and depth. Compared to other brands of visual graphics of cities, Melbourne brand is differentiated in its aesthetic and symbolic aspects (fig. 2).

The graphic brand of Melbourne was planned as an image changing, because its design provides for changes of colors and designs internally. Thus, the configuration of the product remains stable visually, while the visual treatment procedures may be modified according to circumstances (fig. 3). This option promotes differentiated visual sensations that confirm the positioning of the city as a place of many possibilities, vibrant, energetic, colorful and exciting.

5. Concluding remarks

The example above shows communication management strategies in relation to graphic design-visual brand of the city. For other symbols as well as tourist cities, the graphic brand of the city of Melbourne (fig. 1) signals the intention to dispose projective graphic-visual language to express the semantic content of the brand and provide quality technical accuracy, ergonomic and aesthetic . However, it is possible to show the images of this text (fig. 1, 2 and 3) the adequacy of the graphic design for different media. But beyond the intrinsic qualities of the visual official



Figure 3. Different visual treatments for the brand of Melbourne. (photo by <http://www.ergus.com.br>).

graphic brand, its configuration was presented as an applicant country for various compositions streamline your communication, allowing diverse versions consistent with contextual situations.

Previously, we presented ideas and activities of branding, the branding of places and graphic design, considering their interaction in the identification and qualification of the city brand. In this context, the presentation, description and interpretation of graphical images of the brand of the city of Melbourne, as a synthesis of the identity system visual graph illustrates the performance of graphic design as an ally in the strategies of communication and management in the context of branding places, be they cities, countries or regions.

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Public information: Design, visibility and citizenship

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Territories / Culture / Information Design / Visibility / Citizenship

We present three information design developments, focused on the visibility of public information. Graphic design and its infographic production can not remain oblivious to the dialogues and debates, in relation to the socio-political and historical constraints which delimit its production. Development of components and devices imposed thinking about the choice of languages, forms, methods, trying to simultaneously build and question the responsibility and commitment of the designer's role.

1. Socially necessary information, visual and citizenship:

We understand the visual communication media and not from the strategies, but from the spaces, bodies, time, actors, which are included on the context and history where such communication occurs. Analyze visual communication in the broadest sense, means taking into account the relationship of these factors, in excess of merely formal or media type which is registered. This technician look of visual languages that serve the communication is not enough, it is necessary to understand them as conveys regulators sense and cultural practices.

The inherent use of visual languages as instruments of regulation of cultural practices in the field of visual communication, leading to open to the notion of visibility, that is, the political place occupied by the various communications in the public space and how it adds the cultural and symbolic construction of a society.

A design project well thought out, start from the recognition that every person requires socially necessary information to build arguments and views on their political actions, economic, cultural and social.

In late capitalist society, regulated by the market, so consumption and accounts for almost all of the visual field. Culture has become a product. The advertising industry calls for achieving power and happiness through the accumulation of money and buying products. The mass media produce and reproduce ad nauseam advertising images for these purposes, monopolizing the symbolic sphere of service consumption and, second, erasing memories saturated with images of violence in dramatic language, denying the pain should cause situations of injustice.

Graphic design can contribute to generating new knowledge and best experiences of public information on topics that belong to citizens and therefore constitute subjectivity and affect them.

Different visual communication devices can help raise awareness, give visibility to voice and promote the transformation of these environments sustainable spaces and better citizenship. The visual is immersed in a regime of power¹.

The works in the field of forms, but never neutral, always contributing to the field of visibility certain statements of certain sectors of society, creating meanings that refer to certain systems of ideas.

A graphic designer and designed the receiver thinks of his pieces. The intended recipient should not be a static operator expected at the end of a process that will get the message, instead, the designer thinks, conceives and imagines that receiver active and living, anticipating their movements, their readings, their looks and even possible texts that appear around it. [LEDESMA, M. 2003]

From a formative perspective, doing interdisciplinary experiences is critical not only for employability but also to understand and do understand the visual as part of our context.

Currently, to address this complexity, it is necessary to know that

[...]designers work closely with researchers, consultants, agents and many others involved in the creation, dissemination and control the flow of images, objects and information. The discipline of design has shifted from problem-solving processing and as such, the multidisciplinary to interdisciplinary. [JULIER, G. 2010]

2. Information Design:

Information design cannot remain oblivious to the various topics that are vital for the inhabitants of a community. On the contrary, is a graphic design and builder convey sense and cannot remain oblivious to the production of socially necessary visual information. Currently, in the context of Argentina are very few effective communications issues on the agenda: as health, land and natural resources.

There is a highly diverse public expression that remains hidden, displaced the visual field, choked by grabbing that achieved in this area the dominant voices. We start from the conception of the graphic designer as cultural operator, with a critical and reflective towards their productions and reality surrounding it.

We intend to overcome the utilitarian conception, technician, individualistic designer, aiming to build a complex look that integrates the formal to the context² "to divorce the design from the content or context is a lesson in passivity: it implies that the

1 [LEDESMA, M. 2003]

2 [McCOY, K. 2001]

graphic form is separate and unrelated to the subjective values and even of ideas. "We urge you not to forget the history, inquire into the identity, political schemes, social, cultural and economic sectors to those projected, as explored in this" Students see the contextual interdependence and make analogies with present tense³.

From a formative perspective, doing interdisciplinary experiences is critical not only for employability but also to understand and comprehend health as part of our environment today.

Understanding the distribution of agenda items as socially necessary information (SCHILLER, H. 1996) that a person "citizen" required to make decisions and be public about their political actions, economic, cultural and social, is what allows discipline involved, and through that understanding to persuade. The development of computer graphics, posters, broadcast editorial pieces, etc., is essential not only to the level of information transmitted, but also must provide a specific complaint to improve thematic approaches.

For this reason also, it is very important to create a space where students can express directly to the customer experience, describing what ideas were put into play in the process, complexities are found, what were your resolutions, etc. The return time is an essential part for the financial year, as it brings students more than any other experience to the reality of their future profession.

3. Environment, health, territories

We propose a practical where it is shown that persuasion can be present not only for the purpose of generating a simple communication diversion, but where the rhetoric can be used to convey a specific meaning in terms of health.

Environment:

We developed a job where the idea was to build a visual discourse that addresses content analysis and construction of visual speech from the relation of text to the image and the media in which you enroll.

The typography element of the discipline as a way, is code and image communication. The gaze was fixed on the typographical applications from the level of significance, gave voice to visual speech. In the political sphere, the aim was to establish a bridge between form and the word as a living element, trying to install in the shaped network of visibility, part of the struggles of indigenous peoples and campesinos Latin American antisystemic movements integrated, linked to problem of land and territory and finally the environment by providing visibility.

It also included the environmental problem posed from agribusiness in addition to its high pollution and spread of diseases do come with the "wars of dispossession" by evicting the communities that inhabit the area that serve the business development of agribusiness.

³ Idem 1.

To confront the power of the media and economic power groups is essential to build another communication. Power to proceed with other visual elements in public space is one way to bring those voices silenced and provide alternatives to the fight for territory. Is to learn and reflect in an attempt to contribute to the production of other visual discourses as criticism, and political practice.

These posters (figure 1 and 2) are examples of how typography entered the service of our exercise.



Figure 1. Typographic proposal. Agribusiness. GD level 1 (by Margarita Ruben).

Figure 2. Typographic proposal. Biodiversity. GD level 1 (by Altair Mon).

Health:

In parts of prevention, today, can be detected fairly common problem: the idea that the statistical information set objective communication. But what do we get people with different cultural, social, economic, come to that information? How do we integrate the subjectivity of those people to improve health? At the same time, Can we use the same approach for all audiences?

From this overview we work in three groups of diseases endemic in our country, such as chagas, dengue, hydatidosis, leishmaniasis. Preventive medicine, for example, specifically refers to communication as an essential part of their task. Therefore, although we talk about design based on research and objective data from the medical field, we consider the persuasive element must be present to enhance communication. Following this aspect many existing parts, referred to these areas, have failed to communicate effectively, in particular places where they are needed most.

This is where we considered how to design developments are diseases that are nearby and considered forgotten. The development of different pieces of design are essential not only to the level of information they convey, but also must provide a specific complaint to improve the thematic approach of the disease. Research on the target audience is key to developing successful programs of health communication. This information should be used to develop messages, content and relevant materials and to identify the channels that are more likely to reach those who are at high risk and thus have some influence on them.

The target audience should be segmented to identify broader groups of people who share similar values, have the same beliefs or have in common other key attributes that affect their attention and response to health information. It is necessary to consider a development where it is shown that persuasion can be present not only in order to generate a simple communication diversion, but where rhetoric can convey a specific meaning in terms of health.

These posters (figure 3 and 4) are examples of how infographic helps to disseminate valuable information.



Figure 3. Infographic proposal. Trichinosis. GD level 2 (by Stefania Spangenberg).
 Figure 4. Infographic proposal. Leishmaniasis.. GD level 2 (by Emiliano Agnetti)

Megaming:

In a global context territorial defense of the wealth generated by the development of natural resource economies is increasingly relevant. As a developing country, Argentina, has an unfair exploitation of subsoil resources, including so-called mega operating open pit mining, in a complex web of exploitation that spans global economic interests as well as to the complicity of local authorities.

Therefore, in line with the above, the premise on this subject was to assume that production environments visualist environmental crisis requires certain skills to get generate knowledge about specific problems.

Information design is understood as a key and essential domain in the process of communicating and at the same time to reveal knowledge.

In this case, we developed an information design based on public information. This was carried out computer graphics and Internet microsities later. The importance of this experience was based on

experimentation and learning design in digital environments, applicable media or educational fields. Were understood as significant in the communication process of digital media, mediation of the interfaces, the relationship between text, image and audio, cognitive operations, hypertext, organization and information architecture, including several instances.

We favored the use of multimedia resources and discursive procedures that include interaction with the user in the devices construction to convey messages and effective cognitive tools for transforming an environmental reality of risk and required joint action by producers, readers and mediators in general.

Thus, it has been developing the device design and the choice of languages and forms, methods and transitions, always in accordance to the action that was prescribed objective and based on the commitment to the role of the designer and producer social information.

These screens (figure 5 and 6) are examples of how infodesigns makes more accessible complex information.



Figure 5. Interactive proposal.Real time. GD level 3 (by Andrea Lopez y Sofia Museri).
 Figure 6. Interactive proposal. A possible megaming. GD level 3 (by Estefanía Gilges y Natalia Cañas).

We hope we have achieved from the signature to provide graphic design, new ideas that show new ways to apply discipline in the teaching-learning process of these future designers today still students, but also a reflection to all this house of studies about the importance of working in training issues related to socially necessary information.

Acknowledgment

Want to thank all our colleagues and students of this learning process without them this is meaningless. We believe and defend vision of public education tendent to stimulate professionals whose productions contribute to improved citizenship and.

Here we don't speak, here we whistle: designing a language support system for the Silbo Gomero

MATOS, Sónia / PhD / Edinburgh College of Art / United Kingdom

Language / Intangible cultural heritage / Didactic materials / Vernacular and embodied knowledge

This paper presents the design of a didactic application for a whistled form of language known as the *Silbo Gomero* (Island of La Gomera, Canary Archipelago). After fifty years of almost total extinction this form of communication has been revived. As a response to this transformation, the need to develop didactic materials is presented as one of the main challenges encountered by the community.

1. Introduction

A hundred kilometres off the coast of Morocco and the Western Sahara one can find the small island of La Gomera, the home to a whistled form of language known as the *Silbo Gomero*. Even though the historic origins of this linguistic form are difficult to trace, most islanders attribute this practice to the Guanches, a pre-Hispanic people who were the original inhabitants of this Atlantic region until the XVth century, period during which they were largely driven to the brink of extinction by the Spanish colonization (Crosby 1986: 80-82). Despite the apparent total isolation of this ethnic group until this time, this linguistic form has much in common with other whistled languages that span the globe¹. These places have nothing in common except particular geographical features: all characterised by being either mountainous or densely forested (Meyer 2005). This geographical diversity tends to suggest that whistled languages are sophisticated linguistic techniques largely used as telecommunication systems (Busnel & Classe 1976: 13-31) and bearing a correlation with their local spoken languages (Meyer 2005; Trujillo 1978, 2006).

According to bioacoustician Julien Meyer (2005), who documented the regions, what distinguishes the *Silbo Gomero* from other whistled forms of language across the globe is its active place within everyday life. The *Silbo*, as most Gomerans call it, has slowly, since the 1950's, shifted from the fields where it was once used by peasant islanders into the classroom, something which contributes to safeguarding its position within Gomeran culture. This shift is tied to a continual disappearance of agricultural life, processes of immigration and the introduction of tourism as the main means of economic sustenance. In fact, the attempts that have been made to safeguard this intangible cultural form have led to recent recognition of the *Silbo Gomero* as a significant part of world heritage (UNESCO 2009). Such recogni-

1 Especially in Mexico, Greece, Turkey, Papua New Guinea, Vietnam, Guyana, China, Nepal and Senegal (Meyer 2005).

tion not only valorises the linguistic form but has also supported local educational efforts.

Here lies what will be the main thrust of this contribution: how might didactic materials be designed that will support the wealth of skills so that they can be transmitted from one generation to the other. Such interest is intimately tied to a close study of the Gomeran educational community, one that has shown a concern for expanding the *Silbo's* educational resources and learning methodologies (Brito et al. 2005). However, and considering that the learning of the *Silbo Gomero* has shifted from a form of apprenticeship characteristic of non-literate societies to being subject of contemporary educational paradigms, understanding the wealth of such skills becomes more pertinent than ever.

2. What is a Whistled Form of Language?



Figure 1. Students whistling (video still from the documentary 'Aqui no se Habla, Aqui se Silba' by Sónia Matos).

Professor Ramón Trujillo, one of the most prominent figures in the phonetic and phonological study of the *Silbo Gomero*, has presented this linguistic form not as 'natural language' – at least not in the orthodox sense – but rather as an independent phonological system². One "[...] that contains a reduced number of phonic-schemes that are used to produce different sonorous substances [...]" (Trujillo 2006: 15). And even though this linguistic form might resemble the local spoken Castilian Spanish it is not a direct imitation of this linguistic code (Ibid.). Here, it is important to understand that this complex system of telecom-

2 A phonological system corresponds to the collection of phonemes used by a given language. Each phoneme corresponds to the smallest segmental unit of sound, a linguistic convention that attempts universally to represent, through a collection of graphical signs, the 'distinctive sounds' of each human language. As an example, in the English language one can identify phonemes such /c/ for 'car' or /k/ for 'kettle'. (IPA 1999: 27-28)

munication would not be possible without refiguring the body by means of a modification of the linguistic medium. Instead of relying on the lips, the whistled form relies on the interior oral cavity: the tongue must be elevated against the palate or teeth and supported with one or two fingers, or even not supported at all, according to the desired intensity (Trujillo 1978, Meyer 2005). The process clearly disturbs the local Castilian Spanish without disturbing its semantics – for this reason it is frequently called a surrogate of the language spoken in the island (Trujillo 1978, 2006).

The limitation of the whistling apparatus is considered to be the main constraint, which explains why a whistler can only produce 'differences in tonal frequency' and this limits a vowel to being 'grave' or 'acute'. While the spoken vowel relies on a different set of physical resonators the whistled vowel is shaped by and depends upon one resonator, the mouth (Ibid.).

One of the authors to disagree with this separation between 'acute' and 'grave' vowels is Annie Rialland (2005). In fact, Professor Trujillo writes that, within the *Silbo Gomero* we can only find "[...] two 'whistled vowels' or groups of frequencies; two blocks that behave as they would in ordinary language [...] where functional confusion is impossible from a phonological [...] properties that are always distinctive and those that are not consistently distinctive (depending on the context, the situation or what the whistler knows) cannot be considered [...]. Obviously, these latter properties, which Annie Rialland sometimes calls 'optional' [...] do not form part of the structure of the whistled language because they depend on external factors" (Trujillo 2006: 15). Here, a paradox seems to emerge. When attending *Silbo* classes or being in the fields recording with *Maestro* Isidro Ortiz and *Maestro* Lino Rodríguez³, I found that whistled languages are in fact highly 'dependent' on what a 'phonological stage' would call 'external factors'. In fact, here, it is important to understand that both *Maestro* Isidro and *Maestro* Lino are able to whistle and perceive at least two further groups of vowels within the grave/acute separation.

In considering the 'phonological stage', the 'acute' and 'grave' vowels should be completed by the addition of two other groups of consonants, the 'acute/grave continuant' and the 'acute/grave interrupted'. Here, the "[...] whistled consonants are nothing more than intonation curves, transitions or interruptions in the 'whistled line' of what we have called whistled vowels" (Trujillo 2006: 201). The vocalic lines – between 1000 and 3000 Hz – are altered with the 'help' of the whistled consonants. In these terms, an acute consonant will always point the following vowel to a higher frequency; the opposite will happen when it is preceded by a grave consonant. All of the above 'consonantal intonations', whether continuant or interrupted, correspond to spoken Spanish, except for /s/ (that cannot easily be whistled) while "[...] a continuant is transposed into an interrupted [...]" (Ibid.: 205).

³ Maestro is the Spanish word for teacher. Maestro Isidro and Maestro Lino are two teachers who currently teach the Silbo Gomero in the different schools of the island.

3. Moving Towards and Ecological Approach

Revealing some of the paradoxes behind the phonological study of the Silbo Gomero (Trujillo 1978, 2006), and its reliance on phonological data and spectrographic modes of analyses⁴, appears as a crucial ground for discussion. Particularly, when attempting to understand the sorts of skills and the embodied knowledge that inform the wealth of this linguistic form. Here, the concern shifts from safeguarding the *Silbo Gomero* as such to establishing a body of research to tackle the wealth of skills that inform local knowledge systems. This concern can be summarised by the following question: what is really transmitted from one generation to the next? Is it simply a surrogate form of language or a complex and embodied auditory culture? While acknowledging the *Silbo Gomero* as surrogate model of speech the researcher will clearly demarcate the code as it is rendered through a spectrographic measuring apparatus. While acknowledging this whistled form of language as situated and embodied phenomena that stretches the perceptual fabric beyond the delimitation of a verbal code, the researcher is drawn to its ecological significance. However, and in order to extend this phonological approach, one has to extend the unit of analyses and integrate an embodied account of this performative ecology, where whistler and environment cannot be easily detached from one another.

This approach is supported by recent contributions made by Julien Meyer (2005). This bioacoustic study has provided an insightful resource for the development of an ecological approach to the study of whistled languages and their surrounding environment. This move from an informational to an ecological stance, where both subject and environment become key elements, will ultimately reinforce the acknowledgement that the relation that whistlers establish with the surrounding environment is intrinsic to both performative and learning processes⁵. Such an ecological approach has been concurrently supported by work in the field of neuroscience, particularly when it has pursued the idea – largely based on fMRI brain scans of local whistlers – that the performance and intelligibility of this linguistic form involves recognition of complex pitch and melodic lines, where linguistic areas of the brain, largely conceived as speech dependent, show an incredible adaptability to non-verbal auditory signals (Carreiras et al. 2005). This reemphasizes Meyer's idea that: "At the level of the ear, the received whistle is only the visible part of a linguistic and acoustic iceberg of which the immersed part is the brain of the actors in the dialogue" (translated from the original thesis written in the French language, p.236).

However, and as some have argued, cognition as embodied and

⁴ Spectrographic analysis makes use of an oscilloscope (or scope) "[...] a powerful instrument used to display the voltage in a circuit as time passes. Scopes are available as analog scope and as a digital storage oscilloscope [DSO]" (Diffenderfer 2004: 19).

⁵ This conclusion provided by Meyer's bioacoustic study is indebted to an earlier study of whistled forms of language proposed by André Classe and René-Guy Busnel (1976).

interactive phenomena⁶ cannot be easily localized in the brain or even in the simple adaptation to environmental constraints (Meyer 2005, Trujillo 1978, 2006), because it is performative. In fact, my personal experience, when recording in the fields with both *Maestro* Isidro Mendonza and *Maestro* Lino Rodríguez, provided valuable information of the perceptual ambiguities that arise from the environment and the whistlers embodied performance within it. Here, it is important to account not only for the ways one reconfigures the verbal apparatus but also for the ways in which the sonic qualities of the surrounding environment play a role in performance while enriching the subject's auditory perceptual capacities. To take this further, while the *Silbo* might provide a surrogate means of communication to the verbal Castilian Spanish spoken in the island it also supersedes the logics of speech.

While placing all presented contributions into play, a working hypothesis is brought to light, one that ecologically situates what phonological studies will identify as 'universal linguistic properties' (vowels and consonants) (Trujillo 2006: 319). At this point it is important to proceed with care. This body of work does not neglect the fact that the *Silbo Gomero* shares the same organizational principles with spoken language – that would be native. However, it is important to understand that the description of such 'universal properties' conceals a particular disciplinary methodology, one that separates what generative linguistics would qualify as the 'faculty of language in the narrow sense' – "[...] the abstract linguistic computational system alone, independent of other systems with which it interacts, and interfaces" (Chomsky et al. 2002: 1571) from the 'faculty of language-broad sense', where "[...] an internal computational system combined with at least two other organism-internal systems, which we call 'sensory-motor' and 'conceptual-intentional'" (Ibid.: 1570). One might posit for a moment, in the particular case of whistled forms of language, a form of linguistic competence that interweaves both 'faculties'. In this sense, whistled forms of language are as much forms of auditory cognitive apprenticeship as they are of purely generative linguistic competence.

4. The Sound Labyrinth

A continuing engagement with the *Silbo*'s auditory epistemic ecology has become the key underlying component in the design of didactic materials, thus taking the potential to reenact this linguistic form beyond the preservation of a surrogate code while recreating the ancient body of knowledge. This instigated the development of the application '*El Laberinto del Sonido*' (The Sound Labyrinth). Developed in collaboration with computer engineer Theo Burt⁷, this application was designed for the schools of the island and for children ranging 6 to 9 years of age. The initial design stage was developed through a close reading

⁶ Such an ecological or embodied reading of cognition is indebted to an 'enactive theory of perception' as proposed by Francisco Varela, Eleanor Rosch and Evan Thompson (1995) and the ecological and active reading of cognition as proposed by Alva Noë (2004) and James J. Gibson (1966).

⁷ For more information regarding Theo Burt's work please visit: <http://www.theoburt.com/>

of the research component presented in the previous sections. Hence, the '*El Laberinto del Sonido*' presents a first-person experience in which the creation and exploration of an immersive, auditory space. In order to explore linguistic and '*audile*'⁸ (Sterne 2003: 96) spaces, the application is divided into distinct nodes that are visually accessible to those of the user/s in a grid-like shape (see images below). Within this grid, the user/s are able to create record sounds or to move and reconfigure existing ones. Each is accessible for direct sound recording or to import sounds created elsewhere in the computational medium.

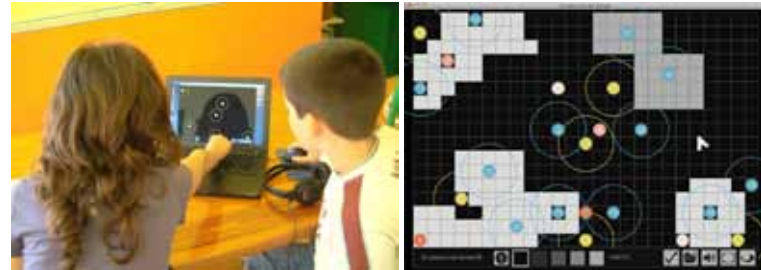


Figure 2 and 3. Students interacting with the application '*El Laberinto del Sonido*' in the school CEIP El Retamal, Island of La Gomera, April 2009 (photograph by Sónia Matos)

To this feature, and as part of the developed design proposal, engineer Theo Burt added a binaural sound generator or algorithm that allows the development of a binaural sound field. This feature is further enhanced by the possibility of directly manipulating distinct reverb presets while 'painting' each preselected reverb onto the grid of the narrative space.

To further continue, the application offers the possibility of switching between a dual visual/auditory and an isolated auditory mode. The possibility of 'hiding' the visual interface allows children to focus on the recorded and inserted 'sounds objects'. Finally, this process demands a shift from an understanding of sound as object to an understating of its 'effects' (Augoyard & Torgue 2005). While accessing the application through sonic means, moving through the space and engaging in different schemes of interaction, the listener is experiencing the 'effects' of sound. Once clear and identifiable 'objects', they are now spatially and temporally entangled and no longer appear as easily discernable and identifiable units, at least without demanding larger degrees of active or 'selective forms of listening' (Truax 2001: 18).

As proposed in 'Sonic Experience: a Guide to Everyday Sounds' (2005) five groups of 'effects' were considered: the 'elementary effects that concern the sound material itself' (Ibid.: 17). In the case of the *Silbo Gomero*'s auditory ecology this category is associated with the reverberation and echo that one can sense when performing in the barrancos of the island. The 'composition effect concerns complex sound arrangements' (Ibid.: 17). This effect refers to sounds that might occur at the same time or

⁸ The term 'audile' appears in Jonathan Sterne's 'The Audible Past: Cultural Origins of Sound Reproduction' (2003) and refers to a person whose understanding of the world is predominantly based on auditory stimulation (p.96).

sounds that have a complex temporal development; this phenomena is visible when performing the Silbo out in the fields where various sounds may be heard simultaneously. The 'mnemo-perceptive effects' concern the way listeners 'memorize sounds, a feature that also influences the ways in which a listener searches for sounds in the environment and the sounds that are culturally valorized over others' (Ibid.: 17). And the 'psychomotor effects' that concern 'the actions or schemes developed by listeners when interacting with particular sounds' (Ibid.: 17). The phenomenon qualifies the ways in which the receiver of a whistled message directs the body towards the source of the whistled utterance. This example is associated with the 'attraction effect', where "an emerging sound phenomenon attracts and polarizes attention" (Ibid.: 27).

At this stage of design development, it was important to take into account the fact that these 'effects' are central to the ecological development of the whistler's body of knowledge as presented above. In this stage it was also pertinent to understand these 'effects' as entangled phenomena that provide distinct schemes of interaction and therefore cannot be reenacted in isolation. This feature reemphasized the potential afforded by computational mediums, one that would shift some of the visually informed didactic materials as suggested in first didactic publication regarding the Silbo Gomero (Brito et al. 2005) to a medium with vaster interactive and sonic potentials.

5. Some Final Remarks

It is important to finalize this contribution by emphasizing that the mobilized ecological direction does not necessarily offer a 'remedy' in the safeguard and effective teaching of the Silbo Gomero in the space of the classroom. My point has rather been a shift in perspective when designing didactic materials for this unique form of language, one that attempts to move beyond its surrogacy to speech. In this sense, this body of research has attempted to mobilize a cultural reading of the Silbo Gomero while offering an ecological framework that is both rooted in local forms of embodied 'audile' knowledge while mingling with contemporary technological platforms and the challenges they carry. Finally instigating future directions that traverse the community. And while an older generation of whistlers might see in this whistled form of language the transmission of a culture of the past, I hope that the work developed so far might actually enhance the fact that they contribute towards the preparation of an 'audile' culture for the future.

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Modernity boundaries in the process of understanding Brazilian Design

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Design / Brazil / History / Modernity / Discourse

Modern mentality, according to sociologist Zygmunt Bauman, is a search for 'control' and 'rationalization' that reflects deeply in political choices. It will be explored the fact that Brazilian design, in some currents of thought, is told to have begun only in 1960s. By the end of the paper, we expose that such affirmation underlines a scientific view of design that only came into place in the 20th Century.

1. The Modernity Issue

Much has already been said about the historical conditions and processes that led Brazil to install the first school of Design in Rio de Janeiro during the 1960s¹ – ESDI, *Escola Superior de Desenho Industrial*². Many of the authors who wrote (and are still writing) about it are more than useful for our purpose, and our work would not be possible without them as well. However, since most are focused on the historical research that allows us today to confront and review any thoughts concerning that there was no design production in Brazil before the 1960s, we also find that there is a certain lack of research in reading the roots of the discourses that surrounded and defined such postures. In other words, we wish here to understand the Brazilian industrialization model in the 1960s, which led to the installment of ESDI, as an attitude that embraced the European idea of Modernity that was in course in such time. So, we do not seek here exactly for an extension on the views that have already been discussed in the authors previously referenced, but yet a different take on the same matters: we wish to find, in Brazilian design discourses from the 1960s, the idea of Modernity as a *posture* that seeks order and structure leading to progress, or, in the words of sociologist Zygmunt Bauman, an *instrumentalization of social relations* through the action of the State and Science (BAUMAN 1999). The industrial development, in this view, would then be the materialization of such wishes in the changes that were needed to occur in cultural, economical and political relations.

There is no doubt that the concept of Modernity is a complex one. There are many interpretations and views on such matter, and, especially on historical studies, it demands more attention. However, since our intention here is to analyze the discourses in the installment of Design as an industrial field in Brazil, we can understand that Modernity can be understood as a process of rationalization (ROUANET 1994: 39-42) that, according to Max

Weber, invades the spheres of Economics, Politics and Culture. In all three fields, a modern attitude would be that which longs for 'good functioning, in systemic terms' (ROUANET 1994: 42). 'Rationalization', here, also refers to the idea that the scientific development, proposed by the Illuminists in the 17th Century, was supposed to be free from any metaphysical/religious beliefs – in other words, society should be auto sufficient, not needing any external forces to guide or help it. This proposal ends up bringing the attitude that all social relations, be they aesthetic, ethical, political etc., might be resolved (and improved) through a methodic scientific way of thinking. To this dynamics, in which the Sacred (cultural element) was disconnected from the Social in the public sphere, Max Weber named 'disenchantment of the World' (WEBER 2011: 107,133). Also according to Weber, it is this essential 'change' in attitude that made possible for Capitalism, and therefore the Industrial Revolution, to take place³.

According to historian OAKESHOTT (2000: 22-26), another key element about Modernity as an intellectual posture, that will be important for our present analysis, is that it has a tendency to diminish the importance of local/cultural tradition (the Past) in the name of what's *new* (the Future) through the ways of forming ideologies and strategies that make Societies believe that the plans for 'tomorrow' will make its life better. OAKESHOTT constantly uses the metaphor of the Babel Tower for a picture of the rationalizing Modernity as a political attitude that longs for the Future, by being an ideology that makes society believe that 'things will be better', however, the 'Heavens' are never reached (OAKESHOTT 2000: 427-446; 2003: 249-284)

The scientific spirit, described as a secularist-rational and methodic attitude towards the World, would then be what characterizes Modernity in our take of the matter. The wishes for "order" and "progress", marked on the Brazilian National flag as a reference to the words of positivist French thinker Augusto Comte, would then find great resonance in the new Republic that was being born in the end of the 19th century. However, despite such wishes, it would take a few decades for the Brazilian Economy to finally step into the Industrial Era.

2. The Brazilian Modernity Project

The year of 1851 is an important one in the history of World Design due to the fact that it was when the Great Exhibition of the Works of Industry of all Nations (or The Great Exhibition) took place in London – an event that would then repeat in the

1 CARDOSO 2005; MELLO & RAMOS 2011; NIEMEYER 2007; WOLLNER 2003; SOUZA 1996.

2 In English, it would be translated as something like Superior School of Industrial Drawing. We choose here to maintain "drawing" instead of "design" to the purpose of exposing the cultural boundaries that the installation of the course itself will lead. In other words, the name Design itself was neglected as a political strategy.

3 It is important to estate that this was in no way a 'radical change', but yet a slow and complex historical process. Even so, such events would not be possible without the mentality changes that marked the European society since the 17th Century. For more on the historical processes of the Industrial Revolution, please refer to HOBBSAWM 2010.

following years as a mean for industrialized/civilized⁴ nations to publicly show their technological achievements. Brazil was no longer a Portuguese colony since 1822, and, under the regimment of Emperor Dom Pedro II (which lasted from 1831 to 1889), participated in such events in the years of 1862 (London), 1867 (Paris), 1873 (Vienna), 1876 (Philadelphia) and 1889 (Paris) (HARDMAN 2004: 68). The intention of making Brazil participate in such events was clear: to promote a civilized image of the country that was giving its first steps into the European model of industrialization⁵.

This wish for Brazil's acknowledgement as a nation with industrial potential faces a problem that is even more complex, that is the search for a national identity – after all, how was Brazil, a country longing for industrialization, while still having much of its work force based on slaves, perceived by the foreigner? If we take in count the fact that the installation of factories was prohibited during the whole period of Brazil as a Portuguese Colony, making the national market totally dependent of Portugal, the 19th Brazilian century is then marked by an incessant search for affirmation and acknowledgement in the production area. The European market already existed, just as the modern ideology of “progress”. It becomes clearer when HARDMAN exposes that

the necessity of the International Exhibitions come from an organicist interdependence among the nations. In the concept performed by Santa-Anna Nery, progress is synonym of *being known*, of being accepted in the hall of civilized countries (HARDMAN 2004: 87)⁶

Such longing for international acknowledgement would certainly mark, then, the attitude of industrialization (or “becoming Modern”, in our terms) during the Republican Era of Brazil, which started in 1889, with the deposition of Emperor Dom Pedro II. However, one the biggest problems faced during such attempts, be they during Dom Pedro II's reign or the Republican state, was the fact that Brazil, no matter how hard it was tried, was constantly considered an exotic land (COSTA & SCHWARCZ 2000: 125).

Despite the efforts of Dom Pedro II to put Brazil in the hall of civilized countries, the whole period between years 1808 to 1930 can be considered as the stage of implementation of industries in the country. The closest that Brazil came to a true “industrial revolution” would only take place from the year of 1930 to 1956,

4 About the concept of “civilized”, Bauman provides us a good idea of what such term meant in such times, when analyzing the concept of civilization in Freud's Civilization and Its Discontents: ‘We know, now, that it was the history of modernity that the book told, even if its author preferred to talk about Kultur or civilization. Only the modern society thought of itself as an activity of ‘culture’ or ‘civilization’ and acted upon this self-knowledge with the results that Freud went on studying; the expression ‘modern civilization’ is, for this reason, a pleonasm.’ (BAUMAN 1998: ?). Therefore, it is important to note that “a civilized nation” would then be a synonym to “a modern nation”.

5 As MELO & RAMOS (2011: 19) show, Brazil, since its ‘discovery’ in 1500, could not have installed factories or machinery whatsoever, by decree of the Portuguese court. That changed in 1808, when the Royal Portuguese family came to Brazil as a strategic escape from Napoleon's army. The first typographic machine came in the ship of Dom João VI, the Portuguese Emperor of the time, and, in 1809, Brazil became the fifth nation in the World to possess a specific legislation for patents, as a way to protect the progress of national industry (REZENDE 2005: 21).

6 It is important to note that there were resistances among some Brazilian intellectuals when the issue of “reinventing” Brazil's image to the World came forward, as it is explained in SOUZA & SCHWARCZ 2000: 151.

starting with period in which the country had Getúlio Vargas as president, from 1930 to 1945. In 1956, Juscelino Kubitschek would then become president, marking the decade of 1950 as the time in which Brazil would seek for a more established and recognized international position as an industrial country. Kubitschek's propaganda of making Brazil evolve “fifty years in five” was certainly the main motto that led to a great industrial development, which brought much of the ideas of ‘social progress’ to the arena of ideas. The wish for making (and showing) Brazil a modern country, finding the Industry as its stronger form of materialization, was finally coming true. Brazil would be, at last, becoming ‘civilized’ to eyes of the World.

Through the decade of 1950 [...] other interpretive currents came to conceive the modern as construction of *society*, through more universalist perspectives, as a society of classes under the regimment of a democratic order, secularized and competitive, corroborated perspectives also in the creation of institutions of democratic character, founded in science. (BOTELHO 2008: 17)

It is in this moment, after all this established historical background that sought for putting Brazil on the map of modern/civilized countries since the 19th Century, that ESDI, the first school of Industrial Design, was finally possible to exist. In December 5th of 1962, the former governor of the State of Guanabara⁷, Carlos Lacerda, backed by the industrial frenzy developed in the recent government of Kubitschek, signed the decree of the school's creation (NIEMEYER 2007: 91-92).

3. Local History x Prospects of a Modern Future – Conflicts in Brazilian discourses of Design

Alexander Wollner (1928–)⁸, important historical figure in Brazilian design, was one of the founders of ESDI in 1962. Before its foundation, he got his degree in design at *Hochschule für Gestaltung* (Superior School of Form) in the city of Ulm, Germany, during the period of 1954 to 1958. This school is recognized specially for being an icon in the need of reeducation of form in post-II-World-War-Germany (WOLLNER 2003: 53-54), as a way of helping rebuilding the country. Wollner explains that the philosophy of the school was that ‘the development of an object is determined by an exact research, a methodic work, taking in general account technical solutions, determined function, aesthetics and economics’ (WOLLNER 2003: 54). Not only that, but he also declares, in several moments, that design should follow a *logical thought* in creative process, in a way that it results in a participation of ‘objective and efficient accomplishments in the social aspect’ (WOLLNER 2003: 44).

In the 1960s, he wrote a brief text entitled ‘*Industrial Drawing, a definition*’ (WOLLNER 2003: 55-57), in which he proposed to

7 Guanabara was a Brazilian State that existed from the years of 1960 to 1975. It comprehended the area that today is the city of Rio de Janeiro.

8 We are choosing Wollner as a source of argumentation about the importance of application of modern ideology in Brazilian industrial production for two reasons: first, due to his importance as historical figure in Brazil's national design; secondly, for being one of the most relevant ‘links’ that Brazil, during the industrialization process of the 1960s, has with one of the birthplaces of modern Design, Germany – more specifically, the Ulm School.

define some basic standards about what would be the field of action of the *designer*. May the reader notice that, in Portuguese, the term 'Industrial Drawing' is institutionally chosen instead of 'Industrial Design' – 'ESDI', for instance, means Superior School of Industrial Drawing. This peculiar choice of words, we believe, is due to three main reasons: 1) the word 'design' is an alien one in Brazilian Portuguese – specially when considering the time that ESDI was founded; 2) by that time, anything 'Industrial' was more likely to be approved in political terms, since Brazil was in search for a worldwide recognition of its industrial power and potential. Thus, 'Industrial Drawing', in Brazil, became synonym to 'Design'⁹; 3) the term 'Industrial Drawing' has been in use in Brazil since the 1850s, when a discipline with the same name was being ministered in the night classes at the Academia Imperial de Belas Artes (CARDOSO 2005: 7).

In the text, even aware of the risks of limitation and imprecision that the act of defining an area might carry¹⁰, he takes the chance and declares the dependency of design and, mostly, the products that came from it, to the machine. The planning of the product is the most important part, just as the method in conceiving it (WOLLNER 2003: 46, 55). Here, we have two important characteristics in Wollner's thoughts: first, design derives from a European method, for it gives it scientific credibility; second, the machine, being it the materialization of modern progress, plays a role of great importance. The ownership of specific machinery (which involves games of economical and political forces) would then permit the birth and performance of design.

By now, it must be clear the way of thinking design as a form a science, involving a specific of industrial production, was very important for Wollner. Until then, not much would have been different to designers that acted in Brazil before the 1960s. However, the modern European discourse, in which Wollner finds himself, becomes clearer when he states that:

The formation of professionals in Brazil is slowly processing, and this is due to the small demand of entrepreneurs of specialists in this field. The entrepreneur understands (or does not) that the utilization or speculation of models from other countries, with success already proven, have positive effect applied to his industrial product. (WOLLNER 2003: 56)

In other words, Wollner specifies that the model of production and planning (his idea of Design) that he brings from Germany is the best one for its allegedly scientific form. Not only that, the 'proven success' from abroad would be another guarantee of its need for installment in Brazil. This is important in our analysis, since Wollner himself states the ideas and models of production from Ulm were effectively applied in the formation of ESDI (WOLLNER 2003: 54).

9 This particularity in the naming of the profession and field of studies would later be felt as a great problem when surrounding the issues about the legal recognition of the profession. By the time this paper is being written, April of 2012, the bill for recognition is still in process in Brazilian congress.

10 'Any definition risks itself into becoming very imprecise, even more when it deals with such a vast and complex sector as it is in this new profession' (WOLLNER 2003: 55). Note the use of the adjective 'new'.

According to CARDOSO, the formation of ESDI is, with no doubt, a mark in the history of Brazilian design, especially for marking the birth of 'a new paradigm in the teaching and exercise of the profession' (CARDOSO 2005: 10). However, the concept of this importance that CARDOSO states is very different from that of Wollner's: while this one defends that only from the formation of the school is that Brazil to have a *true* idea of what design 'really is', the other points out that a so-called 'conscience of how-to-project and think design' already existed and was acted since the 19th Century. In his words, 'the most problematic aspect of affirming the beginning of a Brazilian design around 1960 resides in the refuse to acknowledge what came before' (CARDOSO 2005: 8).

Such affirmations are not given by chance. For instance, in 2005, Cardoso organized a book¹¹ in which several researchers of the Brazilian design developed the hypothesis of a possible existence of a design before the formalization of teaching and practicing design in Brazil – marked by the foundation of ESDI. With greater emphasis in the graphic production, we are presented to a whole tradition of Brazilian material culture that has its beginnings at least since the 19th Century, including various areas of production that, years later, would be claimed by design professionals. There are also consistent data that not only Brazilians had clear methods about the industrial production, but also that the exercise of Design as a *concept* was strongly active in the Brazilian market – even if the word 'Design' hadn't been imported to such social reality yet. If we take a look into the Brazilian graphic production from the mid of the 19th Century, it will be verified that sectors such as the patent of brands (corporate identity), illustration, editorials works for newspapers and magazines, LP covers etc. – all areas of performance of the contemporary designer – were already greatly developed in method and style.

4. Conclusion

In this paper, we aimed to expose the modern thought roots of industrial design in Brazil's 1960s. The validation that design(ers) seeks since such decade (a *scientific* validation) is a very different one from those professionals of design from the 19th Century to the first half of the 20th, who more preoccupied in exploring new ways of manufacturing artifacts according to their cultural demands. As Bauman often tells us, Modernity can be considered a time in which 'science' and 'regulations' are often wanted, for they bring a sense of 'comfort' that were very needed, since the rationalization of the World, as Weber foretold, was an acting paradigm. However, in such 'liquid times' (BAUMAN 2007), it comes the need for revising Modern concepts. Therefore, the posture that a scientific discourse about design is more 'true' than that organic/cultural one is no longer at place. It is this paradigm shift, this 'ambivalence' that, as Bauman tells us, was wished to be overcome during modernity, that now allows us to revise the History of Brazilian design, leading to new ways of analysis.

11 CARDOSO 2005. Other works of the same nature exist, and we have already referenced them in footnote 1.

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Packaging design in Portugal during the 20th century as a political propagandistic device

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Portugal underwent an intense period of change during the last century, experiencing five quite distinct political regimes. The ideological orientation of the Estado Novo, the longest authoritarian regime in Western Europe, had long been transmitted through diverse symbolic and iconographic graphic media developed at the time. Soap and Perfumes Factory Confiança demonstrates that the cultural propaganda device of the regime also involved ephemeral and disposable graphics, including packaging.

1. Introduction

The 20th century consolidated graphic design as a autonomous subject, firstly as a result of the progress resulting from the Industrial Revolution and on the other hand as a result of a series of political, economic, social, cultural and artistic upheavals. The exponential growth of private consumption observed at this time led the industry to place special emphasis on the production of product packaging.

The term packaging is understood to refer to the container that contains or involves a particular consumable product throughout its lifetime and thus serves for the protection, transportation, storage and handling. However, the contribution of packaging to our social organization is not limited to its functional and economic dimension, but also operating at its communicative dimension level, which contribute many diverse social, cultural and psychological factors. In his book "The Consumer Society" Baudrillard states that 'the relationship between the consumer and the object has been transformed: it no longer refers to that object in particular in its usefulness, but on the set of objects in its full meaning' (Baudrillard 2007).

However, unlike other manifestations of graphic design like philately and numismatics, packaging was not subject to a thorough and continued safeguarding job throughout the 20th century because of its ephemeral and disposable nature. Therefore, it was rarely a focus of exclusive and dedicated attention. Given the vastness of the material universe around us, the existing literature on the specific case of packaging throughout the 20th century in Portugal is still limited and characterized by small samples accompanying catalogs of collections whose scientific value is of little significance.

2. "Campanha do Bom Gosto"

Portugal lived the last century intensely; one of the most turbulent eras in its history, experiencing five political regimes quite distinct from one another: Constitutional Monarchy (until 1910); First Republic (1910-1926); Military Dictatorship (1926-1933); "Estado Novo" ("New State", 1933-1974) and, finally, the Second Republic, which finally brought democracy. For decades before the 1974 revolution that overthrew the dictatorship and joining the European Union in 1986, Portugal suffered a major international isolation, self-perpetuated by the longest authoritarian regime in Western Europe.

During this period António Oliveira Salazar, President of the Council of Ministers and the head of the Estado Novo, coined the slogan "proudly alone"; symptomatic of the whole policy of his corporatist, traditionalist and conservative regime. Isolationist and protectionist measures were taken in the economy, while in culture, a 'lusitanism by replacing the image of the 'real' country by one whose past and future are conceived according to the patriotic-clerical nationalist mythology of the Estado Novo' were defined (Almeida 2009). Iconographic and symbolic devices found in graphic works developed during this time transmitted the ideological orientation of the regime.

Despite the late institutionalization of Design in Portugal¹, the Estado Novo was properly aware of its importance by including this discipline, at the time referred to as "applied art", in the "Campanha do Bom Gosto" ("Good Taste Campaign"), an initiative framed in the cultural program of the regime called "Política de Espírito" ("Politics of the Spirit"), under the direction of António Ferro and promoted by the SPN – Secretariado de Propaganda Nacional (Bureau of National Propaganda), later transformed into SNI – Secretariado Nacional da Informação, Cultura Popular e Turismo (National Secretariat of Information, Popular Culture and Tourism). The "Good Taste Campaign" nurtured a special interest in the arts, decoration, graphic arts and advertising according to the nationalist ideals, and highly valued the populist traditions and folklore of the Estado Novo (Santos 2003).

The 'Politics of the Spirit' intended, then, to defend and widely promote the national historical-ethnographic heritage contribution through cultural contribution of the reinvention of the national identity and memory during the Estado Novo, embodied

¹ Almeida identifies as three the dimensional structural characteristics essential to the understanding of historical identity and the institutionalization of Design in Portugal. The author relates the first dimension – institutionalization – with the creation, by the Estado Novo regime in 1959, of the INII – Instituto Nacional de Investigação Industrial (National Institute of Industrial Research) in the logic of 'integrating design as a driver of industrial modernization'. According to the author, this stage is followed by the professionalization ('late, slow, diffuse and induced') and of the education, which begins with the creation of the first design degree in Portugal in 1969 (Almeida 2009).

and perpetuated by the work of António Ferro. The implications of the propaganda of the Estado Novo combined myth, fantasy and historical truths (Almeida 2010).

'From the immoderate pursuit of harmony, a stylized modernism is used for the reappropriation of a reality and of the historic past of the country. A creation of a mythical country was proceeded by the makeup of reality' (Santos 2008). "Good taste" was established and enforced by the regime and it transversely permeated all of the applied arts, including the packaging design of everyday consumable products.

3. Functional and symbolic value of packaging

When packaged, consumable products are evaluated not only for their use and functionality but, above all, for what they represent and symbolize, that is to say, according to a set of social and cultural codes transmitted visually by their packaging. This manner of evaluating products through a dual system of factors – qualitative [functional] and quantitative [symbolic] – was described by Marx in his book "The Capital" by defining the concepts of use value and exchange. According to the author 'the products of labour, which in themselves are things simple and easy to understand, become complicated, full of nuances and enigmatic, when regarded as objects of value, regardless of their physical nature, in a word, since they are converted into commodities' (Marx 1912).

The concept known as "commodity fetishism," which finds its origin in the theories of Marx, describes how the social relationship between individuals becomes mediated by objects, as they become characterized by their communicative and symbolic dimension. This dimension is described by Debord, who states that 'the spectacle is not a set of images but a social relation among people mediated by images' (Debord 1991).

It is therefore understood that, during the Estado Novo, industry incorporate values associated with the "Good Taste Campaign" in the design process of its packaging. This ideological alignment of the graphic material universe was a way for the Estado Novo to symbolically enter into the private sphere of the Portuguese people – their own homes.

4. The case study of Confiança

Founded in 1894 in the city of Braga and operating in its original building until the 21st century

(fig. 1), the Soap and Perfume Factory Confiança demonstrates that the cultural and propagandistic device of the regime was also present at the graphic conception of ephemeral and disposable goods, such as packaging.

The Confiança soaps and the other Confiança products, in general, were highly prestigious and were part of the everyday life of households with a certain economic power. At the beginning of the 20th century, when soaps and other cosmetics of foreign

origin circulated in Portugal, the Confiança factory strongly consolidated, and produced brands and formulas of its own in 1910 (Mattoso 2011: 103).

From 1920 the presence of Confiança products had reached the whole of mainland Portugal and the islands of Madeira and the Azores. Production had increased considerably in order to overcome competition. By 1928 it already produced 'about 150 different brands of soap, and appreciated rice powder, creams, toothpastes, shaving sticks, colognes, lotions and essences' (Araújo 1944) whose raw material was coming from the former Portuguese colonies (Mattoso 2011).



Figure 1. Aspect of the Soap and Perfume Factory Confiança, in Braga (photo: Confiança archive, date unknown)

At this time, the first two decades of the 20th century, given the strong cultural influence from abroad, people believed that foreign products were of high and superior quality compared to those of domestic manufacture. It was a very pronounced bias in Portuguese society, characterized by its provincialism, prejudice and ignorance. For this reason the introduction of foreign languages, predominantly French, on Confiança product labeling was justified, even if its products were intended exclusively for domestic consumption. On other hand, according to the new aesthetic currents that were imported from Europe – Art Nouveau and then Art Déco – Confiança wanted to imbue its products with a cosmopolitan feeling opposed to a traditional language, considered mild and discrete.

Later, under the Estado Novo regime, the design is strongly influenced by the new currents that were coming mainly from Germany which 'remained a centre for design excellence' (Tambini 1997: 217) The introduction of a new taste based on German expressionism and geometric awareness of the visual object, explored from this pathway, showed a balance between image and word, through the powerful styling and removal of any accessory or secondary element; the final key for the effectiveness of persuasion to the consuming public (Lobo 2001: 23). In the new trends used in the graphic arts, a certain formal purism result from the influences of the Bauhaus school, characterized by geometric rigor, and also of some French influences prevailed. The consciousness of synthesis in graphic communication was used in political propaganda and this is also reflected in the discourse of advertising. The aesthetics and the immediacy of the message are valued. The Art Déco influence is still felt, al-

though it is 'a time when the artwork became distinctly stronger and more simple, quickly capturing the attention. It was a time of rationalization with clear and uncomplicated styles' (Tambini 1997: 238). This new aesthetic would find an echo in the graphic design developed in Portugal during the Estado Novo.

In the 1930s, with the wide use of cars as well as the constant evolution of other transport, the Estado Novo recognized the potential of tourism in Portugal. 'Walking in the countryside, sea-side or to the outskirts at weekends is now part of compulsory habits' (Lobo 2001: 7). More and better access roads to major cities from major national borders were created, as well as the construction of rest areas and several inns along the roads. At the same time, celebrations like feasts, festivals, fairs and exhibitions were organized as well as many popular events to attract attention and sympathy in the Portuguese people to the new political system. The iconography of this time displays 'pictures sticking to a popular styling (...) language that was in accordance with the spirit of the government that defended the rediscovery of folk roots and of an inventory of a typical and human Portugal' (Lobo 2001: 8). Artistically, this was an attempt to rip off the past and to create a genuinely Portuguese style by allying traditional and modern concepts. Through this national recovery logic, the ban by Decree-Law in 1930, of the use of foreign language in national brands is easily explained.²

Despite the large number of brands produced by Soap and Perfume Factory Confiança over this period, its products were designed almost exclusively for domestic and colonial consumption. Although Brazil had already been independent for roughly a century, Portugal was still the owner of a colonial empire with scattered territories in Africa (Angola, Mozambique, Guinea-Bissau, Sao Tome and Principe and Cape Verde), Asia (Goa, Daman, Diu and Macau) and Oceania (Timor). This sense of grandeur was celebrated in Lisbon at the Portuguese World Exhibition of 1940, an unprecedented initiative in Portugal. The aim was to show the world the vast economic, cultural and social power of the "Portuguese Empire" in a year that, beyond our borders, the attention and concerns could not be more different – it was the midst of the conflict of World War II.

Despite the war beyond its borders, the country continued the campaign known as the "Portugalisation of Portugal" in which the Estado Novo recognized the importance of historic iconography and of national values applied to touristic, industrial and commercial promotion. The virtually non-existent foreign competition, as a result of economic protectionism carried out by the regime, favoured the Portuguese brands, whose business easily flourished. Because of this it also contributed to the positive economic balance resulting from the Portuguese policy of neutrality during World War II. By this time, the Confiança products had reached the remote parts of the so called "Portuguese Empire", conquering a geographically extensive market.

The Portuguese industry celebrated the political system not only

² Decree-Law n° 18281 of 30/4/1930

through their choice of graphic motifs in their packaging but also by choosing the designations of their brands. Among the more than four hundred brands that were being produced by Soap and Perfume Factory Confiança at this time, we highlight the names and motifs with national-patriotic inspiration, such as Caravela (Caravel), Castelo (Castle), Cavaleiros (Knights), Conquistador (Conqueror), Luzo (of Lusitania), Templários (Templars), among others. Other brands and motifs referred to traditions, folklore and legends, such as Académico (Academic) (fig.2), Arraial (popular celebration), Ceifeira (Female Harvester), Flôres de Amendoeira (Almond Flowers), Fragatas (Frigates), Maioral (Main Man), Pérola do Atlântico (Pearl of the Atlantic), S. Jorge (St. George), Tricana (traditional women costume), Vira do Minho (type of dance in the Minho region), among others.

Most of the chosen names and motifs also referred to towns and geographical regions that represented the typical side of the desired "Portugality" such as the Algarve, the Azores, Douro River, Faro, Pico Island, Gerez, Madeira Island, Nazare (fig.3), Oporto, Aveiro Lagoon, Ribatejo, S. Miguel Island, Troia, Viana do Castelo, and others.



Figure 2. Académico soap label



Figure 3. Nazaré soap label

Also by this time, Confiança supplied a wide network of hotels and spas with exclusive soaps. Amongst the various designations identified, we highlight the products produced for Caldas da Saúde, Caldas Santas, Costa do Sol, Termas do Carvalhal, Termas de Luso, Sal Airport, Hotel Turismo Luanda, among many others. It is also important to highlight the soap developed exclusively for the Pousadas de Portugal, an inn chain controlled by the state, the motif of which is the rooster of Barcelos, a legend turned into a national graphic symbol during the Estado Novo (fig. 4).

In addition, other names and motifs demonstrated colonial inspiration, such as Angolanaco (fig. 5), Dinizes, Indian, Mambo, Merengue, Mombaka, Morna, among others. Noteworthy is the fact that, in these cases, when using illustrations representing local residents, these representations emerge in stigmatized forms, ie, the native is usually depicted barefoot and shirtless, with an absence of any trace of civility. This representation met the regime's ideology which, in the perpetuation of stereotypes, sought to maintain the feeling of the superiority of the colonizer and, consequently, the hegemony of the empire. The social representation of the colonized, in stark contrast to images of sophisticated and cosmopolitan women pictured in other Con-

fiança brands, served to perpetuate colonialism through the power relationship through difference. It should be noted that Portugal was the last European power to grant independence to its colonies, which came only after the sudden change of political regime with the democratic revolution of 1974.



Figure 4. Pousadas de Portugal soap label

Figure 5. Angolanaco soap label



Figure 6. Exposição 1940 soap label

Figure 7. Mundo Português cologne label

Figure 8. Caetano visit to Confiança

From the graphic archive of Soap and Perfume Factory Confiança, we also highlight the launch of the Exposição 1940 (Exhibition 1940) soap (fig. 6) and the Mundo Português (Portuguese World) cologne (fig. 7), which commemorated the Portuguese World Exhibition of 1940, mentioned above; a 'stunning wonder [...] demonstrative of the Genius of the Race and the eternity of Portugal' (Araújo 1944).

The importance that the regime gave to the national industrial and business sector was also reflected in the numerous visits high figures of the state made to the premises of several factories throughout the country. In the case of Confiança, we highlight the visit of Marcelo Caetano (fig. 8), deputy leader of the regime and natural successor to Salazar, who, after his death in 1970, assumed the post of President of the Council of the Estado Novo.

Taking into account its unique role in the 20th century in Portugal, Soap and Perfume Factory Confiança shows the direct influence of recent Portuguese history in the graphic design of consumable products. It was then a symbol of a sense of modernity and

sophistication in a country that was still rural and conservative, as well as distant both geographically and culturally from the rest of Europe. It was also a reflection of the patriotic and nationalist ideologies propagated by the political regime in the constant search for national hegemony. From this case study, we can easily confirm that, in addition to posters and advertising, packaging design also exuded the ideal of greatness that the Salazar regime aspired to. And this way we can also explain how these ephemeral, disposable and seemingly "innocent" objects can tell us a lot not only about us as individuals, but also about our collective history.

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A practical experience on acting local thinking global: design as the enabler of new sources of collaboration

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Product design / Economic development / Cooperation / Innovation / Territory

The paper describes a workshop, outlined in order to use design both as a strategic tool and a tangible outcome, in the context of the furniture and the stone industries of Portuguese Ribatejo region. The projects revealed a different kind of thinking, merging design knowledge that came from the specific level of professional activity and academic research. It was aimed to act local, but concerning global issues as well.

1. Introduction

Design thinking (Brown 2009) can act as an approach to solve a problem by integrating the needs of people, the possibilities of the technology and creatively provide a framework of reflection about the interwoven issues of the design activity at different levels. Considering design both as the process of making things as the tangible outcome of the process (Best 2006), it is assumed that its application can contribute positively to the creation of value to society in different ways: by conceiving new products that solve a particular function; by [re] creating systems; or setting up services in order to respond to identified issues, as well as market and social opportunities.

The research presented in this paper describes a workshop outlined in order to use design as a strategic tool and a tangible outcome, in the context of the furniture and the stone industries of Portuguese Ribatejo region. The novelty of the research is the promotion of the potential of design culture across the industries and the region; working on different levels of a specific contextual overview; and the gathering of different stakeholders to collaborate with multidisciplinary design teams during the process of ideas refinement.

The present work refers to the workshop "Design and territory: furniture and ornamental stones" in Portugal and it is based on previous work developed in Italy (Lotti 2006, Frédout 2008). The general aims are similar, namely the aim of generating new concepts for the industry, the promotion made by a regional entrepreneurs association and an institution of higher education that teach Design, in the case NERSANT and the Polytechnic Institute of Tomar (IPT) respectively. In the presented case the methodology was set up to create a framework in which the gap between designers and producers could be shortened and new collaborations could arise. Participants were producers of the aforementioned sectors and designers, coming from academia

and different professional fields. The goal was to develop a network which includes the variety of perspectives that exists concerning the sectors. The design management was used in order to provide conditions to actively involve individuals, professionals, private and public institutions into the design activity. These principles can be stated as an interpretation of managing the conditions of the two levels of the design activity; the corporate and the project level (Topalian 2002).

2. Methodology

The need of conducting a workshop for creating products for the furniture and ornamental stone industries was interpreted as the need of reflecting upon the system of creating, delivering and consuming products, through planning for long-term growth. The goal of the envisioned methodology incorporated a degree of flexibility to become applicable to problems with similar variables such as: local identity, multidisciplinary teamwork, commitment of the stakeholders, industrial application and value for the community.

In order to identify specific and latent needs, as well as to gather additional information about the design process, its management and results, visits to factories were made. Researchers and practitioners were invited to present themes and provide additional insights to the creation process. The workshop methodology encompassed three main phases: (1) presentation of the underlying principles for the workshop, territorial framework and new design scenarios for the sectors; (2) design development (ideation and prototyping); (3) presentation of results to regional entrepreneurs.

The workshop was directed into the development of products, systems or services for the furniture and the stone industries of Ribatejo region. The development was carried out through design teams composed by designers and architects. Teams' members were organized to fill the specific functions: academic research; 3D modeling and rendering; design profession; visual communication. Sixteen participants were gathered in five groups. Each group would be assigned with specific material – wood or stone – and a typology – interior or urban furniture.

The field for project development was communicated to the teams at the beginning of the design process. The purpose of each project was to think upon issues that affect specific local groups of users as a resourceful way to overcome traditional business market positioning - still focused on mass production

– to accommodate variables of a contemporary turbulent market environment.

The structure of the workshop was divided into three moments, following the organization presented in figure 1 in which: pink areas refer to formal work and dark gray areas refer to cultural experience of the region. Theme seminars (1a) provided information for the design process (1b, 2a, 2c). Third moment consisted in the presentation of the results (3a, 3c).

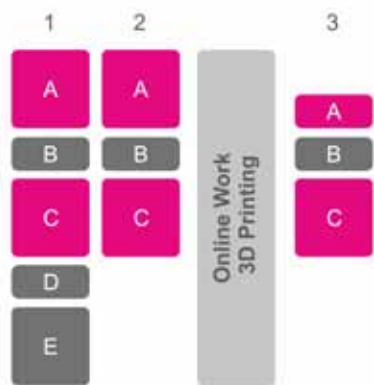


Figure 1. Workshop structure

Underlying principles for the workshop

Seminars were presented to provide the information about the context in which the design teams would have to operate and the workshop general goals. It was introduced the importance of design in local cultures, elements of design in the region in different activities and new social dynamics and opportunities for interior furnishing and urban furniture.

Ribatejo is a region located in the center of Portugal. Main social issues are ageing population facing increasing isolation and low income; and unemployment and layoff due the decrease of production and the exit of multinational companies to other countries. Social fabric is also composed by urban nomads that live in the region during working days, or live permanently in the region but work abroad every day. Cities and villages face increased desertification because of the construction of major retail centers and this reflects on the sustainability of local markets.

These subjects were presented as issues that might be considered opportunities to explore and create value. Ageing population and unemployment can be tackled as available knowledge with time; existence of factories with low production as technological means for producing other goods; and transportation infrastructures – proximity to Tagus river, railway lines and highways linking to major Portuguese and Spanish cities – as the basics of global distribution for locally produced goods.

The importance of design in local cultures was presented as a continuum process of creation that can provide the user several layers of embedded knowledge in the product. The interpretation

of the cultural heritage can be incorporated in some aspects of the strategy, the process and/or the product itself. This added value can be stated in the final product and it is apprehended by the user, creating a relation with the production region, independently from the local of consumption.

The presentation seminar concerning Ribatejo regional aspects, detailed previous concepts by showing design signs through time in different supports. Covering a broad characterization, from historical aspects to traditional and contemporary activities, from landscape proprieties to construction style and details, from craftwork to industrial production, it was communicated a wide scope of information that could be incorporated in the development of the design proposals.

Subsequent presentations were concerned with expanding horizons to drive the areas of domestic and urban furniture. Changes that occurred during the last decades were mapped under social, political, market and technological issues.

The goal of the presentations, made by researchers and practitioners on the subjects, was to enlarge the scope of the context introducing several layers of variables and a deeper knowledge about the region and the subjects. This approach provided the space for presenting and debating specific issues on design aspects as well as existing and latent outside opportunities that could be explored in the projects' development.

Design process

The design process considering the ideation and prototyping phases was divided in six moments; 1) Presentation of group members 2) Themes presentation; 3) Brainstorming; 4) Ideas Analysis; 5) Concept selection; 6) Design Development ; 7) Internal Presentation; 8) Refinement.

Presentation of group members was made through the assignment “The machine game”. Each group had five minutes to conceptually develop a machine and to perform its functionality with gestures to the other groups. Each group member would represent one structural function of the overall machine. The goal was to overcome initial social boundaries and to create a group spirit throughout the physicality of the exercise. The build-up of a social relation is an essential ground point for the good development of the projects.

After the preliminary exercise, each group received the information about the material and typology of the object that they would have to develop during the workshop.

Subsequent stage was the brainstorming session. In its 25 minutes duration each group would have to generate 20 ideas, according to the ground rules established (IDEO 2011): 1) Not judge ideas; 2) Have always the theme as goal; 3) One people talking at the time; 4) The amount of ideas; 5) Buildup ideas of one other element; 6) Communicate visually; 7) Generate two wild ideas.

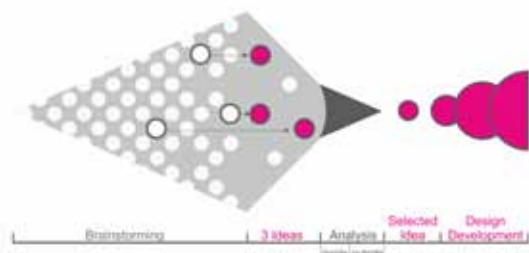


Figure 2. Outline of the design process

After this broadening process, focused on the subject, it was asked the groups to select and present three of the most capable ideas and the two wild ones (figure 2). The teams had to focus on a smaller group of ideas whilst having a wide conceptual range of ideas, and debate further about several aspects developed during the brainstorm session.

The ideas were presented to other groups and submitted to an open discussion to provide additional insights about influencing factors for each concept design. With the input of the other workshop members on the selected ideas, the groups were then able to better evaluate and choose the idea that they would continue working on.

In the design development stage each group would have to work on a single design proposal. At the beginning they would work on a conceptual level, defining the impact that the product could have in a system; and then refine it further to a functional product that could be fabricated or implemented in the region, creating value to different stakeholders. The output of the proposal developed in the workshop would have to include a graphic presentation of the concept, 3D renderings about the design in usability contexts, technical information and a *.STL file for 3D printing.

The development of these projects was mentored by designers who made previous presentations and entrepreneurs of the region. There were two kinds of interaction: formal and informal. In the first moment mentoring group debated with each design team the ideas developed during the brainstorm session. Different insights regarding aspects of practical or academic experience was exchanged. The informal interaction period occurred during the remaining time of the design process.

In the end of the workshop session the projects were presented to the other teams. The goal was to assess the degree of development of the proposal and improvements to be made.

There was a month period separating workshop session from public presentation session. During this period 3D printing of the designs were produced and the groups worked online to refine the design proposal and prepare final presentation.

Presentation of workshop results

Third phase of the workshop was composed by a meeting with team members and workshop coordination team to discuss the



Figure 3. Workshop main phases

overall methodology to provide additional insights for future initiatives. SWOT analysis was made towards each project by the entire group, collecting necessary information to future refinements.

Presentation of the results session was organized in order to follow the predefined goals of future developments under the two levels of the design activity; the stakeholder level and the project level. After design associations presentations each team presented the project and could discuss the results with the audience. From these discussions proposals for new sources of collaboration arose, since some companies revealed the interest for producing three of the five projects.

3. Developed scenarios

The developed scenarios during the workshop responded to object typology and material of construction defined in the initial briefing.

NUA (domestic furniture – wood) is the naked chair. This object intends to be a structural base of a chair that people buy and create their own custom version. The system around the object would consist on an online platform in which users could buy other users' designs, DIY tutorials or just the original *NUA* chair. The chair can also be acquired as a standard version by craftsmen to accommodate its work, or by social institutions to reintegrate unemployed people, prisoners, or other groups of people. The goal of *NUA* is to become an open system of creation and added value to a standard item.

Mocaplac (domestic furniture – stone) aims to facilitate the connection between house and work by the development of a system of objects composed by a mobile wooden device that may be connected to stone supports installed in the home, public spaces and local businesses. The supports can be installed in spaces that need revitalization and it can enhance social experiences to a population that is usually lonely. As an example of the approach, it was developed a wooden object that can be used as a table when attached to the stone supports and can be transformed to a cart to transport groceries or other items, from local business to home, as well as other places.

CSS (urban furniture – wood) is a sound system developed to be implemented in city gardens or public squares. This system consists in different exercise machines that produce sounds/music when used. The different equipments were developed in order to present a museographical approach to the history of musical

equipments. Its leisure and educational components encourages the meeting of different generations and knowledge, the use of public space and space identification.

Produção na Praça (urban furniture – stone) is a system of urban design in which the public oven is the central piece. It is a contemporary approach of a Portuguese traditional use of public ovens. The geodesic dome inspired design is constructed using traditional Portuguese craftsmanship. It would be used by the city population for making food such as bread, clay pieces and its use can be promoted and secured by local associations and city halls. This project revitalizes the different heritage and knowledge that exists in the region and intends to pass them to younger generations. The use of this public urban design system will create knowledge meeting places based on pro-activity of older generation.

Nature Stone (urban furniture – stone) is a project aimed to create value to waste of material. Large percentages of laminated material are considered waste due to the existence of fossils or minor cracks that occur during the cut phase of limestone. The goal of the project is to use computer aided design and manufacturing to scan individual pieces and to use them to create custom versions of selected typologies of urban design. To illustrate the envisioned idea it was developed a public bench that uses CNC cut laminated stone, assembled to create the overall shape. This project predicts that the urban design piece can accommodate several layers of information, such as city maps, that can be engraved using the similar numerical control techniques.

4. Conclusion and future research

The developed projects revealed that an approach to design as a system rather than just as a product can lead to the inclusion of several issues surrounding the activity. It can transform threats into opportunities, and create value to the region in cultural, economical and social terms. The inclusion of these variables can lead to the development of solutions to particular cases and stimulate new forms of collaboration needed to revitalize industry and craftsmanship. The platform of collaboration and the need to think upon issues in practical terms are some of the achieved goals.

From the analysis of the methodology used, we believe it can be

extended to projects working with the community, and be adapted to the number of participants or the sector to work with.

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NATIONAL POLICIES ON DESIGN

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Investigations on totally or partially state funded plans and institutions for the promotion of design, studied as signifying practices in both their economic and cultural dimensions.

The doctrines of Good Taste

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Portugal / Propaganda / Nationalism / Education / Identity

This paper try to analyse the *Good Taste Campaign* (Portugal, 1940's) and understand how it was generated and produced: the intentions, sources and influences supporting it; how it derived from these usually irreconcilable concepts (modern and tradition); and, despite the authoritarian background, its decisive consequences on the present Portuguese identity and in the formation of the discipline, as probably the most successfully implemented Portuguese *national Design policy*.

1. An original regime

It's expected of an authoritarian regime, as Portugal was after May 28th 1926, the formulation of a set of values that should rule the country and maintain its strength and perpetuity.

This essay, part of my PhD research on the dictatorship idealization of a *Portuguese Home* concept, try to survey how the formulation and promotion of these political, moral and social values interconnected with the *Design* emergence in 1930's and 1940's Portugal.

The military *coup d'état of 1926* was the outcome of an extended political crisis led by the failure on the implementation and stabilization of a liberal and democratic system experienced since the monarchy exactly one hundred years before. This *coup* was part of a European predisposition, between the wars, for political extremism from which derived the birth of authoritarian regimes all throughout the continent.

In Portugal, after a brief and equally unstable beginning, the regime found its pace under the authority of António Salazar (1889-1970), a conservative catholic economy professor, invited in 1928 to straighten out the acute national debt as an all-powerful Finance Minister; he gradually secured a more prominent role in the government until he arose to the position of Prime Minister in 1932.

With the ratification of the *1933 Constitution* (establishing the power on a corporative regime entitled *Estado Novo* [New State]), Salazar held his position as a *de facto* dictator, balancing out the different factions of the Portuguese far right. For the equilibrium of these forces (from the poles of the *ancien régime* Monarchists to the *pro-fascists* National-Syndicalists) Salazar, himself a Conservative Catholic close to the Integralist-Lusitan movement, created a single-party regime. He brought together the reactionaries with the authoritarian moderns while also answering to the yearnings of different society sectors (the high-rank military, the old rural landowners, the arising industry monopolists and the crescent administrative middle-class) against a unique enemy: the social-liberal-democratic system (Rosas, 1989).

Regarded in the broadest sense as *fascist*, *Estado Novo* differentiated itself from other contemporary systems as an *original* hybrid regime that, trying to modernize a still underdeveloped country, simultaneously kept it lost in a glorified, bucolic and pious past. Salazar, a somewhat non-charismatic and reluctant crowd pleaser, sought to incarnate a stoic persona that carried out the divine duty of fathering the country, giving up his personal freedom and happiness in the name of the Nation (Rivero, 2010).

To maintain this unquestionable power *Estado Novo* promoted nationalistic ideals based on the celebration of its history, ethnical uniqueness and global mission as standard in authoritarian regimes regardless of their politic faction. This example of a *dynamic revolution* tried to recreate a modern national identity moulded on the traditional world of the *bonhomous peasant*, allegory of sanctioned values, and on the culmination of decades of nationalistic exaltation and of an artistic and ethnographic identity quest (in everything similar to other European movements developed since the end of 19th century). The most effective method for this identity implementation was the previous indoctrination of *established truths* that should irrefutably prevail and suppress *opposing truths*.

2. A cultural policy

The *SPN/SNI*¹ creation in 1933 filled this need of indoctrination; a propaganda service had become an important tool for governments and a crucial one at an authoritarian regime. While refusing the idea of modernity, ironically it would be through these *modern* instruments that the regime would publicize its ideology. 'Propaganda emerged as a fundamental strategy of the society acceptance of itself, and presented as revelation of its own «core»'² (Melo, 2001: 54).

Until 1949 *SPN/SNI* was run by António Ferro (1895-1956), a cosmopolitan writer associated with the Portuguese and European modernist and futurist *milieu* since his youth³.

¹ *SPN-Secretariado de Propaganda Nacional* [National Propaganda Bureau]. In 1945, on the aftermath of World War II, and probably due to the negative connotation of the term *propaganda*, it would be renamed *SNI-Secretariado Nacional de Informação, Cultura Popular e Turismo* [National Bureau of Information, Popular Culture and Tourism].

² This quotation, as the others, is a free translation by the author.

³ In 1915, with just 19 years old he was editor of *Orpheu*, the avant-garde magazine that laid the foundations of the Portuguese modernist movement with Fernando Pessoa, Mário de Sá-Carneiro and Almada Negreiros, among others. António Ferro wrote novels, poems and plays (some of which created some public outrage) while working as journalists for various newspapers and magazines. As an international reporter he interviewed personalities like d'Annunzio, Maurras, Pétain, Rivera, Mussolini and even Hitler but also Cocteau, Mistinguett or Poirret. Politically he began as a Republican Party sympathizer, evolving to the Sidonists (authoritarian modern) and the Conservative Republicans, while gradually admiring the contemporary authoritarian regimes, especially Mussolini's. In 1932 when interviewing Salazar they discussed the political role of the culture; months later his political career began when invited to *SPN*.

At the end of 1932 he presented his cultural ideas in a newspaper article where he defended that:

The Art and Literature conscious and deliberated development is, after all, as needed to a nation progress as its sciences, public infrastructures, industry, commerce and agriculture development. [É] *Política do Espírito* [Policy of the Spirit⁴] [É] it's not just necessary, although of the utmost importance in such point of view, to the Nation's outer prestige. It's also necessary to its inner prestige, its reason to subsist. A country that don't see, read, listen, feel, don't walk out of its material life, become an useless and bad-tempered country. [Ferro, 1932].

These thoughts, discussed also in personal interviews he did with Salazar, led to the invitation to implement *SPN/SNI* one year later. There, he finally launched *Política do Espírito* program, establishing culture as one of the Nation founding stones.

During these interviews he told Salazar 'there are a bunch of lads, full of talent and vigour, that wait, anxiously, to be useful to their Country!' [Ferro, 2007 [1932]: 59]. Working with these *lads*, Ferro would merge regime principles with this new generation influence [to which he belonged]. This dubious attitude that strived for the new denouncing the decadent orthodoxy was at the same time cherishing the essence of the vernacular, the authentic, the primordial. This search for genuine, this *return to the roots*, had been fundamental for much of the artistic research produced since mid 19th century, and by the recent [re]discovery of primitive and local folklore valued by modernists artists as an escape to academic discipline.

Influenced by the power of analysis and synthesis brought by Modernity [although far from the radical interpretations close to Functional and Abstract rationalism] this assorted group of artists⁵ would work with *SPN/SNI* transposing the regime ideals in several different *media*. They would purify formal features of folk arts reducing them to an assortment of recognized formulas that were subsequently applied to communicate official values.

From 1933 onwards, the *SPN/SNI* developed numerous activities: several popular competitions; the creation of theatre and ballet companies; traveling cinema and libraries services; diverse editorial lines [from tourism guides and art catalogues to propaganda pamphlets in various languages]; an extensive program of national prizes; the development of an ethnographic collection presented all around the world [housed since 1948 in *Museu de Arte Popular* [Popular Art Museum]]; the production of a large number of exhibitions; and the significant task of presenting Portugal abroad in many different events.

3. An aesthetic doctrine

The aim of this paper is to centre attention on *Panorama*; sub-

4 Ferro mentioned the homologous conference presented days before by Paul Valéry at the *Université des Annales*, November 15th of 1932, "*La politique de l'esprit, notre souverain bien*" [published in 1936].

5 Among the team of *artistas-decoradores* [decorator-artists] were Bernardo Marques, Carlos Botelho, Eduardo Anahory, Emmérico Nunes, Estrela Faria, José Rocha, Manuel Lapa, Maria Keil, Fred Kradolfer, the Novais brothers, Paulo Ferreira, and Tom.

titled *art and tourism Portuguese magazine*, it was published by the *SPN/SNI* from 1941 on as *Estado Novo* culture organ: its purpose was to report and publicize the regime's initiatives and values. A series of 16 articles labeled *Campanha do Bom Gosto* [Good Taste Campaign] presented advices on good practices on *living* and on *doing* in what was then called decorative and graphic arts. Other articles reported exhibitions and state initiatives, presented examples and models, defended guidance values, since all the editorial line of the magazine was understood as a massive aesthetic doctrine campaign.

The main goal of *Campanha* was promptly summarized in its first article [fig.1]:

These pages of *Panorama* are reserved, every month, to the instinctive and impartial promotion of examples of ornamental good taste found all through the country within reach of our cameras, because what only tempt us can as easily disappoint us. What grabs our attention is what enchants us. That's why People's good taste is, in tourism, the best partner of the landscape picturesque. [Panorama, 1941a]

Good taste was understood as:

a certain style, a certain grace, a certain touch of originality that makes a façade or a simple house window, a shop window, a poster, a corner of a waiting room, a restaurant table, etc, discreetly attract our senses and, affectionately, fondle them. The fair note of comfort and sympathy is given by the harmonious convergence of the visual elements [colours and shapes] with logic and strict compliance to the designed purposes [and that] will not be done because it's modern art since good taste isn't modern or ancient.

Although immediately it was mentioned that:

proof is that we would always prefer, for instance, an interior decorated with old objects and furniture, to another with modern ones — just as long as, in the first case, everything is right [attractive, friendly and civilized] and, on the second case, everything wrong [the contrary of what we said].

In this article, if on one hand abstract principles of rational and functional harmony were mentioned [the 'strict compliance of



Figure 1. A Tom poster, SPN windows by José Rocha and a restaurant interior by Maria and Francisco Keil [Panorama, 1941a].

the designed purposes'), on the other (on the *old versus modern* quarrel) it looked like the intention went on the exact opposite direction, and if at first this seemed as some kind of an obligatory rule, in reality the opposite was safeguarded (if the old is wrong and the modern is correct then this should be chosen).

However the last phrase of this article wasn't that ambiguous: 'Good taste is the contrary of artificial, of dissimulated, of mass-produced, and.... of the tacky'. The mass-produced (a reference to the industrial production) was then usually perceived as a synonym of *modern* following the Ruskin legacy.

Good Sense was the expression most commonly used as an alternative to *good taste* and later it was explained that the overall campaign wasn't named like that because 'it looked more clear and direct to our goal the use of GOOD TASTE' (Panorama, 1943).

It's important to highlight that half of *Campanha* articles were dedicate to discussing graphic arts questions, addressing proper shop windows presentation, posters, advertising, publishing, photography, etc in texts that showed a clear knowledge of the discipline in tune with the international tendencies. There was also a clear pressure for employing professionals on projects of decorative and graphic arts: 'an authentic advertising technician is a specialist [ε] like any other specialist, such as a physician, an architect, an engineer' (Pinto, 1941).

This group of *SPN/SNI* artists (responsible for initiatives reported insistently at *Panorama*) had their independent work equally publicized at the magazine, an assumed preferential treatment. The magazine presented mainly interior decors (both private and public) according to a *Gesamtkunstwerk* aesthetic where furniture, materials, bibelots, art and the building itself were understood as a unit goal and rarely analysed *per se*.

Mainly it defended the 'vernacular truthfulness [ε] incompatible with the fake and purposeless vernacular restyling' (Panorama, 1941b) on essays that praised rural well-being and simplicity, always advocating the escape from mass-produced, from industry banality and from urban horror. When there were examples of *old meeting modern* some care was took in mentioning its discretion and moderation as an 'antithesis of the *nouveau rich* style' (Panorama, 1941b).

In 1943, in an article about Ferro's home renovation (fig.2), emphasis was put on the old 'frantic spirit of the owner, prototype of his own generation' with his recent 'official responsibilities' reaching the conclusion that the 'house had suffer the owner's evolution' developing a *neo-classic* harmony achieved by taming modern elements: 'a question of taste and intelligence', a model of classic superiority over modern (Mascarenhas, 1943).

The need for an explicit and uncomplicated discourse led to the preference of an emphatic language in articles that described



Figure 2. Ferro's house by Paulo Ferreira (Mascarenhas, 1943).

examples without many details. The most used epithets were *moderate* and *honest*, that can be related to the *pobrezinho mas honesto* [poorly but honest] maxim defended by the regime as a role model for Portuguese people. As for objects and spaces they were *friendly* and *welcoming*, clear attempt of humanization. When some constructions escaped desired norms (in an earlier vanguardism) their functional features were praised, the wideness of spaces indicated and/or the boldness of the act reported. In the article about the lavish Aviz Hotel, a case of eclectic decorative excess, it was even referred as a *haven* 'offered to the most high-ranking foreigners' (Cunha, 1943), tactfully separating the social status.

Since 1940 *SPN/SNI* was also entrusted with Portuguese tourism services, and one of the most emblematic actions was the construction of *Pousadas* (1940-1949), state-owned inns built all over the country mending the inefficient private offer. These first seven were thought on 'the idea of the small cosy house, without an hotel character, with «different» furniture, «different» ambience, «different» culinary, an accommodation for everybody that looks that it is for each one' (Ferro, 1949: 113) hoping that 'if a guest by entering these inns has the impression they didn't enter a tourist establishment where he is known by his key number, but has entered his own country cottage where his servants wait for him, we got what we wished for' (Ferro, 1949: 68-69). While aiming for contemporary comfort standards these regional-themed small hotels, furnished with traditionally-inspired objects and furniture, were thoroughly reported on *Panorama* (fig.3) and announced as having been 'built and fitted with the main purpose of serving as model for this new orientation of Portuguese hotel business, lively prototypes, scattered all through the country, where it would be easy to harvest teachings, to learn and to generate certain ideas' (Ferro, 1949: 68). In 1940 and after the creation of *Brigadas de Revisão dos Hóteis* [Hotels Revision Brigades] teams of decorators travelled the country visiting establishments and helping owners to improve conditions and ambiances.



Figure 3. *Serém Pousada* by Carlos Botelho and Rogério Azevedo [Cunha, 1942].

4. An unexpected Design policy

By the end of the decade, *Campanha* results were announced and exposed private initiative examples that to some extent resulted from campaign lessons and *Brigadas* actions (fig.4). The question of if main goals were achieved or not was elaborated by Ferro at the 1948 exhibition *Catorze Anos de Política do Espírito* [Fourteen years of the Policy of the Spirit]:

To which point a well done shop window, a carefully book presentation, a tasteful ornament or a theatre decoration, hasn't been influenced by that spirit, hasn't been a result of that work system and of that attitude? This doubt involves precisely everything that is imponderable in a work whose contours is difficult to define but whose results – concrete and real – are there to be seen by everybody. [Ferro, 1948]

After Ferro left *SPN/SNI* in 1949 and with a rising sense of dissatisfaction towards the regime orientation (mainly due to the Allied victory) the bureau gradually lost its impact, but the influence of this cultural policy proved worthy.

Paradoxically this policy resulted in a somewhat unexpected Design policy even while following distant intents from industrial progressive globalism and with more positive results than more contemporary ones done in a country where *Design* is still a strange word.

It was then that a definition of a Portuguese visual identity was achieved; many decades later we still live surrounded by national concepts, images and stereotypes that were then generated. But more important was *discipline* development that led to the so-called birth of Portuguese Design.

This generation of pioneers, the *SPN/SNI artistas-decoradores*, were in fact the *grandfathers* of it, conceiving the first idea of a profession, instituting methods and practices, establishing the first *creative agencies*, tutoring at their ateliers those who later were perceived as the first generation of *designers* born on a dif-



Figure 4. *Golfinho* guesthouse interior [Tello, 1948].

ferent Portugal at the end of the 1950's.

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Between art and Industry: the Art Products' Factory in Tallinn in the 1950s and 1960s

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Soviet applied art / Soviet Estonia / Industrial art

One of the central discussions in the Soviet society from the mid 1950s was raising the living standards by providing better choice of consumer products and improving the everyday environment. Art Products' Factory stood in the centre of these discussions. The paper explores the Art Products' Factory's phenomenon as standing in-between applied art and design, its position in the development of Soviet Estonian design scene and the context of terminology.

1. Introduction

Tallinna Kunsttööstete Kombinaat (*Tallinski hudozhestvenno-proisvodstvennyi kombinat*) or Art Products Factory poses an interesting case in the Soviet Estonian design context from several aspects: first of all, considering the way it was put together, secondly, looking at its position in the context of discussions of advancing the everyday environment where improvements were made employing the means of applied art. And thirdly, regarding its position in between art and industry, applied art and design. For years it provided a basis for the technical and ideological development of local applied art. We could consider it to be an answer to demands to make art available for the people. I will follow the changing attitudes towards the Art Products Factory over the course of the 1950s and 1960s. If the discussions on reorganizing everyday material culture started out from the basis of handicrafts and applied art then the changed industrial and productive course in the mid 1960s brought to the centre the notions of industrial art and design, changing thus also the position of the Art Products Factory. In 1966, with the establishment of the Industrial Art Department at the State Art Institute the discourse of design changed considerably, shifting from product design to analysis of environments and their totality.

2. Organisational structure and possibilities

The Art Products Factory was established right after the II World War in Tallinn, when several decorative arts workshops from the 1920s and 1930s were nationalised and reorganised under the supervision of the Applied Arts Centre of Estonian SSR.¹ These were comparatively small studios where most of the work was done by hand but their technical skills allowed for a high quality production that had also been successful in foreign markets. Now these workshops became a basis for a new production model, often using the same premises, applying same skills, tools and people.

¹ Until 1947 the enterprise was known as the Applied Art Centre and after 1975 as factory ARS.

The Art Products Factory was working under Estonian Artists' Union, that in turn was a branch of the Artists' Union of the USSR. An organisation standing between the Artists' Union and the Factory was the Art Fund that organised the union's economic affairs and in some sense had to market their artistic output. (Valk 2010:208)².

According to its statute from 1958, the Art Products Factory was an ambitious endeavour with a wide scope of activities under one umbrella organisation. It had to provide suitable conditions for artists' to work, popularise their output and implement the samples produced in workshops to industrial production.³ The Factory also opened shops, called salons, for the sales of their own work products. (Fig. 1) The Factory was organised into studios, based on the artistic medium, including textile work, porcelain, painting, ceramics, metal, leatherwork, decoration etc. (Fig. 2) Every studio had a director and an artistic director who decided on the number of copies produced of each design and on how much to pay for the work. The designs were evaluated also by the Factory's artistic board, consisting of the head designer and studio directors, the final permission for production came from the Factory's director. In 1964, for example, the artistic board had to evaluate 5000 design proposals from all the fields of decorative and applied arts.⁴

The employees of the Art Products Factory consisted of artists responsible for designing and craftsmen carrying out their proposals.⁵ By 1959 there were 534 workers in the Factory, of whom 67 were artists and 25 in turn were artist union members.⁶ The studios of the Factory were used by the artists also to produce their own work. Equally, the collaborating artists of studios had the possibility to use the premises for executing their own, unique pieces for the exhibitions which, finally having a negative influence on the Factory's own production, so it had to be restrained.

Art Products Factory was important also for carrying out commissions for the state as well as different organisations and the public. Some of the smaller works, done for large factories, were foremost a significant source of income for artists: the decorative studio designed shops, candy wrappings, wall newsletters, signage for kindergarten clothes hangers, different posters and trade marks, the textile studio worked on carpets for sanatoriums and holiday homes. But there were also larger commissions, like interior designs for holiday homes, theatre designs outside Estonia and exhibition designs.

² Art Products Factories (in Tallinn and Tartu) and publishing house Kunst that also belonged to the Artists Union, were a significant source of the Fund's income.

³ Tallinna Linnaarhiiv (TLA) F 144 n 1

⁴ TLA F 144 n 1 s 171

⁵ Design proposals were accepted and welcomed also from external artists.

⁶ TLA F 144 n 1 s 122

The Factory's usual production that went for sale included leather wallets, writing pads, vases etc. (Fig. 3) These works were done in comparatively small series, depending on the studio and the materials they used, up to 25-50 jewelry items, 100-200 ceramic items, 25 woodcut pieces etc. A separate group was formed by the so-called author series, meaning that the piece was crafted personally by the author. This was added to the signage and meant also higher price. At the same time care was taken on the obtainability. Usually there was no problem of getting the work sold.⁷

An additional support system existed from 1960, for artists who were not Factory's employees but could reproduce their work and sell it through the salons. The only demand was that it could not be unique objects but had to be serially produced.⁸

In addition to participation in local applied art exhibitions, from 1957-65 the Factory were represented in 19 exhibitions abroad, including 1958 world exhibition in Brussels and Estonian applied art exhibition in Helsinki in 1960.

3. Position and reception and changing attitudes

One aspect to look at, is the functioning of the Art Products Factory in relation to the program of raising the living standard in the Thaw period and the change in the status of applied art and artist. In initial discussions in the 1950s, it was applied art that had to play role in redefining the new everyday life, in providing a model for good taste.

By mid 1950s, raising the welfare of the population was one of the central topics in the Soviet society. One of the tasks in this that was often quoted was the improvement of the selection and design features of mass consumer goods. This had to be carried out by the applied artist who traditionally was trained in the State Art Institute as a specialist for industrial production, working in existing and future factories. Discussions at that period revolved around the need to engage the applied artist more to the process of production and that the failure to do so is seen in shops and in industrial products. Already in 1953 the Factory was pointed out as a model in the use of artists in production, seen as the key in increasing the value of the product. (Rohkem 1953). The same discussions continued in later years: industry was blamed for using artists only temporarily, the artist had to cooperate with production to raise the selection. As two artists wrote in 1954:

'Applied art plays a significant role in this. The use of artists in industry, the use of the designs worked out in the Arts Product Factory, has to find a way to every industry. ... Our cadres of applied artists is strong and they are willing to help.' (Külv, Reemets 1954).

⁷ The prices were kept attainable for the consumer – usually 67% was added to the self-cost, in case of the author series the addition was ca 20. In 1956 the production consisted of around 2500 different items that were sold through three "salons".

⁸ These series gained wide popularity and became an important source of income for several artists.

In comparing industry and art, industry was seen as something clumsy, slow and only seldom reaching up to the standards and flexibility of the Art Products Factory. At the same time it was realized that to reach the population as a whole, industry was needed.

In the II half of the 1950s however this idea about applied art as leading the way in industrial product design started to change. In a conference on Estonian, Latvian and Lithuanian applied art in Tallinn in 1955 the design of consumer items and the place of applied artist in this production was a central topic. One of the results of the meetings was a focus on reorganizing the education of applied artists who would have more training in technological and economical matters. The focus had to be taken not on unique items but comfortable and practical mass-produced goods. (Bernstein 1955). The conference also doubted in the efficiency of the where of exhibitions should have introduced product samples for the consumers and get feedback from them.

The long-term aim in integrating artists to factories was the eradication of the difference between a unique product and a mass-produced one (Gens 1959). However, in late 1950s it was stated that the difference between the products seen in exhibition showcases and on shop windows was still too big one. (Kunstnik 1957). Some authors pointed out also the lack of materials as a reason for the small number of serial production in the Art Products Factory, this was said to be the reason that for example carpets were produced there as unique items. (Kuma 1958:47)

Applied art, which was so far seen as a platform for a successful industrial product changed into an elite artistic genre, existing primarily in the form of exhibitions. The reasons for this could have been also lack of materials that made the production accessible to only a few, high price based on still a large share of handcraft in the production and outdated technological equipment used in industry that forced the artists to compromise, resulting in unsatisfactory solutions. This was sustained also by a system where artists, working in industry, hardly exhibited their work in design exhibitions and were excluded by this from the artist union membership. (Gens 1959)⁹

If the Art Products Factory acted for some time as a link or compromise between industry and unique production, being at the same time hand crafted and serial, then from 1964 works produced in the Art Products Factory were not allowed any more to the applied art exhibitions. (Kuma 1981:46) Serially produced objects were separated to an exhibition of industrial art, held from 1963, drawing thus a sharp line between the two fields and putting unique objects to a privileged position. Therefore the attempt to widen up the concept of applied art by including the aspect of seriality into it, had failed resulting in two separated fields instead.

Another often-discussed problem was that items seen on the exhibitions hardly reach the people. Art critic Leo Gens wrote in 1963, that applied art has been divided to two large branches: a utilitarian or industrial art and unique or decorative art. He blames applied

⁹ The union accepted only artists who participated in exhibitions.

artists in producing objects only for exhibitions and museums and that they demand a special museum space for items that are meant to carry out a certain function in real life. The misfortune of applied art was for him that it did not find its way to contemporary interiors, resulting in applied art being out of touch of the needs of real life and turning to a luxury that exists only thanks to the system of purchases by the Art Fund. (Gens 1963a)

4. Industrial applied art

A new term that appeared around 1961, industrial applied art, attempted to consolidate the contradiction and join together the two fields. This was most probably derived from a Finnish design exhibition in Tallinn Art Hall in 1961 that did bear the same name.¹⁰ In an extended exhibition review there were several paragraphs devoted for unpacking the different branches of applied art that had recently emerged. Starting from difficulties that handicrafts have to face, a turn was taken to the middle ground between art and industry:

'Including artistic creation in industry considerably enlarged the field of artists' activities, that now includes the whole of industrial production and almost all fields of industry. The field of the applied artist has expanded also in content. Today's industrial artist is an artist, engineer and technologist in the same person'.

The article ended however by defending or apologizing for applied art's unique output:

'In our century the practical and aesthetic need of contemporary person is met by industrial applied art. But an element that brings to the interior and warmth humanity and thus individual accent is hand crafted applied art. One field is an addition to the other and only the harmonious compatibility creates a perfect whole. Here, in Soviet Estonia, we have put an emphasis on handcrafted applied art that develops on the basis of the Art Products Factory'. (Kuma 1961:42-45)

Despite the separation of unique and produced pieces and that applied and industrial art are seen as who different worlds, two sides or outputs of one field, these explanations show how Factory's strength is seen in the handmade applied art, clearly differing from the industrially produced, retaining its somewhat elitist nature and as if wishing to maintain its special position where the product is not just another mass-produced item but carries additional value being a handmade and artistically of high level.

A major manifestation of industrial applied art was an exhibition in 1963 in Tallinn Art Hall, introducing newest industrial production as well as the works of various recent graduates from the State Art Institute¹¹. The exhibition was very well received, and reviewers considered it to be different from all previous applied art exhibitions. The main lesson of this exhibition was seen 'to find the right proportion in practicing decorative and industrial art, that in turn would have a positive effect on unique applied art production'. (Gens 1963b)

¹⁰ Work by Alvar Aalto, Tapio Wirkkala and Antti Nurmesniemi, among others were shown at the exhibition.

¹¹ The exhibition included 72 participants from 20 different factories and 33 freelance decorative artists (Sirel 1963)

Criticism of the same exhibition questioned also the role of industry in reproducing applied art and taking it to the masses as this was too simplistic of an idea that unique products could be directly put to mass production. It was emphasized that every industrial product has to be related to its specific productive base and thus the hand crafted objects of the Factory were seen not to have a potential in becoming industrial products. (Vaher 1964)

The exhibition also brought up discussions where the artists working in industry were counterposition to artists working in the Art Products Factory, seeing the latter to occupy a privileged position having had better and flexible possibilities to meet the changing needs of the consumer. (Kirme 1963) But at the same time the critics were commenting on the quality of the Factory's output. Leo Gens blamed applied artists (the ones working in the Factory system) for a tendency to work only for exhibitions and for a neglect of serial production.¹² He tells the artists to build a model that would be multipliable and at the same time take into account that the series would not be too large. The models would have to be easily modified, that the series could be "refreshed", when the consumer needs something new. (Gens 1963a)

Interest in the ideological role in industrial arts of the Art Products Factory declined considerably in the II half of 1960s. In 1966 The department of industrial art was opened at the faculty of architecture of the State Art Institute which brought a considerable change in design discourse in Estonia. The 3rd industrial art exhibition in 1969, which exhibited already works of the students from the department, considered Art Products Factory to represent traditional applied art, in their decorative approach they were foremost seen as applied artists who did not fit into the framework of industrial art.

There was indeed a considerable difference with the works of design department students who presented their compositional exercises and works done in design classes. The studies in the design department focused on the environment as a whole, starting from surface texture, formal structure and exercises in proportioning to form- and model-making, laying an emphasis on the role of object in a large system of the space. There was a difference between the applied artists and designers in their approach to form, functionality and decoration. The new design professionals got a lot of positive feedback for their work and was seen as an optimistic beginning for a new practice.

The Art Products Factory, that in the 1950s was seen as the technological and ideological basis for changing the everyday life and order of things, combining art and production, producing applied art in series had by the mid 1960s the evolved into a place where handcrafted objects were produced generally in very small series, well-known among the consumers, but prioritizing artistic uniqueness. Although initially demanded, the production of industrial samples and models did not fit the pro-

¹² In his view, the art salons selling the products end of 1950s had ceramic works on much better level in artistic and crafts sense whereas the ones of the 1960s used extravagant form and too complex glazing.

file of the Factory due to its difference from a mass production enterprise as well as the profile of its products. Its influence on industry might have existed in the early years of its existence, but later remained largely an indirect one.

In later decades The Factory continued its activities in several directions, providing serial products through the shops and carrying out commissions also for artists. With the separation of industrial art from so-called exhibition art, the Art Products Factory was put under the latter. At the same time its production had high reputation, good quality and due to small series, it always found buyers. The high honorariums and large and important commissions as well as its technically well-equipped premises kept it a popular place also among artists.

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Figure 1. Shop of the Art Products Factory. 1950s. Photograph courtesy of the Estonian Museum of Applied Art and Design.



Figure 2. Porcelain painting workshop. 1950s. Photograph courtesy of the Estonian Museum of Applied Art and Design.



Figure 3. Products of the leather workshop. Reproduced from the Factory's advertising booklet, 1957.

Transforming territories and forging identities at the Independence Centennial International Exhibition in Rio de Janeiro (1922)

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Independence Centennial International Exhibition / Republicanism / National identity / Modernity / Brazilian material and visual culture

This paper examines Rio's Independence Centennial International Exhibition – a festival that forged and projected a supposedly cohesive and coherent identity for Brazil. Part of this identity was forged through the dramatic transformation of the territory where the exhibition was erected. The paper considers how Rio's press visually communicated this transformation, and discusses the exhibition's 'nation-building' pavilions, designed to offer a view of the nation conflated to that of the state.

1. Anxiety for renewal

French anthropologist Claude Lévi-Strauss was unimpressed by the cities he saw in the American continent during his first visit in 1935 (Lévi-Strauss 1961). For him, while European cities were more highly regarded the older they were, in America the passage of time was 'an element of disgrace' (Lévi-Strauss 1961: 100-101). American cities, he wrote, 'are not merely newly built; they are built for renewal, and the sooner the better' (Lévi-Strauss 1961: 100-101). Lévi-Strauss condemned American architecture and urbanism by concluding: 'Their preoccupation with effect and their desire to catch the eye reminds us more of our fairgrounds and temporary international exhibitions' (Lévi-Strauss 1961: 100-101).

Lévi-Strauss' remarks place us at the centre of my paper's interests. My paper investigates the Independence Centennial International Exhibition, held in Rio de Janeiro – then capital of Brazil – in 1922 to mark the nation's hundred years of independence from Portugal. It investigates also that 'anxiety for renewal' noted by Lévi-Strauss – an anxiety likened to the rush for the modern and modernisation prompted and promised by exhibitions of that scale. Brazil's Centennial Exhibition was a consequence of and contributed to an anxiety for renewal that is fundamental for the understanding of the Brazilian experience of modernity during the 1920s.

My paper examines two moments of Rio's Centennial Exhibition – a festival that wished to forge and project a supposedly cohesive and coherent identity for its host nation. Part of this identity – one that promoted Brazil as a modern, industrial and sovereign country – was forged through the dramatic transformation of the very territory where the exhibition was erected. Thus, the first part of my paper considers this transformation of territory and how some of Rio's press visually communicated this transforma-

tion as part of Rio's and Brazil's modernised identity. The second part of my paper discusses the festival's exhibitionary complex (Bennett 1988) and what I call 'nation-building' pavilions. These were pavilions specifically designed to instil civic sentiment into local population and to offer a particular view of the nation according to exhibition organisers.

2. A visual display of national growth

The Centennial Exhibition was a matter of the state. It was entirely conceived and organised by politicians in the local and federal governments. Their reasons for organising a costly exhibition during the troubled inter-war period were threefold. First, the symbolic association between celebrating Brazilian sovereignty and being a politician helped substantiate their right to govern. Second, the Brazilian republic wished to show to the world that its pre-war international position as raw materials exporter remained strong. And finally, these politicians turned exhibition commissioners wished to promote their vision of an industrial and modernised nation to a domestic audience that was increasingly participating in national politics as voters.

In 1920s Brazil, political power was closely linked to coffee production. Between 1925 and 1929, coffee alone provided 75 per cent of Brazil's foreign earnings (Dean 1993: 227). The concentration of power and money in the hands of a few plantation owners caused an uneven process of modernisation within the country. São Paulo city and state experienced urban and economic growth driven by industrialisation and coffee plantation revenue. In contrast, in the Brazilian north and north-eastern regions 'pre-capitalistic relationships predominated' (Fausto 1993: 267). Rio and São Paulo were Brazil's largest cities where wealth and skilled workers concentrated. But even under frank urban expansion, during the 1920s Brazil was a rural country and 75 per cent of its population were illiterate (Fausto 1993: 278).

The organisation of an exhibition in Rio in 1922 was part of a programme of public opinion formation, set in a context of a political regime that wished to promote itself as the future of Brazil. Only thirty-three years earlier, Brazil had been the last monarchy in the Americas and the last American nation to have republicanism imposed as a political solution to national problems. Thus, during its Centennial Exhibition, Brazil projected the image of an assumed stable and modernised nation that would return any international investment. To a largely illiterate domestic audience, republican politicians mounted a predominantly visual display of how Brazil had grown under their rule, and of how it would continue to grow.

3. The artifice of nature

Preparations for the Centennial Exhibition began in 1920 with the razing of the Castelo Hill, a mammoth feat of engineering that aimed to transform not only Rio's landscape but also its history. The hill had a significant place in Brazil's colonial past. It was the site of a fortress from where the region had been administrated and the bay defended against foreign invasions since 1567 [Czajkowski 2000: 12]. Strategically located at the entrance of Rio's bay, the hill's surroundings included housing, forts, the oldest Jesuit College in Brazil, and churches. Despite its historical significance, by the 1920s the hill was redefined by Rio's mayor Carlos Sampaio as 'an excrescence' [Kessel 2001: 49].

Sampaio was a firm believer in the progressive force of modernisation by technology. His electoral campaign was based on the modernisation of the republican capital under two banners: beautification and sanitation [Kessel 2001: 50-51]. As mayor, Sampaio promoted the razing of the hill for alleged health reasons. He claimed that the hill inhibited 'the respiration of our capital' and encouraged the proliferation of miasmas and tropical diseases [Kessel 2001: 49-50]. However, Sampaio was not only mayor but also one of the major players behind Rio's Exhibition. In this capacity, Sampaio used the remains of the hill to landfill the shore by the bay entrance and to create a brand new space on which to erect the exhibition. In this way, the old literally paved the way for the new.

As current historiography demonstrates, though, the elimination of the hill aimed at not only removing tropical diseases [Kessel 2001; Levy 2010]. It was also designed to remove 'the remnants of the Portuguese colonial period as well as rundown and insalubrious housing' where poor dwellers tainted a space earmarked for modernisation [Bontempi & Sobe 2008: 228]. Sampaio developed an ambitious reform programme for Rio in the 1920s that began with the elimination of the past and the poor, and culminated with the realisation of an exhibition. In this way, by radically transforming Rio's territory Sampaio was helping forge an identity for the city and for the nation aligned with the idea that modernisation alone could bring about modernity.

In a predominantly illiterate country, the future was not only to be verbally communicated but also mainly seen. Illustrated magazines frequently communicated that modernisation that would soon culminate in the Centennial Exhibition. As the widely circulated *Revista da Semana* (Weekly Review) convincingly advertised, engineering wonders were capable of transforming 'a mountain [sic] into a plain' and could 'elongate the city over the waters of the Guanabara Bay' [fig.1]. At once two major features of Rio's famous tropical landscape were conquered and modified: the hill was gradually lowered, and the seafront, reconfigured. While a magazine spread compared the destruction of the hill's colonial remnants to spectacular ruins, another celebrated the 'vestiges' of the destroyed Jesuit College, the only one of its kind built in Brazil [fig. 2]. The disappearance of parts of 'old Rio' was naturalised to the wide public in unsentimental photographs

that made modernisation seem inevitable [fig.3]. For a nation suffering from what was perceived as a lack of tradition, the razing of the hill also served, paradoxically, to create ruins out of Brazil's colonial past.



Figure 1. 'A montanha e a planície', Revista da Semana 1922.



Figure 2. 'A engenharia e a montanha', Revista da Semana 1922.



Figure 3. 'O Rio que desaparece', Ilustração Brasileira, 1922.

Parallel to the eradication of the old was a conspicuous display of 'manpower' in conquering nature and ushering in the new. In another instance of persuasive visual communication, a 'vision of the city of future' was carefully rendered 'hovering over the spoils of the historical hill' [fig. 4]. The argument visually made

by these illustrations, in accordance to the official view of modernity, spoke of a future that was not just the succession of the past. The future was the necessary demolition of the past. Lévi-Strauss' observations about the frantic renewal of American cities could not have been more appropriate in this case.



Figure 4. 'Visão da cidade futura', Revista da Semana 1922.

4. The naturalisation of the state

The Centennial Exhibition opened on 7 September 1922, exactly a hundred years after Brazil's independence from Portugal. This festival of sovereignty featured several of the elements that typically made international exhibitions. It comprised national and international sections with pavilions, palaces, and monumental constructions. It offered a large amusement park, transportation, cinemas, fancy restaurants, and convenience bars to its more than three million visitors (Bontempi & Sobe 2008: 234).

The exhibition celebrated Brazil's centenary with new monuments, music bands, lavish parties, official speeches, and the display of the country's productive forces to date. It took a long time to be built, consumed much work and money, and lasted for a short period – ten months in total. Its long-lasting impact on the city's landscape and Brazilian history, though, cannot be underplayed. The Brazilian exhibition was specifically successful in showing force and control over nature, as we have just seen, and in naturalising the role of a strong state in people's lives.

Rio's exhibitionary complex stretched over an area of 2,500m² (Almeida 2002: 372). Visitors began their journey at the monumental South Gate and continued northwards along the sea-facing Avenue of Nations, filled with land brought down from Rio's foundational hill. Along the Avenue of Nations, visitors passed by 14 international pavilions, convenience shops and bars before reaching the largely domed Festivities Palace.

This palace marked the beginning of the national section where nine pavilions organised and compartmentalised Brazil's political and economic forces. These are the buildings that I call 'nation-building' pavilions. Following Benedict Anderson's proposal that 'communities are to be distinguished [E] by the style in which

they are imagined', I argue that the nature of the pavilions devised to represent the national section can guide us through what type of community was being imagined then (Anderson 1991: 6). It is in these 'nation-building' pavilions that we can see the materialisation of abstract civic sentiments through a visualisation of the state and an organisation of society according to a progressive view of modernity.

The type of 'nation-building' pavilion that best exemplifies which Brazil was being imagined during the Centennial was the Pavilion of Statistics. Dedicated solely to showing statistical works, this pavilion stands as an unusual feature in the history of exhibitions, although statistical congresses were common in world's fairs from the nineteenth century. In this unique exhibit, the nation and its inhabitants were the objects on display. Exhibition organisers intended to display 'numerical studies on territory, demographics, the economy' and the 'intellectual' and 'moral' advances of Brazil during the last hundred years (Sant'Anna 2008: 50-51). These achievements were demonstrated, above all, through images and other techniques of visualisation. Pictures, murals, maps, graphs and diagrams formed, according to the official guide, 'a complete exhibition on statistics of all works from Brazil'. (Official Guide 1922: 159).

The Pavilion of Statistics displayed an image of how the nation was growing back to its inhabitants, especially for those who could not read. Moreover, while commercial pavilions undertook a census of Brazilian artefacts and productive forces, the Pavilion of Statistics was offering a visualisation of the political and social state of the nation. Corroborating Anderson's understanding of how communities imagine themselves, this exhibit made visible the 'abstract quantification/serialization' of persons in Brazil; the maps displayed established the nation's 'political space' (Anderson 1991: xiv).

The Pavilion of Statics offered a picture to persuade Brazilians of their cohesion as a nation under the aegis of the republican state. My interpretation corroborates Carlos Kessel's metaphors of the vitrine and mirror used to describe the impact of the Centennial Exhibition on fairgoers:

The Exhibition had not only the character of a double vitrine, whereby visitors from abroad got to know about the riches and potentialities of the country, and whereby Brazilians had the opportunity to make contact with foreign marvels. The space conquered from the sea and the Castelo [hill] was also a mirror, where the city and the nation searched for the image that they truly wanted to project, the image of progress, civilisation, hygiene and beauty. (Kessel 2001: 61)

If the entire exhibition was organised to confirm and show the advancement of national life, the Pavilion of Statics was the decisive site where this advancement could be located, measured, and proved.

The Festivities Palace was another significant nation-building pavilion that contributed to a naturalisation of the state. Beyond its primary purpose of hosting parties and official ceremonies, the

Festivities Palace displayed educational exhibits that exposed fairgoers to the ways of modern life (Official Guide 1922: 7). Its first floor was given to the eminent Dr. Carlos Chagas, director of the Brazilian Department of Health, who had just been nominated for the Nobel Prize in medicine. Chagas was invited to organise the exhibitions' hygiene exhibit and to endorse scientifically the programme of sanitation proposed by Sampaio (Official Guide 1922: 157). The educational purpose behind the hygiene exhibit had parallels with similar exhibitions on childhood and welfare seen in 1922 and discussed elsewhere by James Wadsworth and Tamera Marko (Wadsworth & Marko 2001). These scholars argue that a special exhibit and the opening of a museum of childhood during the Centennial Exhibition served to promote a 'welfare state ideology' in which children were framed as assets of the nation. In this way, the nation-building pavilions of the Centennial Exhibition were not only mapping a territory called Brazil. They were there and then forging a new identity for this imagined community – an identity that spoke of a healthy and modernised nation whose colonial, monarchic past was giving way to a brilliant future, made possible under a strong republican state.

5. Conclusion and further considerations

In conclusion, the international exhibition medium was employed in Brazil to convey two messages. First, that Rio's natural features could and would be redesigned by the hands of men in the name of modernisation. In this way, nature was transformed into an artifice – challenging our wider notions of what is natural and what is artificial. The second outcome of the exhibition was demonstrating that Brazil was becoming more progressive as a nation under the aegis of the newly instated republican regime. In the process, a naturalisation of the state and of its participation into people's lives occurred.

This paper is part of a wider research that investigates the Brazilian material and visual cultures promoted during the Centennial Exhibition of 1922. It contributes to an understanding of how the official press has visually communicated and naturalised the radical transformation of Rio's landscape in the name of a certain view of modernity that conflated the concept of modernity with that of modernisation. This view also conflated the idea of a national identity with that of an identity imposed by the state. These arguments will be further developed when future research unearths the design of the interior displays of the Pavilion of Statistics and Palace of Festivities, and when dissentious voices to those of the official press are investigated.

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The Belgian participation in the Milan Triennials

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Belgium / Milan Triennials / Industrial design / Design exhibitions

The Milan Triennials were a series of international exhibitions on design, fine arts, architecture and urban planning. Their history dates back to 1923 and includes several historical episodes. Since the beginning Belgium was a regular participant in the Milan Triennials. This paper discusses the Belgian sections from the early 1920 to the late 1950s and sheds a light on the changing approach in exhibiting the cultural and economical production of the nation.

The Milan Triennials are a series of international exhibitions on design, fine arts, architecture and urban planning with a history that dates back to 1923. Within the field of design history several national entries in these exhibitions have been thoroughly discussed. For example this is the case with the Swedish, Danish, Norwegian and Finnish sections of the 1950s, which played a key role in the promotion of 'Scandinavian modern' (Halen and Wickman 2000). Other national entries are less well known, such as the Belgian ones. Nevertheless since the beginning Belgium was a regular participant in the Milan Triennials. During several decades the national authorities considered their participation as an important form of cultural and economical export.

Unlike the Scandinavian example, the impact of the Belgian entries on the international design production and debates turned out to be rather limited. However, as this paper will show, a study of the Belgian sections from the early 1920 to the late 1950s sheds an interesting light on the way the country exhibited its cultural and economical production.

1. Belgium: an early and regular participant

The Triennials, of which the first edition was organized in 1930, was the successor of the 'Mostra Internazionale delle Arte Decorative' held every two years in the Villa Reale in Monza (Pansera, Venturelli and Mastrobuono 1985). Since the first edition of the Monza biennial in 1923 until the Milan Triennial of 1964, Belgium was regularly represented on these international events, except for two editions (1927 and 1940). At first it was the Belgian Ministry of Science and Art and the Commission of the Royal Museums of Fine Art who organized the Belgian entries (X 1923, X 1925). The aim was to underline the importance of the nation's art history and to promote the work of a selection of contemporary artists, interior decorators and architects (X 1923). The Belgian entries of the first two biennials showed applied arts and architecture by established architects and designers such as Albert Van Huffel, Paul Hankar, Victor Horta or Henry Van de Velde. However, there was also room for experimental work, such as the modern interior presented by the avant-garde group *7arts* with furniture designed by

architect Victor Bourgeois and lightning by Marcel-Louis Baugniet (Pica 1957, Strauven 2005).

Since its official start in 1930 the Triennial explicitly intended to broaden the scope of the earlier international exhibitions in Monza. Instead of focusing on 'decorative arts' the new exhibition title – 'Esposizione internazionale d'arte decorativa e Industriale Moderna' – clearly indicated that from now on decorative and 'modern industrial arts' would be on show (X 1930). This change in focus was paralleled by a change in the organization of the Belgian section. From 1930 onwards the responsibility of representing the Belgian nation moved from the Ministry of Science and Art to the Ministry of Economic Affairs. Nevertheless the nature of the national section only slightly changed. In the 1930s the exhibition architects for example still used the format of the furnished model room. However it should be noted that an increasing amount of large Belgian companies participated, such as furniture firm De Coene, the department stores Grand Magasins du Bon Marché and Vanderborght or the crystal glassware manufacturer Val Saint Lambert.

After the Second World War the organization of the Milan Triennials regularly dedicated the international exhibitions to a specific theme: 'housing for all', 'the house and the school', 'leisure'. Most post-war Belgian entries showed the ambition to respond to these themes. The Belgian Ministry of Economic Affairs remained one of the key organizers of the national sections, although on several occasions it collaborated with different experts to properly address the topic at hand. For example, to deal with the theme 'housing for all' of first post-war Milan Triennial (1947), the organizing committee of the Belgian section also included representatives of social housing organizations and institutions. That year's national entry was designed by architects Victor Bourgeois and Louis-Herman De Koninck and consisted of a presentation of products of Belgian companies, a fully furnished model apartment for a middleclass family and an exhibition on the possibilities of so-called 'economic building' (X 1947).

In the course of the fifties the Belgian entries developed an explicit interest in industrial design. A close reading of these entries, this paper argues, shows the authorities' gradual recognition of the discipline of industrial design (Martinez 2009) and as a result the changing demands towards exhibition architecture.

2. The Belgian sections of the 1950s: architecture and industrial design

According to many critics the Belgian entry of 1951 was a very problematic one. Architecture and design critic Pierre-Louis Flouquet explained that many professionals condemned the 'aston-

ishing concept' of the national section in the Palazzo dell'Arte (Flouquet 1951). Contemporary photographs show a very dense compilation of craftwork, glassware, modern furniture, a large stained glass window, a sculpture of Saint Francis, etcetera. According to architect Jean Hendrickx the problem was not so much the quality of the products, but the way the products were combined and presented (Hendrickx 1951). The exhibition layout lacked direction, form and style, he claimed. Perhaps the most unifying element of the exhibition design was its use of color. After all, the dominant colors were red, black and yellow, explicitly referring to the Belgian flag. More unity was found in the Belgian participation in the experimental housing district QT8, which was linked to the same edition of the Milan Triennial. On this offsite location the SBUAM (Belgian Society of Modernist Urban planners and Architects) was assigned to build a 'Casa Belga', a full-scale model house furnished with Belgian design, especially furniture. Contrary to the Belgian section in the Palazzo this modernist house was much more appreciated by the professional press and according to some critics allowed Belgium to 'save face' (Hendrickx 1951).

The 1954 edition of the Milan Triennial in general was marked by an increasing interest in 'industrial design'. This also showed in the Belgian section, which focused on the theme 'the honor of mankind and his work' (Aars 1954). Possibly in response to the criticism of the 1951 entry, the 1954 section consisted of a quite minimal installation, designed by architect De Poerck, which mainly consisted of a partly elevated floor, a few tables and a spatial composition of several laminated timber beams (Devos & Floré 2006). On show were not only domestic objects and crafts (again including products by Val Saint Lambert), but first and foremost technical instruments, such as microscopes, cameras, surgical instruments and even guns. The layout of the Belgian entry was awarded with a 'diploma of honour' and several products on display received golden, silver or honorary medals (Sosset 1954). According to design critic Leon-Louis Sosset this form of recognition was important because it would strengthen the position of the slowly emancipating discipline of 'industrial design' in Belgium (Sosset 1954). Indeed, at the time there were only a few small-scale organizations or initiatives supporting the development of industrial design. From the mid 1950s onwards, stimulated by the policy of Minister of Economic Affairs Jean Rey, the discipline gradually gained recognition with for example the establishment in 1957 of the quality label Le Signe d'Or for products made in the Benelux (De Kooning & Strauven 2000; Martinez 2010). The Italian Compasso d'Oro, established in 1954, served as an example.

As in the previous edition the Belgian section of the 1957 Milan Triennial combined an airy and serene exhibition architecture with the display of a limited selection of craftwork and especially industrial products (X 1957). This time architects Lucien Kroll and Charles Vandenhove, both involved in the recently established Institut d'Esthétique Industrielle (Institute of Industrial Design), were responsible for the overall layout of the national entry. They organized the exhibition space using several orthogonally placed wall panels while combining the exhibition objects into small-scale ensembles. Among the exhibited products were several

furniture pieces designed by the self-made designer Jules Wabbes (Ferran-Wabbes 2010). The combination of his sophisticated, modern (office) tables with industrial products like a shotgun, a milking machine or professional measuring equipment and large prints of the almost abstract photographic work of Serge Vanderkam resulted in interior settings, which barely remind us of the model rooms or model apartments presented in previous editions of the Milan Triennials or in the then popular home educational exhibitions in Belgium (Floré 2004a, Floré 2004b). The Belgian section of the 1957 Milan Triennial showed industrial design as a fully recognized export product of the Belgian state and exhibition architecture as a design discipline, which had liberated itself from the dominant formula of the model room.

3. Conclusion

The Belgian entries of the Milan Triennials illustrate the emergence of industrial design as a cultural and economic representation of the Belgian state. Although at the home front it would still take some time before the discipline became officially recognized, within the context of international exhibitions by the late 1950s the Ministry of Economic Affairs clearly chose to present Belgium as a country with a high quality output in industrial design. This also showed in the 1958 World's Fair in Brussels where a specific exhibition within the Belgian Section was devoted to the objects selected by Le Signe d'Or.

At the same time a study of the post-war Belgian entries of the Milan Triennials show that the emergence of industrial design as a product of national prestige required a different approach in terms of exhibition architecture. In response to the increasing diversity of the objects on display (from chairs to shotguns), architects were challenged to develop other presentation formats next to that of the model house.

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Furnishing the street

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Street furniture / Council of Industrial Design / 'Good Design' / Taste / Civic reform

This paper will examine the effect of a state-supported interpretation of good taste upon the materiality of the street during the postwar period in Britain. Drawing on original material, this paper will reflect upon the notion of official principles in the design of street furniture and by doing so, address the nuances of responsibility and control in the public realm more generally.

The postwar urban landscape can either be described as a well-designed modern room which 'quietly and unostentatiously' served its purpose¹, or a series of 'endless grey streets' set apart only by degrees of 'extreme dullness'.² Such contrasting views characterize the furnishing of Britain's streets during the postwar period and the strong feelings that process produced. Yet the lamp-posts, benches and litter bins that aroused such strong feelings, were largely expected to perform these roles inconspicuously, while also maintaining a 'modern' appearance. As objects of modern design, their role was not to dominate, but to gently impose a sense of rationality, uniformity and neutrality upon the street. Yet this paradox begs the question: why did objects designed to be ignored incite so much dissent, and – given the role of the state in furnishing Britain's postwar streetscape - what does this tell us about national policies on design more generally?

This paper will seek to respond to these questions and examine the influence of the state upon the materiality of the street during the post-war period in Britain. While several other organizations also extended their reach over the design of postwar street furniture, only the Council of Industrial Design was state-endorsed and state-funded.³ By promoting 'well-designed' street furniture, the Council acted on behalf of the government as an arbiter of good taste and arguably played a crucial role in visually unifying and standardizing the aesthetic of the street. Therefore, this paper will focus on the role of the Council as a state-funded organization charged with maintaining street furniture design standards, and the tensions that surfaced as a result. By doing so, it is the ambition of this paper to explore the way in which the state has sought to influence design in an environment many continue to take for granted – and upon objects which to date have not received much academic interest – as well as to examine the nuances of responsibility and control in the public realm more generally.

1 The CoID, Book L. Street Furniture: A Design Folio, No date [Circa 1951], p. 4

2 W.P. Jaspert, of London NW3, Letters page, Design, no. 168, January 1961, p.81

3 Engagement with this issue extended out-with central and local government to the public utility companies, civic groups and preservation societies, the specialist design press, material associations and Industry, as well as several prominent urban reformers.

It could be argued that the most significant official body concerned with the promotion of design in Britain during the Twentieth Century was the Council of Industrial Design.⁴ Though it had no direct powers and operated mainly through persuasion, its impact was felt across design disciplines in the design of toasters and curtains, portable radios, aircraft interiors and street furniture. According to Council's First Annual Report, the organization's primary task was 'to promote by all practicable means the improvement of design in the products of British industry'.⁵ The need for improvement in design became particularly pressing towards the end of the Second World War when Britain's economy was considerably unstable. And yet the Council's role in the field of design went beyond economics. The organizational model for the Council was as an educational and advisory service for the public, industry and municipal authorities. The Council's interpretation of 'good design' was thoroughly endorsed through exhibitions, symposiums and conferences, publications, the Design Centre and Design magazine. However, given its emergence out of a long period of conflict, it is perhaps no surprise that the Council's mission was felt by some to be a moral one. In its Fifteenth Annual Report, the Council defined itself as a 'missionary' organisation promoting the cause of good design.⁶ Its primary task then, was to promote design as a social and economic good.

Though much of its central work focused on consumer goods, among the Council's early design responsibilities was the approval of street furniture for Britain's streets. The importance of street furniture during this period was underlined by the huge demand for such equipment in the immediate aftermath of the wartime conflict.⁷ Accordingly, manufacturers took advantage of the demand and began producing products in much the same way as they had done before the war. Yet for the Council, the pre-war acceptance of historicist styles was no longer appropriate and ways were sought to replace 'the masses of ugly ornate columns throughout the country'⁸, and remedy what it perceived as a pronounced absence of good taste reflected by the British streetscape.⁹ Yet matters of taste were difficult for a government-sponsored organization to discuss openly for fear of accusations of a centrally orchestrated agenda, but also because 'taste' undermined the notion of inherently 'good' design. For the Council,

4 The CoID will herewith be referred to as the Council in the main body of the text.

5 CoID, First Annual Report 1945-46, p.5

6 CoID, Fifteenth Annual Report 1959-60, p.11

7 This was due in part because of the devastation that had occurred as a result of bombing raids, and a desire to modernise the street; but also because of the 'the post-war proliferation of urban transportation and increase in car ownership' Jonathan Woodham, *The Industrial Designer and the Public*, [London: Pimlico Press, 1983], p.84

8 David Davies, 'Influence of changing transport systems', *The Municipal and Public Services Journal*, 24.11.67, in 'Street Furniture Articles and Lectures' [1432.15 Pt III]

9 The public might have felt differently however - refer to Jonathan M. Woodham, *Twentieth Century Design*, [Oxford: Oxford University Press, 1997]

well-designed street furniture – i.e. ‘good’ street furniture - was ‘no different from that of other articles with industrial design content: fitness of purpose, proper use of materials, and of course, good appearance’.¹⁰ That appearance had to be modern. In a private letter from the third Director of the Council, Sir Paul Reilly, to Lord Snowdon, he noted that,

‘The answer to the lighting problems of today and tomorrow does not exist in the past. Much as we regret the passing of the few fine examples, we should be capable of producing something better than the pathetic reproductions which invariably misuse modern materials and manufacturing techniques.’¹¹

Arguably, such a clear rejection of the past was to be diluted somewhat throughout the post-war period, but at this relatively early stage in the Council’s involvement with street furniture, its position was unequivocal: good design meant modern design.

In order to ensure modern street furniture design was used to furnish the street by those concerned, the Council’s influence was extended through the appointment of an independent Street Furniture Advisory Committee, which approved street furniture designs submitted by manufacturers. The Committee was responsible for approving products for inclusion in the Design Index, which was a photographic database of all the products approved by the Council.¹² Though the Council did not have enforceable powers, it could be viewed as a latter-day QUANGO: state-funded and appointed by the government, which in turn sought advice from the private sector, but broadly autonomous in spirit. The Council was in effect, a consultative body which could not engage with the design process directly but, using inclusion in the Design Index as leverage, was able to influence design decisions by manufacturers. Yet the process by which such decisions were made, especially at a local government level, also affected the aesthetic of the street. For instance, a Council official remarked in 1960, that municipal councils

‘all vie with each other to make their objects conspicuous so that the doings of their department may be readily identified. The whole conception of the subject [street lighting] is crazy because we would all prefer the items to be unseen. Indeed it can be said that the ideal lighting installation is the invisible one.’¹³

Paradoxically, lighting – or indeed, all street furniture – should not only appear modern but also be invisible.

Over the course of the post-war period, the Council developed a number of methods for promoting its understanding of good design, as well as reaching the various groups identified as being influential upon the design and application of street furniture.

¹⁰ David Davies, ‘Influence of changing transport systems’, *The Municipal and Public Services Journal*, 24.11.67, in ‘Street Furniture Articles and Lectures’ (1432.15 Pt III)

¹¹ Paul Reilly, *Lamp post feature: Notes sent to Lord Snowdon (confidential)*, 19th March 1962, p.1, in ‘Street Furniture Articles and Lectures’ (1432.15 Pt III)

¹² For more information on the Design Index, formerly known as the Design Review, read Catherine Moriarty, ‘A Backroom Service? The Photographic Library of the Council of Industrial Design, 1945-1965’, *Journal of Design History* Vol. 13 No. 1.

¹³ The CoLD, *Notes for a lecture given to Durham County Council planning officers on Wednesday the 27th Jan 1960*, p.2, in ‘Street Furniture Articles and Lectures’ (1432.15 Pt III)

One of these was the publication of Design magazine which can be considered as the Council’s mouthpiece during much of the post-war period. Indeed, reflecting upon its formation the February 1970 issue of Design defined its early years as a ‘propaganda magazine’ combining a pulpit message with a crusading determination.¹⁴ Interestingly, Design’s first reference to street furniture appears to support the use of colour in the urban environment by stating that,

‘there is no need for street furniture to apologise for itself by camouflage colouring or tamely traditional design. If it is to be useful it must be noticeable, and England is grey enough without neglecting these opportunities for a blob of colour’.¹⁵

Yet other means through which the Council extended its reach were not so relaxed. In the same year – 1951 - the Council published a Design Folio on street furniture, the objective of which was to educate readers – particularly those considered design literate - on modern design.¹⁶ These visual guides indicate good and bad examples of street furnishings, but invariably celebrate modern design. One plate shows railings from a municipal housing estate built in 1949, and the Council celebrates their ‘invariably uniform’ characteristics, particularly because ‘individualism is avoided’.¹⁷ Another plate explains that the materials used to fabricate modern lamps, in this instance steel and concrete, rendered the lamp unfit to accommodate ornament. ‘The finished effect’, the Folio editors claimed, ‘is of grace and dignity, and their simplicity is such that either would look well in any setting. They are content, quietly and unostentatiously, to serve their purpose’.¹⁸

The Council also attempted to influence street furniture design through the exhibitions it staged on the subject – the first in Victoria Embankment Gardens in 1953, and on London’s South Bank in 1961, and in 1974 the Council mounted Streets Ahead in the Design Centre. These exhibitions were an opportunity for the public, as well as planners and engineers from Britain’s local authorities, to see the best examples of modern street furniture design that manufacturers could supply. While public support for the Council’s recommendations might have been more forthcoming in the immediate postwar period, by 1974 when Streets Ahead was on display, the response was more mixed. Some newspapers, such as The Journal from Newcastle upon Tyne, praised the Council’s efforts, while others such as the Norwich paper, The Eastern Daily Press, announced that ‘the only trouble is, ‘the grey angular conformity of the designs is as depressing as the present clutter is irritating’.¹⁹ Besides exhibitions, the Council also sought to influence the design of street furniture through illustrated catalogues, which it published every two years from

¹⁴ Design, no. 253, February 1970, p.56

¹⁵ Design, no. 32, August 1951, p.3

¹⁶ Penny Sparke (Ed), *Did Britain make it? British design in context 1946-1986*, London: Design Council, 1986), p.34

¹⁷ The CoLD, *Book L. Street Furniture: A Design Folio*, No date (Circa 1951), p. 4

¹⁸ The CoLD, *Book L. Street Furniture: A Design Folio*, No date (Circa 1951). p.4

¹⁹ ‘Grey conformity’ in London Letter section, *Eastern Daily Press*, Norwich, 7 Jan 1971, in ‘Streets Ahead’ (76)

1963 onwards. There were several editions of the Catalogue but the advice changed very little over successive editions. The general message was that street furniture ought to be as invisible as possible, for it could be 'ruined by crude and insensitive painting, in particular by unsuitably bright colours. If in doubt a dark, neutral colour should be used in preference to a light, "pretty" one.'²⁰ Other editions remarked that,

'England it has been said is a water-colour country and bright primary colours used with abandon on street furniture lack the strong Mediterranean light that matches them in key.'²¹

But most editions agreed that, 'in general, repetitive items – other than those concerned with traffic control – should be sited, and coloured, as inconspicuously as possible, so as to minimize their impact upon the streetscene.'²²

And yet, for a category of object that the Council recommended should remain inconspicuous, it is perhaps ironic that street furniture should have provoked such strong opinion during the post-war period. Even from the beginning the Council attracted considerable hostility for its engagement in this area of design. A particularly vocal critic during this early period was John Betjeman, whose ire was repeatedly raised by the Council's recommendations on modern street lighting. His article on 'Ugly Lamp Posts' published by *The Times* in 1950 was one of the first to criticize modern street furniture.²³ Unsurprisingly, the Council rejected Betjeman's interpretation. While Betjeman perceived concrete lamp-posts as 'sick serpents', the Council praised their 'smooth unbroken lines'.²⁴ Yet Betjeman's criticism continued unabated, and in the letters page of the July 1953 issue of *Design* he raised concern over the Council's competition for outdoor seating. Rather than focusing on the aesthetic qualities of seating - objects which he believed were comparatively unobtrusive - Betjeman claimed that because of the high-masted lamp posts approved by the Council several towns 'have been ruined by tall poles with hideous bases with jazz modern decoration on the bottom and giants' match strikes on the sides'.²⁵ He also disputed the 'good taste' of the Committee, writing that 'it is not safe to say that what a committee has chosen as a decent design for one place will look well anywhere'.²⁶

The Council's Director, Paul Reilly, was compelled to recognize the plurality of opinion in 1962, when he informed Lord Snowdon that 'practically no two artists, painters, sculptors, architects or planners seem to agree on this subject'.²⁷ By then, some officers in the Council perceived the criticism of street furniture as having become a 'sport' in which works committees and

engineers were baited by 'eminent architects, aged actors and journalist alike', and 'the excitement of bleeding one or other of the contestants has tended to eclipse the real problem'.²⁸ Others suggested it had merely become 'fashionable' to protest about street furniture, and all that was needed to incite such a reaction was 'for an official body to erect or remove something from a public place'.²⁹ Letters of complaint were routinely published in national newspapers by members of the public. For instance, in 1969 the *Financial Times* printed a letter from a reader who characterised Britain's street lights as 'concrete giraffes'.³⁰ Another warned against the 'danger in too much good design and design planning'.³¹ This particular reader defended the idiosyncratic nature of Britain's streets, whereby 'part of the attraction of English towns lies in the happy disorder of shop signs in the streets, many of which would otherwise be very drab indeed'.³² Such was the strong feeling about modern street furniture that some members of the public decided to take matters into their own hands. One community in a residential area of London, led by a Mrs Ian Davison, objected to its cast iron columns being replaced by their local Council with 'clumsy concrete ones with the pimple lanterns', and fought to pay for replacements to be installed themselves.³³ Another man in Stoke-on-Trent, Arnold Machin, chained himself to an old light fitting on his Victorian estate as part of an unsuccessful attempt to resist its removal.³⁴

From the professional sphere, such anxiety over the Council's narrow understanding of modern design was shared by the architectural writer and critic Reyner Banham. Writing in *Design* in 1955, Banham castigated the Council's 'misplaced desire for unity at a time when diversity and differentiation of product-aesthetics seem to offer the most exciting rewards in the field of design since the Bauhaus'.³⁵ While Banham's point was made in the context of the automobile industry, his general argument can be extended into the context of street furniture. He warned that Design's promotion of a 'single aesthetic standard' was likely to end in disaster, and encouraged Design's readership 'to accept, exploit and enjoy the fact that we no longer have to trim ourselves to fit into a single procrustean aesthetic'.³⁶ However, what eventually undermined the Council's authority however was not aesthetics, but questions over the legitimacy of its position to make those decisions. By the 1960s definitions of good taste and good design had become broader in scope, and well-known designers

28 CoLD, *Report on Lighting. (Lighting: Part of the Streetscene)*, no date, p.2 in 'Street Furniture Articles and Lectures' (1432.15 Pt III)

29 The CoLD, *Notes for a lecture given to Durham County Council planning officers on Wednesday the 27th Jan 1960*, in 'Street Furniture Articles and Lectures' (1432.15 Pt III)

30 James Ker Cowan, of Aldenham Herts, Letter to the editor, 'Standards of lighting', *The Financial Times*, 21st Jan 1969

31 W.P. Jaspert, of London NW3, Letters page, *Design*, no. 168, January 1961, p.81

32 Ibid.

33 Peter Whitworth, 'Street furniture', *The Times Review of Industry*, 11.10.1962, in 'Street Furniture Articles and Lectures' (1432.15 Pt III)

34 Ian Nairn, *Counter Attack against Subtopia*, (London: The Architectural press, 1957), p.407

35 *Design*, no. 79, July 1955, p.24

36 Ibid.

20 *Street furniture from Design Index 1965-66*, (London: CoLD, 1965)

21 *Street furniture from Design Index 1972-73*, (London: CoLD, 1970), p.39

22 *Street furniture from Design Index 1965-66*, (London: CoLD, 1965)

23 John Betjeman, 'Ugly Lamp Posts', *The Times*, 16th August 1950

24 *Design*, no. 42, June 1952, p.29

25 *Design*, no. 55, July 1953, p.6

26 Ibid.

27 Paul Reilly, *Lamp post feature: Notes sent to Lord Snowdon (confidential)*, 19.3.62, p.5, in 'Street Furniture Articles and Lectures' (1432.15 Pt III)

and writers had begun to challenge the moral zeal of the Council in improving the nation's taste. Misha Black, whose bench designs were later favoured by the Council, criticized the Council for adopting 'a position of moral self-righteousness no different from that of the sermonizing total abstainer'.³⁷ Black's position was also supported by Banham, who blamed the Council's patronizing attitude. For him, 'the concept of good design as a form of aesthetic charity done on the labouring poor from a great height is incompatible with democracy as I see it'³⁸ Largely as a result of such challenges, which arguably reflected the changing social and cultural climate of the 1960s, the Council was eventually forced to reconcile itself to the diminishment of its authority to decide what constituted 'good' street furniture design.

In conclusion, it is perhaps unsurprising that in literature produced by the Council itself, the organisation believed its mission to promote modern street furniture had been largely successful, and its influence tangibly felt. Yet while the Council's annual reports, press statements and even its own magazine, *Design*, might have promoted the unflinching view that the organisation had succeeded in its objective to rid the streets of ugly street furniture, it is important to place such claims in context. While the intervention of a centrally funded body might have been tolerated in the immediate aftermath of the war, resistance to the Council's efforts at imposing a particular aesthetic came from both the public and the professional sphere soon afterwards. Its interventions, however subtle, between the manufacturers of street furniture and designers, as well as its advice to local authorities seem to have become increasingly unwelcome. Moreover, eventually its very status as an official authority on good design was called into question. While the Council often deflected criticism by blaming local authorities, manufacturers and even the public for its lack of good taste or understanding of good design, such criticism might, in some ways, have had less to do with the Council itself and more to do with perceptions of authority more generally, and the rapidly changing social and cultural landscape the Council found itself within. Recognition that other perspectives on design, drawn from out-with the elite groups which had determined British culture up until that point, eventually affected the Council and forced its members to adopt a less hierarchical tone.

³⁷ Misha Black, 'Taste, Style and Industrial Design', *Motif*, no. 4, 1960, p.63

³⁸ Reyner Banham, 'The End of Insolence', *The New Statesman*, 29 Nov 1960, p.646

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Design promotion in Belgium in the 1960s: national interests and european ambitions

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This paper analyses the transnational design initiatives set up by Belgian design bodies during the 1960s to construct and disseminate the idea of 'European Design'. Based on archival records and design magazines, the analysis offers new insights in intra-European design networks. Moreover, it deals with the complex tensions between Europe and the nation states, and between the globalization and the identity of products.

1. Introduction

This paper analyses the attempts by Belgian design institutions to construct and disseminate 'European' design in the 1960s. Based on archival records and design magazines, the following account offers new insights in intra-European networks of design bodies. Moreover, it deals with the complex tensions between Europe and the nation states, and between the globalization and the identity of products.

The paper is divided into three parts. The first section considers the foundation of the Liaison Committee for Industrial Design in the European Common Market, which served as a mediator between the European authorities and the different national design institutions of the member states. This foundation is discussed in the broader international and Belgian context of the institutionalization of design. The following section analyses the European Selection of Industrial Design, a failed attempt to construct and disseminate a European canon of products. This section will also shortly address what was understood as 'European' design. Finally, the third section studies the Brussels Design Centre, which, faced with the European Common Market, had to rethink the criteria for the national identity of products.

2. Liaison Committee for Industrial Design in the European Common Market¹: Mediator between national and European institutions

In February 1961, the Liaison Committee for Industrial Design in the European Common Market was established on initiative of the Institute of Industrial Design for Belgium and the Grand Duchy of Luxembourg [De industrial design 1963, Informations Beligues 1961]. In the scope of the new extended European market, the Liaison Committee was aiming to group the efforts of the European national design bodies. It legitimized its reason for existence as follows:

¹ The name of the organisation varied in different publications from "Comité de Liaison pour l'Industrial Design dans el C.E.E." to "Comité de Liaison pour l'Industrial Design dans els Pays du Marché Commun".

To establish a good consultation between the authorities of the European Economic Community (EEC) and the Institutes for Industrial Design in the six member countries of the EEC, it is necessary to find a coordinating body that protects and represents the common interests of the member countries regarding Industrial Design to the European Community. [De industrial design 1963: 6]

In other words, the committee wanted to be a negotiator between European and national institutions.

The institutionalization of industrial design dates from the decades after the Second World War, when national design bodies proliferated throughout the world. As the design historian Jonathan Woodham (2010) has noted, 'design' was often included in national design policies as a response to economic pressures. In the 1950s one such economic challenge was the increasing economic liberalization in light of the European Common Market [Gimeno-Martínez 2010]. The 1959 Treaty of Rome, signed by the six member states, namely Belgium, France, Germany, the Grand Duchy of Luxembourg, the Netherlands and Italy, stipulated the free trade between the members and the creation of a European customs union. From the outset of this changing economic climate, national bodies for design promotion emerged throughout Europe [Woodham 1997: 171-177, Yagou 2005, Kjetil 2007, Thompson, 2011].

In Belgium, this tendency was initiated under the reign of the socialist-liberal government chosen in 1954 [Gimeno-Martínez 2010: 133]. The Ministry of Economic Affairs considered industrial design as a tool to stimulate the dynamics of the national economy that had to stand up to strong competition on the European Common Market and therefore conducted a policy in favor of industrial design [Ministère Affaires économiques 1958: 41]. In 1956, two institutions were founded: the Institute for Industrial Design for Belgium and the Grand Duchy of Luxembourg on the one hand, and the Foundation for Promoting Quality in Industrial Creation on the other. The latter later changed its name in Signe d'Or, which was also the name of the award scheme it organised [Gimeno-Martínez 2010].

It might seem surprising that Belgium was the initiator of such a European venture, since it was considered anything but pioneering in design [Gimeno-Martínez, 2010: 132]. Belgium was depicted in the press as a country that was running behind in the field of industrial design. Even the general secretary of the Signe d'Or, Josine des Cressonnières, called Belgium a country that was lacking a design tradition. Yet, the large Belgian share in this European design operation might be explained by the international scope that characterized the Belgian design initiatives from the

beginning. The Institute for Industrial Design was oriented both to Belgium and to the Grand Duchy of Luxembourg, while it was financed only with Belgian means. The organization of the *Signe d'Or* Award shows a similar approach. The first four editions, from 1957 until 1960, included products from all over the Benelux, even if it was funded only by the Belgian government.

This transnational attitude was probably related to the position of Belgium as one of the original driving forces behind the European unification. Moreover, all these national design institutions were located in Brussels, which became in 1958 the third temporary capital of Europe as the host city for the European Economic Community (EEC) and the European Atomic Energy Community (Euratom). It is also worth pointing out that Jean Rey, who played an important role as the Belgian minister of Economic Affairs (1954 - 1958) in the Belgian institutionalization of industrial design, became European Commissioner (1958-1967) and even President of the European Commission (1967-1970). As a European Commissioner he supported the initiative of the Liaison Committee.

Next to the Belgian and Luxembourg Institute for Industrial Design, the Liaison Committee for Industrial Design in the European Common Market consisted of four more institutions: the German *Rat für Formgebung*, the French *Institut d'Esthétique Industrielle*, the Dutch *Raad voor Industriële Vormgeving*, and the Italian *Associazione per il Disegno Industriale*. At the first meetings an ambitious agenda was formulated, which demonstrated that the committee did not limit its task to the mediation between national and European institutions, but took its responsibility in a much broader sense. The committee stated: 'A European design awareness has to be strongly stimulated in the industry' (De industrial design 1963: 6).

Further, the Committee claimed: 'Europe can and has to develop its own possibilities. It has to give an answer that is worthy of Europe: a well-considered expression which reflects the heritage of the old cultures, but connected with the demands of our industrial civilization' (De industrial design 1963: 6). To create this European 'style' the committee wanted to raise the level of industrial design and organize exchanges between producers. A second objective was to bring the 'European product' to the public. Through exhibitions, press and television broadcasts, the committee planned to improve and reinforce the reputation of the European product. Finally, more concrete plans were formulated, such as the investigation of the consequences of the Treaty of Rome for Industrial Design and the formulation of answers to common problems regarding design education, the status of the designer and the patent protection.

The committee organized its first event in November 1962. It was a colloquium in Brussels to inform the authorities of the European Economic Community about industrial design (Congressen en studiedagen 1962). The inauguration by the European Commissioner Jean Rey was followed by presentations of representa-

tives of each national design institute.² For Belgium this was Pol Provost, chairman of the Institute for Industrial design. He announced in his speech that 'the first contacts with the Information service and the direction of internal and external markets of the ECC, made clear that they got our message. A collaboration seems to be possible' (De industrial design 1963: 7). Mia Seeger, member of the board and secretary of the *Rat für Formgebung*, argued in her presentation that the member states of the EEC should establish an international documentation centre. Also, The rector of the Hochschule für Gestaltung in Ulm, Tomás Maldonado was invited to give a lecture. He advised large companies 'to adapt the creative tradition of the old industry to coop with the new competition' instead of turning to the dangerous American method of 'styling' (De industrial design 1963: 8). With this colloquium, the committee tried in first instance to negotiate the form and shape of 'European' design between the national state agencies and the European authorities. Yet, as described in their objectives, the ambitions of the committee reached much further. Accordingly, the following action of the Committee was the European Selection of Industrial Design, which was an attempt, albeit an abortive one, to bring the 'European product' to the public.

3. The European Selection of Industrial Design. A failed attempt to create and disseminate a European design canon.

Around 1961 the committee announced its intentions to organize a European Selection of Industrial Design (Het leven van het instituut 1961: 5).³ This event was planned to take place in 1963 (Het leven van het instituut 1962). The aims were 'to compose a panorama of European design and by doing so reveal an "aspect of Europe"' (Het leven van het instituut 1962: 2). But what was this European design? It was only vaguely described in general terms such as 'ingenuity, originality, logic, daring, honesty and economics'. Further, this European panorama was proclaimed to be a 'powerful tool in the hands of the European government to make Europe aware of its own identity and to masterly represent it on external markets'.

² The speakers at the colloquium were: Pol Provost (chairman of the *Institut d'Esthétique Industrielle*, Belgium), Tomás Maldonado (Rector of the *Hochschule für Gestaltung* in Ulm, Germany), Augusto Morello (Director of the Design Department of the *Rinascente*, secretary of the award *Compasso d'Oro*, member of the board of the *Associazione per il Disegno Industriale*, Italy), N.H. Benninga (vice-chairman of the *Raad voor Industriële Vormgeving* and chairman of the *Design Centrum* in Amsterdam, The Netherlands), Mia Seeger (member of the board and secretary of the *Rat für Formgebung*, Germany), G. Gomet (the chairman of the *Institut d'Esthétique Industrielle*, France). This program was indicated on the invitation found in the archives of the Belgian Office for Increasing Productivity (Brussels, State Archives, BDOP, 65: *Comité de Liaison pour l'Industrial Design dans les Pays du Marché Commun* [Invitation for the Colloquium addressed to R. Talpaert]).

³ In 1960, the Commission 'Design' of the Institute of Industrial Design already expressed the intention to expand the activities of the Award Scheme *Signe d'Or* to a European level. Later on, in 1961, it was decided to award the Belgian products of the European selection of Industrial Design with the *Signe d'Or* label. The organization of European selection of Industrial Design by the Institute for Industrial Design together with the *Signe d'Or* was also mentioned as one of the reasons why the *Signe d'Or* was not awarded in 1961. This information was found at the State Archives in Beveren in the collection BKM [Archives of the Department of Fine Arts and Museums, Ministry of the Flemish Community/Transfer 2005 [1945-2004]]: BKM 2013: *Commission "Design" 18.10.1960*, fol. 106r-109r; BKM 2013: *Previsions d'activité du Signe d'Or pour 1961*, fol. 87-88; BKM 2013: *Commission "Design". Compte-rendu de la réunion du 13.1.61*, fol. 95r-96r.

More concretely, the selection was carried out in two phases. First, a selection of fifty products would be made on a national level by the different design bodies. Second, an international jury would travel from city to city to select the best products of these national selections in order to make a 'European' compilation. Remarkably, to address the 'European' spirit or style, they first had to pass the national level. European design was understood as a sum of products with each its own nationality. It seems that the Committee was aware of this since they foresaw in the future a unification of the national selection criteria and a harmonized European production, implying this was not yet the case.

Similar attitudes towards European design are found in the consumer culture of the early 1960s, where 'Europe' became gradually part of a commercial vocabulary.⁴ Yet, at the same time the national characteristics of the products became of great value in the global trading (Sparke 2004: 198-206). Two examples will be shortly discussed to illustrate the ambivalent attitudes towards Europe. The first example is the 'European kitchen' (De Vos 2009: 14-15). The Belgian architectural magazine *La Maison* reported on the 'European kitchen' in its February edition of 1961.⁵ The kitchen was equipped with labour-saving precision appliances from Switzerland, gadgets from the Netherlands and practical and elegant plastic furniture from Italy. All this was completed with techniques and taste from Germany, and highly qualified craftsmanship and creative spirit from France. European was thus in this case understood as an assemblage of national images.

The second example is a huge advertising sign that was attached to the facade of the Department store *Galerie Lafayette* in Paris. It was pictured in the book of photographs *Europa unita* published in 1966 under the auspices of the European Communities (van Millegem 1966). In huge capital letters was written 'Ici l'Europe' while the background was filled up with logos of the different European countries, including also Eastern- and Northern countries. The logos were designed as if each nation was a brand.

Unfortunately, the attempt of the Committee to create and disseminate a certain notion of European design failed. While in 1961 and 1962 the European selection was announced with all the trimmings, the archival documents and design magazines did not mention a word of it in 1963. However, the magazine of the Institute of Industrial Design for Belgium and the Grand Duchy of Luxembourg reported on the national selection of 50 products, which was previously announced to be the first phase of the European selection, but which was now shown on the opening ex-

⁴ This was not surprising given the high expectations that the European Common Market would imply more democratic prices for the consumers. The use of 'Europe' as a tool to sell products was illustrated in a broadcast for the French Community of Belgium in 1968 on the real effects of the customs union. While the voice-over proclaimed 'Europe fait vendre' (Europe sells) the camera shows stills of neon signs and placards of shops and companies whose names were inspired by the alluring idea of Europe. (Van Besien & Thierry 1969)

⁵ In her research on the mediation of the American kitchen in Belgium, architectural historian Els De Vos encountered the 'European kitchen' in the architectural magazine *La Maison*. Unfortunately, the magazine does not mention a broader context in which this 'European kitchen' was conceived. Els De Vos suggests the Annual Contest of the European House, organized since 1958 by the International Trade Fair. (De Vos 2009: 14-15)

hibition of the Brussels Design Centre in 1963 (Een Design Centre te Brussel 1963, Belgisch Industrial Design-Selectie 1963). Moreover, the Liaison Committee was never mentioned again in reports. Although, it could not be documented, the committee probably didn't pursue its activities after 1962.

However, the European authorities start showing interests for industrial design in 1965, although it wasn't linked with the actions of the Committee. The European Commission set up an investigation about industrial creation in Europe since 1945 (Echo's 1965). The Italian architect-designer Marco Zanuso was appointed as reporter. Subsequently, the CECA (the European Coal and Steel Community) included industrial design as one of the four themes on the programme of the second steel congers held in Luxembourg.⁶

4. The Design Centre in Brussels (1962-1986): caught up between European ambitions and national interests

In 1962, around the same time that the European selection was prepared, the Brussels Design Centre was founded (Bucquoye, Daenens & De Kooning 2001, Courier 2004). It was a non-profit organization under the protection of the Belgian Office for Foreign Trade and was financed by the Ministry of Economic Affairs. The main goal of the centre was to give prestige to the words 'made in Belgium'. This was done by promoting Belgian design abroad, by stimulating industrial design in the Belgian industry and by educating consumers via measures such as exhibitions, award competitions and conferences. The products that were promoted by the Design Centre as 'Belgian' and that were displayed in its permanent exhibition had to be produced in Belgium by a Belgian company.

Three years after the Centre opened its doors for the public, the director Josine des Cressonnières suggested to revise the selection criteria in view of the economic evolution.⁷ More and more companies on the European common market were closely intertwined through associations. The production was often reorganized among the associated factories, inspired by the principles of rationalization. So it was possible that products of Belgian companies were partly produced in a foreign country and consequently could not be promoted by the Brussels Design Centre.

⁶ The second Steel Congress was organized by the High Authority of the European Coal and Steel Community, Luxembourg, October 26-29 1965. The central theme was: Progress in steel processing. Misha Black was the chairman of the session devoted to design. Other lecturers included Tomas Maldonado (Germany), Richard Latham (USA), Gino Valle (Italy), Marco Zanuso (Italië), Henri Vienot (France), Sigvard Bernadote (Sweden), Carl Aubock (Austria) and Ilmari Tapiovaara (Finland), George Williams (UK), Nuccio Bertone (Italy), Herbert Ohl (Germany), M. Lepoix (France) and others. On the congress was suggested to organize an award scheme every two year after the example of the 'Design Steel Award' of the 'American Iron & Steel Institute'. This information was found in Brussels, Archives Historiques de la Commissions C.C.E., CEAB 8: no. 1120, 1121, 1122, 1125.

⁷ This part of the essay is based on the various reports of the Design Centre, which discuss this issue. The quotations which follow, unless otherwise referenced, are extracted from these reports, which are currently preserved in Brussels at the State Archives: BDOP, 1081: *Procès-verbal de la réunion du Conseil d'Administration du 30 novembre 1967*; BDOP, 1081: *Séance plénière du Comité de Direction, 3 juillet 1968*; BDOP, 1082: *Procès-verbal de la réunion de l'Assemblée Générale 26 mars 1970*; BDOP, 1083: *Compte rendu de la réunion du Conseil d'Administration du 14 septembre 1972*.

This problem raised by the director was subsequently discussed by the board members of the Design Centre. The general conclusion of this discussion was formulated in the reports: 'The Belgian Design Centre is the best organized one of the six member states of the EEC. It is positioned to become possibly the first Design Centre of the Common Market. It is necessary to study this issue more thoroughly.' Thus, due to the blurring national frontiers with regard of the manufacturing of products, the Belgian Design Centre envisaged a European future.

In 1968, the selection criteria were adjusted, but were still quite restricting especially by the conditions imposed by the federations of the different industries. The products promoted by the Brussels Design Centre, had to be sold under a Belgian brand but could be produced by an associated factory outside Belgium. Yet, for each such case, the Design Centre had to contact the federation of the industry in question for approval. Moreover, on demand of the federations, other foreign Design Centres were asked to revise in a similar way their regulation for selection. Products designed by Belgian designers but produced by foreign companies could not be promoted as being 'Belgian'. They could only be shown in the Design Centre on the thematic temporary exhibitions.

Still this formula was experienced as time-consuming and to be restricting. Eventually, the procedure became slightly more relaxed. The Design Centre did no longer had to ask permission to the federations to include a Belgian product produced in an associated factory outside Belgium. Yet, the issue kept being brought up in the meetings of the board members. The chairman of the Design Centre Pol Provost stated in 1972 that it became 'more and more difficult to define with precision the nationality of products, due to the internationalization of the production.' The members agreed unanimously with this statement of the chairman and claimed to support the principle of freedom. Yet, they argued that 'one had to considerate the fact that the Design Centre is financially supported by the Belgian Office for Foreign Trade and has to remain a tool of national promotion and progress.'

5. Conclusion

In the scope of the European Common Market, transnational design initiatives were set up in the early 1960s to construct and disseminate the idea 'European Design'. This 'European design' was understood as a compilation of products each having their own nationality. Unfortunately, most of these initiatives stranded. This failure was probably due to the lack of European infrastructure, which obstructed the development of a true European design network, while at the same time national identities were developed as an effective trading tool on the international market.

At the end of the 1960s, the consequences of the European Common market on the way products were produced, created a discord between identity and the place of production. In the case of the Brussels Design Centre, the changing nature of production forced the national institute to rethink the question of national

identity with regard to products. While it was before defined on basis of where it was produced, the evolutions on the market compelled to come with new selection criteria and definitions of what was 'Belgian' or not. The Design Centre embraced this situation as a steppingstone to become the first European Design Centre, but was inhibited by its official status as national institute.

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Carmen Miranda, Marca Brasil (Brazil Brand) and national identity: a historical glance

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Marca Brasil (Brazil Brand) / National Identity / Fashion Industry

Marca Brasil (Brazil Brand) and its visual discourse have become a parameter for the other productions of Brazilian design, whether in advertising or product development, and especially in the fashion industry, creating a homogeneous narrative of identity. At this moment that a Brazilian "identity is now sold as diversity", the images of Carmen return to be read by fashion designers, which give them new connotations with a current view on past intentions.

1. Marca Brasil¹

In 2005, in order to position itself more expressively in the global market, Brazilian government turned to its cultural capital as a strategic differential and differentiator and the Ministry of Tourism along EMBRATUR (Brazilian Tourism Institute) launched the Brazil Brand. This strategy is part of the *Aquarela*² Plan, initiated in August 2004 in order to define the basis of all actions to publicize and promote the country in Brazil and abroad, a trademark "for dissemination and promotion of Brazil as a tourist destination in the domestic and international market", according to the trademark guidelines.

The project development took place under the coordination of tourism international consulting company *Chias Marketing* and supported by the Ministry of Development, Industry and Foreign Trade (MDIC) (EMBRATUR). In order to understand how Brazil should be featured in a brand, the consulting company conducted a research that involved interviews with more than six thousand people in eighteen countries, asking them which the image and the perceptions they had of Brazil (PORTES, 2005). The main conclusions, which are in the presentation of the brand, are that Brazil is an exotic and happy place, with an exuberant nature, not to mention the unforgettable sinuous curves which the brand's manual claims to represent "the mountains, the swing of the sea, the design of clouds, of the beaches". The brand guidelines text introduces us to the conclusions obtained with consultant agency and constitutes a valuable document for discourse analysis:

Nothing is as representative of Brazil as a curve. The sinuosity of the mountains, the waves of the sea, the soft outline of the clouds, the undulation of the beaches. The joy of our people is permeated with subjectivity, and subjectivity is curved just as objec-

tivity is straight. The curve envelops and snuggles you, it is receptive. Those who come to Brazil immediately feel at home. Brazil is also a bright, luminous and colorful country. It is said that the astronauts circling the earth noted that Brazil is the most luminous sight on the planet. Whether it is a myth or reality, it is well known that Brazil has a special energy which attracts and fascinates visitors. It is a joyful country. Foreigners often say that Brazilians are always merry making! And this facility for being merry, even when things are somewhat difficult, is impressive. The fact that Brazil is a melting pot of races and cultures has made it into a "mestizo" country with regard to the strength and resilience of all that is hybrid. All those who land here contribute to the cultural and affective heritage. We are a land that is accepting and generous "where all that is sown grows". Perhaps because of all this, Brazil is a modern country in the most up to date meaning of the word: a country with a great capacity for adjustment, in constant mutation. But if Brazil is joyful, welcoming and exuberant, it must also demonstrate that it is serious and capable. It must show that it has structure and is earnest when required. The "Marca Brasil" was built considering the following: Joy. Sinuosity / curve (of nature, of the people's character). Luminosity / brightness / exuberance. Meeting of cultures / blending of races. Modern / capable (MINISTÉRIO DO TURISMO, "Marca Brasil" Guidelines, 2010).

In this release, within the idea of curves, it is understood the vision of the female body, internationally associated with sinuosity, which is materialized in the lines adopted to make the trademark logo. Nevertheless, the minister of tourism claims "the trademark is crucial because it gives shape, color and visibility to a set of feelings that we always had in the country" (cited VILLAÇA, 2007: 255).

Another aspect of the release to be discussed is the final ideas, in which stands the intention of adding to Brazil values of *seriousness* and *capability*. Such arguments contrast with the



Figure 1 Logo Marca Brasil. Creator designer: Kiko Farkas. EMBRATUR

¹ Brazil Brand.

² Watercolor Plans.

first features highlighted, in which the image of a “vacation and pleasure destination” is easily assumed. Moreover, even though emphasizes the “melting pot of races”—idea of ideologues like Gilberto Freire—, and cultural diversity, in more contemporary terms summarizes the plural, reinforcing stereotypes present in the look foreign and domestic.

Along with these possible interpretations and connections with a political project of Brazilian identity, more specific questions are the object of discussion in this paper that develops itself before the visual composition of the logo: Is there such a personification for a *colorful, sexy, curvy, joyful, exotic, hybrid and hospitable* Brazil? The movement of the juxtaposed shapes may refer us to “samba”, when we enter a field of analysis that associates the image to Brazil. The color reminds us of the carnival, which reinforces the idea of samba from the first level of analysis, in this sum of carnival and samba the reading process triggers a visual idea of the “baiana”³. Not directly the “baianas” from carnival colorful wings, swirling their skirts and printing their great smiles, which were gradually absorbed by the trademark image. The synthesis is more thresholds and stands on the icon of most popular and international “baiana” of all: Carmen Miranda. The artist and her character dressed in a close-fitting skirt with a deep slit in her right thigh that ended with generous ruffles on the edge, with a corset well-shaped that signalizes the breasts, and above all with her turban full of rich and colorful tropical fruits. Thus, it’s on her turban bursting with “tico-tico” that the logo image full of motion and heat makes us think of, in a sensual Brazil and *locus* of mysterious pleasures.

This iconic Carmen Miranda/“Baiana” figure, which currently incorporates an image of nation, was “shaped” in the 1940s Hollywood and American perspective. At this time when was in force the Good Neighbor Policy, there was the intention of creating a character in Carmen Miranda that would synthesize the identity of all Latin America. Thus, in Carmen Miranda’s “Baiana”, several elements were added until they constituted a cultural hybridity of tropical countries, marked exactly by *sensuality, color, excess, exuberance and mischiefness* (trickery), selected from that foreign perspective, which lingers in the collective visual imaginary today.

2. Carmen Miranda and the establishment of a Brazilian image

Born in Portugal in 1909, Carmen Miranda came to Brazil before completing one year old, settling with her family in the city of Rio de Janeiro, where her career would begin (CASTRO, 2005, p. 13). However, before starting the film career in Hollywood, she was already part of Brazil’s representations and narratives of a Brazilian nation (CASTRO, 2005; MENDONÇA, 1999). In the United States, the “baiana’s” turban was enlarged and increased with many other trinkets, as well as the rest of her costume and performance,

³ “Baiana” is a female who was born in the Brazilian state of “Bahia”. It is also a traditional costume associate with “Candomblé” religion that a lot of ladies wore to sell fruits and Bahia typical treats, especially in “Rio de Janeiro” city in the beginning of twentieth century. In 1939 Carmen Miranda transformed this traditional garment into a performance costume.

gaining new meanings in this new territory. In Hollywood cinema, Carmen was always the “Baiana” caricature in the way of communicating, singing, dancing and dressing, one that caused a huge explosion by that time’s standards (that’s why they called her the *Brazilian Bombshell*), which represented for Americans a [allegorical] combination of all Latin America. Carmen represented the excess of everything in the tropics, mostly pleasure, joy and some mischiefness (trickery) (LEITÃO, 2007, p.180-183), which was not well seen by Brazilians in the 1940s.

In the twenty-first century this perspective continued, however, in new guises in which the developments of Carmen Miranda’s images reverberate as the basis for a “market-oriented identity”. It is precisely on this track that appears “Marca Brasil”.

3. Identity, “Marca Brasil” and Fashion Industry

Initiatives such as “Marca Brasil”, saturated with a graphic speech tuned with Carmen Miranda, eventually direct Brazil’s *branding* on stereotyped expectations. The identities are always complex constructions (BAUMAN, 2005), and in this context, to define a Brazilian visual identity is to determine who are the “we” and why we differ from “others” (SILVA, 2000).

Given the process of lifestyles homogenization and the consequent flattening of diversity in the market sphere, Dario Caldas stresses the “need to search the specific each in each people, each culture”, an “equation ‘global’ versus ‘local’” as a strategy to position innovatively before the domestic and international market (CALDAS, 1999:40; *free authors’ translation*). Carrying this intent, Brazil reopened the matter of identity; expressed as background of the will to position itself more actively in the foreign market, to change the focus of commodities exporter to a goods manufacturer and to attract investment and strategic partners. In “Marca Brasil”, for example, it is clear that “[...] a matter of [...] internal market defense well as the conquering of new foreign markets” stands above all, at the expense of selling a exotic and miscegenous Brazil, which dates back from our colonial past social constructions and comes back with the performance of Carmen Miranda (BARBALHO, 2007:12).

In 2009 the graphical discourse proposed by the creators of “Marca Brasil” seems to find place in the “Havaianas”⁴ campaign named “*Recortes Brasileiros*” (Brazilian Cutouts) which praises as its star none other than Carmen Miranda, surrounded by many colors and other elements that are easily assigned to Brazil, women’s legs, soccer, macaws and wild nature. Due to the strength that the brand “Havaianas” earned both in Brazil and abroad, as a product that illustrates the Brazilian culture, the 2009 campaign that uses Carmen Miranda theme shows direct influences of “Marca Brasil”.

Thus, “Marca Brasil” and its visual discourse have become a parameter for other productions of Brazilian design, whether in

⁴ “Havaianas” is a Brazilian brand of flip-flops.



Figure 3 Campanha internacional da Havaianas Recortes Brasileiros, 2009

advertising or product development, creating a homogeneous narrative of identity.

Especially in fashion industry it is remarkable how “Marca Brasil” has progressively been imposing itself as economic policy, aiming at increasing its profits by defending a national identity. In this system, Carmen Miranda is still a very accessed icon by fashion to legitimate a Brazilian identity and give territoriality to its products.

4. Carmen Miranda in Fashion

At this moment that a Brazilian “identity is now sold as diversity”, the images of Carmen are once again considered by fashion designers, which give them new connotations by a current view on past intentions, reframing the artist’s own story with contemporary discourses.

In 2000 began an international euphoria about Brazilian fashion, models and designers on the rise (FEGHALI & DWYER, 2001, p.145-146). In that context, Brazil presents itself as a trend, which unfolds in patterns, color, scenery, music and sensuality in several national representations.

The “Morumbi Fashion Brasil”⁵ Spring-Summer 2000/2001 edition was the main stage of the search for “Brazilianness” that year and engaged the image of Carmen Miranda as a trace of tropicality and sensuality. In 2009, going in the same direction, there was the “São Paulo Fashion Week” Fall/Winter edition (SPFW 2009) paying tribute to Carmen Miranda in her centenary and adopting the theme “Brasileirismos” (Brazilianisms) (PEPPER, 2009; LETTIERI, 2009). The concept of the event came from the appreciation of national culture and highlighted Brazilian fashion as a product of identity to be considered, emphasizing the (Portuguese-) Brazilian personality as a natural fashion creator and a combination of joy and Brazilianness.

Based on the broadcasted images of Carmen Miranda, her films and all the noticed usage in fashion, are remarkable the versions made by international brands. We may especially point out the recent footwear and accessories spring/summer 2011 collection

⁵ First format of “Sao Paulo Fashion Week”, the most important Brazilian fashion week.



Figure 4 Charlotte Olympia. Collection Spring Summer 2011. The first model is named “Miranda”, the second is “Banana is my business”, the third is “Tutti-Frutti flats”, and the fourth is “Carmen”.

of Charlotte Olympia and Prada proposal for the 2011 summer.

Some of Charlotte Olympia shoes came with patterns of tropical fruits before seen in Carmen Miranda’s turban, some with the traditional Carmen’s platform, and many were given names of her characters in movies and other clichés that are referred to the “Brazilian Bombshell”, such as “Tutti-Frutti” and “Bananas is my Business”. Among the accessories, there was a handbag in the shape of a banana, Carmen’s trademark.

The 2011 Prada’s summer collection explores the same conceptual context. On release of the collection called Real Fantasies, they do not indicate Carmen Miranda or Latin America as inspiration; they pointed out the Baroque as a reference (Site PRADA). However, by seeing the collection, the fashion show and the campaign, the viewer would probably notice a Carmen Miranda atmosphere within lots of bananas, monkeys and vibrant colors. Somehow the material (collection and release) invites us to remember mythical creatures, different from ordinary, rich in colors and exuberant nature shapes; just what Carmen Miranda represented in the 1940s and was explicit on the catwalk. References bordered a Latin American kitsch syncretism.

In Prada’s collection this references appear in the following as-



Figure 5 Prada releases fashion campaign Spring/Summer 2011 (1). Estilors. Nov. 23rd, 2010.

pects: the several stripes recalled both the rumba dancers as the Brazilian “malandros”, characters featured in Hollywood films of Carmen; the big hats that could be versions of Mexican sombreros and an indication of the needed protection from strong sun, trace of the tropics; the hair drawn in waves in going down the forehead is a reminiscent of 1930s Latinity; the big shoes’ platforms, Carmen Miranda’s trademark which were included even in models like Oxford; frilly skirts, that despite of indicating a “rumba” are very close to being a shorter version of the models worn by Carmen; the monkeys and bananas used as a pattern, symbol of tropical countries and also of the artist who used to say “Bananas is my business”, the mix between green and yellow in many looks that inevitably take us back to Brazil with its green forest, yellow bananas, the famous canary soccer team selection; and inevitably, the “baiana” print, which although it’s not Carmen Miranda’s version, because Prada’s “baiana” is black, represents sub-textually the artist due to the other elements (colors, ruffles, platforms, bananas, monkeys) of the collection that she was surrounded for.

5. Final Comments

Based on this context, it’s remarkable how the discussion of Brazil’s national identity relies in some level in the character of “Carmen Miranda”. Furthermore, we may see that her image still echoes and vibrates in today’s fashion industry, as aesthetic of transnational Latinity.

In the new configuration, Carmen Miranda and the “baiana” become a symbiosis, a visual mirage, a character created through images from the past that settle in the present, inflaming new feelings and memories in every new usage, installing new texts and stereotypes, dictating “beliefs and social and cultural practices” (FLORES, 2010:7, *free authors’ translation*). However, the usage of her images only exists for other images to be attached to it.

The character from the past is transformed into a collective body of images in which society and culture shape their meanings by creating new images over the old ones (BENTES, 2006). That operation generates models and shapes feelings of identity, therefore, building a *postmodern* space. The image of Carmen Miranda behaves as an amalgamation of Brazilian identity that comes established from the past but it’s open enough so the present may articulate this collection of meanings and update it (MACHADO, 2004), such as “Marca Brasil” presents.

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Sweden designed by Ikea

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National identity / Nation Branding / Swedish design / Scandinavian Design

In this paper I discuss similarities between Ikea's profile and Sweden as a brand: Ikea's co-opting of a nationally inflected discourse of social democracy and how Sweden, in turn, has co-opted Ikea as an index of national values. Ikea provides an example of the relationships between perceptions of national image and the process of imaging the national.

Functional. Pared-down. Blond. Socially responsible. This is how Swedish design is often described and the image corresponding with the view of Sweden has a democratic and egalitarian welfare state. Ikea acts in a global arena and is one of the faces Sweden presents to the world. The company sells "Swedish design" – generally manufactured outside Sweden – and thus shapes the notion of Sweden and Swedish design, both globally and in terms of a national self-image. Despite repeated attempts to puncture myths about Swedish design, it still is perceived to represent democracy, welfare and social justice: ideas that Ikea has successfully used.¹

In my ongoing research I examine Ikea, focusing on the 1980s and 1990s, when the company's symbolic connection to Sweden and Swedish design was constructed and expressed in various ways.² Ikea provides an example of the relations between perceptions of national image on the one hand, and the process of imaging the national, on the other. In this paper I will discuss similarities between Ikea's Swedish profile and Sweden as a brand: Ikea's co-opting of a nationally inflected discourse of social democracy and how Sweden, in turn, has co-opted Ikea as an index of national values.

The material studied consists of manuals with guidelines and rules about Ikea's product line and corporate profile. These publications are intended for in-house use. My discussion also engage theory and debates about nation branding and notions of Sweden. In the 1990s design played a central role in shaping the image of the nation. For example, the Swedish Institute, the official Swedish agency responsible for international cultural relations, was charged with selling Swedish design. An activity which was also identified as crucial for the economic growth.³ Or, as the former Director-General, Olle Wästberg, has claimed: 'IKEA

1 In recent years, the Scandinavian design tradition has been redefined and questioned. One example is Kjetil Fallan (ed.) *Scandinavian Design: Alternative Histories*, Berg, London, 2012.

2 The project is funded by Riksbankens jubileumsfond (RJ) which is an independent foundation with the goal of promoting and supporting research in the Humanities and Social Sciences.

3 Nikolas Glover. *Imaging Community. Sweden in 'cultural propaganda' then and now*. *Scandinavian Journal of History*, Vol. 34, No. 3, 2009.

is doing more for the image of Sweden, than all governmental efforts combined.⁴

1. Ikea of Sweden

Ikea's identity is well-known and recognizable. The global chain's blue stores with yellow logotype on the façade, inevitably evoke Sweden. All products are consistently given Swedish names: the armchair *Poäng* is *Poäng* in Stockholm as well as in Riyadh. The store restaurants serve Swedish meatballs and the food markets sell Swedish crackers and herring: "A Taste of Sweden". The company also claims to have its ideological roots in Sweden: 'Ikea was founded when Sweden was fast becoming an example of the caring society, where rich and poor alike were looked after. This is also a theme that fits well with the Ikea vision'.⁵

The Swedish identity has not always been there. Originally Ikea was spelled in the French manner (Ikéa) and the furniture had Italian and American names, such as: Piccolo, Forum, Strega, Verona, La Plata, Swing, Tender and Cowboy. The current positioning is the result of a gigantic branding operation, initiated in the 1980s, which included an in-house training program, "The Ikea Way", as well as an overhaul of the entire product line. Resulting in a distinctively pronounced Scandinavian identity.⁶ An elaborate logistic system that keeps track of thousands of products and which also has a Scandinavian profile.⁷

In Ikea's in-house manuals – guidelines and rules for how Ikea's product line, range presentations and corporate profile – the Scandinavian profile is emphasized time and again in different ways. The employees are encouraged to emphasize the Scandinavian identity because it is: 'an opportunity to strengthen our Swedish IKEA profile'.⁸ The style strategy is 'to broaden styles for more people's tastes while our identity is the unique Scandinavian profile'.⁹ This style is described in key words such as 'functional', 'practical', 'solid wood' and 'blond'.¹⁰ Furthermore, the Ikea stores are said to be 'characterised by an architecture based on Swedish functionalistic tradition. The building is visu-

4 Olle Wästberg. *The Symbiosis of Sweden & IKEA*. *Public Diplomacy Magazine*, 2009.

5 <http://www.ikea.com>

6 The IKEA Way is the name of one of the many courses that are included in the company's extensive training programme, and is today used as a concept. Nowadays there are a plethora of courses in a variety of areas. These are assembled Ikea's internal database "Toolbox". Study in this database and interview with Ivana Hrdličková Flygare, Helsingborg 03/12/03.

7 Interview Lea Kumpulainen and Lennart Ekmark, 12/06/09. Kumpulainen and Ekmark has worked at Ikea since 1960s in leading positions and developed this system.

8 *Range News and info*, Inter IKEA Systems B.V., 2001.

9 *IKEA Concept Document 2003. Style Groups 2004*, Inter IKEA B.V., 2004.

10 *Ibid*

ally clear, informal, simple and stripped to essentials.¹¹

In fact, the typical Ikea store is distant from what is known as folkhemsarkitektur (The People's Home Architecture) in Sweden: buildings from the 1940s - and 50s are characterized by hand-crafted elements and materials such as brick and wood. Ikea is rather a precursor to the so-called "big boxes" or "category killers" – buildings with the simplest possible interior – like Toys'R Us and Wal-Mart.

2. Sweden and Swedish design history: a marketing strategy

It was when Ikea expanded internationally during the 1980s that Swedish profile was improved and developed. But national identity became important already in the 1970s, when the company established outside Sweden. One reason was that the stores abroad had different looks and the style needed to be strengthened and regulated.¹² In 1976, founder Ingvar Kamprad and his closest associates, concluded that:

Not only with respect to range, but, even with regard to range presentations, the Swedish profile must be preserved. The Swedish profile referred to is IKEA's interpretation of the word "Swedish". Most companies in Sweden presents its range, in a way that we are not prepared to describe as Swedish.¹³

The strong corporate culture is a key factor in Ikea. In the 1980s, Ikea started to use what they called *Kulturambassadörer* (Cultural ambassadors): co-workers who learned employees abroad about Swedish values and Swedish culture.¹⁴ In 2010, *IKEA Tillsammans* (Ikea Together), opened, a corporate cultural center in Älmhult, Sweden, which offers kick-offs, team-building exercises, training programmes and annual meetings.¹⁵

During the 1980s and 90s, Ikea consistently makes references to an established view of both Sweden and Swedish or Scandinavian design, which is often portrayed as being influenced by a social and democratic pathos. There are a number of surveys of Swedish design, but most of them repeat well-known facts, phenomena and socially committed exhibitions. Publications such as Ellen Key's *Skönhet för alla* (Beauty for All, 1899), Gregor Paulsson's *Vackrare vardagsvara* (Better Things for Everyday Life, 1919) and *acceptera* (1931) are mentioned repeatedly.¹⁶

Ikea successfully utilises these ideas and simply turn well-known mottos in the Swedish design history into slogans. One example is the catalogue for the furniture line Stockholm in

11 Ibid

12 Interview, Lennart Ekmark, 16th December 2011.

13 Notes from meeting in Humlebaeck, 03/09/76. Present: Hax, RD, LE, IK [Ingvar Kamprad], RM, JA. Unpublished material.

14 Miriam Salzer. *Identity across borders. A study in the IKEA world*, Linköping: Linköping Univ, 1994.

15 Folder, *IKEA Tillsammans*, Inter IKEA Systems, 2011. I have also participated in "The IKEA Brand Programme 2012". An in-house course about how to communicate the IKEA Brand.

16 For english translation and discussion see Lucy Creagh, Helena Käberg, Barbara Miller Lande (ed.). *Modern Swedish Design. Three Founding Texts*, New York: Museum of Modern Art, 2008.

1990, which is called *Vackrare vardag* (A More Beautiful Everyday Life): a paraphrase of Gregor Paulsson's publication from 1919. Under the heading *Skandinavisk hemkänsla* (Scandinavian Domesticity) a romantic image is described:

That light is the main characteristic of Scandinavian Domesticity, one understands when looking at the map of Europe and you see how far north Scandinavia is situated... The furniture is usually bright, and made of wood that grows in Scandinavia: beech, pine, birch, with its natural aging visible. When the furniture is painted, they tend to be painted in white and light colours to give light. Another characteristic is that the Scandinavian interior design is often simple and clean.¹⁷

Ikea often tries to project an image of not being a capitalist company but one with a social commitment. This is described in, for example, *Democratic Design* (1995), published in conjunction with the company's 50th anniversary:

As everyone who has grown up in Sweden has learnt – either from their Dad, or from society in general – people who are not at all that well off should still be given the same opportunities as people who are. It's hardly surprising that, as a Swedish company, Ikea espouses Swedish values.¹⁸

The phrase "Democratic design" is used in different contexts, such as in a pamphlet (1996) which contains a section headed "Design for everyone": a rewrite of Key's *Beauty for all*.¹⁹ The catalogue also contains the article "History of Nordic design: From the late 1880s to the late 1900s", by design historian Kerstin Wickman. The text provides an established depiction of Nordic design, which is described as being inspired by nature and cast in a democratic setting with social pathos: 'Unlike the rest of Europe, the aesthetic debate in the Nordic countries was part of the democratization process.'²⁰

A similar depiction is given in the catalogue to the first PS-collection, 1995, which was presented, as a kind of "post scriptum" to the rest of the product line and launched under the headline "Democratic Design" in Milan, Italy. The collection was characterized by a stripped-down, neo-modernistic expression and in the catalogue it was described as "Design for everyone":

The Swedish model has also become synonymous with a high utility value, good function and quality, and an ambition for easy access... Ikea PS works with the aesthetics of simplicity that was defined back in the mid-19th century and which has long gone under the name of Swedish Modern.²¹

Behind Ikea's external image – expressed through the publications mentioned above - are internal manuals, guidelines and rules about how the brand should be portrayed. These in-house publications are produced by Inter Ikea Systems B.V. that – similar to a central station – owns and manages the business concept. The history and image of Ikea is not static; it has developed, changed and been described in various ways over the years. But

17 *Vackrare vardag*, Ikea Folder, 1990. My translation.

18 *Democratic design*. A book about form, function and price – the three dimensions at IKEA, p. 9. Inter IKEA Systems B.V., 1995.

19 *Democratic design*, Inter IKEA Systems B.V., 1996.

20 Ibid

21 *IKEA PS. Forum for modern design*, Inter IKEA Systems B.V., 1995. My translation.

a red line, or a core, can be found when studying Ikea's brand values from the 1980s and 90s. The philosophy is expressed in both shorter and longer versions. The short one is: 'The IKEA concept in a nutshell. To create a better everyday life for the many people.'²² This is the first thesis in *The Testament of a Furniture Dealer* which Kamprad wrote in 1976.²³ The title has religious undertones and the theses speak of morality and social justice.

3. Ikea and the Swedish Model: Paradise lost?

By references to Swedish design history and the romantic image of Sweden, Ikea makes use of established beliefs – and in doing so, reinforce them. However, there are different ways of looking at Sweden and Swedish design. The image is perhaps selling but the question is whether it reflects reality. The notion of Swedish design corresponds to the established image of Sweden as a “model state”. Marquis Child's book *Sweden: The Middle Way* (1936) is one of the more common descriptions of the idea of the Swedish model as the middle way between communism and capitalism. But the idea of Sweden plays a crucial part in the Swedish self-image. The success story of how Sweden went from a recent past of inequality and poverty to a Social-Democratic welfare state, has been recycled by a numbers of Swedish historians.

In the late 1970s the Swedish model reached the peak of its influence and began to be challenged. In the 1980s the Social Democratic model began to lose its hegemony in the intellectual debate. The crisis and depression that characterized the 1990s was followed by a debate where the ideological foundations of the Swedish model were questioned, including the moral and normative foundations, which were criticised for putting the common good before the interest of individual citizens and minorities.²⁴

The historian Jenny Andersson presents the idea that, after the crises of the 1990s, the “Swedish Model” was back again and Sweden emerged as a renewed utopia. One example that supports this idea is the publication by journalist Robert Taylor's pamphlet *Sweden – Proof That a Better World is Possible* (2005).²⁵ Another example is *Fishing in Utopia* (2008), by the journalist Andrew Brown, in which he describes his infatuation with the social democratic model society. He deplores the fact that this society no longer exist, and grieves a disappeared future.²⁶

Andersson also claims that Sweden post 1990s suffers from a kind of nostalgia, in which the Swedish Model emerges as a kind of paradise lost. The concept “People's home” became a slogan

²² Ikea Concept Description, Inter Ikea Systems B.V., 2004, p. 4.

²³ *The Testament of a Furniture Dealer*, Inter IKEA Systems B.V., 2007 (1976).

²⁴ Jenny Andersson. *Nordic Nostalgia and Nordic Light. The Swedish model as Utopia 1930-2007*, *Scandinavian Journal of History* Vol. 34, No. 3, 2009, pp. 229-245. See also Urban Lundberg and Mattias Tjeden. *In Search of the Swedish Model*. Helena Mattsson, and Sven-Olov Wallenstein (ed.). *Swedish Modernism. Architecture, Consumption and the Welfare State*. London: Black Dog Publishing, 2010.

²⁵ Robert Taylor. *Sweden: Proof That a Better World Is Possible*. London: Compass, 2005.

²⁶ Andrew Brown. *Fishing in Utopia. Sweden and the Future that Disappeared*, London: Granta, 2008.

and was used as a political strategy for reclaiming a lost utopia. The decade also witnessed a revival of interest in Nordic design (or Scandinavian, which is often used synonymously in the English-speaking world), both in its more exclusive variants such as the work of Danish designers like Hans Wegner and Kaare Klint, as well as mass-produced versions like Ikea.²⁷

This can be understood in the light of nation branding. It is well-known that recent decades have been marked by a revival of nationalism. Although it is not synonymous with older forms of nationalism, national images and stereotypes seem to become more important in an era of globalization. This is also an observable fact in Sweden, where there have been debates about the notion of Swedishness and what defines Swedish values.²⁸ The way Swedes conceive of Sweden is a fundamental part of how the image is shaped abroad, and in this context Ikea plays an important role.

4. 'The Social Democrats built the welfare state. Ingvar Kamprad furnished it.'

This has become a saying in Sweden. In 2008, Ikea came on top of the *Förtroendebarmetern*, an annual survey of the institutions in Swedish society and what level of confidence Swedes have for them.²⁹ The result can be understood as an expression of national mythologizing. Ikea is frequently described with references to politics: 'IKEA is a community builder as much as a home decorator. Side by side with national political programmes, the company has slogged away to realise the founders project: to be for the many people by the means of, as they say, a democratic design.'³⁰ And the founder Kamprad is often portrayed as a philanthropic politician rather than a crass businessman, by others and himself: 'What keeps me going is the feeling that in a broader sense, I participate in a massive democratization project....'³¹

Kamprad is a kind of advertising figure for Ikea. He not only personifies the brand but also an image of Sweden and a general Swedish self-image. But, like the success story of the Swedish welfare, Kamprad has been criticized. Most damning are the revelations about the founder's involvement in Nazi movements. Journalistic investigations by those in power are usually welcomed by Swedes. But in this case there was a widespread disapproval of the criticism. This might be due to the exalted view of Kamprad and Ikea among Swedes. It is possible that Swedes want to maintain the Swedish success story and the myths of Sweden.

A postmodern understanding of history claims that it is not fixed, but instead a construct that can be produced and used for different purposes. According to this approach, there are multiple pro-

²⁷ Jenny Andersson. *The Library and the Workshop: Social Democracy and Capitalism in an Age of Knowledge*, Stanford University Press: 2010.

²⁸ *Scandinavian Journal of History* Vol. 34, No. 3, 2009

²⁹ *Förtroendebarmetern* is produced by Medieakademien, Gothenburg. <http://www.medieakademien.se>

³⁰ Staffan Bengtsson. *On a democratic concern*. In: *Ikea at Liljevalchs Konsthall*, Stockholm: Liljevalchs, 2009.

³¹ Bertil Torekull. *Kamprads lilla gulblå* (Kamprad's little yellow and blue), Stockholm: Ekelids förlag, 2011, p. 36. My translation.

ducers of history. A company, like Ikea, is one such producer. This leads to questions like: What happens when history becomes a part of corporate branding? The corporation's creation of history has certainly a commercial motivation but, in a larger perspective, it can have political, ideological and existential consequences.

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Opportunities and challenges for the Design in the Brazilian National Policy on Solid Waste

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Ecodesign / Recycling / Waste / Logistics / Life cycle / Reuse / Packages

The article presents the Law number 12.305, year 2010, establishing the Brazilian National Policy on Solid Waste, detailing the points concerning the activity of the designer, and presents the opportunities and challenges that the law's implementation will bring to the practice and research in the field of design. It also emphasizes the importance of the participation of designers in the law's implementation.

1. Introduction

The Brazilian National Policy on Solid Waste arises as a regulatory framework proposed to mitigate the social and environmental impacts of the current model of consumer society — in which productivity and consumption are imperative.

The content of the law encourages numerous post-consumer practices, such as reverse logistics, recycling and environmental education programs aimed at consumer awareness. However, little emphasis is given on production and pre-production processes, which are extremely important stages in the conception of products that will or not become waste, depending on how they are designed. The law does not adequately emphasize the desirable changes in the development of a new product and even how the design field is included in this context.

Design presents itself as a discipline that mediates the material culture, dealing with projects, products, services and other various roles in the productive sector, but the law does not mention mechanisms that provide incentives for new practices based on a new ethic of environmental conservation. It is interesting to observe, however, that some concepts explained in the Law are aligned to the model defined as ecodesign, which will be presented throughout this article.

The field of design has been expanding its areas of activity, not only with the contribution brought by new digital technologies, but also due to the development and improvement of the various subareas it covers. In addition to product design and ecodesign itself, areas such as graphic design, editorial design, packaging design, signage design, and web design, among others will have broader work opportunities, according to the guidelines established by the national solid waste policy. Nowadays designers can rely on digital networks to obtain and disseminate information, which creates, by itself, circumstances to evaluate,

reorganize and release new practices in the whole process of production, consumption and waste disposal.

2. Methodological approach

Selected items from law number 12.305, year 2010, establishing the Brazilian National Policy on Solid Waste, will be presented. These items dialogue with the activity of the designer and are discussed in the present article according to the concepts from the ecodesign field literature, in order to show the proximity between the two areas. This method of analysis is based on "Grounded Theory" which aims to make comparisons between the data in order to identify, develop and relate concepts [Strauss & Corbin, 1998].

3. Ecodesign

In the field of ecodesign, some theorists such as Ezio Manzini and Thierry Kazazian, among others, have published several contributions about the subject.

The terms "ecodesign" and "sustainable design" are related to products and services whose production characteristics and life-cycle prove their convergence to the planet's sustainable development.

Namely, through practices that reduce environmental impact such as: recycling; reusing; efficiency and low energy consumption; reduction of materials used in production and the final product's life-cycle; control over the life-cycle of the product from its manufacture to its disposal; reduced use of nonrenewable resources and the ability to decompose or recycle after use, among others. All practices mentioned are recommended both in the production process and during the entire life-cycle management of products. When implemented they would act directly in the reduction of solid waste.

Hence, there are some definitions of ecodesign proposed by two important theorists of the field:

"[...] ecodesign is a model of designing, guided by ecological criteria. The term, consequently, presents itself as the expression that summarizes a wide array of designing activities that tend to address the issues posed by the environmental questions from the start point, that means from the drafts of the products themselves" (Manzini 2002: 17).

"The ecodesign, which the first definition was given by Victor Papanek, participates in a process that has the effect of making the economy more 'lightweight'. Also called 'eco conception', it is

an approach that consists in reducing the impacts of a product and at the same time retaining its quality of use (functionality and performance) to improve the quality of life for users of today and tomorrow” (Kazazian 2005: 36).

We can find many of the definitions mentioned above in Chapter II, Article 3 of the Law of Solid Waste. Deeper relations with the field of design will be commented below.

4. Product Life Cycle

As defined by law: “A series of steps involving product development, procurement of raw materials and inputs, production process, consumption and disposal” (Article 3, Section IV).

The life cycle design incorporates a systemic approach to the design of products and services to minimize environmental impacts — considering from the amount and type of raw material to the final disposal of used materials — and products. It proposes the replacement of the unidirectional linear production system (fig. 1) with the closed flow system (fig. 2).

The closed flow includes design for the end of life and for waste reuse. In this scheme is interesting to note that the waste goes through a valorization process to be put back in the production cycle. The recovery of value can be done preserving the physical and chemical properties of objects, or changing them, through practices such as reusing or recycling.

This valorization process is also often thought of by teams of designers, both in terms of its form and function, and in all the aspects of the product communication. According to Kazazian, these changes lead to reorganization of the role of companies in the economic cycle, so that they may also become producers of raw materials and services, which could help to reduce waste and fees related to their generation.

“This new production structure can be created. For example: two factories in the same workplace: one producing and the other remanufacturing and generating industrial goods [...] Once returned, the product is refurbished and updated to be replaced on the market or taken apart in order to have some parts reused in new products” (Kazazian 2005: 52).

The Closed Flow Chart shows the possible uses of a product after its initial application is completed, and how it can be remanufac-

tured, transformed into a new one or into secondary raw material. The life-cycle design postulates the need of a project that takes into account the fact that the product will have a history: a past and a future. It is easier to work in the production chain earlier, that is, in its planning, rather than just investing in programs to recycle, reuse or conscious consumption.

5. Reverse logistics

As defined by law: “Economic and social development instrument characterized by a set of actions, procedures and means to facilitate the collection and recovery of solid waste from the productive sector, for reuse, in its cycle or other productive cycles, or other environmentally sound disposal” (Article 3, Section XII).

Reverse logistics is a crucial step to enable the production system with closed flow, besides being a great tool for social inclusion. As mentioned in the previous section, it would be interesting to think the reverse logistics process from the beginning of the product conception, with all stages of their life-cycle planned so that this residue can be recovered after use, in other raw materials or products. Nowadays there are many products that did not have their end of life previously planned so it remains a challenge for designers and recyclers: which new alternatives can be created for our waste?

Designers, in turn, can cooperate in the process by setting equipment and techniques that facilitate the return of the waste for recycling or reuse. An example is the mineral water Crystal (fig. 3) that is designed to be twisted after use, to occupy less space on its return for recycling.

6. Reuse

As defined by law: “The process of solid waste utilization without its biological transformation, physical or physicochemical, subject to the conditions and standards set by the competent bodies of Sisnama and, if applicable, of the SNVS and Suasa” (Article 3, Section XVII).

The product reuse can occur in many ways and a majority of them involves the design in the projectual stage to facilitate the product return for the production chain. This can be done by ap-

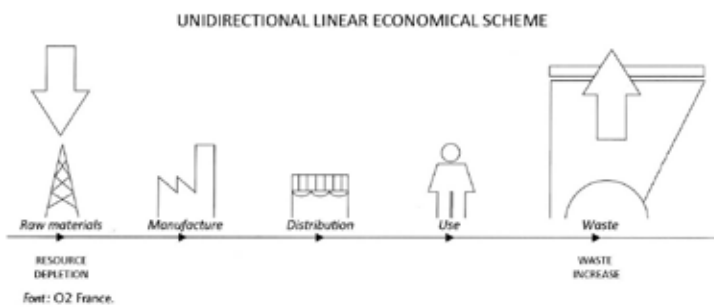


Figure 1. Chart: “Unidirectional Linear Economical Scheme” (Kazazian 2005: 52).

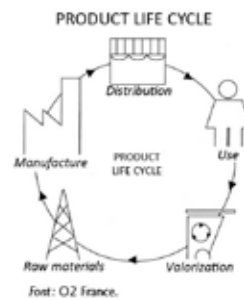


Figure 2. Chart: “Product Life Cycle” (Kazazian 2005: 52).

plying design for disassembly after disposal. There are several industrial products that fit this case, such as refrigerators, appliances, auto components, some electronic components etc. (fig. 4).

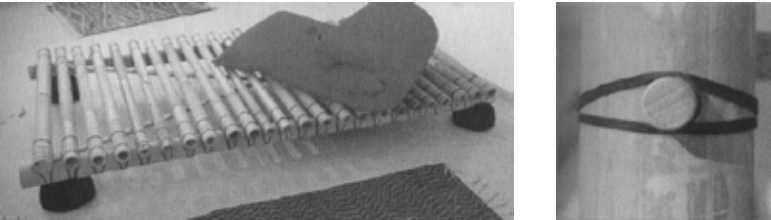


Figure 4. The company TUPA produces a collection of handmade bamboo beds treated with wood locking and strips of air cameras to bind it. They are delivered disassembled in a packaging which is used as a component of the bed. It is cut into pieces filled with straw, rice or small stones and then tied to serve as the foot of the bed (Manzini & Vezzoli 2008: 131).

There is also the case of durable product reused in another function. In the Brazilian design, perhaps because of economic and technological limitations, this practice is adopted frequently, almost entirely handmade. Our most notorious example is Fernando and Humberto Campana (fig. 5, 6 and 7), who often reuse materials in different applications. Lina Bo Bardi had already noticed this reuse vocation in the Brazilian vernacular design (fig. 8 and 9). Another category of this group includes the products that, without altering its physical and chemical properties, are reprocessed, such as aluminum cans and glass. And finally we have the case of reusable containers such as bottles of beer.

7. Sorted waste management

As defined by law: “Collection of solid waste, pre-sorted according to its constitution or composition” (Article 3, Section V).

Waste sorting is one of the tools used in the implementation of shared responsibility for the product life-cycle, where consumers and large generators of waste should be organized to acquire the means to select recyclable materials, assorted by type of



Figure 5. Gude necklace from the Brazilian artist Mana Bernardes, in nylon net and marbles (Arc Design, n. 39, 2004: 55).

Figure 6. Sushi Chair IV from the Campana Brothers in felt, EVA, fabric rubber, PVC and carpet, with metal structure (Arc Design, n. 29, 2003: 19).

Figure 7. Lego lamp from the designer Luiz Pedrazzi, made of parts from the well-known toy Lego (Arc Design, n. 44, 2005: 21).

material, for future recycling. The design may come as a facilitator in the process of public awareness on the implementation and dissemination of the National Policy on Solid Waste, through projects involving visual communication in the various areas of graphic design, such as, printed and electronic media, signaling projects etc. There is already a visual standardization for colors or symbols, according to CONAMA (2011) (fig. 10), to facilitate the selective process of collection, but this initiative, as well as many others, require greater disclosure.

In addition, new equipment could be developed to expedite the waste separation, for example: new residential containers or even new industrial containers for large recyclable material generators, as provided in the article 35 of the law, where consumers are required to adequately pack and make the generated solid waste available.

8. Recycling

As defined by law: “The process of solid waste transformation that involves the alteration of their physical, physicochemical or biological state, aiming on transforming it in new inputs or products, subject to the conditions and standards set by the competent bodies of Sisnama and, if applicable, of the SNVS and Suasa” (Article 3, Section XIV).

With the law on solid waste, recycling becomes official as one of the main ways to reuse and recover solid waste. It helps to avoid the extraction of new raw materials from nature, prolonging its life-cycle. For years, Brazil has structured recycling based on informal workers who collect recyclable waste in the streets. These “catadores” were initially motivated by financial need, even before most people recognize the value of their work. The design may come as a facilitator in the process of using the recycling material, developing products already designed for its post-use (fig. 11, 12 and 13), or can even develop equipment to improve the “catadores” work.

The working condition in the majority of cooperatives is poor. The workplaces for the materials separation are improvised and they are not designed considering the ergonomics and health of the workers. As the picture taken at the Coopere Centro cooperative (fig. 14) shows, the conveyor has a very low height and runs very fast, so that workers have difficulty working, pivcking up only the large-volume materials. Besides the physical problems that it can cause, the conveyor is not efficient in order to collect as much material as possible. In the case of Coopere Centro, everything that was not selected through the conveyor, goes straight to the landfill. The solid waste law brings a great opportunity for designers to develop new equipment, and systems, to facilitate the recycling work done in the cooperatives.

9. Packaging design

As defined by law: “The packaging must be manufactured with materials that facilitate the reuse or recycling” (Article 32).



Figure 8. Kerosene lamp made from an old lamp (Lina Bo Bardi, 1993: 210).



Figure 9. Barbecue grill made out of a washing machine drum (Pavilhão das Culturas Brasileiras: Puras Misturas, 2010: 204).



Figure 10. Colors that define a collector for each type of material based on CONAMA Resolution 275 (Picture by Ecologia Online site).

The packaging industry is responsible for most of the waste disposed, because packages are products with a very short life-cycle. The package design allows the restriction of volume and weight, according to the dimensions required to protect the content. The design strategies for integrating environmental requirements into the product development phases must take into consideration the management of 3Rs. It is advisable to reduce the use of natural resources, reuse packaging, and recycle raw and clean materials, providing efficient operation of the selected waste collection and transport facilitation to reverse logistics process.

The current position of the packaging industry is to develop the product considering only until its delivery to the consumer, however, they should change this to a “cradle to cradle” life cycle view —meaning that the product is conceived in the company and it should return to its place of origin when appropriate (McDonough, 2005). The reuse of packages, which are designed to have a short lifespan, can be increased by replacing the disposable packages with reusable ones or making them part of a new product. The reuse will depend, besides on the material, on an interesting design that will allow its reuse. If it is discarded, the designer can think of its disassembly and materials separation for future recycling.

The authors Manzini & Vezzoli (2002) found that less use of materials and the minimization of the products external content and packaging on the environment significantly reduces the environmental impact. Therefore, a project that foresees the impact of packaging is essential for the solid waste law to be consolidated (fig. 15).



Figure 11. Herman Miller's Aeron chair, Stumpf and Chadwick design, 1994, derived from 100% recycled plastic and aluminum. (Arc Design, n. 3, 1998: 22).

Figure 12. PET plastic bottles turned into yarn for future production in the handloom weaving company Baobá (Arc Design, n. 13, 2000: 31).

Figure 13. DEJA tennis shoes, Bob Peterson design, 1993, recycled cotton, rubber, felt, polypropylene, and other discarded materials (Arc Design, n. 3, 1998: 22).

The way it will communicate to consumers how to appropriately discard the packaging in the label is essential for the viability of a proper disposal by the consumer and the collection. The book Guidelines for Packaging Environmental Labeling, from ABRE's Committee on Environment and Sustainability (ABRE, 2010), directs how some aspects of the way the label package should be to communicate and to facilitate future recycling. ABRE recommends that all packages include the type of material symbol identification on the label, when not stamped with the selective discard symbol. It is desirable that the company also put an environment declaration with emphasis in its percentage of recycled material and if it is pre or post-consumer. It would be also interesting an additional text encouraging consumers to recycle, with instructions on how this can be done. Such information, presented in the packaging, facilitates the materials separation and the integration of the consumer in the recycling process.

10. Conclusions

The various aspects of the Solid Waste Law presented here demonstrate that the knowledge in the field of design could contribute to enrich the current demands and move towards the reduction of solid waste. The economic, social and environmental crisis we are living calls for a review of the productive models. The “eco” conception of products, systems or services shall be considered concerning the aspects that promote the reduction of natural resources use, the respect towards the environment and social inclusion.

Waste generation prevention policies mentioned in the law (Chapter 2, Article 6, Section 1) could consider the field of design as a priority area to foster research and teaching programs with a focus on new practices that consider the reduction of waste or a closed cycle of production. In the specific case of Brazilian design, several examples of the creative practice of reuse are observed, both spontaneously and anonymously, as well as created by designers, especially in products such as furniture, lightning and fashion accessories. On the other hand, in large Brazilian cities there is already a network of “catadores” and recyclers of waste. It would be interesting to promote a greater analysis of a suitable approximation between these two links in the chain, in order to create new possibilities for expanding materials and products life-cycle.

Most recycling today, according to Braungart & McDonough (2002), is considered a downcycling — it reduces the quality of the material over time. Designing can facilitate the process of upcycling by developing new products derived from waste. This proposal also establishes a dialogue with the model cited by Kazazian (2005), in which new productive structures are now being designed with the valorization of used products and materials and can offer services, materials or new remanufactured products.

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Design as strategy to improve wooden furniture production, through a network perspective

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Strategic design for sustainability / Networks / Collaborative actions / Furniture production in MSEs

This paper reports a Design Pilot Project that aims at promoting sustainability within wooden furniture Micro and Small Enterprises in a Brazilian context. By approaching the network capacity for sharing knowledge, making evolve a fragmented local system and supporting development innovation, the integrated work entails to establish and maintain connections among different actors, creating new possibilities of thinking and collaborating to improve environmental, sociocultural and economic aspects, as a whole.

1. Introduction

In literature, among other definitions, networks are considered flexible spaces where organizations can exchange knowledge, information, goods and services. These interactions are the connection foci to encourage innovations and the relationships compose a cohesive whole. (Marchica 2004; Tomael et al. 2005). Thus, strategies created from a network perspective are a competitive factor within Micro and Small Enterprises (MSEs), enabling knowledge to provide innovation and to support local development. (Van de Ven, 1986; Swan et al. 1999; Lopes and Baldi 2009; Mortati 2010). Therefore, connections between different actors aim at achieving a new manner of collaborating and at improving the environmental, technological, economic and sociocultural aspects of context. (Hardy, Lawrence and Grant 2005)

For some authors, Pilot Projects are strategic collective experiments for testing innovation and for scaling up processes (Lator, 1999); can motivate individuals, organizations or wider groups (Schneider and Ingram, 1990); offer learning platforms to develop constant perceptions (Pahl-Wostl, 2006). Consequently, to investigate network capacity for increasing value and enabling resources and knowledge, the MODU.Lares Pilot Project¹, a partnership including different institutions, as follows: ten wooden furniture MSEs of Uberlandia, the Federal University of Uberlandia/MG-Brazil, the Politecnico di Milano-Italy, the Local Association of Furniture Industries (SINDMOB), Brazilian Support Institutions and Local Government was proposed.

The paper reports the research process and the preliminary outcomes of the Project where each entity assumed a specific role to prototype serial production products. The experience aims at:

[1] visualizing the interaction potential and limits, to learn and increase successful possibilities of innovation, [2] stimulating opportunities for MSEs, Academic and Support Institutions and Government to strengthen collaboration, [3] providing the sustainable development and innovation of Uberlândia/MG.

The Local Brazilian Context

Uberlandia is located in the Minas Gerais State, Southeastern Brazil. With about 634.345 inhabitants, the small industry is relevant in the city. The furniture sector has about 800 MSEs working in personalized productions and it is strongly characterized by an inertia, either regarding to organizational, technological or knowledge aspects. These firms lack control over raw material use and waste disposal. Almost 85% of them are not officially registered, and work in precarious facilities (FIEMG et al 2006). The unawareness of good practices within both informal and official MSEs characterizes a serious environmental problem. Therefore, for these companies and professionals succeed, and for a balanced city growth, an appropriate strategy becomes necessary.

2. The Action Strategy

The reduction of ecological impacts entails an approach that includes: concept development; a pilot as a trial; optimization of production techniques and distribution systems and reduction of environmental impacts (Castro 2008). Hence, the MODU.Lares proposes: (i) configuration of partnerships to try new paths; (ii) more efficient processes through design; (iii) prototyping furniture, industrially oriented to a new market².

Research and Design Methodologies

The main methodologies used were: Case Study Analysis (Yin 2005), and the Action Research and Participatory Design (Wadsworth 1998; Smith 2001). Action Research was adopted to achieve qualitative strategies such as: (i) empowerment of participants; (ii) collaboration through participation; (iii) knowledge acquisition; (iv) and social change (Smith 2001).

The Case Study methodology was relevant to design assessment parameters for evaluating the Project results, as well as to create guidelines to replicate it. The Cases permitted the analysis of collaborative practices, mass custom design, and environmental solutions. They combined complementary sources of evidence such as documentation, interviews, direct observation, and files.

² Regards the Brazilian low income customers. The research uses the Prahalad's reference (2005, p119) that considers as low income in Brazil groups that pertain to C, D and E strata of population and have income of up to ten minimum wages (about US\$3,500.00).

¹ Móveis De Uberlandia para Lares Sustentáveis, in English - Uberlandia's Furniture for Sustainable Homes.

A survey was performed to collect quantitative information using questionnaires and interviews.

The parameters were classified in six major topics, as follows:

- Environmental parameter: to minimize resources and material; to select low impact processes and safe raw material. (Manzini and Vezzoli 2002; Vezzoli 2007)
- Technological parameter: to improve quality by: conceiving new products; adopting low cost production x high performance (Noguchi 2004); ; sharing design and production processes.
- Organizational parameter: increase collaborative levels by: connecting actors; developing products/services complementarily; sharing knowledge and information. (Parker and Ford 2009)
- Economic parameter: increase production capacity and competitiveness and motivate market flow. (Hardy, Lawrence and Grant 2005)
- Cultural parameter: knowledge and competencies improvement, to converge interests and achieve common results. (Parker and Ford 2009)
- Social parameter: to deliver better products/services addressed to low income customers.

3. The Pilot Project Development

The MODU.Lares Project started in February 2011 and it is planned to cover an 18-month period. The beginning phase (6 months), carried out by researcher and SINDMOB, aimed at creating partnerships, and at checking the MSEs availability of participation. The second phase (12 months) defined a set of actions to orient project development, including the design of seven objects created for this experience, based on concepts of Design for Sustainability, to try the industrial production process.

Defining the Partnerships: contacts with Partners & selection of MSEs

After the SINDMOB's agreement, the Project intention was presented to other members of the Association. From March to June 2011, in order to enlarge the network, contacts with other institutions were made. Among several appointments with different Local Government Departments: Economic Development and Tourism, Environmental Control, Social Development and Work, and Education to present sectorial proposals, only the first Department provided a positive response.

As the Economic Development and Tourism Department supports industries actions, and recognizing the possible advantages through the Project implementation to improve a wider context, it agreed in giving Institutional Support.

The next contact was established with SEBRAE/MG local office. The institution supports small business activities in Brazil, including credit and capitalization support, and professional and technological qualification. With it there were observed the most feasible activities to be developed with companies as well as potentials and restrictions of actions.

The School of Design of Federal University was engaged by a research project, reinforcing the scientific support and opening opportunities to engage students. This will stimulate the research on sustainable design.

The definition of the MSEs followed some conditions. To be selected, the enterprise needed: (i) to be a member of SINDMOB; (2) to be a micro or small enterprise working in custom-made processes; (iii) to have taken part in any previous project to improve production, organization or technical conditions; (iv) to participate by its own expense.

In July 2011, after the profiles analysis, ten MSEs were selected, and so initiated the work planned for the next twelve months. It included the diagnosis, possible from the application of questionnaires and their analysis which furnished a panorama of the MSEs. After this, was created a preliminary program of actions, in partnership with SEBRAE and SENAI³.

The first planned activities with SEBRAE's partial financial support regarded technical, infrastructural and production aspects. Considering the environmental aspect importance for the Project's success, it was vital to know the conditions of MSEs related to production processes, waste, among others. This step was carried out by SENAI through technical consultancies, and planned to occur in six months (from September 2011 to February 2012).

Furniture Design Concepts

The adopted concept of Design for Sustainability defined that the objects:

- must be done in wood panels, since it is the most used raw material;
- must be simple, rational, with few components, thus preparing MSEs to assume a serial production process;
- must consider environmental aspects, hence: (i) using the maximum of material; (ii) attending low level of gas emissions with raw material; (iii) ease of assembly/disassembly, to reduce storage volume and gas emissions from transportation;
- ease of manufacturing to minimize errors and increase production capacity.

³ Institution that supports educational and professionally the industries activities in Brazil.

Prototyping phase and Exhibition

The prototyping phase occurred in January 2012, when the objects were produced in a two-phase step: first as a mock-up and then as a prototype. Before starting the production phase, an initial meeting was made with the Firms, SINDMOB and University to discuss the design/project and the production solutions. The definition of MSEs to prototype a specific object was based on the infrastructural data analysis considering the resources and the equipment available. After this, it was defined that only 8 firms would participate in this phase.

The researchers and students monitored all the prototyping phase, from 02 to 26 January 2012, within the 8 MSEs. The mock-ups production aimed at evaluating technical and aesthetic solutions of objects. Some adjustments were necessary due to the equipment's low technology. But, even though some objects needed few modifications, the results were satisfactory.

During the prototyping stage, as MSEs already knew the products and their productive process, some of them demonstrated less attentiveness in fabricating the objects. Some objects were not produced as expected due to the short time available to prototype; others, due to many errors during production, needed to be manufactured more than once, thus requiring an agenda adjustment.

In the production time, the entrepreneurs behaved in different ways among themselves: some of them produced the mock-up and the prototype by themselves, and others transmitted the production job to a responsible employee.

The Prototype Exhibition was organized on 27 January 2012, at the FIEMG Regional Centre, as a means to communicate the initiative to the society as well as to gain other partnerships.

Preliminary results

The establishment of partnerships (first phase) was crucial for the progress of the project. As partners, the MODU.Lares Pilot Project connected ten Micro and Small Enterprises that produce wooden furniture, the Local Government, the SEBRAE and SENAI Institutions and two Universities (Federal University of Uberlandia and Politecnico di Milano), which is a significant result, since it is a pioneer initiative in the region.

In the prototype phase, only 8 from 10 engaged MSEs participated on it due to the characteristics of the objects. Five MSEs had the prototypes completely developed by their owners, who were effectively engaged in comprehending and applying the proposed design concepts, discussing solutions and limits of production. Two other companies had their owners' support only partly during production time. Only one company did not count on its owner's contribution, because of an agenda incompatibility.

The Prototypes Exhibition is too a significant consequence of the Project. The event received great media support, with almost all regional TV and radio channels and the main city newspaper present.

Although the technical and infrastructural aspects do not still respond to the best production practices, all enterprises were attentive in testing the project's concepts, to understand the promising steps in order to implement them in their companies. Moreover, it is the first time these MSEs produce an object that adopts concepts of Design for Sustainability and, specifically, which intends to be for serial production. Considering all difficulties, preliminary outcomes are reasonably positive.

4. Considerations

As the Pilot Project is in progress, it is opportune to mention that the results are partial and there are still some steps to implement and evaluate. The preliminary phase of the Pilot Project, from February 2011 to July 2011, demanded a great effort to engage partners because it was a new proposal both for the furniture sector and for the Local Government.

The preparation time with the MSEs was difficult because of the collective work required. Besides, there was no funding to develop the actions, thus all the MSEs needed to be involved by their own expenses. With the Local Government, it was also a hard time due to its bureaucratic configuration, which takes much time to program supports. The first interactions' results indicates a strong cultural and behavioral barrier that needs to be crossed in order to explore local potential and to create successful opportunities for all the involved.

According to Lopes and Baldi (2009), networks are not *per se* a synonym of innovation and local development. These depend on the group that integrates them, the specific context and instruments of coordination, and on the knowledge that need to be continuously created and recreated, to share a common understanding. (Swan, 1999). Collaborative actions must reserve space for differences and debate in order to balance interests and to construct a collective identity, minimizing the failure of effective interactions (Hardy, Lawrence and Grant 2005).

Considering innovation as a process through which new ideas are developed and implemented by people engaged in connections with others in an particular context, Van de Ven (1986) mentions some problems in managing it. They regard to paying attention in new ideas, needs and opportunities; collective achievement of moving the ideas into good acceptance; part-whole relationships, which emerge from the diffusion of ideas, people and transactions; and creation of an infrastructure that is favorable to innovation.

The current Project phase demonstrates that not every company can effectively implement modifications, whether they be technical or behavioral. Some factors impact its potential for changing: (i) internal factors - enthusiasm, potential for innovation and cooperation, competitiveness, preparation, awareness; (ii) external factors - partnerships, support, market/customers, suppliers; (iii) to the products - design, materials/emissions, market share. (Gerstenfeld and Roberts 2000)

The historical inertia within the local furniture sector also reveals that even though companies have the capacity to adopt a new path and to change, it is necessary a continuous presence of a manager (either a researcher or a group coordinator) that assumes the control of proposed actions in order to have progress.

Thus, in order to enable knowledge to reach innovation, it is fundamental a network-building effort focusing on the creation, assumption, and sustained implementation of a set of ideas among the involved group. Even though it will take time and energy to adopt new sustainable concepts and behavioral practices, these individuals, companies or institutions, through connections, become appropriately committed to these ideas to transform them into good and concrete reality.

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The Italian public system supporting innovation: which role for design?

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Design policies / Design innovation / Public bodies / SMEs

This paper aims at highlighting the main features of the Italian public system that supports innovation, technology transfer and enterprise growth. Traditionally founded on governmental and public support, this has fragmentarily involved design. Through a series of structured interviews, we want to draw a picture of the recent transformations of this system.

1. Introduction

This paper highlights the main features of the Italian public system that supports innovation, technology transfer and enterprise growth. This has traditionally been based on governmental support, and has had a fragmented and often not explicit involvement of design-related topics. Nevertheless the recent economical and political evolutions, both at the European level (European Commission, 2009) and at the national one (reform of all public bodies, from universities and research funding to business support) make it relevant for design to understand how its tacit contribution to socio-economical growth can be acknowledged. This is very relevant in Italy, a Country that has greatly benefited from a virtuous collaboration between designers/entrepreneurs (e.g. made in Italy) (Mortati & Cruickshank, 2011; Becattini, 1989). Finally the recent socio-economical and environmental issues that are calling for wider transformations at all levels of the society and the industry raise important questions on how each profession can effectively contribute to smarter growth and sustainable social regeneration (OECD, 2005; 2007).

The questions this paper addresses are: (1) How can the design profession engage with business more effectively? (2) How can the opportunities of collaborating with design be communicated to companies? (3) What role can local, national and EU level governmental intervention play in facilitating this? By unveiling the recent inclusion of design by Italian public bodies in business engagement, we aim at suggesting possible ways forward for answering the above.

We present a series of structured interviews as part of an ongoing research. The objective is to acknowledge design in a wider innovation context and especially innovation policies, suggesting initial considerations for how Design Innovation Policies could promote socio-economical growth.

2. Framework and Method

There is a consistent constellation of public bodies in Italy to sup-

port innovation and industrial growth. In the attempt of listing them, we should include: Innovation Centres, Research Centres (Universities, Research Consortia, and Foundations), Entrepreneurial Associations, and Consortia for Industrial Development, Finance System, Policy makers and Public administrations, Industrial Observatories, Scientific Parks, and Industrial Liaison Offices. This crowded picture is motivated by historical reasons. The Italian productive landscape is characterised by small companies (family businesses often with less than 10 employees) (IPI, 2003; ISTAT, 2006a; 2006b) with high specialisation in medium/low-tech sectors, and with less human and financial capital to invest in research and innovation. These properties make dedicated support particularly important to enable the connection between industries and centres for knowledge production. For companies with limited resources these represent a fundamental link for translating research into innovation that is new products, processes and productive methods.

A national survey on these bodies has been conducted by RIDITT (Italian Network for the diffusion of Innovation and Technological Transfer to Companies promoted by the Italian Ministry for Economic Development and managed by the Italian Institute for Industrial Promotion) (Mallone, Moraca, Zezza, 2006). This is the most recent national investigation on the intermediaries of innovation and technological transfer in Italy, and has involved over 300 bodies. It identifies a national support system based around CITT (Centres for Innovation and Technological Transfer). These are mainly organised as consortia of public nature that act on a regional basis and have 15 employees on average. They deliver services in three main areas: (a) information, (b) education, (c) technical assistance. Informational services include consultancy on the company's catalogue, technological brokerage, patents, connection with research. Educational services involve designing and delivering specialisation courses on a variety of topics (management, engineering, design). Technical support varies between researching specific competencies/partners, financial assistance, technological diagnosis, certification and IPR, test and prototyping, incubation of new companies.

Although some of these services include closely design concerns, the last is seldom acknowledged. In order to understand the reasons for this, we have started inquiring the relationship between design/business engagement in Italy. This journey started in 2008 through an investigation on the Italian design system (Design Directory –www.designdirectory.it), which has had two main results (Simonelli et al. 2009): Italy has a large design system (schools, companies, professionals, publishers, museums) that has no institutional back-up to support and ac-

The Italian public system supporting innovation: which role for design?

knowledge its importance; design is a diffused phenomena, that is its tacit (hidden) dimension is as important as the explicit one. This means that it needs to be investigated at two levels: *an explicit one*, represented by the acknowledged sources such as Design Schools, Design Magazines, and so on; *a tacit one*, represented by all of the hidden data to be gathered *on field*, due for example to the absence of a national order that makes it difficult to map the active professionals in the field. Design does not have a clear role both in public support mechanisms (dedicated design policies do not exist in Italy) (Sorvali & Nieminen 2008), and in the points/ways of contact between designers/design competencies and industry. CITT as intermediaries between industry and research, represent one of the privileged entry points for addressing this gap.

The second research step has involved CITT directly to start a dialogue that is both reflexive (to understand their point of view), and proactive (suggesting methods to include design in their service offer). We have mapped over 300 centres that entertain an explicit or tacit relationship with design. Here we present an extract of four interviews to show how the system is currently organised. The interviews have been conducted following a questionnaire divided in 6 sections: (1) identification data, (2) mission and network, (3) activities, (4) services to companies, (5) relationship with design, (6) relevant projects. The cases presented describe four exemplar situations: Treviso Tecnologia is a virtuous centre that explicitly acknowledges design; CEI Trentino offers a dedicated design service developed through a period of experimentation with designers directly; InnovHub

although favoured by its geographical position (Milan) lacks a closer understanding of design competencies; Aster does not include design explicitly although its activities are oriented to higher added value services.

Interview 1: Treviso Tecnologia

Treviso Tecnologia is the Special Agency for Technological Innovation established in 1989 by the Chamber of Commerce, Industry, Craft and Agriculture of Treviso. Its general intent is to foster the development of innovative companies in Veneto, and organises activities in three areas: (a) *Innovation and technology transfer*, to ease ICTs introduction in SMEs and their collaboration with Universities and International Research Institutes; (b) *Vocational and managerial training*, to improve qualification and education level in companies; (c) *Business services and IPR*, especially linked to CERT laboratories (Treviso Tecnologia Certification and Testing Centre) that help companies further the promotion/distribution of local products.

Treviso Tecnologia has widely integrated design in its service offer: user-centered innovation and non-technological innovation are being integrated through laboratories like Neroluce (service centre that promotes creativity and design); new professional figures with design competencies are being formed (e.g. the project Campus Azione Impresa promotes internships of design graduates with local companies); systemic interventions are experimented with companies willing to redesign their product/service offer (e.g. the project CreativaMente promotes design and creativity in all industrial sectors).

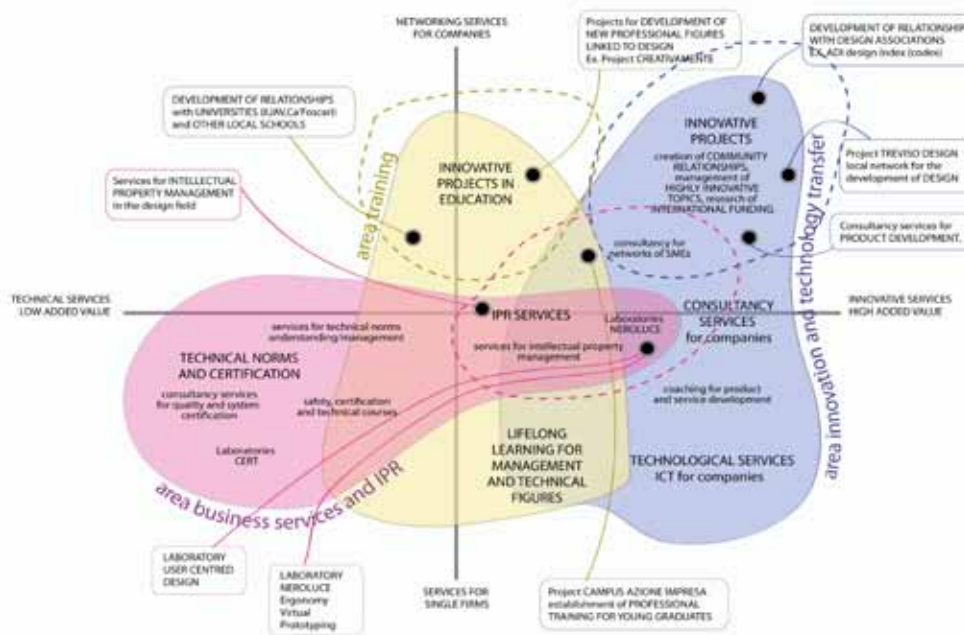


Figure 1. Chart: Treviso Tecnologia service offer

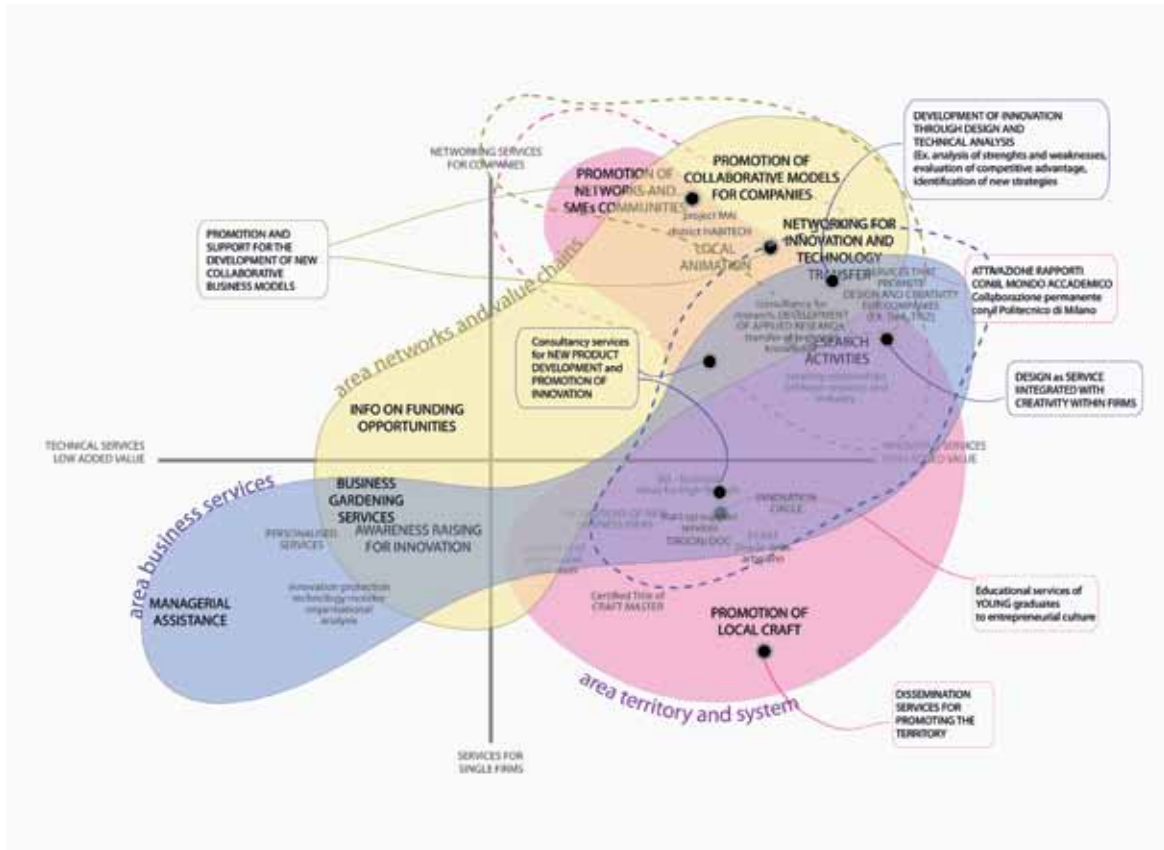


Figure 2. Chart: CEII Trentino service offer

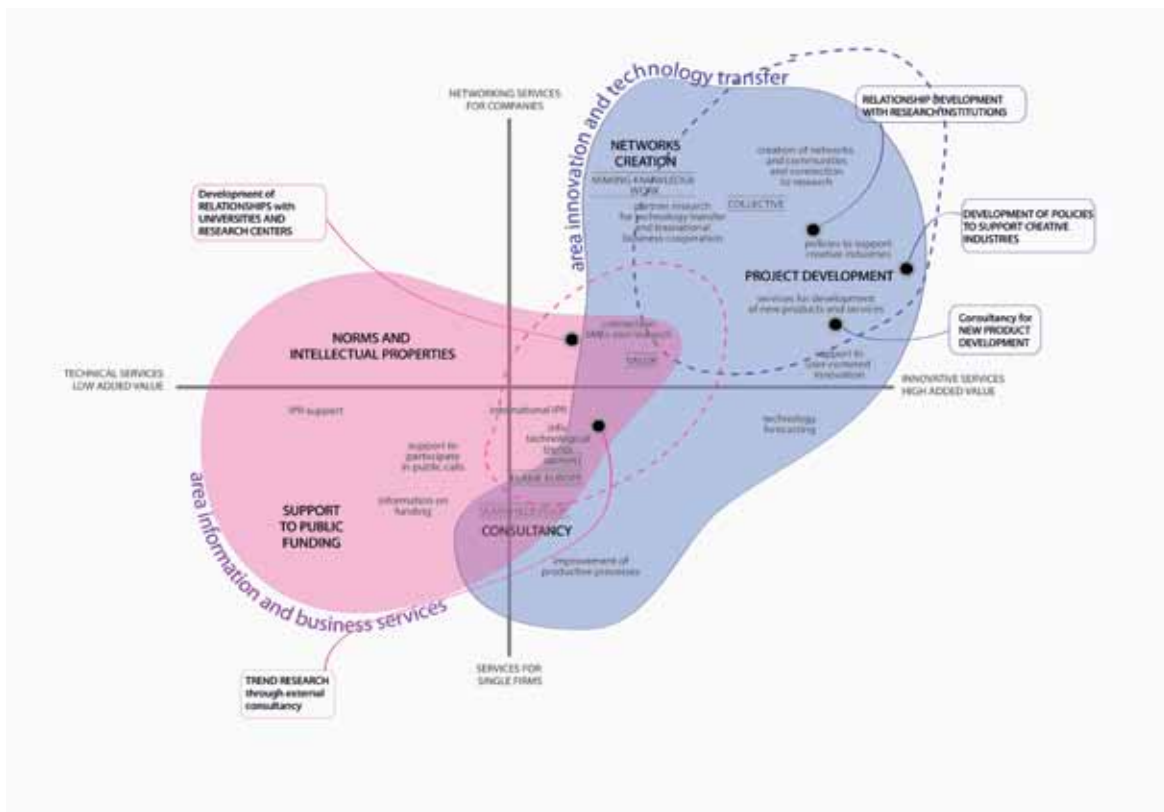


Figure 3. Chart: InnovHub service offer

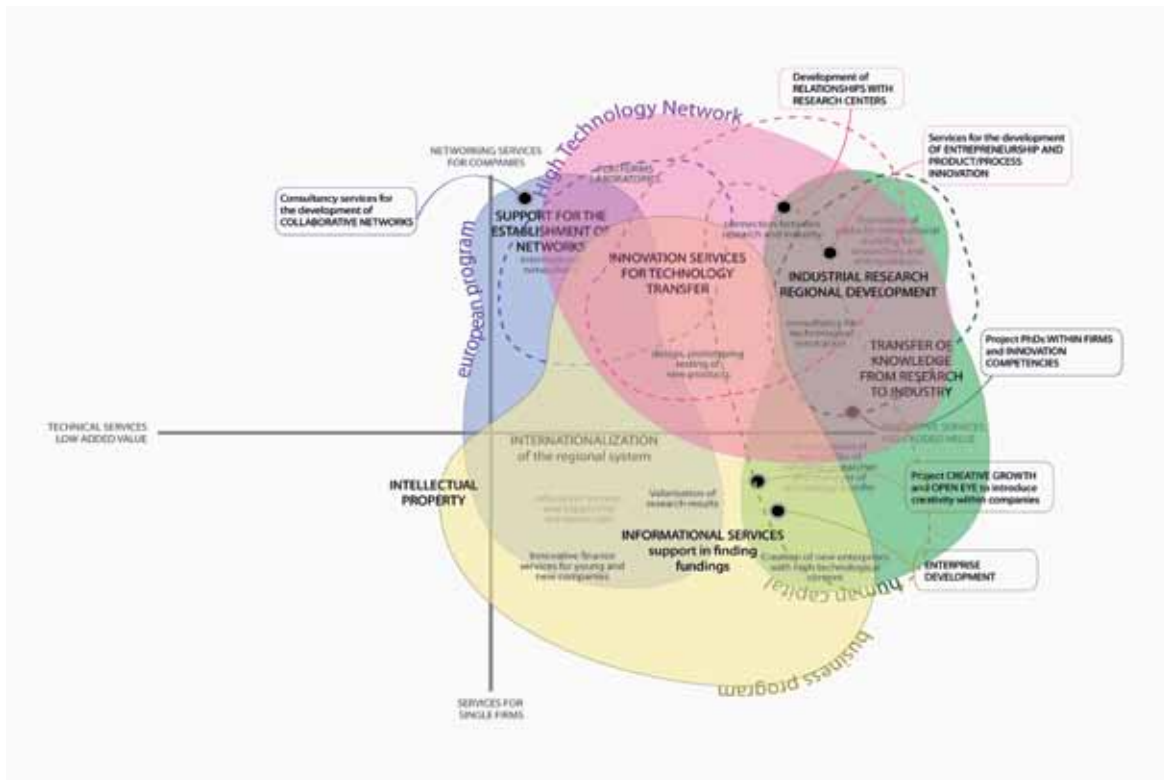


Figure 4. Chart: Aster service offer

These activities have been mapped in a chart to contrast services for single companies and for networks on the y-axis, and basic technical services as opposite to high added value services on the x-axis.

The diagram highlights that the three service areas are growing toward the right hand side of the chart. For example the area *innovation and technology transfer* is totally included here, divided in services for single companies [such as helping introduce ICTs], and services for networks of companies [such as “Treviso Design” that aims at creating a multi-expert collaboration around design for companies’ growth]. The area *vocational and managerial training* is placed in the middle as it is changing slowly through the collaboration with universities, whilst the area of *business services* maintains its core in more traditional offers, while also experimenting on new topics like user-centered innovation and virtual prototyping.

Interview 2: CEII Trentino

CEII Trentino is a BIC (Business Innovation Center) established in 1998 by the Association of Craft and Small Companies of the Trento Province. It aims at supporting the growth of innovative companies and especially the local craft sector by offering three sets of services: (a) *Territory and system*, that promotes synergies between local craft and the wider territorial context; (b) *Networks and value chains*, to support the establishment of new networks of companies; (c) *Business services*, including services built around the demands of local craft companies (e.g. Business Gardening).

CEII Trentino is strongly rooted in the local context of the Trento Province, and its services are especially aimed at reinforcing the local entrepreneurial culture. For example the centre invests greatly in promoting the territory, that means supporting companies both from a micro perspective (promotion of the single company), and from a macro viewpoint (promotion of the entire system of companies, natural, cultural and historical resources). CEII Trentino supports the local entrepreneurial system at 360 degrees, from more basic services for start-up, up to creative problem solving courses.

Mapping these activities emerges a strong concentration of services in the right side of the diagram. It is interesting to notice the attention to topics such as collaborative networks of companies, and education of young graduates to the entrepreneurial culture of craft businesses. In addition the three areas are largely overlapping in the upper right quadrant, showing the intermediary role of the center, as enabler of knowledge exchange for innovation. Design, although initially introduced as a sperimental activity (through projects like DeA - Design and Craft – started in 2010), currently represents a permanent service that connects local craft to young designers for generating virtuous collaborations for product innovation. In addition, the service area *Networks and value chains* is including a design approach for stimulating collaboration between companies, institutions, and research.

Interview 3: InnovHub

InnovHub is one of 5 Special Agencies for Technological Innova-

tion of the Milan Chamber of Commerce. Established in 2008, it offers support to local SMEs mainly through informational services with a special focus on R&D activities. The service areas are: (a) *Information and Business Services*, dedicated to linking local companies with European, national and local funds as well as to promoting the local business system; (b) *Innovation and Technology Transfer*, especially focused on creating connections with research and external competencies.

InnovHub is mainly concerned with informational activities that are communicating the opportunities for innovative companies, both in terms of funding and competencies retrieval. It facilitates innovation by participating in networks and projects to connect local firms to research, while core activities are based around services with a lower added value. This is a more traditional CITT and its growth toward higher added value services is mainly driven by European policies. This can be considered a paradox, because of the territorial location of the center. Milan is in fact renowned for being the European Design Capital, and the creative industries play a relevant role in the local economy. This contrast makes the case quite interesting, as one of the centers with a great underexplored potential. At the same time it exemplifies the situation of many other CITT that are struggling to evolve their offer.

The interview has underlined that one of the main causes of this situation is the low understanding of design competencies in general, although many of the existing initiatives could greatly benefit from a contamination of skills and perspectives. Few steps have been made toward the creative industry sector. Recently 10 scholarships have been assigned to young researchers for studying the policies' system in interesting European regions. In addition InnovHub is endorsing the development of national policies for user-centered and non-technological innovation.

Interview 4: Aster

Aster is a Consortium between the Region Emilia-Romagna, the local universities and the national research centres operating locally (CNR and ENEA), the Regional Union of Chamber of Commerce and the Regional Entrepreneurial Associations. It promotes actions for developing the regional productive system towards industrial and strategic research, for transferring technological competencies to the productive system, for educating the local human capital to innovation. Its main actions are: (a) *High Technology Network*, made of industrial research laboratories and centres for technological innovation; (b) *Business Program*, that includes services for creating business networks and to address needs, like financial assistance and IPR services; (c) *European Program*, regarding informational services on European policies and funding; (d) *Human Capital*, involving educational activities. The first of these underpins all others, as it sustains the retrieval of resources from actors in the network.

Aster's activities are totally concentrated in right quadrant. This is an important difference with the other cases. The reason resides in the nature of the centre, as strongly oriented to acting

as a network, pulling resources when needed and creating a system around local needs. Its relationship with design is not consistent. Besides few attempts of promoting its competencies within the *High Technology Network* (e.g. Design Centre in Bologna, lasted only two years), the collaboration has not been able to flourish further. Recently the attention has moved toward the creative industries, but this remains linked to specific projects (e.g. the project Creative Growth).

3. System transformation: how to move forward?

The interviews witness a moment of transformation that is peculiar of a country with a strong tradition in governmental and public support to SMEs. Italian public bodies are currently undergoing a redefinition of their function and role that moves into two converging directions: on the one side they are shifting their attention towards including services with higher added value (with design included here); on the other they are being re-shaped to become more flexible and less bureaucratic, and to meet the current requirements of leanness (Mulgan, 1997). The investigation shows that although Italy is rich in design culture, history and tradition, a real collaboration between designers/SMEs is highly personal. This means that it varies with the characteristics of the territorial context, and it depends on the personality of the entrepreneur and on the company's culture. Thus it reflects specific contextual conditions, resulting in an uncertain national support system. In a wider innovation context, business challenges are no longer represented only by intensified global competition, but mostly by the ability to collaborate while operating with distributed teams and offering co-created solutions (Poynor, 2008; Owen, 2007). This requires complex interventions negotiated between different socio-economic actors (companies, institutions, citizens) working in teams of multi-experts. The support for achieving this ought to be more flexible and adaptable, and must operate resembling an ecosystem (Mortati, 2011).

The Italian situation is peculiar, because of its tradition of successful collaborations between entrepreneurs/designers. These have been based on trusted friendships that would influence the development of the company's culture (Utterback et al., 2007). Because of the need for this kind of external support, Italian design companies have developed in networks based on strong bonds, capable of pulling resources from a distributed system of suppliers. This was mainly hidden in the personal relationships of the entrepreneur, thus very difficult to measure and support. Relationships would often emerge by serendipity, creating models that could not be replicated top-down and where design would represent a tacit addition. Due to the difficulties in grasping this structure, the government has developed a networked system of public support very specialised locally and bound to know better the necessity of an area. The interviews show how this kind of organisation is no longer sustainable, unless new kinds of networked structures are thought. For example, the wider business landscape is increasingly valuing *designerly approaches* (Boylan & Collopy, 2009), calling for a new entrepreneurial culture

and renewed paths of integration between business and creativity – and/or design. How can this be effectively integrated in the public support system? Although a consciousness of design as an approach to wicked problems is emerging, many criticalities remain that stimulate debate and action. Companies need to be educated to innovation and design culture: they have the basic ingredients, but don't know the right mix that creates value. Innovation should emerge from collaborations that mix competencies and resulting in creative ecosystems for innovation.

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Contributions of design: a tool to improve business performance

Metropolitan Design Center, Buenos Aires

OFFENHENDEN, Camila / Industrial designer / Metropolitan Design Center (CMD) / Argentina

Design policies / design management / case studies / Buenos Aires city

The Metropolitan Design Center (CMD) mission is to be the main public promoter of the economic and cultural importance of design in the City of Buenos Aires. Its objective is to promote the incorporation of design in companies and institutions. CMD has recently published the study “Contributions of design. A tool to improve business performance”, a series of case studies of companies which have incorporated design services within their work processes.

1. Introduction

For almost ten years, the Metropolitan Center of Design (or CMD in its Spanish acronym) has focused its activities on the promotion of design as a corporate competitive tool, as a key element to provide value-added to the products developed in the City of Buenos Aires. Research and the working out of content have become a trademark of the CMD, and the study “Contributions of design. A tool to improve business performance” is a result of this tradition.

This project comprises a series of case studies of companies located in the Buenos Aires Metropolitan Area which have incorporated design services within their work processes, and it has the aim of divulging the contributions this tool can make to improve corporate performance. It includes eight examples, in which different approaches to the relationship between company and design are analyzed from the standpoint of marketing impact, production impact and degree of innovation in design.

Upon providing a tool that fosters greater understanding between strategic design and companies, applicable when planning future developments and upon evaluating other cases involving the incorporation of design, this fourth research project developed by the team of the Metropolitan Design and Innovation Institute (IMDI), represents a continuity of the results of the three previous studies carried out¹.

The study of a qualitative nature presented in *Contributions of design. A tool to improve business performance*, is complemented by the quantitative analysis developed in the publication *SME*

+ design. A study of the demand for design among SMEs in the City of Buenos Aires Metropolitan Area², carried out in cooperation with the Creative Industries Observatory of the Government of the Autonomous City of Buenos Aires and the SME Observatory Foundation.

2. Field of study

Design is a discipline the exercise of which can have an impact on different aspects of society. Nowadays, we are facing a disintegration of the limits of what has been considered a design object and new forms of professional practice have emerged that exceed the traditional notions of design. The Argentine designer Rosario Bernatene expresses this plurality in the following way: “we have one historic legacy for those who wish to enquire into the liberating role of design—as set out in the concrete art invention manifestos—; another for those who prefer to insist on the poetic function of design; another for those who wish to work on the basis of its democratizing function, or its fetish function, or as a tool for regional and local development, as a lever for strengthening the smes, as interface between basic sciences and state of the art technology and everyday life, to accompany arts and crafts programs, or as combinations of several of these options.”³

In the case of this project we will concern ourselves specifically with one of these many possible forms of exercising design: design as a lever for strengthening the smes. While it is possible to identify the impact of design in social, cultural and environmental matters, here we propose to study its economic impact, specifically in companies in the City of Buenos Aires.

This approach to design, in spite of being one of the least widespread or glamorous topics discussed in specialized media, is one of those which can probably contribute most to industrial growth. Whereas design when integrated within a company, can to a certain extent be anonymous since in most cases the author's signature does not appear, it involves far larger scales of production, and hence its benefits and impact acquire greater significance in economic terms.

In this respect, we are interested in interpreting design not so much as a discipline bordering on the artistic, which produces

¹ Cervini, Analía; Kayser, Juan. *Strategic Identity. Local alternatives in global markets*. Buenos Aires, Centro Metropolitano de Diseño, 2004.

Cervini, Analía; Becerra, Paulina. *Through and about the product. Strategic design and CMS innovation in the city of Buenos Aires*. Buenos Aires, Centro Metropolitano de Diseño, 2005.

Becerra, Paulina; Fábregas, Silvia; Pizzabioche, Georgina. *Through experiences. Values and design in the retail and consumption systems*. Buenos Aires, Centro Metropolitano de Diseño, 2006.

² Arias, Fernando; Bruera, Ignacio; Mastroscello, Laura; Offenhenden, Camila; Sanguinetti, Marco. *SME + design. A study of the demand for design by industrial SMEs in the Buenos Aires Metropolitan Area*. Buenos Aires, Centro Metropolitano de Diseño and Fundación Observatorio PyME, 2011. Link: <http://cmd.buenosaires.gob.ar/sites/cmd/files/PyME%2BDisen.pdf>

³ Design program, INTI. *Hablando de diseño* [Talking about design]: 2007 cycle of talks. *Hitos, relatos y vivencias del diseño en la Argentina* [Design milestones, tales and experiences in Argentina]. Buenos Aires. 2007.

a select group of so-called “designer” goods, but as a methodological model containing inherent values applicable, to a greater or lesser extent, to the entire range of goods and services an economy offers and which overlaps progressively more with the world of business. As opposed to engineering and marketing, which focus on production and commercial aspects, respectively, design articulates both dimensions and can function as a link between different areas of a company that speak different languages. As Beatriz Galán explains: “Its capacity for symbolic analysis enables it to re-position and resignify other knowledge and resources toward corporate—in particular qualitative—goals; it has the ability to read contexts. It identifies and mobilizes its store of knowledge—both within the organization and territorially—and assimilates it within the company; it codifies, represents knowledge—either implicit or incorporated—for its combination in denser, interdisciplinary knowledge, and in more complex products; it possesses the logistical ability to mobilize resources in due time and form; by means of values of accessibility, equity, sustainability and net worth valuation, design thinking links companies with the value-ideas of the community, incorporates them and externalizes them, makes them visible and translates them into models of the globalized economy.”⁴

Design professionals can work within a company on new product design, corporate or institutional image design, the redesign of existing products, packaging design, promotional material design, commercial furnishings design, pop, stands and display cases, the design of in-house elements, the drawing up of plans, technical documentation and 3d representation, on editorial design, digital, multimedia and web design, on the development of dies, molds, models and mock-ups, and in strategic design research and consultancy. The correct development of these activities has the capability to impact positively on business performance, in both its commercial and production aspects.

To highlight the contributions design can make to corporate performance, we undertook a study of its impact for which we developed an analytical tool which has been applied to a series of cases involving companies in the Buenos Aires Metropolitan Area.

3. Work Methodology

The present project offers the hypothesis that design is a tool capable of improving business performance. To this end, a qualitative study was made of a number of cases involving companies which have in recent times had a significant experience with the incorporation of design—in any of its multiple fields—either with in-house or outside designers. The analysis was conducted on the basis of semi-structured interviews to company directors, on one hand, and to those responsible for the design studio contracted or the in-house design department, on the other. The information thus obtained was complemented by documentation provided by both parties. Over thirty cases were studied, of which eight were chosen for inclusion in this investigation. The

⁴ In the Approaches section, see the paper by Beatriz Galán: “Creative companies and intangible knowledge.”

aim of the project is, clearly, not to provide a generalization on the basis of the results of the chosen case studies, but to generate a tool for analysis of the impact of the commissioning of design by companies and its application in a series of exemplary cases. This analytical tool was developed considering the level of innovation in a series of design variables, and the level of impact on both commercial and production aspects of the companies.

All the cases were analyzed using the same format and the aim of this publication is that it be appropriate for use as a tool to analyze future cases. The design incorporation impact has been analyzed in each case by three matrix: design innovation matrix, business impact matrix and productive impact matrix.

Design innovation matrix

This matrix offers a series of variables inherent to the design activity on the basis of which it is possible to evaluate the level of innovation of a specific design project. Four levels have been established to indicate the level of contribution of each of these variables.

- **Technological-productive axis:** Refers to the contributions of design in the use of resources, instruments and procedures to materialize a product or service. (Use of raw materials, consumables, processes, finishing details, assembly, final finish, etc.)
- **Usability axis:** Refers to the contributions of design to enable the effective, efficient and satisfactory application of an innovation within a specific context of use. Usability is related to the interface and interaction established between a product and its respective users (ergonomics, communication of uses and operational areas, security, legibility, etc.).
- **Identity axis:** Refers to the contributions of design upon formulating the intrinsic features of the company that individualize it among its competition. It also includes symbolic aspects associated with the definition of qualifying values and meanings, associated with subjective interpretation and valuation (brand image, corporate identity, brand usage, product families, style, product semantics, aesthetics, etc.).
- **Environmental axis:** Refers to the contributions of design in the reduction of the environmental impact of the product or service throughout its life cycle, considering its entire value chain, with the aim of preserving natural resources (recyclable materials, reusable parts, minimization of the amount of raw materials, processes and energy used, etc.).
- **Social axis:** Refers to the contributions of design oriented toward solving the needs of the most vulnerable sectors of society (the elderly, the handicapped, low income groups, cooperatives, etc.).

Contributions of design: a tool to improve business performance

- Marketing axis: Refers to the contributions of design directly associated with the market and the performance of the products or services at the moment of sale (point of sale, advertising, purchase dynamics, packaging, promotional strategies, potential consumer studies, etc.).
- Organizational-management axis: Refers to the contributions of design in the organization and coordination of all the variables affecting the internal activities of the company (logistics, internal order, internal communication, distribution, administration, contact with suppliers, etc.).

Business impact matrix

The commercial function of a company encompasses all aspects involved in the marketing of a product or service produced (or to be produced), that connects the company with the market. The direct effects of these activities, aimed principally toward symbolic aspects, are reflected in the marketing impact variables detailed below. They correspond, in general, to the later stages of the business cycle, when it is desired to reach the consumer with the product or service produced (“from the factory door to the consumer.”) Four levels have been established to indicate the impact of each of these variables.

- Sales volume
- Opening of new foreign markets
- Export volume

- Customer satisfaction
- Media impact
- Brand perception

Productive impact matrix

The production function of a company encompasses the formulation and development of the most appropriate methods for the production of the product or service to be offered, and the coordination of the work, the team, the installations, the materials and the tools required. The direct effects of these activities, aimed primarily at the material aspects of the products, are detailed below. It is, in general, the stage prior to the business cycle, during which it is sought to produce in the best way possible the product or service that will subsequently be marketed (“from the purchase of the raw materials to the arrival of the product at the door of the factory – for its subsequent marketing”). Four levels have been established to record the impact of each of these variables.

- Labor optimization
- Raw materials optimization
- Productive capital optimization
- Cost reduction
- Environmental responsibility



Figure 1. Design innovation matrix

MATRIZ DE IMPACTO COMERCIAL MARKETING IMPACT MATRIX



10. Encargo, desarrollo y resultado

Figure 2. Business impact matrix

VOLUMEN DE VENTAS: A pesar de tener un precio final mayor, los libros con el nuevo diseño realizado por Tholón Kunst se vendieron más que los mismos títulos antes de ser diseñados por ellos.

APERTURA DE NUEVOS MERCADOS EXTERNOS: Continuaron exportando a los mismos países a los que ya venían exportando.

VOLUMEN DE EXPORTACIÓN: En España, a donde ya exportaban, mejoraron mucho las ventas a partir del nuevo diseño, sumado a la actualización de las correcciones y traducciones. Los lectores españoles son más exigentes, acostumbrados a otro tipo de estándar en el diseño de libros.

SATISFACCIÓN DE LOS CLIENTES: Podríamos distinguir dos tipos de clientes: los directos (librerías) y los indirectos (lectores). En el caso de las librerías, todas elogiaron el nuevo diseño y el impacto visual causado en el punto de venta. Así, decidieron exhibirlos en mesas y vitrieras por más tiempo de lo habitual. En lo que respecta a los lectores, la editorial recibió varios mails y comentarios positivos en cuanto al nuevo diseño.

IMPACTO MEDIÁTICO: Desde la empresa gestionaron varias notas o comentarios en distintos medios que hablaran del cambio de identidad y crecimiento de la editorial. También los libros comenzaron a ser más exhibidos en librerías más sofisticadas. El Centro Metropolitano de Diseño (CMD) presentó el caso Siglo XXI-Tholón Kunst para la Conferencia CMD 09: Empresas + Diseño. El evento y su programación fueron difundidos en diversos medios.

PERCEPCIÓN DE MARCA: El diseño de marca y todas sus aplicaciones (por ejemplo, las diagonales, isologotipo y logotipo que figuran en lomo, tapas y contratapa) permitieron que las colecciones se perciban como productos de la editorial.

SALES VOLUME: In spite of a higher end price, the books with the new design produced by Tholón Kunst sold more than the same titles before their redesign.

OPENING OF NEW FOREIGN MARKETS: Exports continued to be made to the same countries as before.

EXPORT VOLUME: In Spain, which was already an export market, sales improved considerably with the introduction of the new design, plus the updating of corrections and translations. Spanish readers are more demanding as they are accustomed to another standard of book design.

CLIENT SATISFACTION: We can distinguish two types of clients: direct clients (bookstores) and indirect customers (readers). In the case of bookstores, all praised the new design and its visual impact at the point of sale. Thus, they decided to exhibit the books on their tables and in their windows for longer than usual. Concerning readers the publishing house received a number of emails and positive comments on the new design.

MEDIA IMPACT: The company organized a series of notes and comments in different media on the change in identity and growth of the publishing house. Its books also began to be exhibited more in sophisticated bookstores. The Metropolitan Center of Design (CMD in its Spanish acronym) presented the case history Siglo XXI-Tholón Kunst during the CMD 09 Conference: Companies + Design. The event and its program received widespread press coverage.

BRAND PERCEPTION: The brand design and all its applications (for example the diagonals and logo-type that appear on the spine and back and front covers) enabled the collections to be identified as products of the publishing house.

MATRIZ DE IMPACTO PRODUCTIVO PRODUCTIVE IMPACT MATRIX



interno en general sí lo conformó ampliamente el desarrollo de la nueva imagen.

CALIDAD. La calidad de la cartulina es la misma, el papel es el mismo, la calidad de la impresión es la misma. Sin embargo, la percepción de calidad ha subido muchísimo.

printing is also the same. Nevertheless, there is a noticeable increase in the level of quality perceived

OPTIMIZACIÓN DE MANO DE OBRA: Si bien el manual de marca impuso nuevas exigencias de estilo en el diseño de los interiores (tipos de citas, sangrías, párrafos, etc.) que implicaron mayor trabajo para los diagramadores, se ahorró tiempo a la hora de hacer otras piezas gráficas, porque a partir del manual de marca se simplificaron muchas decisiones.

OPTIMIZACIÓN DE MATERIAS PRIMAS: Al rediseñar los interiores de los libros para mejorar la legibilidad, dejando márgenes más generosos y usando tipografías más grandes, los libros aumentaron la cantidad de páginas. Fue una decisión consciente para mejorar la calidad de lectura de cada publicación.

OPTIMIZACIÓN DE CAPITAL PRODUCTIVO: Utilizaron las mismas máquinas que ya venían utilizando.

REDUCCIÓN DE COSTOS: No fue prioridad reducir los costos de cada publicación, sino mejorar su calidad de lectura.

RESPONSABILIDAD AMBIENTAL: No se sumaron acciones de mayor responsabilidad ambiental. Quisieron imprimir en papel ecológico pero no encontraron proveedores locales y los importados eran sumamente costosos.

ORGANIZACIÓN INTERNA: No hubo grandes cambios en la organización interna. Solo la adecuación de la dinámica de trabajo a las normas establecidas por el manual de marca desarrollado

REDUCCIÓN DE CANTIDAD DE PROCESOS: Gracias al manual de marca se redujo la cantidad de procesos utilizados para resolver piezas gráficas como publicidades, banners o folletería.

SATISFACCIÓN DE LOS EMPLEADOS: El manual de marca planteaba cuestiones de estilo muy específicas, lo cual hizo que aumentara el trabajo de los diagramadores (ej.: para notas al pie, una tipografía, para párrafo francés otra, etc.). Finalmente tuvieron que duplicar el honorario para los diagramadores. De todas formas, al personal

LABOR OPTIMIZATION: Whereas in the area of style, the brand manual imposed new demands on the book interiors (style of quotes, indentation, paragraphing, etc.) involving more work for the layout artists, production time was saved in the case of other graphic items, since the manual simplified many decisions.

RAW MATERIALS OPTIMIZATION: Upon redesigning the book interiors to improve legibility by using more generous margins and larger typefaces, the number of book pages increased. It was a conscious decision to improve the readability of each title.

PRODUCTIVE CAPITAL OPTIMIZATION: The same machines as before were used

COST REDUCTION: The priority was not to reduce the cost of each publication, but to improve its readability.

ENVIRONMENTAL RESPONSIBILITY: No environmental responsibility action was taken. It had been hoped to print on ecological paper, but no local suppliers were found and imported papers were too costly.

INTERNAL COMPANY ORGANIZATION: No great changes in internal organization were required, apart from adapting the working procedures to the norms established in the new user's manual.

REDUCTION IN THE NUMBER OF PROCESSES: Because of the brand manual, the number of processes used to produce graphic pieces such as advertising items, banners or folders was reduced.

EMPLOYEE SATISFACTION: The brand manual included very specific aspects on style, which increased the work of the layout designers (e.g. one typeface for footnotes, another for paragraphing, etc.). In the end they were forced to double the layout artists' fees. Nevertheless, in general company employees were very pleased with the creation of the new image.

QUALITY: The quality of the cardboard is the same, the paper is the same, and the quality of the

Figure 3. Productive impact matrix

- Internal company organization
- Reduction in the number of processes
- Employee satisfaction
- Quality

4. Case Studies

The eight cases analyzed are:

CASE 01

Company: SigloXXI

Design: Tholön Kunst

Project: Editorial design and institutional image (brand, collections, book covers and interiors).

CASE 02

Company: Medix

Design: Legaria

Project: Design of medical equipment (incubators and accessories)

CASE 03

Company: Muresco

Design: Vanina Mizrahi

Project: Wallpaper design (Infinita collection)

CASE 04

Company: Lázaro

Design: Design department

Project: Collections design (handbags, shoes and accessories)

CASE 05

Company: Tonel Privado

Design: Fontana Diseño

Project: Institutional image design (brand and point of sale)

CASE 06

Company: Sarao

Design: Mercer.Quinteros

Project: Resource optimization and new product design (household and gift products)

CASE 07

Company: Buplasa

Design: Duo

Project: Design of products for children (drawing table)

CASE 08

Company: Emegé

Design: Guillermo Brea

Project: Brand development (consultation, design, normalization and implementation)

To read the analyzing of each case look up the complete study: <http://cmd.buenosaires.gob.ar/sites/cmd/files/Aportes%20del%20dise%C3%B1o..pdf>

5. Conclusions

The aim of this project is to provide a tool for analysis that will serve to study the impact generated by design upon the incorporation of this discipline within the working methodology of a company. It has been applied, as an example, to a series of cases in the Buenos Aires Metropolitan Area that are presented in this publication. While it is not our intention to generalize, the analysis of these eight cases enables us to offer a few final reflections:

Design is a tool capable of improving business performance

Design, when correctly applied and accompanied by the necessary strategic actions, is a tool capable of improving corporate performance and competitiveness. As Kathryn Best, the specialist in design management, explains: "Design represents, more than ever, a competitive advantage for businesses. This means that correct management of the design resource is an indispensable requirement for any organization. In today's world, companies compete against each other in a global environment, which generates new challenges and new opportunities. An open, creative vision is vital in the search to find innovative new solutions that can bring new scenarios into being."

Companies usually accompany the incorporation of design with other strategic activities

In the majority of cases, when a company begins to work with design, it also decides simultaneously to modify other variables. In such a case it is not possible to discriminate and measure the objective impact corresponding exclusively to the incorporation of design. In this respect, it could be said that design is a tool which, together with others, can collaborate to improve company performance. It is precisely with the interaction between the contributions of design and the strategic changes effected in other areas that a multiplication of benefits is achieved.

Design is a tool applicable, to a greater or lesser extent, to all economic activities

We are keen to demystify the idea of design as a discipline that borders on the artistic, which produces a select group of so-called "designer goods." Design is a methodological model containing inherent values applicable, to a greater or lesser extent, to the entire range of goods and services an economy offers and which overlaps progressively more with the world of business.

It is necessary to let a certain amount of time go by before beginning to measure the impact of the incorporation of design

It is not possible to analyze the impact of the incorporation of design in a company immediately after the conclusion of the pro-

ject commissioned. Each particular case, according to product category and the task developed, will have an optimal moment to begin to measure its results, which may correspond to either its upward curve or its peak. Design requires a certain period of time for the development of strategic solutions. Similarly, these solutions require a degree of implementation time for the results to become visible and really successful.

In many cases, the incorporation of design occurs as a result of a generational change in company management

Generational change in company management – especially in the case of family owned companies – tends to favor the commissioning of design services. Younger executives are inclined to be less tradition minded and more open to change. “There was a generational conflict in the company and we realized that something had to change,” explained Jonathan Dayan, Director of Tonel Privado, upon referring to his preliminary thoughts about contacting Fontana Diseño to restructure the company identity.

Design studios are in general structurally small and flexible, which enables them to adapt to the particular needs of each project.

The capacity of adaptation of a design team to different company demands, represents a strength that favors the pertinence of the results of the projects carried out. Many studios choose a small and flexible structure, and associate with other teams according to the needs of each commission they receive. Not all companies need the same designer, in the same way as not all projects are solved with the same team. In the cases studied, a scale of micro and small studios was identified (no case had over 17 employees). Moreover, the benefits of association between professionals from different design disciplines was verified.

Designer fees tend to represent a very small amount in relation to the investment required for the development of an entire project

As seen in the cases analyzed, the task of a design team is complex and has a strategic basis. Contracting professionals to meet these challenges logically represents a corporate investment. Nevertheless, the fees corresponding to the design team represent a very small proportion of the entire investment demanded by the project. On this matter, Carlos Díaz, Director of SigloXXI, commented: “It was expensive, but I value every cent we put into it.” Meanwhile, Guido Reizner, Sales Manager of Muresco, stated: “Insofar as investment is concerned, Vanina’s collection costs Muresco the same as any other collection, except for the royalties. But truth to say this difference is recovered in the price.”

The designer transfers methodological habits to the company, which represent a rarely recognized yet very significant contribution

In their interaction with design professionals, companies tend to acquire, at times unconsciously, a working methodology inherent to design disciplines. A designer’s systemic behavior tends to be transferred spontaneously both to the client and

the areas with which they interact. This transference is almost never appreciated, and much less considered in the fees paid to the design team, yet it becomes installed as an intangible company asset. As Beatriz Galán explains: “It is natural that it should be difficult to assess the value of this new articulating design knowledge, which develops between implicit and explicit knowledge. The value of investment in design is quantifiable in the degree to which it can be considered an asset.” Naturally, when the design team forms part of the company, the transference is greater and this knowledge is absorbed in a far deeper and verifiable sense.

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TECHNIQUES AND TECHNOLOGIES

Paul Atkinson / Chair / Sheffield Hallam University / United Kingdom

Charles Vincent / Co-chair / Mackenzie Presbyterian University / Brazil

Studies on methodologies and different models of process and practice, including histories of technique and practice and studies on cross and inter disciplinary collaborations, and on the impact of emerging and enabling technologies on the production, reception and consumption of design.

A survey on low-income housing research topics in Brazil

MENDES, Leticia Teixeira / MSc / State University of Campinas / Brazil

CELANI, Gabriela / Phd / State University of Campinas / Brazil

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Design of elastic form with parametric simulation

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Digital Design / Parametric Systems / Elastic Curve / Smart Materials

Today design fabrication faces to the dynamics of large-scale production is necessary to use advanced modeling systems. The research investigates an algorithmic approach deepens the elastic forces and their relationship with nature. We found that the methodology used here allows alternative and collaborative access that can help in urgent demand in the adequacy of our cities, architecture and objects to drastic climate change and energy.

1. Introduction

The digital systems helped by CAD/CAM design have given, within a few decades, dynamism to the design seen before only in the goods and objects production. The belated industrialization of civil construction is related to the poor technology and resistance of the parametric systems evolution and the implementation of new algorithms to its representation. These integrated systems give a new hierarchy to the productive chain permitting the simulation and, consequently, the cost reduction. According to Katz (2010), the project concepts and paradigms already existed even before computers got recognized through the use of parametric tools, which besides facilitating the mathematical and algorithmic link of the shape, also simplify the manipulation and alteration work. These tools and techniques permit an increased flexibility in the development and inspiration of works and in the shape creation. The work with parametric systems is not recent. In the Renaissance the artists and architects utilized mathematical expressions to define architectonic elements. That way, it was possible to build, for example, pillars with proportions between the diameter and the height, keeping, thus, the building styles.

According to AMORIM (2010) the parametric systems differ from the traditional systems of digital design for keeping the model capacity for being altered during the whole design process and for permitting the generation and testing of a great quantity of versions in an environment controlled from the mere change of values of a specific parameter.

The changes are big and the higher investment is aimed at the reeducation of the workforce, at the acquisition and manipulation of new technologies. They are not aimed at the acquisition of digital systems. To be automatized, dynamic and produced at a large scale with quality and energetic use, it is necessary to utilize an advanced modeling.

The parametric programs bring many advantages to the project. It is possible to combine the dynamism with the discovery of new materials. An example is the recent utilization of bamboo in structures with an optimized and more elaborate performance of the material. In this research the use was simulated, tested and compared to what happens in nature.

Another advantage brought with the use of parametrization is the possibility of shape variability. That happens since the alteration of the constructive data reflects directly on the behavior of the parametrized objects (SILVA JUNIOR, 2011, p. 63).

What would be the changes or new possibilities regarding the form dominance in the face of the news brought by the "Information Era"? It is possible to notice the numeric machine associated to the real time communication in our economical and social relationships, used to conduct an alteration without precedents in the way people relate to objects, houses and cities. The adjective "intelligent" is added to our attitudes and objects so that the energetic efficiency and the environmental preoccupations are guaranteed in their sustainability and that the materials used can be renewable.

For Koralechi (2000) the computational architectures require certain design strategies, which provide a dynamic manipulation of them with a high degree of indetermination. However, the existence of such strategies is not considered as a limiting factor in the project. Unpredictability, uncertainty and indetermination are still present and so is the possibility for finding out the form.

In Algorithmic Architecture, de K. Terzidis, Antonio Picon suggests two positions regarding calculus in architecture. The first restricts the use of the machine (computer) as an advanced tool for the creation of more sophisticated forms. The second, in which Tarzidis belongs, would be composed of projectors who use the programming for using the machine more creatively.

2. Simulations with physical forces and new materials

Here, the investigation deepens some computational tools helping in the process of digital modeling of elastic force (bend), which consists of the simulation of a certain force application to materials that have some kind of elastic flexure (non elastic). These simulations indicating form ruptures and alterations permit the energy release and the return to its initial position.

These small changes, generally “Y”- or “H”-shaped, alter the initial physical characteristics permitting the deformation with the optimization of elastic force performance.

Besides investigating its relationship with natural materials, the research deepens the elastic form algorithmic approach in new simulated forms. We have investigated how the objects and architectures use these proprieties and physical qualities.

Katz (2010) divides the “modeling construction” in two: “parametric modeling” and “algorithmic modeling”. The first is classified by the creation of a model that can be controlled [guided] through variables or parameters. In the construction of a parametric model, besides describing those parameters, the person also describes the connections between the model components; manipulate a parameter [which can also be referred as flex the model and/or component] will have an effect on the whole model, not only on part of which the parameter is connected. And the second permits us to create a model based on a set of rules, which can describe a process that, when used one or more times, will always create an identical result. For this author the algorithmic modeling permits the creation of a model based on a series of rules that describe a process, creating parameters that make it possible to create specific conditions for visually and performatively varied models.

According to Kolarevic (2000), in a parametric design it is the parameters of a project that are declared, and not the predetermination of its form. In other words, by attaching different values to the parameters, objects and/or different settings will be easily created and, consequently, we will have different forms suitable to the solution of the initial.

Terzidis (2006) uses the term “algotecture” to indicate the use of algorithms in architecture. That term is different from “CAD” [Computer Aided Design] in which algorithms do not depend on computers to be implemented. An algorithmic is a computational procedure that solves a problem from the deduction, induction, abstraction, generalization and structured logics.

For Issa (2010) the parametric curve is the function of an independent parameter $(t)^2$ on a domain [generally between 0 and 1]. For him, the parametric curves are a compact and intuitive form of representing gentle curves. These curves are easily modified if compared with other known forms of curve modifiers, such as curves Bézier¹ and curves NURBS [Non Uniform Rational B-Spline].

3. Methodology

In this investigation, we have tried to associate a mathematical and algorithmic form approximation in relation to fibers and

¹ Pierre Bézier, engineer for Renault, is known for developing Paul de Casteljau's algorithm linked to a family of curves. These curves were initially developed with steel rulers and weights to draw ship hulls, then airplanes and cars. The curves were initially called as sp-lines, later called Bézier's Curve, who is one of the founders of the solid, geometric and physical modeling field. http://en.wikipedia.org/wiki/Paul_de_Casteljau

materials susceptible to elastic deformation. The look of the designer and architect having this technology makes involuntary comparisons when accumulating the algorithmic possibilities in his repertoire. The research presents the professionals who work in the elastic universe, where the “intelligent” materials permit the energetic storage and release in engineering objects, architectures and works of art that take forms that are mutant and intentionally configured for certain functions.

The elastic force is present in many ordinary objects. We notice its use in feeding plugs whose wire elasticity is necessary. Initially, the helicoidal form used to be used in the home appliances during the 80's, with the evolution of the molds for injection, the plugs present, today, a series of bevels that permit the wire to recover its initial position after being tautened or flexed.

In the evolution of the S-shaped and the C-shaped chairs constituted at a first moment with compensated, glued and molded wooden blades that permit the comfort and the serialization of pieces with well-explored elastic properties. The technique needs molds, glue and press for the large scale industrial production process. After the introduction of the patent ZipShape, the elastic form can be serialized favoring the construction of forms, glues and favoring the fit. With the introduction of the elastic force technology, the introduction of recycled materials has been made possible.

A good example of the appropriation of the craft culture by the new production methods in EAC is Millau² bridge. The Y-shaped pillars of the stayed bridge have been conceived by Norman Foster and his team to take earthquakes and up-to-250-km/h winds. In order to take side and dilatation efforts the pillars have been inspired in the Gaelic craft culture. The cen-

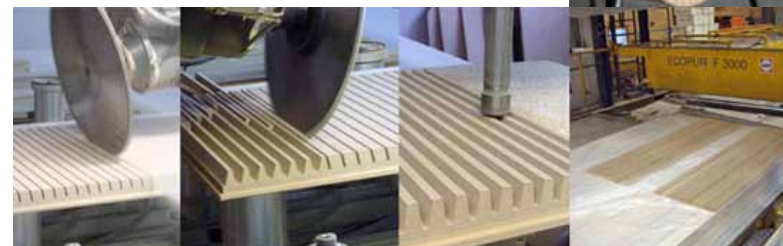


Figure 2. ZipShape Chair <http://www.stylepark.com/en/news/zip-shape-by-design-toproduction/288505>

terboards of the Gaelic vessels used to be made in “Y” with cliffy wood, which permitted the vessels to take sharp curves at the same time their resistance was doubled. Wedges would open

² Designed by English architect Norman Foster and by French engineer specialized in bridges, Michel Virtogeux, is the highest open-to-traffic bridge in the world, 343m high. The lane weighs 36,000t and is 2,460m long. It is 32m wide and 4,2m high. It is the biggest cable-supported lane in the world. The six central voids are 342 m each, and the other two, on the edges, 204m each. The roadway has a declivity of 3% from south to north, with gentle curves with a 20-km ray, which gives drivers excellent visibility. It was inaugurated on December 14th, 2004, and opened to the traffic two days later. <http://pt.wikipedia.org/> access in April 2012.



Figure 1. <http://www.alinecable.com/european-power-cord/484118.html>

the wood in the longitudinal direction of its fibers giving the form elastic proprieties.

The bridge is composed of eight steel stretches that can expand up to 1.4m in the longitudinal direction. The parametric-algorithmic programming is a way of conceiving and embracing the unknown. At its best, it goes beyond the development of commercial applications. It becomes a way to explore and map our own mind-set. It is the means through which the experience can be extended with rules, principles and results of the traditionally defined as “cultural arch-processes”.

4. Elastic force

Swedish Marten Nettelblad³ is one of the artists and designers who propose a new geometry resulting from the material resistance to torsion and flexion forces. This geometry does not fit the category of the known basic forms, which suggests the discovery of new concepts.

We initiated the investigation through the senoidal curves that represent the basic fundament of bending in the application Grasshopper, but for the bending execution, in its fullness, it was necessary to use the 4D algorithmic modeling (3D + time) and the plug-in Kangaroo, by Daniel Piker, through which we can simulate flexion and gravity conferring the model properties that are next to reality.

In this context, the “bending” is presented as a very useful algorithm in the simulation of real situations for the application of forces, natural or inducted, and it can be used to eliminate test phases that, in the past, could only be evaluated through physical analyses, scientific experiments or through the designer’s experience with the material. The craft approach was also considered in the investigation and the new uses of fibers that behave similarly to the elastic form due to its physical characteristics.

5. The investigation

Recently in Brazil, the structural use of fibers was recovered from constructive methods that date back to antiquity. Natural materials were generally associated to vegetal fibers and are used in the production of objects, accessories and their uses are restricted to coverings, ceilings, rugs and pieces of furniture. In rural popular houses it is still common to find the structure of wooden or fiber weft covered with clay, popularly called “pau-a-pique”.

The materials that are called fiber have a natural, mineral and industrial origin and can be combined in compounds aggregating physical-mechanical characteristics such as flexibility, malleability and energy conservation. Their use is popular due to its low cost, easy availability and, mainly, for being biodegradable.



Figure 3. Form created by Marten Nettelblad. <http://thegeometryofbending.blogspot.com.br/>

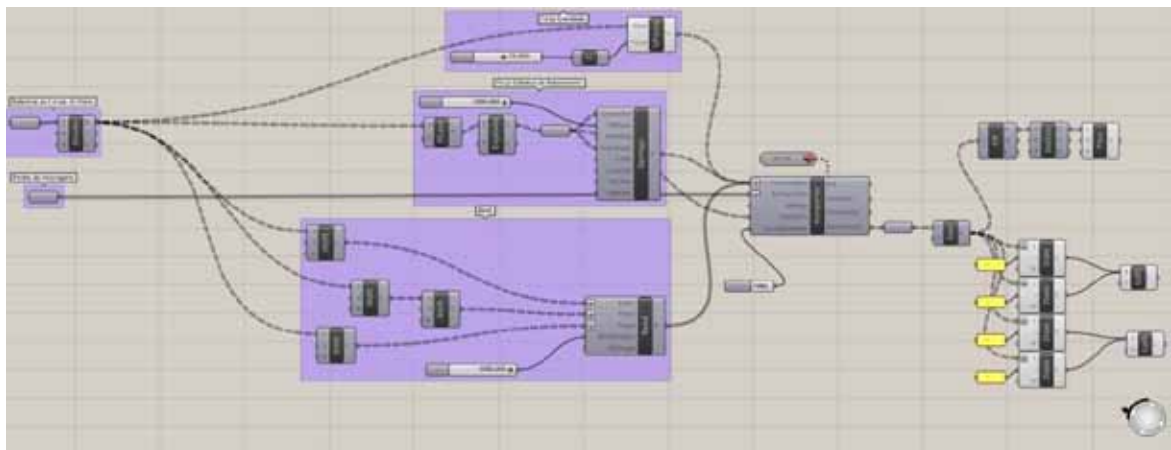


Figure 4. Script bend – Grasshopper + Kangaroo.

³ Mårten Nettelblad, Swedish architect who does research into complex geometries. He owns the site “Omkrete arkitektur” www.omkrete.se/ and the blog: thegeometryofbending.blogspot.com/ [access in April 2012]



Figure 5. BioPlac - Source: www.fibradesign.net

Thus, we remember the large quantity and diversity of species that our flora has: trees, bushes, lianas, grasses, seeds and palm trees. The diversity of our vegetal species provides us with strong possibilities of creation and innovation, but, industrially, they are not sufficiently explored because of its strong relationship with craft production. That permits the mixing and composition of other fibers enhancing its performance.

Fibers such as rush, sisal, “piaçava” straw and wicker are frequently found, in a braided way, in pieces of furniture all over the country. Other industrialized applications of these fibers have been appearing. The mantle of sisal, for example, is a new substitute for the foam in mattresses, but the sisal can be seen in other elements such as rugs and carpets. However, the above-mentioned uses do not present any innovation with a technological character. All of them are cultural practices found in different communities.

On the other hand, in Brazil we can find some designers, companies and public institutions willing to find “intelligent” materials from new combinations of natural fibers and that permit new uses. Some of these inventions have even been awarded internationally, fact that has highlighted the diversity of Brazilian fibers.

One of the materials created by Brazilian designers from Fibra Design Office was the BioPlac, a plaque formed by three internal layers of laminated bamboo and two external layers on each side with laminated “Pupunha”. The result is a plaque that can be used in objects and pieces of furniture because it optimizes and aggregates the characteristics of these two materials. Fibra Design has gotten the prize IF Material Awards 2008 with the BioPlac.

After verifying the existence of architects, designers, students, private companies and governmental institutions, willing to research and develop new materials and new products based on an innovative design, allied to the abundant vegetal diversity existing in Brazil and with the new technologies of parametric modeling, it is possible to affirm that we still have a vast field to be explored.

6. Conclusion

It is noticed that there is a huge effort to apply the parametric design and also to develop materials suitable to the Brazilian reality. The new findings and the research in that area are fundamental for the evolution of sustainable productivity in the Brazilian society.

Materials such as bamboo and wicker are totally malleable and their behavior seems random and involuntary, but simulations can be performed helped by the algorithmic modeling predicting as diverse as possible situations to that model. These simulations can be applied to different kinds of materials, and other forces can be simulated, such as gravity and torsion, for example. On airplanes, boats and in racing cars, carbon fibers are structured to adequate its minimum weight to the functions of tension and traction. The simulation permits the adjustment of the fibers in the right direction of the effort. The optimization of the performance of the materials is still recent in design. It is possible to notice, in addition, a considerable waste of materials due to insufficient research and poor workforce in many sectors.

Although we utilize these concepts in Brazil only in the construction of decorative objects or pieces of furniture, they are perfectly applicable to civil construction thought for an automatized and sustainable world. With the algorithmic parametrization it is easier to transfer the technology from one sector to another, at the same time new materials are successfully reused in other areas. Airplanes, cars, boats and objects have a yearly calendar of races and competitions abounding in huge investments in technology. Some sectors cannot create their own competitive circuit yet due to a lack of incentive to experimentation and research. On the other hand, we have to respond urgently to the climate changes and perfect the performances of their results on the built works. The slow adaptation of our roads, harbors and airports to the World Cup standards can be a favorable moment for the parametric design to adequate our lagging behind in a context of valorization of Brazilian fiber materials and projectors.

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Digital personal fabrication: social actions, ephemeral objects

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Open-Source / Durability / Materials / 3D Printing / Subjectivization

This paper looks at the emergence of personal digital fabrication as a design technology and attempts to construct a theoretical framework of reference for its impact on the creation and experience of design. Desktop 3D printing can be seen as a design and manufacturing process in which objects are temporary, delimited in time by the function they attend to. As new design technologies emerge, they act as apparatuses that create new subjects by responding to their very needs.

1. Technology, an envelope of objects

New technologies typically bring about unexpected consequences that span beyond the immediate needs they were initially conceived to respond to, and engender new patterns of behavior in users. For the archeologist André Leroi-Gourhan, technology represents an interface between humans and their environment, a sort of envelope made of objects. He wrote of 'technological tendencies' that emerge from our side of the interface, the cultural one, and proceed towards the environment that surrounds us [1945]. Our perception and understanding of the world is therefore screened or affected by a technology, but once the latter is developed, it will then also influence the way we behave and interact with each other.

Current developments in digital personal fabrication now promise to trigger major changes in the way design is produced and experienced. In the near future users may have the possibility to download the objects they need in the form of digital files and print them layer upon layer at home, subsequently being able to address functions as they emerge by creating temporary objects. When used in combination with 3D scanning, 3D printing allows the user to copy and reproduce an object indefinitely, without any further loss in definition after the first copy is made. At this stage in the development of digital personal fabrication devices, there is already one machine — MakerBot Industries' Thing-O-Matic — that can repeatedly re-use and recycle the raw material used in the fabrication process when the object is no longer needed [MakerBot Industries, n.d.] The plastic filament used by the Thing-O-Matic can be described as a sort of non-material devoid of own will, from which the user can conjure up ephemeral shapes for temporary functions, a preternatural substance bound to take and lose shape again and again, like the very stuff of life. The actions of disposal and recycling coincide in time and place, and the emphasis is not on durability and quality, but on the fact that users can create items by themselves and that objects can then easily be disposed of, to be recreated if and when necessary.

In this paper I will look at this emerging design technology and attempt to construct an initial framework of reference in which it can be placed. What categories and forms can we use to analyze aspects of design like materiality, agency, authorship and durability when objects become ephemeral and functions transient?

2. Layer upon layer: additive fabrication

Not a new technology in absolute terms, 3D Printing is a manufacturing process that has been developed over the course of several decades. One of the first procedures, known as stereolithography, was conceived by Wyn Kelly Swainson [Chua et al., 2010: 110-111] and involved the use of a laser beam that progressively solidified layers of photo-curable liquid resin. A plate would slowly sink in the liquid, layer after layer, until the object completely formed on its surface. Most current technologies derive from this first intuition. The expression 'subtractive fabrication' was in fact coined to describe traditional manufacturing techniques, such as traditional machining, in which a quantity of material is removed to shape the desired product, as opposed to additive manufacturing. In the latter, all the raw material used is included in the finished object — with the possible exclusion of supporting parts built using water-soluble materials. There are at the moment several competing additive manufacturing techniques, but they all share the basic principle of a layered construction. In Fused Deposition Modeling (FDM), a plastic filament or a metal wire is unwound from a coil, melted and deposited by a nozzle. Another method is particularly similar to inkjet printing and involves syringes moving across the three dimensions and spraying layers of powder (plastics, or resins) and binders along a cross-section of the product. The quality of the output in all cases depends on two aspects of the fabrication process. One is the ability of the printer to handle specific materials, which include metals, plastics, resins, glass and composites. The second, more crucial, is the thinness of the layers, which can be compared to the amount of definition in a two-dimensional printed artifact.

Initially very expensive and used almost exclusively in prototyping or in medical application, in the course of the last decade 3D printers have become increasingly available first to computing enthusiasts and then to the general public. At the moment of writing, the first devices costing under 500 US dollars have become readily available to consumers [Solidoodle, n.d.]

3. A Factory for everyone: RepRap Project

One of the main motors of this radical change has been the RepRap project, founded in 2005 by a Adrian Bowyer, a senior lecturer in mechanical engineering at the University of Bath [Jones et al., 2011].

The RepRap 3D printer electronics are based on open-source Arduino boards, and its entire design has been published from the very outset under a free software license, the GNU General Public License. The RepRap devices are continuously updated and instructions for their construction are immediately released into the public domain. In fact, it is already virtually impossible to predict the number of machines in function throughout the world, and the way they have evolved. The original design has also spawned several of commercial and non-commercial offspring, including the aforementioned Thing-O-Matic. The rationale behind the project is to render the device self-replicating. After the first one is built using basic hardware components, the machine will be able to print the parts necessary to build a new one, and so on, endlessly. At the moment, the researchers and the enthusiasts working on the RepRap project are devising ways to enable the machines to print also the electronic parts, in order to make the self-replication seamless. The long-term aim of the founders of the project is twofold: on the one hand, to provide desktop fabrication systems to anyone on the planet for inexpensive home manufacturing, and on the other hand, this is a more ambitious experiment to create a real-life Von Neumann universal constructor, a model of endlessly self-replicating machine that only exists in computing environments. Towards the first aim, the RepRap machines include computer-aided design (CAD) and computer-aided manufacturing (CAM) software, and can virtually accept files created with any commercial or non-commercial 3D modeling system. Database are already forming, like the Thingiverse, where users upload their scans or designs into the public domain, for free use [2012].

The RepRap machines work by FDM and can use as source material a filament of ABS, or other similar thermopolymers. The most popular material within the RepRap user base, however, is Polylactic acid (PLA): a polyester derived from renewable resources that can biodegrade when released in the environment if adequate levels of oxygen and moisture are present. PLA can be produced all over the world using local crops: corn, tapioca or sugarcane are all suitable and at least one of them is cultivable in most parts of the planet.

4. Hardware and apparatus

The discourse on sustainability that emerged in recent decades in mainstream design culture implicitly included a rethinking of the meaning of the lifespan of an object. Durability was one of the core qualities associate to Good Design, along with the idea the form has to come after function, which implied high specialization in design and resulted in an extreme proliferation of industrial products. Towards the end of the Modernist paradigm mass production, specialization, proliferation, and durability were combined in a certain environmentalist vision to depict dystopian scenarios of natural landscapes covered by artificial objects that promised and threatened to outlive their very manufacturers and users.

From this point of view, the emergence of a homemade design and manufacturing technology in which objects are temporary, delimited in time by the function they attend to, seems to offer a way out of the impasse. It is interesting to read in parallel some passages of *Les Lances du Crépuscule* [1996], in which the French anthropologist Philippe Descola describes the ability of the Achuar people to improvise the objects they need, and leave them behind afterwards. The lifestyle of peoples like the Achuar was dismissed at the height of colonialism as being little provident — but in fact, argues Descola, what they were doing was avoiding the accumulation of objects. To the possession of the object *per se*, the Achuar substituted the possession of the material knowledge required to build a temporary, ephemeral artifact, designated to respond to a material but transient need. The idea behind an enterprise like the RepRap project is very similar. Despite the efforts by Bowyer and the other people involved in the project to make the production process streamlined, to link it with 3D scanning and to render the machines ‘autonomous’ in their self-replication capability, there will always be some technical, material bond involved in the users interacting with the devices: the new technology, the machines, the artifacts produced, and the users can be all seen as parts of an actor-network in which all members have the same amount of intentionality, like in the theorist Bruno Latour’s idea of the *Parliament of Things*.

The philosopher Martin Heidegger coined the concept of *Ge-stell* to describe modern technology as a complex of elements that goes beyond the simple machine involved in the process, however iconic this becomes [1977]. His example is the airplane: without the whole system around it, which includes runway and other material infrastructure, pilot and passengers, the fact of airborne transportation would never exist. To some extent, the concept *dispositif* introduced by the theorist Michel Foucault [1980] and refined in their discussions by Gilles Deleuze [1992] and Giorgio Agamben [2009] describes a similar fact. The *dispositif*, also translated as ‘apparatus’ in English, is an arrangement of elements that forms a mechanism, created in the first place to respond to a condition, to a problem posed by the environment. But while Heidegger’s *Ge-stell* typically describes a technical reality, the *dispositif* includes cultural, social, and historical mechanisms. Agamben for instance drew examples from the legal sphere to reconstruct the origin of the term. Sometimes when talking about technology, for sake of clarity, the distinction is made between *dispositif* as overall apparatus and *appareil de base*, or ‘hardware’, to refer to the machinery alone.

In fact, the *dispositif* is a combination of heterogeneous elements, including practices inherited or acquired without knowing their meaning or their origin. Such, of course, is also the case of most users dealing with complex technologies in an everyday setting. Ours is an implicit, intimately material knowledge. We do not need to be computer scientists to word-process a document, or physicists to be able to watch TV. Technologies are typically created in the first place to deal with a problem posed by the

environment. Yet, *dispositifs*, once in motion, set off two processes. On the one hand, they increase the distance between man and the very environment, because they interface and make this relationship more abstract. On the other, they define and re-define their own subjects functioning as a mold, through a process of *subjectivization*.

Digital personal fabrication through 3D printing as a material technology — but even more as a *dispositif* — has the potential to shape new subjects and new visions of the world, maybe even beyond the already ambitious, socially and economically revolutionary intentions of the proponents of the RepRap project. Leroi-Gourhan developed a method for the study of found artifacts, called *chaîne opératoire*, or 'operational chain' (1964). The method broke down the history of an artifact in all the significant stages where human intervention had happened: supplying of materials, designing, execution, improvement, use, disposal. Even finding a discarded object had its meaning, because in Leroi-Gourhan's theory of technical processes the technical acts are also, and most importantly, social acts. When looking at this operational chain, authorship is not relevant as the perpetuation of technology and the reiteration of social cohesion. Certainly, this may sound unfamiliar in a culture in which breach of copyright and intellectual property are considered crimes, and in which brands and the very designers' signatures are fetishized.

Yet, in a possible world where we can 3D scan an item and re-print it, or even download it and modify it at will, this syntactic process of semantic reconfiguration will certainly trigger momentous questions. We will have to ask ourselves to what extent we can still talk about a life cycle of an artifact if an object can be quickly, easily and quietly resurrected at home; and also, whether products will cease to have a recognizable identity when their specifications become blurred, imprecise, and limitless as a result of continuous re-adaptation and hybridization.

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Living system design Studio: from digital to fabrication process

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Living systems / Parametric generative design / CAD/CAM tools / Design studio / Interactive architecture

Various approaches have been developed to deal with digital tools in architecture design process. The most recent is responsive architecture. This paper presents the results of a design studio based in an interdisciplinary collaboration research at Vitruvius Fablab-ISCTE IUL. The main goal was to explore the new digital technologies to generate a Discursive Wall – Living System that physically responds to movement, interacting spatially and temporally with the environment and its inhabitants.

1. Introduction

“Digital fabrication techniques will certainly play a key role in the affair, but the direction in which they will lead architectural design is still unclear. [...] In context of incertitude, the quest for a new poetics will perhaps represent one of the most enduring legacies of the current experiments” (Picon 2010:7)

The autopoiesis theory (Maturana and Varela, 1980) seems to contain the necessary knowledge to enable the creation of new poetics in architecture. Recent discourse on digital and living systems in architecture is exploring number of biological concepts: self-organization and emergency. Going even further several architects argued that, the implementation of locally-sensitive differentiation, achieved through morphogenetic responsiveness, can produce more flexible and interactive architecture (Kronenbur, 2007; Fox & Kemp, 2009). Over the past years, there has been a large number of works over the living systems, and the relationship between their components, co-existence, emergency and complexity (Hensel et al, 2010; Roudavski et al, 2006).

Traditional architecture design process starts from principles that architectural structures are singular and fixed, well integrated and separated from their environment or context. Emergence design processes and technologies require the opposite, complex structures as part of an environment or context. These assumptions associated to development of digital culture are changing the definition of materiality. Materiality is synonymous of resistance, performance, sensation and perception (Malkawi & Kolarevic, 2005). More than finding architectural surfaces as solutions this “form follows performance” strategy mixes appearance and organization of patterned skins and structures in nature, enabling to explore new materials behaviors and effects – biomimetics and biomimicry (Kolarevic & Klinger, 2008; Diniz

& Turner, 2007). However, it is necessary to develop new approaches to design studio involving digital tools. According to Oxman (2010:291) “theories and methods of digital design can no longer be conceptualized as the merging of computational tools with conventional formulation of design.[...] age of digital media presents the need to pioneer a new understand of the nature of designing [...]”. It is essential to challenge the supremacy of top-down processes of form-making, and implement bottom-up logic of form-finding. The highlighting is on material performance over appearance and on processes over representation (Leach, 1997). The materializing of a responsive walls need to have multidisciplinary approach towards developing intelligent artifacts (Goulthorpe, 2008). Digital fabrication offers opportunities to produce non-standard elements, which have the potential to create physical spaces with specific characteristics and economically viable (Bonewetsch et al, 2008). Recent research and experiences went deeper into the prototyping phase, providing the viability to these hypotheses (Hensel et al, 2010; Sheil & Glynn, 2011; Burry, 2011).

In order to explore these new architecture challenges, a multidisciplinary group of researchers proposed “a living system” design studio, held at Vitruvius Fablab ISCTE-IUL. The goal was to design an acoustic structure – discursive wall - to a coffee shop, using parametric, generative, programming and fabrication computer supported techniques. Inspired by the performance-based design, the main target was to develop a 3 x 5 meters wall prototype, that would physically respond to movement, interacting with the temporary space, establishing a direct dialog with the inhabitants, constantly reshaping their perception, and minimizing acoustical problems of the space. This acoustical issue was determinant to understand the need of the real scale model, and to establish the material to be used in the model – Valchromat (a variable of MDF) for the structure and Black Cork for the front effect material.

2. Design Studio

The design studio involves three partners: VitruviusFablab-IUL, FabLabEDP and Rhino3DPortugal/DigitalLab. The theoretical and practical design studio (64 hours), was composed of two modules: (1) LS_01, Firefly + Grasshopper + Arduino and Scale Model Fabrication; (2) LS_02, Design Studio – Discursive Wall. The design studio had the participation of students and professionals from different areas of knowledge (architecture, product design, fashion design, sculpture, engineering, electronics, and programming) from different countries. The main scope was to go through

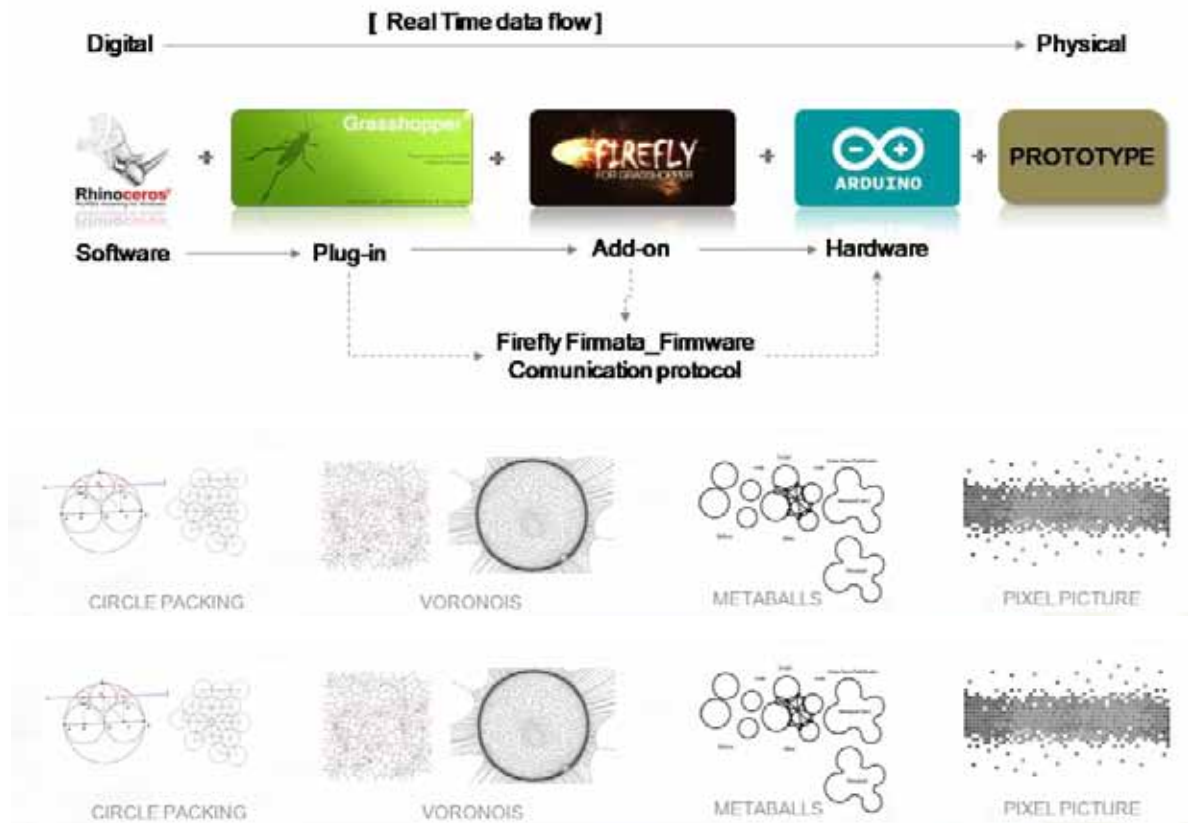


Figure 1. Design Studio Framework

all the lifecycle of the design solution: ideation to prototyping. The design studio explored the use of Rhino Grasshopper plug-in, Firefly add-on and Arduino hardware as creative and technical tools. The design processes used CAD/CAM tools to simulate and prototype 3D interactive architectural solutions (fig.1). The LS_01 was to establish a clear understanding and direct dialog between CAD environment Rhinoceros and programming interface Grasshopper with Firefly and finally the insertion of data in the Arduino – the open source element that manipulates the physical mechanism. The final step was to prototype a parametric structure 1x1m, totally compatible with the selected servo motors and then design a bearing system that could support and provide the fluency of the movement. The LS_02 was to set-up the 3 x 5 meters Discursive Wall in coffee shop.

3. Living System – discursive wall: from digital to fabrication process

The design studio was divided in four phases: [1] LS_01 Grasshopper+Arduino+Firefly; [2] LS_01 Prototyping; [3] LS_02 Design Studio; and [4] LS_02 Discursive Wall set up (fig. 1).

Phase 1: LS_01 Grasshopper+Arduino+Firefly

The first two days of the design studio were dedicated to the creative process and the production of the cork units using the Grasshopper. The participants were organized in four groups, which developed several design logic=s, like simulated Mem-

branes through the application of fibers over the cork (fig. 2), the Voronoi logics (fig. 2), Metaballs (fig. 3) and the simplicity of the Pixel (fig. 3). In order to provide the basis of programming and open source resources, the third day of the design studio was fully dedicated to Arduino [C/C++]. After this creative design process and after providing the open source knowledge the design studio led the participants to create the animation movement that would engage the cork. This was done through the use of Firefly, a translator to integrate Grasshopper and Arduino [C/C++]. The tool allows nearly real-time data flow between the digital and physical worlds, and reads/writes data to/from internet feeds, remote sensors and more. Firefly allowed the simulation of the different movements created by the four groups, first in the computer and then in the 1x1m prototypes.

Phase 2: LS_01 Prototyping

After the virtual test of all the four solutions, the last day of the module LS_01 of the design studio was dedicated to the construction of the physical 1x1m model. Supported by the pre-designed parametric structure, each cork solution gave rise to specific customized structures. Four different parametric structures were cut by the CNC milling machine and completely assembled by the participants. After the physical prototype was assembled, and the cork units glued to the bearing systems, the participants proceeded for the electronic connection – harness and wirings, breadboards, arduinos [C/C++], source supplies – everything was inserted into the structure. After the electronics



Figure 2. Left: Group A fingers; Right: Group B – Voronoi, in Lisboa (photos by Alexandra Paio).



Figure 3. Left: Group C - Metaballs. Curves; Right: Group D: Pixel, in Lisboa (photos by Alexandra Paio).

worked, each group uploaded their definition into the Arduino and all the four prototypes exhibited their full process – parametric design and programming movement in their own physical 1x1m prototypes.

Phase 3: LS_02 Design Studio

Between LS_01 and LS_0 was voted online the best prototype. The winner was the group B, with the Voronoi solution and wave movement (fig. 4). After the competition, at the end of the second week, was time to fabricate the parametric structure to the

winner 3x5m cork panel. In the first two days of the second module, participants and trainers dedicated their time assembling the five modular 3x1m structures that together would form the 3x5m wall. This strategy (to split the complete wall in five modular structures) was intended to facilitate the CNC fabrication, the transportation and specially to minimize the vibration effect caused by the motors movements. The last component of the wall being mechanized was the 3x5m cork panel, during the first two days of the LS_02 design studio module.

The design studio consisted in the constant flow of information between the Grasshopper VPL and the Sensor. Firefly made the translation – from VPL to C++ and VS. Arduino was the bridge between the virtual and physical. Many adjustments were made from the LS_01 to the LS_02. In the first four 1x1m prototypes, one Arduino UNO was used with nine entries, one for each unit motor. For the 3x1m modules of the second phase, as the UNO were not sufficient, Arduino MEGA were used (each 3x1m module contains 27 unit motors). In the first phase 1x1m prototypes, one 12V power supply was used to feed the each set of nine motors. In the second phase 3x1m modules, power supply was optimized, one power supply being used for 20 motors.

Phase 4: LS_02 Discursive Wall - Design Studio

Resistance, transportability, functionality, operability, and tenacity were all features to be include in the final test to the Discursive Wall surface. After the two days period of assembling the different components, in the third day all participants had to set-up the wall in the coffee-shop (fig. 5). All the electronics (wires, Arduino, power supplies) and the cork panel were assembled in loco, after the Discursive Wall structure had been fixed to the coffee-shop wall. The next question to be answered was to

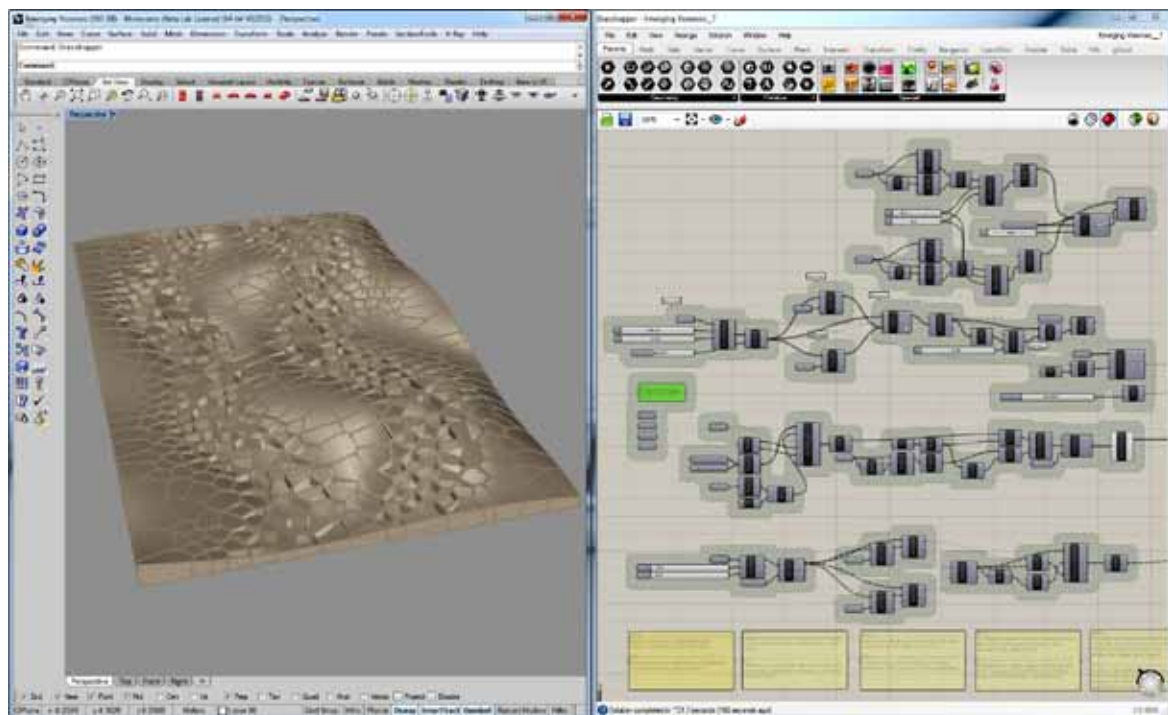


Figure 4. Geometric modeling and parametric control-relation definition in grasshopper.

determine the most strategic location of the movement sensors. The obvious chosen locations were frequently used spots. After the movement sensors had been installed in their locations, the 3x1m modules were tested. All were firstly validated individually, making sure that all the motors were responding and working correctly. This motors issue was very delicate. Since these electronic equipment are specific to micro scale tests, their durability and precision were very sensitive within this larger scale model. Basically the solution was to control their velocity and concurrency of movement. The final challenge was to make sure that all of the five independent structures were able to work together and could produce a unique and continuum movement.



Figure 5. Discursive Wall in coffee bar at ISCTE-IUL, in Lisboa (photos by Alexandra Paio).

4. Conclusion and future work

This paper has presented only a brief outline of the design studio. The challenge of translating complex geometries based in living systems into a physical artifact was allowed by the application of advanced parametric 3D modeling techniques that directly were linked to CNC fabrication technology. The parameterization allowed: [1] a quick adaptability to the several elements of the structure, and [2] the manipulation of the assembly parts only with simple assembly logic. The greatest difficulty was to improve the motors performance within the bearing system. The solution was to improve the continuous movement with a shorter and slower step-by-step movement. This was still able to create the illusion of a continuous movement.

The future work will explore and create new wall systems. The adopted framework will be developed to seek new achievements by display more intelligent inputs. The new wall will respond and solve different issues related to solar radiation creating an autonomous input/output organism.

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The evolving terrain of the book: Ariel Malka's *Javascriptorium*

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Book history / Jewish history / Bible / Dead Sea Scrolls / Motion graphics

The landscape of the book is shifting, and many see this moment as analogous to the invention of the printing press, which destroyed a vibrant manuscript culture. In this essay, I challenge the simplistic notion that mass-produced traditional books are rendered irrelevant and ultimately extinct by mass-reproduced digital books. I argue that designer Ariel Malka's experimental book *Javascriptorium* offers a particularly compelling site for discussing the evolution of the book.

1. The Future of the Book

Recently there has been great interest among designers in the interconnections between physical and digital media. The landscape is certainly shifting, and many see this moment as analogous to the invention of the printing press, which destroyed a vibrant manuscript culture. In this essay, I want to challenge the simplistic notion that mass-produced traditional books are rendered irrelevant and ultimately extinct by mass-reproduced digital books. I argue that designer Ariel Malka's experimental book *Javascriptorium* (www.chronotext.org/scriptorium) offers a particularly compelling site for discussing the symbiotic phenomena of materiality and dematerialization. A series of animated 3-D typographic landscapes that present biblical and non-biblical texts, *Javascriptorium* was custom-made for the Shrine of the Book, a part of the Israel Museum in Jerusalem. The Shrine of the Book houses the Dead Sea Scrolls (150 BCE to 70 CE), which contain 972 biblical and non-biblical texts that many experts believe were penned by the ancient Jewish sect, the Essenes. The Shrine of the Book also houses the Aleppo Codex (10th century CE), the first extant bible designed in codex form. *Javascriptorium* is in deliberate and fruitful dialog with these ancient texts.

2. Ariel Malka's *Javascriptorium*

Malka's experimental book is rendered by real-time custom software that can be viewed on most recent desktop computers—this potentially mass-reproducible piece becomes obviously physical only when it is projected onto a surface. *Javascriptorium*, though, is designed to invoke the physical forms as well as the textual content of the Dead Sea Scrolls and the Aleppo Codex. Malka explains that 'the plan was to build a continuity for the visitor: contemplating the Dead Sea Scrolls, discovering the Aleppo Codex, and getting immersed in a sea of text' (Ariel Malka, interview by the author 2011). Standing before the piece, viewers are indeed submerged in a shifting 3-dimensional typographic landscape, giving new meaning to the metaphor of being absorbed by a book. *Javascriptorium*, according to Malka, ques-

tions how we read and experience text (Ariel Malka, interview by the author 2011). When reading text in scrolls and codices, for example, readers must scan text, scroll or turn pages, and 'zoom in' on the text. In *Javascriptorium*, Malka convincingly executes all of these functions for the viewer by advancing and scaling the textual landscape to give viewers a sense similar to reading in various traditional material manifestations.

Javascriptorium cleverly connects the time before books (Genesis) to our own post-book era, in which the form and medium of the book is in transition.¹ *Javascriptorium* contains three episodes, each of which includes two scenes. Many of the texts are about times of transition and separation. The first episode, Episode 1, Scene 1 (fig 1) depicts the Sea of Chaos, the disordered state preceding the creation in Genesis. The final episode (fig. 2) (Episode 3, Scene 2) depicts the Water of Life flowing over cliffs of text into the Sea of Death. Malka notes that in Episode 3, Scene 2 Ezekiel's vision 'contains a reference to a visionary/idealized temple. In addition, the scene [ends] by water flowing, which takes us back to the Water of Chaos of the first scene. In a perfectly cyclic and never-ending fashion' (Malka 2011). *Javascriptorium* both begins and ends with an essential biblical thesis: divine creation is a consequence of the separation of land from water, and light from darkness.

Malka's focus on landscape forms—land and water—makes sense because so many of his texts are about spiritual travel in a physical environment. Landscape imagery, which serves as a substrate for the text in *Javascriptorium*, comes together with the text to convey the piece's content. Malka's computer-generated spiral forms, rolling landscapes, and cliffs, though, also suggest paper-like surfaces. The surface in figure 1 (Episode 1, Scene 2), for example, features a scroll-like spiral that extends down into a desert landscape with bulges and indentations that resemble those on a damp piece of paper. Paper scrolls and the Hebrew letters play a critical role in the Jewish religion beyond the Dead Sea Scrolls. The most holy renditions of the Torah (The Five Books of Moses from the bible) are created in scroll form. There are strict guidelines for the proper formation of each Hebrew letter in Torah scrolls. These most sacred artifacts feature, as does *Javascriptorium*, minimalist typographic design: pure black letterforms in straight columns on a roll of clean paper. The Torah scroll is kept covered and hidden in a dark cabinet except in specified situations. The Torah text, then, is an esoteric and awe-inspiring entity that in its creation and use also plays out the separation between light and darkness.

¹ Interestingly, the content of the Dead Sea Scrolls was transmitted both in written form and orally; though written on parchment and papyrus, they were both read silently by individuals and also read aloud 'in public circles' (Ariel Malka, interview by the author 2011).



Figure 1. Episode 1, Scene 1. Zoom out on the Sea of Chaos. A divine column, link between Heaven and Earth is represented at the center of the world. Episode 1, Scene 2. The sanctuary is represented at the center of the desert encampment among the people of Israel.

Light and darkness are also essential to *Javascriptorium*. *Javascriptorium* was custom designed for the Shrine of the Book building, which is also a ‘book’ of sorts (fig. 3). Malka explains that visitors to the Shrine of the Book have to first move through a series of spaces intended to ‘slowly “put you back” into some caverns in the middle of the desert, 2000 years ago, and then to show you the scrolls’ (Ariel Malka, interview by the author 2011). The building, a white dome across from a black basalt wall, is based on the Dead Sea scroll the *War of the Sons of Light Against the Sons of Darkness*. This scroll lays out the Essene’s apocalyptic vision of war between good and evil—and the covenant between the Essenes and God.² The architecture of the Shrine of the Book leads visitors through the covenant narrative played out in the War scrolls.

Episode 2, Scenes 1 and 2 of *Javascriptorium* (fig. 4) depict the exodus of the Jews from Babylon using texts from Ezra 1 and Isaiah 40. On the right side stands a block of text that represents the tall Ishtar Gate, which was an inner gate to the city of Babylon. The gate image is also reminiscent of a title page or cover that opens to reveal its book’s content—arches or gateways were common

² The dome represents the Sons of Light (the Essenes along with the angels and God) and the wall represents the Sons of Darkness (all other peoples in league with the forces of evil).



Figure 2. Episode 3, Scene 1. The members of Community are leaving an impure and corrupt Jerusalem (about 150 BCE) and begin their descent into the Judean Desert. From the ‘Manual of Discipline’ or Community Rule, Scroll 9: ‘This is the time for the preparation of the way into the wilderness, And he shall teach them to do all that is required at that time And to separate from all those who have not turned aside from all injustice.’ Episode 3, Scene 2. One frame depicting Ezekiel’s vision of the Water of Life flowing into the Sea of Death (Ezekiel 47).

motifs on the title pages of old Hebrew books since the Renaissance. The gate motif, like a book cover, once again symbolizes transition and separation, and Episode 2, Scenes 1 and 2 move from light to darkness on the far side of the gate. One distinctive bright line of text, representing the Jewish people heading to Jerusalem, moves along the landscape in the direction of the horizon. We ‘follow’ this line of text, much as we would follow a particular character or characters in a book, as it reveals its significance over time. Malka likewise employs renderings of light and darkness to play up the covenant between the Jews and God. In Episode 1, Scene 2 (Figure 2), the exodus from Egypt is represented by what looks like moving shadows that are cast from some unseen object between the light and the ground, reinforcing the idea of the fellowship between God and the Jews. All the Episodes in the piece are black and white, as are most traditional text-based books. In this way, *Javascriptorium* manages to invigorate the traditional black text on white paper book paradigm.

Javascriptorium also manages to suggest a connection between the experience of the book and the Jewish concept of sanctuary.



Figure 3. The Shrine of the Book building, The Israel Museum, Jerusalem.

As I noted earlier, many of the texts are about times of transition and separation. Other texts in *Javasciptorium* portray the evolution of the concept of sanctuary. Adolfo Roitman, who curated the Israel Museum exhibition in which *Javasciptorium* appeared in tandem with the Dead Sea scrolls and the Aleppo Codex, in fact, emphasized the concept of sanctuary in his 2004 book *Envisioning the Temple: Scrolls, Stones, and Symbols*. Roitman elaborates in his book the concept of sanctuary in his discussions of the link between earth and heavens (e.g. the Tower of Babel), the Holy Tent of the wandering Hebrews, the semi-permanent waystation at Shilo, the physical Temple in Jerusalem, and the eschatological (i.e. after the apocalypse) visions of an ideal temple (as in Ezekiel). Roitman also describes the virtual sanctuary within each sect member (Roitman 2004). Malka explains that he uses the helix form as a representation of the divine; this form connects the divine with the profane in various episodes and scenes (Ariel Malka, interview by the author 2011). But projected in a gallery space, *Javasciptorium* itself can also be understood as a sanctuary of sorts. Watching *Javasciptorium* kindles an experience akin to Roitman's 'virtual sanctuary within.' Its moving text and imagery play in a hypnotic repeating loop, allowing viewers to temporarily lose track of their surroundings and immerse themselves into Malka's virtual representation. In this way, *Javasciptorium* functions much like traditional books, which can allow readers to find temporary sanctuary within their pages.

3. Conclusion

Malka's Ariel Malka explains that, day in and day out, the Essenes copied the Holy Book on scrolls to be read by others. Malka adds:

In some way, they were designing the whole experience of 'reading the Bible': the precious and rare scrolls were spread all over the land, where they were either read in public circles or

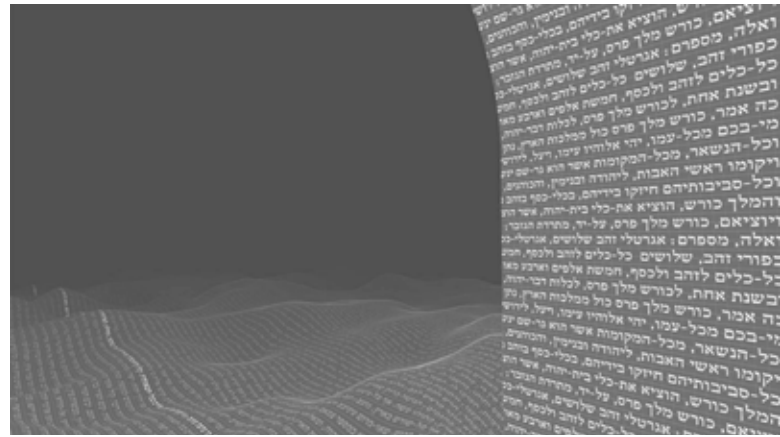


Figure 4. Episode 2, Scene 1, Emancipation of the oppressed leaving through the Ishtar Gate at Babylon, freshly conquered by King Cyrus of Persia. The text is from Ezra 1.

Episode 2, Scene 2, Isaiah was very popular among the members of the Community of Qumran, due to his critique of corrupted power and his mentioning of an Apocalypse to come.

40:3 *A voice cries: In the wilderness prepare the way of the LORD, make straight in the desert a highway for our God.*

40:4 *Every valley shall be lifted up, and every mountain and hill be made low; the uneven ground shall become level, and the rough places a plain.*

The text is From Isaiah 40.

reserved for study purposes. Today, with computers and the internet: the modern scribe [programmers] can design [his or her] own 'Bible reading experience' and propose it to the world. This is part of what the *Javasciptorium* is trying to achieve (Ariel Malka, interview by the author 2011).

To build on these ideas in the future, Malka plans to add an interactive component to the project. He hopes to extend the project so that people around the world can be 'scribes for one day.' He imagines a set up in which users could access the Israel Museum's Shrine of the Book website, pick a passage from the bible, and then type it at their own rhythm to be displayed live on the wall at the museum over scenes from the *Javasciptorium*.

The Essenes lived at Qumran in the vicinity of the caves where the Dead Sea Scrolls were found. Malka says visitors can still see the 2,000-year-old paths to the caves made by human feet. In response to this information, Malka hopes to place roof-cameras in the room with *Javasciptorium* to record visitors' movements. This motion data would then be used to erode the virtual land-

scapes seen in *Javascriptorium*. If a visitor returned to watch the piece a few weeks later, there would be a different landscape.

At first glance, it makes perfect sense to see the ascendance of mass-reproduced digital books as the necessary cause of the 'death' of the traditional book form. I would like to argue, though, that the DNA of traditional books remains in even the most experimental digital work.³ Malka's *Javascriptorium* is a prime example of precisely the sort of media recombination that foreshadows possible future book forms and structures. *Javascriptorium* suggests that digital and physical books will continue to evolve together, sometimes integrating information structures and processes, and sometimes retaining traditional information structures and processes. In *Javascriptorium* we are seeing not merely a unidirectional transition from physical to digital information; rather, this design project breaks down the distinctions between material and virtual media at the same time as it embraces the very qualities that make these media so different. Every designer should see this work—in it we glimpse at once the past and future of the book.

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³ Malka renders the line 'let them make me a sanctuary, that I may dwell in their midst' as a helical form, suggesting, in my opinion, a vital link between God revealed as the life force, and the DNA double helix revealed as the life structure.

Joining Up: evaluating technologically augmented interdisciplinary cross-cultural collaboration

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Design education / Cross-cultural / Multidisciplinary / Collaboration / Interactive media

RARE EARTH: Hacking the City is an open studioLAB encouraging students from China and Australia to collaborate using Shanghai as a laboratory for investigating ideas for the future of cities, immersive interactive environments, and cross-cultural co-creation. This paper discusses the opportunities, constraints and outcomes of the studioLAB and proposes insights pertaining to a pliant model for Cross-Cultural Interdisciplinary Collaboration (CCIC).

1. Introduction

Globally networked social, economic and geopolitical systems mean humans are ever more interdependent, in ever more immediate ways. Despite this the extremes, contradictions and consequences of wild capitalism perpetuate a reality where China, Islam and the 'West' are on a collision course. Unless these diverse models of culture and capital find constructive engagement, economic, social and ecological collapse are realistic scenarios (Nolan, 2010). The aim of this research is to propose ways design educationalists can challenge students from different cultures to collaborate on envisaging and co-languaging as yet unimagined futures. This strategy repositions design as a multidisciplinary, culturally adaptive, social platform for creating shared visions about our collective sustainable future. Ezio Manzini (2007, p1.) laments that,

Unfortunately, looking around I see the majority of designers (and design researchers) happily continuing to work in a business-as-usual mode, oiling the wheels of a catastrophic consumption machine. There are several reasons for this worrying situation, but one of the major ones is the lack of shared visions. (Ezio Manzini, 2007:1)

The scale of the global challenges impels us to envisage what to date has been unthinkable. In particular, China's re-emergence signifies complex political and cultural challenges to developing shared visions complimentary to both Asia and the 'West'.

Today, more than ever, the stakes of design are very high, raising at every turn urgent economic, political, social, and philosophical issues. The relation between design and its context is particularly salient in a rapidly transforming space like contemporary China... not because China leads the world in the field of design, but because China today is where design issues are raised in perhaps their most problematic and provocative form. (Designing China, 2009)

In response to this unprecedented exigence, our research hypothesises a model for Cross-Cultural Interdisciplinary Collaboration (CCIC) deployed within immersive networked studios that

foster the capacity of students' working in creative disciplines to think in more 'joined up' ways about how humans engage in designing our world.

2. COFA Collaborative Studios

'RARE EARTH: Hacking the City' is an intensive studioLAB where students from China and Australia developed dynamic content together using a live database. Held in Shanghai (September 2011), RARE EARTH emphasised experimental improvisation (the hack) and use of interactive media to facilitate cross-cultural collaboration. Conceived at the College of Fine Arts (COFA), University of New South Wales, the project explored the future of cities, immersive interactive environments, and transcultural collaboration with faculty and students from Donghua University (DHU), Shanghai. RARE EARTH is the second collaboration between Collabor8 (C8)¹, COFA's innovative Porosity Studio, and DHU, the first being eSCAPE Studio² (2009).

Since 2003, C8 has developed insights and recommendations pertinent to a matrix of cultural and communication issues encountered during online and face-to-face studio interactions between students in China and Australia. The multidisciplinary collaborations with Porosity Studio³ encouraged students to test their individual practices at the scale of architecture and the city. "The relationship between the city and public space are key concerns – hence the name Porosity which speaks to the need for architecture to be porous in relation to public space" (Goodwin, 2009).

An Interactive Media Platform (IMP)⁴ was integrated into RARE EARTH as a means to document, facilitate and exhibit the studioLAB process and outcomes. The IMP draws on a database of images, sound and videos to display content as an immersive environment. Participants create, tag and upload their content to a Flickr database that regularly updates the IMP forming the installation. These data 'moments' are animated by custom software and a live video camera feed and then sequentially embedded into a strip of images presented horizontally. The platform employs synchronised projections in a large-scale installation format supported by multi-channel sound that responds to a machine-vision tracking system. The interactivity of the system enables users to control the display of individual visual elements

1 Ian McArthur instigated The Collabor8 Project to enable design students in Australia and China to collaborate.

2 eSCAPE Studio can be found at: <http://porosity.c8.omniwin.net.au/outline/>

3 Professor Richard Goodwin established Porosity Studio in 1996.

4 The IMP *augment_me* was developed by COFA design academic Brad Miller.

of content by slowing and enlarging an image or video in response to audience movement and position.

3. An Open Brief: City as Urban Laboratory

Cities are crucial sites for research concerned with the transformation of design practice, design education and a re-visioning of what a sustainable urban-centric future means. Chinese megacities, of which Shanghai is the most populous⁵, have a particular significance for the planet given current trends in China and the forecast for future urbanisation⁶. Shanghai has become critical within C8 projects as a site for experimentation and prototyping models of cross-cultural design and design education that may be globally applicable. The RARE EARTH brief framed urban Shanghai as “the laboratory of the future”.

If the experiment of 20 million people in Shanghai, all wanting Audis, all wanting parks to fall in love in, all wanting dumplings doesn't work, then the world is truly doomed. It is at critical mass. You can't solve this but you can get involved. (Goodwin, R., 2011, Rare Earth StudioLAB brief)

Students from DHU Environmental Design Department worked in collaboration with COFA students to respond to an open brief encouraging them to explore the city as a laboratory for producing work at a scale of their choice. The content produced daily was tagged and uploaded to Flickr according to the tagging schema specified in the brief. Typically the works are filmic, sculptural, architectural, or performative in nature, with some including graphic or audio elements.

Shanghai's creative industries were involved through a diverse range of lectures, site visits, workshops and presentations. Areas of practice covered in these encounters included urban farming (Good to China), maker-culture (Xinchejian, Shanghai's Hackerspace), design thinking and social innovation (IDEO), collaboration and co-working (Xindanwei), interactive digital art (aaajiao), and local design practices (Bee or Wasp).

4. Creating spaces for shared vision

Asia's re-emergence in the global economic, political and cultural landscape is creating an urgent need for culturally based education for both Asian and Western students entering the networked world of work (Buchanan, 2004). However, opportunities for students from 'West' and non-West to engage in deconstructing cultural difference are rare. Language is, unsurprisingly, a significant challenge - but not one that stops collaboration from occurring. C8 projects provide students with translation support although many students do not see language as a constraint. Even where participants in a community are bilingual the specific meanings of words may be unclear (Cassell & Tver-

⁵ The 2010 Census recorded Shanghai Municipality had a population of 23,000,000 inhabitants.

⁶ The McKinsey Global Institute's report "Preparing for China's Urban Billion" (2009) forecasts there will be 8 megacities, 11 economic clusters of on average 60 million people each, and over 900 smaller cities in China by 2050.

sky, 2005). Luna, Peracchio and de Juan (2002) and De Groot (1992) argue that a psycholinguistic framework known as “the conceptual feature model” points to language as a cultural symbol whereby individuals use language to, “...express concepts and values embedded in culturally bound cognitive schemas”. In this model words in each language activate a series of conceptual features. Features activated by a word in one language may not correspond to schemas activated by the same word in literal translations – even where the recipients are bilingual.” Cognitive structures are therefore affected by cultural cues as well as language. In C8 conversational English has proved generally unproblematic due to the bi-lingual ability of many Chinese students but discipline specific communication and terminology along with the expression of abstract ideas was cited as a significant challenge. This has significant impacts on the potential for complexification of designed solutions.

Culturally specific expectations of learning environments and processes are also crucial considerations. Despite our best efforts to communicate clearly, collaboration between people from different cultures is often subject to communication breakdowns because our realities are comprised of differing norms, symbols, and representations reinforced through education (Snow 1993, Sussman 2000). Ostensibly, we have potential to occupy digital space together but there are complex challenges that can limit understanding. Digital environments diminish visual, auditory and environmental cues and therefore impact understanding, even amongst those of similar cultural backgrounds.

Despite rapid advances in information and communication technology (ICT) approaches to networked learning, relatively little is known about actual experience in the field using these technologies to facilitate communications between individuals and groups from different cultural backgrounds. (Mackie, Macfadyen, Reeder and Roche, 2002)

Students and faculty from Australia tend to use online space to converse, discuss ideas, respond to discussion points, and to develop their profiles. In contrast students and faculty from China describe digital studio spaces as “resources”, and engage them largely as a text for reference. Their ‘discourse’ online is sometimes limited, but their presence consistent. These differences are useful in revealing assumptions and stereotypical perspectives about how students will perceive and use online and offline spaces for learning and collaboration. Responses gathered correspond simultaneously, with evidence of resistance to dialogue on the part of Chinese students, and potential opportunities afforded in seeing drawings, photographs, video sketches, technologies and spaces themselves as boundary objects (Star & Griesemer, 1989) that might be used as collaborative tools.

5. Boundary objects as co-linguaging tools

Boundary objects are shared objects to talk about and to think with that are plastic enough to adapt to local needs and constraints of the several parties employing them, yet robust enough to maintain a common identity across sites (ibid, 1989). Marick (2003) cites Arias and Fischer (2000), in defining the circum-

stances where boundary objects may emerge. They assert that:

“Challenges facing communities of interest are found in building a shared understanding of the task at hand (which often does not exist upfront, but is evolved incrementally and collaboratively). Members of communities of interest need to learn to communicate with and learn from others who have a different perspective and perhaps a different vocabulary for describing their ideas...” (Marick, 2003:1)

RARE EARTH's brief encouraged sharing of experience through photographs and video sketching, Petcha Kutcha presentations, immersive networked space, and digital tools including Flickr to provide opportunities for identifying boundary objects that the different cultural groups might use to communicate in ways that reflected their multiple realities (McArthur, 2009). In particular the socialising role of the image, or photograph, as a boundary tool is evident. Eppler (2007) confirms the “crucial and multiple roles of images for collaboration, whether they are conceived as visual boundary objects, inscription devices, visual non-human agents, trading zones, epistemic objects, or simply collaborative graphics.” The power of the image includes a diverse and persuasive facility to focus the attention of a group, identify conflict or congruence, reveal implied knowledge and past experiences, highlight new or unfamiliar ways of seeing and being in the world, and to document.

Ellen Christiansen (2005) argues that boundary objects cannot be designed and that, “You can never predict use, hence designed structures must have an open end.” Eppler (ibid. 2007) describes our still rudimentary understandings of how images might facilitate shared understandings or form the basis for decision-making amongst different sociocultural groups. Even when framed as boundary objects we are, “are still far from rigorous advice on how to make sound use of images as knowledge-intensive communication catalysts.” (ibid. 2007) RARE EARTH's experimentation with image sharing via networked interactive technologies as a potential collaborative tool confirms this challenge. We usually consume images alongside text. The image itself is rarely the whole story. However, sharing images online introduces tags as units of language articulating concepts attached to an image potentially signifying intended meanings that can be interpreted and discussed by students. Sharing also introduces and amplifies disclosure to the studio interaction. This is significant because in Interpersonal Communication Theory disclosure establishes a basis for interaction and trust. Guo-Ming Chen (1989) acknowledges that between people from different cultures the act of disclosure carries a dual significance.

Self-disclosure is the individual's willingness to be open or to appropriately tell their counterparts things about themselves. It is one of the most important elements for the development of an interpersonal relationship. In addition, according to Bochner and Kelly (1974) and Parks (1976), self-disclosure is not only the way to reach communication competence, but also the way to achieve communication goals (Guo-Ming Chen, 1989:118-133)

We rarely collaborate successfully with those we do not trust. In Confucian Heritage Cultures interpersonal norms emphasise trust,

holding significant status as a foundation on which relationships are built (Kwang-Kuo Hwang, 2007). By manifesting Borges' declaration that, “the Other often turns out to be no other than the Self” (1984: 12), through the sharing of images describing our respective ontologies we transcend some constraints of language and culture mobilising social learning processes that challenge limiting perceptions of cultural ‘otherness’ and prejudice.

6. Cross-Cultural Interdisciplinary Collaboration

Much remains to be investigated but it is crucial that educators within creative disciplines collaboratively evolve pliant methodologies advocating sensitivity to divergent institutional expectations, language difference, culturally based assumptions about learning, and explore further the potential of IMP as open intercultural communication and collaborative tools. Integrating the IMP into the studioLAB provided a sophisticated open networked technology enabling a dynamic mediation and documentation of individual and collective creative processes. Additionally, the sharing of media allowed the actors to interactively curate the disclosure of aspects of their cultural background, life experience, their engagement with Shanghai as locals and visitors, and their encounter with the ‘other’ culture. This was successful to the extent that during the two week studio over 1400 images, video clips and audio files were selected, edited, tagged and uploaded to the database culminating in an exhibition featuring more printed images, sculptures and installations.

The open studio format used in RARE EARTH also revealed its potential to create problematic situations in terms of funding, government and commercial bureaucracy and the transport of communication technologies across international borders further highlighting the challenges that keep humans apart and not talking to each other. Other challenges were encountered in the dilemma of some students in evaluating and negotiating the relationships between their own practice and the studio apparatus that was presenting a bigger picture representing the collective work. This reveals that further consideration must be given to how immersive technologies might enable richer studio learning.

Although marked by contingent factors, it remains clear that the cultural immersion enabled by situated experiential studio learning creates unique circumstances where students and faculty inevitably confront troublesome knowledge and difficult threshold concepts⁷, together and individually, in what becomes symbiotic, liminal transformation space (Cousin, 2006; Meyer & Land, 2006). RARE EARTH offered students opportunities to think ‘beyond possibilities’ (Wood, 2012) to explore the implications of culture amid the emergence of complex network technologies, Asia's rapid urbanisation, and this century's reconfigured geopolitical relationships.

⁷ A threshold concept is integrative in that it exposes the hidden interrelatedness of phenomenon. Mastery of a threshold concept often allows the learner to make connections that were hitherto hidden from view. Threshold concepts are often irreversible and the student is unlikely to forget it once learned (Cousin, 2006)

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Making Space: the future places, tools and technologies for open Design

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Open design / Making / Spaces / Design tools

This paper discusses the emerging and enabling technologies of open design that have begun to have an impact on design practice; looking at the historic writings of Schumacher and Illich, and how the discourse around the tools, spaces and organising principles being trialed at the present might develop.

1. Introduction

Traditionally, industrial design has been viewed as a solely professional activity, practiced by a designer elite that produces products for public consumption. For most of the 20th century we believed new ideas and developments sprang forth from the individual creative talent of 'the boffin in the lab, the artist in the studio, or the inventor in the garage' [Leadbeater, 2007]. Collaborative design work was viewed with suspicion, yet there are moral and pragmatic arguments for not simply consulting end users in the design process, but elevating their status to that of co-designers [Carroll & Rosson, 2007]. Enabling the users of a product to influence its design seemingly makes good business sense, resulting in an increased demand for the product. However, the process of mass-manufacture that was historically used to produce such products, and the industrial design profession that it birthed, now appears to face a watershed.

Historical Context

The conditions required to establish a new design and manufacturing paradigm were identified over thirty years ago, notably in the economic writings of E.F. Schumacher and the social, political texts of Ivan Illich. Both discuss the need for science and technology to serve all humanity, citing specific conditions that both must fulfill. Schumacher, lists three main requirements for technology in this context [Page 21, 2011]:

Cheap enough so that they are accessible to virtually everyone;
Suitable for small-scale application; and compatible with man's need for creativity

Similarly, Illich talks about how scientific discoveries are to be treated, so they are beneficial to society as a whole, rather than serving monolithic, centralised, systems of power. Illich has a specific term for a society that utilises scientific breakthroughs and specific tools to 'enlarge the range of each person's competence, control, and initiative.' [page 12]; Illich uses the term *conviviality*, which is used in this case to refer to the use of tools (referring to institutions, systems, and physical machinery) that do not dehumanise a person. Illich highlights the different types of tools available to humanity, and how these relate to a person's work: 'There are tools which can be used normally for fully satisfying, imagi-

native, and independent work; others tend to be used primarily in activities best labeled as labour; and, finally, certain machines can only be operated' (page 46, 1973).

2. Open Design

The term "Open Design" appears to have first been coined by Dr. Sepehr Kiani in late 1998, and subsequently disseminated by the Open Design Foundation, a project developed at MIT. [Vallance, 2000]. Inspired by the Open Source Software movement, the foundation's mission was to "Promote an alternative method for designing and developing technology, based on the free exchange of comprehensive design information." [Opendesign.org, 2002]

Individual perspectives have shaped the open design philosophy since the original definition was developed. For Ronen Kadushin, one of the early exponents of open design in an Industrial Design context, the prerequisites for an Open Design project is CAD data and its translation into a physical product by CNC machines [Kadushin, 2010]. One of the richer definitions can be found in Katz, who cites the four freedoms as the key tenets for Open Design: "The freedom to use the design, including making items based on it, for any purpose... The freedom to study how the design works, and change it to make it do what you wish." [Katz, 2011]

It is no surprise that due to the inconsistency of the definition, a universal version is currently being developed through a project established by the Open Knowledge Foundation, building on the original work of the Open Design Foundation. [OKF, 2012]

Collaboration

One of the opportunities afforded by open design is the ability to co-design or co-create with other stakeholders; there-being strong moral and pragmatic reasons for including users in the design process. Co-design can produce compelling and innovative designs [Chamberlain & Roddis 2005, Swann 2011]; showing that the emancipation of the 'end user', where they can meaningfully contribute can result in good design outcomes. The use of design workshops, and collaborative tools are well documented, but there have also been projects that have sought to give the user increased influence over the process of product conception. In 2006, the Automake project [Atkinson, et al 2006] provided people visiting an exhibition access to software with prescribed parameters, some of which could be altered, generating unique products.

Since Automake there have been further examples of user-created objects through software. Recently, during MOST Salone at the 2012 Milan Furniture Fair Digital Forming, a software development company, invited the public to "Co-design with Tom Dixon"

(Digital Forming, 2012). This software enabled users to alter the complexity and geometry of an existing design for a Tom Dixon lamp, using a series of sliders, and 3D print their own; to be delivered before they arrive home from the fair (Etherington, 2012). As stated by Parsons, who cited an earlier version of the Digital Forming software in the article "Tooling Up the Layman", and contrary to the company's invitation, "The user is simply choosing from among the many possible combinations of slider positions dictated by the team." (Parsons, 2009).

These two projects are more akin to "mass customisation", which allows for consumers to arrange pre-described modules into a new product specification, using online 'toolkits for user innovation and design' (Franke & Piller, 2004), as opposed to a concurrent co-creation activity between attendee and designer. Again, Parsons (2009) describes the ideal outcome of the process of co-creation, as one that challenges the wisdom of the professional. If open design is to continue to question the status quo of the design industry then "designers must move beyond their egos, creating enabling systems, processes and features for user adaptation and improvement." (Cousins, 2012), rather than provide customisation software thinly disguised as a co-creative experience. One should be wary of what could be viewed as a more traditional, hierarchical design model subverting or diluting a progressive, future-facing paradigm.

3. Tools, Places and Technology

Tools

Spaces for online collaboration would seem essential to make the best use of the opportunities afforded by open design, supported by the power of the internet. The real-time editing of capability of Google Documents is a powerful online tool, and a similar process for the creation of CAD files could be similarly revolutionary.

Sketchup is a software package used to create and manipulate 3D geometries, which can be outputted to a 3D printer. Sketchup has gained popularity through the maker and open design movement, as it is free and relatively intuitive. By combining the power of live-editing CAD data, with a VOIP technology protocol, collaborators could see and speak to each other whilst developing their co-created project. Should individual collaborators possess a 3D printer, design iterations could be physically tested and critiqued through a networked and collaborative open design studio.

Places

As Makerbot founder, Bre Pettis, observes "Online collaboration can only get you so far. Sometimes you have to get together in real life to make things happen." Should you not possess your own personal 3D printer, there are still physical spaces where you can be involved in open design and digital fabrication. Fab labs are one of a number of spaces for physical making that have appeared over the past decade, others include Makerspaces, Hackerspaces and Tech Shop. Fab labs evolved into an outreach project from a multi-million

dollar research project aimed at producing molecular assemblers that could make almost anything, at the Massachusetts Institute of Technology (MIT). The fab Lab visited community groups and schools across inner city Boston, educating the public on making using digital fabrication tools.

A fab lab consists of around \$50,000 dollars of equipment, including a laser cutter, CNC milling machine and CNC router, amongst other tools, supplemented by an inventory of electronics for developing programmable interfaces and instruments. "Activities in fab labs range from technological empowerment to peer-to-peer project-based technical training to local problem-solving to small-scale high-tech business incubation to grass-roots research." (CBA, 2007)

It should come as no surprise, with its egalitarian outlook, affinity for peer-to-peer learning and use of open-source software, that fab labs have gained popularity with the open design movement. (Menchenelli, 2012) But as technology evolves and our relationship with it develops, one criticism leveled at the labs is that they don't go far enough with the technology that they house. Nick Pelling, a UK-based technologist and entrepreneur believes that for fab labs to seed new approaches to manufacturing they need "proper kit" which includes "an EOS direct metal laser-sintering system, a 3-axis computer controlled mill, a decent laser cutter, and so forth." (Pelling, 2011)

Design researchers at Massey University, in New Zealand, propose a similar concept in their "Advanced Fab Lab", where the network is as important as the fabrication tools at its disposal. The advanced fab lab would see the collusion of expertise from engineering and design, partnered with industry, and would become a hub for innovation, product development and new knowledge, developing applied-research for the benefit of the nation (fig. 1). By facilitating multi-disciplinary and transdisciplinary practice across a range of ages and cultures, it is hoped that innovative co-creative practice can be enabled and collaborative relationships between, what is commonly viewed as the "amateur" and "professional", fostered in a physical space. Troxler and Wolf would much more closely relate this to their "fab lab innovation ecology" put forward in 2010.

Technologies

Charles Hull first coined the term Stereolithography in his 1986 patent entitled "Apparatus for Production of Three-Dimensional Objects by Stereolithography". This process horizontally sliced a 3D computer model into layers which were traced by a laser in a resin bath, which cured the corresponding resin layers, from the bottom up, creating a physical 3D version of the digital file, with no tooling set-up. 3D Systems, the company which Hull subsequently founded, is the leader in this area, although other companies followed suit with technologies that achieved similar results, including Fused Deposition Modeling (FDM), Selective Laser Sintering (SLS) and other processes akin to inkjet printing. Initially, processes that we now generically call 3D printing, were prohibitively expensive and the territory of high-end en-

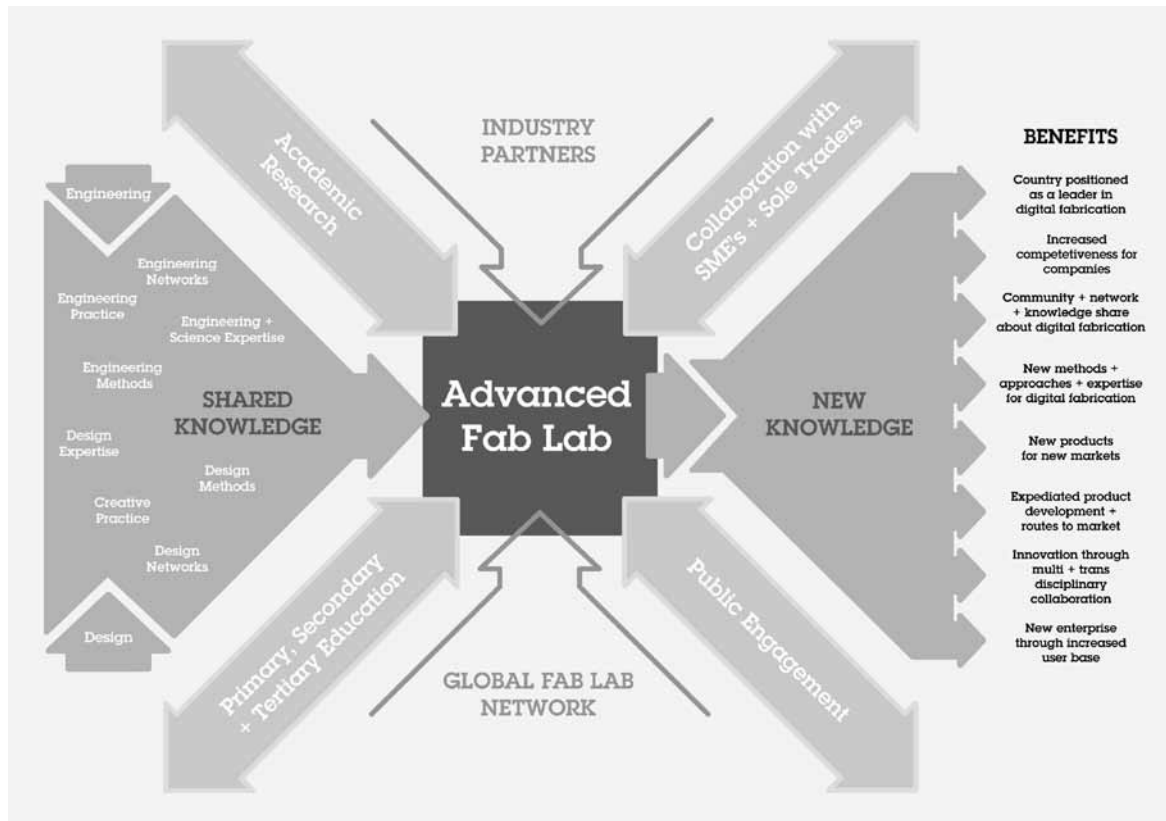


Figure 1. The Advanced Fab Lab Network [By C. Jackson & R. Adank, Massey University, 2012]

gineering and research and development firms. This changed in 2004 when Dr. Adrian Bowyer developed the RepRap 3D printer (Bradshaw, et al 2010). By designing an open source, self-replicating machine (which is something of a misnomer, as many of the structural elements and electronic components can't currently be produced by the machine itself), the net effect was a reduction in the cost barrier and increased accessibility to early adopters. Numerous companies, such as Makerbot (Fig. 2) and Ultimaker, have built upon the RepRap 3D platform, quickening both the pace of innovation, and reductions in retail price, to the point that previous DIY, self-assembly 3D printers now come pre-assembled and ready for use.

But just as there is a perspective that fab labs don't go far enough in their use of technology, a similar critique could be focused towards the development of low-cost 3D printers. All of the low cost 3D printers currently on the market use FDM technology, which was originally prototyped using a hot-melt glue gun on wax paper. Although some of these machines can achieve a resolution comparable to many industrial standard machines, the output still retains a relatively low-fidelity appearance with questionable durability (Additive3d, 2012).

This recently changed with a number of DIY resin printers, such as the Veloso, that attain a high level of resolution. It remains to be seen if these low-cost printers will evolve into additive manufacturing machines capable of production parts in other mate-

rials. Although this would appear to be a natural progression, there are many patents that protect such technology, and many companies, such as EOS, who are willing to use them (Fabbaloo, 2012). As we witness the increasing popularity of low cost domestic 3D printers, we may also witness an increase in litigation by companies such as Stratasys and 3D Systems, even for FDM technologies that have previously gone under the radar due to their relatively low market share. Should these convivial tools succumb to the pressures of capitalism and intellectual property law, this would present a considerable setback for the open design movement.

4. Conclusion

When prompted in a recent interview to comment on the latest trends or movements to emerge out of the 2012 Milan Furniture Fair, Joseph Grima, Editor-in-Chief at Domus Magazine responded with "the era of open design" (Etherington, 2012).

The overwhelming feeling from the world's biggest celebration of design was a celebration of making. Tom Dixon imported a 62 ton Trumpf metal pressing machine, digitally fabricating a collection of metal products, with signed versions given away (Etherington, 2012).

Although it is notable that the strategies and technologies associated with open design appear prevalent at the

Salone del Mobile, one must ask if the home of salubrious product launches is the right venue to promote its antithesis. If Grima's observation that the ideas of the maker movement have filtered up through the maker faire to a design audience, then maybe the accumulated knowledge of the design disciplines should be reciprocated into the maker environment, through the places and spaces of open design.

For open design to not appear as an esoteric and frivolous blip on the design history radar, the outcomes of such projects need to be functional, meaningful and engaging to the wider public. In many cases this means moving beyond the limited capabilities offered by the conventional low cost 3D printers and laser-cutters, and accessing additive manufacturing tools to produce increasingly sophisticated results, enabled and driven by transdisciplinary expertise.

Maybe it is the design process that is the most convivial tool of all, and it is open design that presents the best opportunity, not only to upskill the layman [Parsons, 2009], but to enrich human culture with the ability to engage in the 'fully satisfying, imaginative, and independent work' proposed by Illich [Illich, 1973. p46] and facilitate the Industrial Revolution 2.0 that Swengley, and many others, have promised.

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Designing through the loop: programming as a tool for aesthetic creation in the field of graphic design

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Graphic design / Programming / New media / Digital aesthetics

This paper will discuss the advent of programming and the creation of software as a methodology in graphic design. This will be achieved through the exploration of three main areas of interest: the history of these practices, the tools, methodologies and concepts necessary to understand this type of work, and a critical examination of current work related to this field.

1. History

The Work of Karl Gerstner

While the ideas and methodologies utilized by hybrid designers/programmers have a deep relationship to the advent of the personal computer and the field of computer science, many of their conceptual ideas and approaches existed before the computer became commonplace in the field of graphic design. An example of this is the work of Swiss designer, Karl Gerstner. Gerstner's methodologies relied on the creation of systems and rules that that would be executed manually. The result was a process very similar to computer programming where the programmer establishes certain rules, creates a certain system and then observes how the system behaves. An example of this type of work is "Carro 64". Gerstner's writes: "I selected a simple, coherent structure of 4 rows, each with 16 gradated squares which could be changed, or set in movement, according to simple rules. The consequence of these abstract considerations was a concrete image: carro 64" (Gerstner 2007: 110). This approach to making visual work is not unlike a piece of conceptual art, where the artist surrenders control of the piece emphasizing that is the concept that is actually at play. Gerstner emphasizes the system and its rules as the element of primary importance. This approach is a precursor to more recent intersections of design and programming. These are successful when the code carries and communicates underlying ideas and concepts. The final piece is a byproduct of the system and it's most important function is to show its underlying system and the concept behind it.

Postscript

In the 1980's Adobe Systems started developing a computer language designed specifically for digital printing.

The Postscript Language is a simple interpretive programming language with powerful graphics capabilities. Its primary application is to describe the appearance of text, graphical shapes, and sampled images on printed or displayed pages, according to the Adobe imaging model. (Adobe Systems Incorporated, 1999: 1)

The introduction of the Postscript language made available for the first time the computational medium in a way that was fairly simple and visual. While Postscript was intended mostly as a means for turnkey software programs like Adobe Illustrator to communicate with printers (and ultimately the computer displays) a small number of designers took on the challenge of working with the language directly. The resulting work, concept and processes were quite different to the work achieved by designers using GUI-based (Graphical User Interface-based) programs.

The Design of John Maeda

An example of this type of work is the designer/programmer John Maeda. Maeda would push the limits of the marriage between graphic design and computer science. Instead of using pen and paper, or canned program and laserwriter, he created software to produce his own work. For example, in a poster designed for the Japanese type foundry, Morisawa (Maeda 2000: 217), Maeda used the language of repetition to make his poster. The piece shows a 'loop' in which this particular sign (the logo for this Japanese company) is repeated continually, but the number of instances displayed per line recurrently increases. The result is a mesmerizing pattern, informed by a very simple concept conceived by the designer and executed by a machine. In this particular instance, the computer becomes the agent in charge of rendering the rules established by the designer. The role of the designer lays in creating interesting rules that are conceptually and visually engaging, while effectively communicating the intended message.

Design by Numbers

In addition to his own work, Maeda made another significant contribution to field with the creation of DBN, an acronym for "Design by Numbers". DBN is a "programming system available on the Web that can be freely downloaded to run directly within any Java-enabled Web browser" (Maeda 2001: 13). DBN was designed as a programming language intended for people who do not know how to program. More specifically, it was intended for designers and artists, so they could explore the computational medium more deeply by creating their own software. Maeda states that in Design by Numbers: "I will introduce the concept of computer programming in a language designed to engage you visually. By acquiring the skills necessary to write computer programs that are themselves visual expressions, you will come to appreciate the computer's unique role in the future of arts and design" (Maeda 2001: 13). This might have been the first attempt to create a programming language specifically for designers and artists, instead of for engineers and mathematicians. Its commands are specifically created to speak the language of the

visual form maker. While typical programming languages deal mostly with the processing of text and numerical information, this language deals primarily with images. For example, while in typical programming languages one can calculate the distance between two points with a simple mathematical function ($c^2 = (x_2 - x_1)^2 + (y_2 - y_1)^2$), it would prove much more difficult to plot these points out and draw a line between them. This second type of function would be much more relevant to a graphic designer and this is exactly the sort of function that DBN attempts to do. To draw a line in DBN you would write "line 20 50 70 90" and a line would be drawn between 20, 70 (horizontal and vertical position respectively) and 50, 90. A few years later, as part of the Aesthetics and Computation Group at the MIT Media Lab, a new programming language was built that furthered the ideas of DBN and extended DBN's limited functionality for more advanced applications. This software was called Processing. It is described, "is a text programming language specifically designed to generate and modify images" (pg 1, Reas and Fry). The creation of these programming languages has promoted the use of these methodologies with a new generation of designers. This programming language has already been used in a vast of array of application such as print,

2. Tools, Methods and Concepts

An important thing to understand about the methodology of designing through programming is the necessity of understanding certain digital tools and concepts that are essential to the work created through these means. In this section, I intend to show some examples using the programming language Processing. Processing is perhaps the most popular programming language used by graphic designers today. Currently, there are many other languages in which these ideas are embedded into their design. Programming languages such as Max, Pure Data and vvvv are also popular within the arts (Reas, McWillinad & LUST 2010: 19).

When beginning a project in the Processing environment, the first thing one would typically do is 'set up' (through the setup function) the sketch (the name typically given to a piece created under this Programming language). The size of the space will be 400 by 400 pixels and its established through the size() function. One can also 'setup' the background, color of a stroke and the default fill color of shapes.

```
void setup(){  
  
    size(400,400);  
  
    background(255);  
  
    stroke(0);  
  
    noFill();  
  
}
```

The simplicity of this language along with its native support of visual elements makes it optimal for visual artists and designers. With this programming language one might, for example, draw a circle. This might be achieved the following way:

```
void draw(){  
  
    ellipse(width/2, height/2, width, height);  
  
}
```

The previous code would make a circle the size of the sketch (fig 1). This is done by including the 'ellipse' function in the 'draw()' function. The first two variables are the horizontal and vertical positions of its center. The next two variables correspond the height and the width of the circle, which in this case is the same width and height of the spaces established for the piece.

Initially this might seem very simple and limited, but when this language is combined with concepts native to computer programming, the possibilities are endless. Let's take the example of a 'for' statement. A 'for' statement executes a certain action a certain number of times. It can repeat an action endlessly. To illustrate this, I will extend the previous example by adding a 'for' statement to my piece.

```
void draw(){  
  
    for(int i = 100; i > 0; i--){  
  
        ellipse(height/2, width/2,i*4,i*4);  
  
    }  
  
}
```

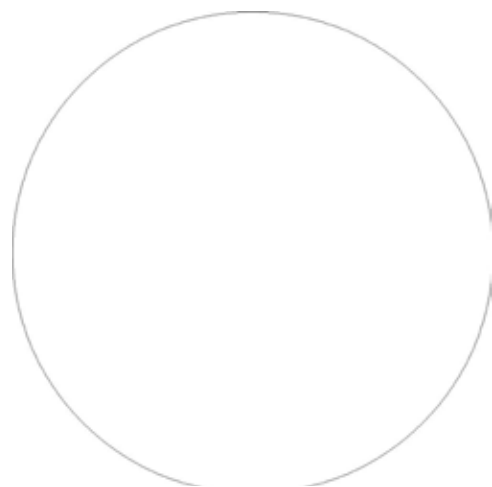


Figure 1. Circle generated with the ellipse() function (photo by the author).

The following example (fig. 2) establishes a variable (i) that continually diminishes from 100 to 0 to form 100 perfect circles on top of each other. The same variable (i) that guides the 'for' statement also determines the size of the circle. They are both perfectly synchronized. The number of occurrences of a given instance also determines the size of the circle. Their proximity and quantity establish a sense of space that did not exist before, precisely because of that continuous repetition. The concept of a 'variable' is essential to all computer programming. When establishing a variable, the programmer can change many aspects of a piece (in this case the size of the circle) instantly. Through variables, many different relationships can also be established within the piece.

While this particular example is useful to explore some of the basic concepts in the interaction between design and programming, it fails in the degree of participation the example expects of the computer. A. Michel Noll views the computer as "an intellectual and active creative partner that, when fully exploited, could be used to produce wholly new art forms and possibly new aesthetic experiences." (Reas, McWillinad & LUST 2010: 25). How can we make the computer an "intellectual and active creative partner"? In order for that to happen the computer must acquire an increased agency in the piece. For example, in the previous example the positioning of the circles was articulated by the programmer and was consistently in the same position, but what would happen if the computer positioned the circles? In the next example (fig. 3), a randomly generated number that deviates 15 pixels from the center of the image determines the X and Y positioning of the circles. The center of the image is determined by 'width/2' and 'height/2'. The scale of deviation is indicated by the 'r' variable.

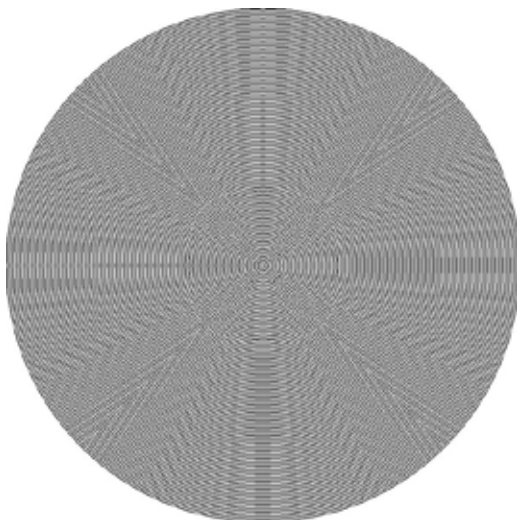


Figure 2. Series of circles created with a 'for' statement (photo by the author).

```
void draw(){
    int r = 15;
    for(int i = 100; i > 0; i--){
        ellipse(random(width/2 - r,width/2 + r),
            random(height/2 - r,height/2 + r),i*4,i*4);
    }
}
```

The computer (although in a very simple way) begins to have a voice in the final piece. It begins to be a co-creator of the piece, instead of merely a "time saver".

3. Examination of Work

This next section of the paper intends to provide a critical examination of some recent work in which some of these methodologies, concepts and tools have been used with success. I intend to show projects in which the computer not only functions as a tool for automation, but also as a creative partner. In these projects the computer plays a vital role in executing decisions with respect to how this piece will look like, instead of just accelerating the design process.

Identity for the MIT Media Lab

In creating the identity for the MIT Media Lab (fig. 4), the designers made a visual algorithm rather than a static logo or identity. This algorithm had certain rules that determined its visual behavior. The designers explained that:



Figure 3. Series of circles with a varying center (photo by the author).

“The logo is based on a visual system, an algorithm that produces a unique logo for each person, for faculty, staff and students. Each person can claim and own an individual shape and can use it on their business card a personal website” [“MIT Media Lab Identity”, 2011]

The role of the designer in this type of situation is not necessarily the creation of a visual outcome, but rather, the establishment of rules and the programming of systems that become autonomous from the designer. In this piece, the computer becomes a creative partner in charge of design decisions. Aspects such as the positioning of the black squares, the direction of the corresponding shapes and the color of these shapes are determined by the computer in accordance to the rules established by the designer.

The value of this type of systems comes from their inherently dynamic character. Typically, the design of a visual identity consists of static imagery that is not intended to change. In this case, the visual identity is constantly invigorated and is always different. It is constantly re-computed and regenerated. In this way, it is more related to its inherently digital nature (and, of course, to the computational emphasis of the Media Lab itself).

Beowulf Typeface

Beowulf is a typeface designed by Dutch type designers Erik van Blokland and Just van Rossum (also known as LettError). The typeface is programmed in such a way that every time a letter is typed, the letter is displayed differently. In other words, the appearance of the letter is randomly generated.

“Every Beowulf character will be different each time it is printed - for instance, every B in a row of B's will be different. Moreover, each time you print out that row of B's, they will all be different to previous printouts” (Kidd 1990: 33)

Again, we find how the computer becomes an essential part of the design process. The computer takes decisions about what the final outcome will be, following an established system. Here, the use of programming is utilized to create design that is inherently dynamic. Every string of letters printed with this typeface is constantly re-invigorated by its random character. It is of

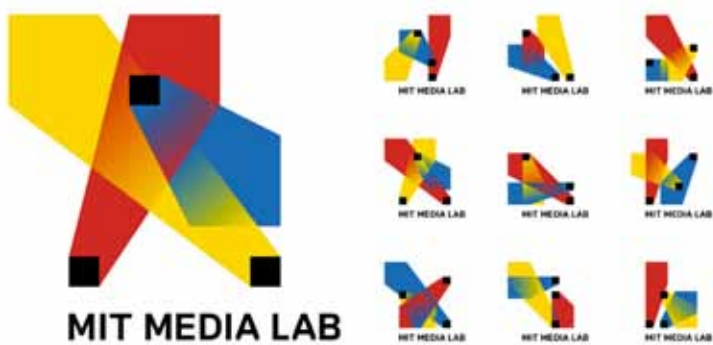


Figure 4. Example of the MIT Media Lab identity with several outputs generated by its algorithm



Figure 5. One of the outputs generated by the software created for this piece (work of the author).



Figure 6. Another output generated by the software created for this piece with a different color, rotation angles and positioning. (work of the author).

importance to note how this concept is related to programming and the use of the computational medium. Kidd explains that "With their typeface Beowulf (1991), they were the first designers to use code to randomize typography" (1990:33). We might say that something similar happens with typewriters or handwriting where variety is constantly introduced. But this variant is based on errors and, it does not follow specific rules and relies on human ideas of randomness, which tend to be quite limited.

Cheyenne Rivers Lecture Poster

The following poster design is an example of open rules applied to the creation of a poster. In this case, open rules refer to rules in which there multiple outcomes are possible. In this example a system was created in which open rules were programmed into the piece. The computer randomly determines elements such as positioning, movement and starting color. Since the rules are open, the system has multiple outputs (fig. 5 and fig. 6). The designer, who establishes the rules, programs the behavior of the piece. But, the final result relies on the computer interpreting these rules without the designer's control. The idea of 'process' begins to regain importance in what the final outcomes will be. If only a certain number of the outcomes are needed for a particular purpose, it is up to the designer to choose his preferred solution from all the different outputs created by the system. The judgment value of the designer remains important.

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Sewn or Simulated: transformational fashion realizations

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Fashion design / 3D garment simulation / Multidisciplinary research / Historic fashion / Design education

This paper describes developments in a fashion design program which, through the embrace of progressive technology and the interdisciplinary research opportunities afforded by a university venue, is addressing new practices for fashion design. In particular, this paper considers advanced 3D technology for production of the physically-based simulation of clothing being incorporated into the fashion design curriculum.

1. A Brief History of Fashion Design Education

The study of design in the United States was instituted in the latter half of the 19th century when, in the wake of the 1876 Centennial Exposition in Philadelphia, financiers and philanthropists began to think about how education could be constructed to improve the quality of manufactured goods by including the practical study of the art and craft of design in vocational training. In the early Schools of Domestic Science and Arts women were trained in the skills necessary to obtain jobs in the needle trades, learning both traditional design and craft techniques, and the machine made processes into which some of these hand techniques were being translated and rethought. The Fashion Program of Drexel University began in such a milieu in 1897. Philadelphia philanthropist Anthony J. Drexel envisioned the Drexel Institute of Art, Science, and Industry as an institution of higher learning uniquely suited to the needs of a rapidly growing industrial society. Son of an artist, he understood the influence of both fine and design arts with the study of science and industry in education. (Rottenberg, 1990). Collections of art, craft and dress were purchased in Europe and, when Drexel opened in 1892, these examples were on display and used as prototypes to inspire the students in their designs. In 1894, the Drexel Department of Domestic Science and Arts offered three specialized programs: domestic science, cookery, and dressmaking and millinery, the latter to teach young, mostly immigrant, women the skills to populate the growing American garment industry. By the early 20th century advances in sewing, cutting and finishing technology brought mass production to the fashion industry. The Drexel Institute continued integrating the practical requirements of industry into its curriculum and in 1936 became the Drexel Institute of Technology.

In the second half of the 20th century Computer Aided Design and Manufacturing (CAD/ CAM) software migrated out of research laboratories and into design studios and the merchandising, manufacturing and distributing processes of the fashion industry. Drexel responded to the industry's need for designers,

patternmakers, drapers, sample makers, and merchandisers educated in both traditional and computer aided solutions for fashion production. In the curriculum, greater emphasis was given to the design of fashion along with the craft of fashion production. Donations from designers and benefactors enabled the Historic Costume Collection to continue to grow to be one of the finest fashion teaching collections in the United States. The Collection is used internationally by students and scholars for research on color, silhouette, embellishment, construction and theme. A.J. Drexel's vision of an education inspired by art and kept relevant by current technology and industry demands continues to drive the Fashion program.

2. Computer Aided fashion Design

A review in 1990 by Willard Van De Bogart of Computer Aided Design (CAD) software available to the fashion industry determined that designers were "finding a more predominant role in all decision making within the garment industry in terms of what software best feels like a creative tool in order to design clothes." (Bogart, 1990) Software programs like SnapFashion, with its suggested 5 MB of RAM and an 80 MB Hard Drive, provided a library of fashion design component elements which could be "snapped" together to produce new designs with pattern accuracy and speed. For example, if a particular dress silhouette did well in one season, the sleeves, neckline, length, pocket detail and fittings could be interchanged with elements retrieved from the software's library by the designer or even the merchandiser. Print, woven, and knit design was particularly adaptable to CAD processes. PrimaVision and Pointcarre software provided the ability to accurately visualize a textile design before it was manufactured. Additionally, software was being developed to streamline the patternmaking process. Bogart "observed the trends of interchangeability, bundled software, ease of use, and innovative design tools as to having a competitive edge in being able to accurately visualize the garment before it goes to manufacturing, and then to market" and predicted that "3D (simulation) will be the norm rather than the exception." (Bogart, 1990)

The "Fast Fashion" revolution is driving many companies to produce new designs every two months. Recent improvements in artificial intelligence and 3D simulation help the designer to more quickly translate runway and street style into this month's trendy "must have." Candace Lombardi observes in her review *CAD is the New Black*, "While pin-bearing seamstresses and mannequins are still used for couture, the maker of clothing bought off the rack is more likely a piece of software." Lectra and Gerber offer programs for design, 3D prototyping, pattern making, size grading, nesting of the pattern pieces to maximize use of materials,

and integration with automated textile-cutting machines - software tailored for the ever increasing globalization of the fashion industry. She notes the addition, to these comprehensive fashion software systems, of modules which let the designer visualize the fit and movement of a design in 3D and then translate it into 2D patterns. [2007]

In a comparison of the efficacy of CAD versus manual patternmaking, Ondogan and Erdogan found CAD to be superior in grading, marker making and economy of fabric usage, a prime determiner in garment costing. They found the success of the CAD process was governed by matching the right system to the company's need to train operators to carry out their functions in the fastest and the most efficient way and recommended that universities include this training as part of their curriculum. [2006] Drexel adapted to this revolution in the designer's toolbox in 1993 with the MKS system, followed by Pointcarre textile design and PAD patternmaking systems. Courses in technical drawing, product development and fashion presentation were reconstructed with an emphasis on Illustrator and Photoshop and their use in design and manufacturing in the fashion industry. In 2000 an online archive for selected garments from the Drexel Historic Costume Collection was created to be used as a research tool in the classroom and by the international community of fashion scholars. By manipulating the Quicktime, 3D panoramas of the garments, users can rotate the garment in multiple views and zoom in on details of construction and embellishment. <http://digimuse.cis.drexel.edu>

3. The Digital Clothing Suite

Advances in complex 3D surface modeling for CAD software has enabled apparel specific body scanning and 3D simulation to be introduced to the apparel industry as an innovative means of rapid prototyping. In 2009 the Digital Clothing Suite (DCS), was demonstrated to Drexel Fashion Design faculty by faculty from the Department of Electrical and Computer Engineering, Seoul National University. The quality of the draping of fabric in simulation was better than any other 3D software previously reviewed. A collaboration to introduce the software into the Drexel curriculum was begun.

The advanced 3D technology for production of the physically-based simulation of clothing used in the curriculum is readily adaptable to any body type and motion and can construct complex ensembles and reproduce their dynamic movements with a striking degree of realism. For the draping simulation, inside the DCS, cloth is represented by a set of particles, the physical simulation of which is governed by a differential equation based on Newtonian mechanics:

$$\ddot{\mathbf{x}} = \mathbf{M}^{-1} \left(-\frac{\partial E}{\partial \mathbf{x}} + \mathbf{F}_{ext} \right)$$

where \mathbf{x} is the position vector of the particles, E represents the internal energy associated with the stretch, shear, bending de-



Figure 1. The Drexel Digital Museum Project.

formations, M is the mass matrix, and F_{ext} is the external forces such as the gravity and air drag.

The primary physical attributes of the fabric that influence the formulation of the differential equation are the deformation characteristics the fabric exhibits in stretch, shear, and bending. Since the equation tends to be stiff in the case of cloth, numerical instability can occur. Numerical techniques such as the implicit integration method are employed to overcome such difficulties. Even with implicit integration methods, however, wrinkles still were causing instabilities. Finding that the problem results from what is called post-buckling instability rather than the numerical instability, the DCS developers invented the immediate buckling model, a physical model which assumes that cloth immediately starts to buckle rather than compress when a compressive force is applied in in-plane direction, which turns out to solve the problem quite effectively. It is this research that produces the high quality draping of multiple types of fabric construction and fiber content of the DCS.

4. CAD in the Fashion Design Classroom

Along with quality of the resource, success of technology in the classroom can be determined by how and when software is introduced in the classroom. Another key concern is how the software integrates with software and traditional skills in which the student has been previously instructed. The DCS is a comprehensive garment development system which includes patternmaking, textile design, material properties determination and simulation. Confidence brought to the student by starting with system function basics helps sustain creativity in the design process by not overwhelming the student with the new tool. In the Drexel class discussed, all students had already taken the series of traditional courses: Construction Skills, Flat Patternmaking and Draping. Three of the students additionally had previous CAD patternmaking with PAD software.

To accustom them to the basic functions, pattern drafting, panel

creation, seaming, textile import and manipulation, body specification and 3D simulation, the students were provided with a sample dress pattern. They used this sample to practice seaming, panel positioning and static and dynamic simulation. They then created textile designs using Photoshop and Color Matters, a textile color reduction, color ways and repeat manager software. The designs were readily imported into the DCS as it supports a variety of standard file formats. They were able to repeat, place, scale, and rotate their prints in DCS. The next step was to learn the patternmaking functions of DCS. DCS provides the designer with the ability to create basic pattern slopers in any size range. Measurement specifications are entered into the automatic sloper fields and the custom sloper is generated by DCS. As of this writing, students were well on their way, working from their own fashion design illustrations, to making the patterns for their designs in DCS. The finished work will be shown in the conference presentation. Examples of fully finished designs created in DCS can be seen in the following section.

5. The Digital Clothing Forum

Noting that digital clothing technology can be very important in clothing production, purchase, and education in the near future, a group of professors and fashion practitioners in South Korea started a monthly meeting called the Digital Clothing Forum. The forum is a venue to present/discuss recent developments in digital clothing and a means to disseminate the technology to colleges and industry. One interesting activity initiated by the forum is the Digital Fashion Awards, an international competition for digitally generated clothing. The competition is open to students, faculty, and companies. The first Digital Fashion Awards ceremony, in which \$13,000 in prize money was awarded, was held in Seoul on April 28th, 2012. Participants were permitted to use any software, or combinations of software, to create a one minute video clip and stills of their simulation. A jury evaluated the submissions from the perspectives of creativity and completeness as a show. The forum expects that the award will contribute to increasing the number of people who are flu-



Figure 3. CAD Textile design and 3D Simulations, Jasmine Chandler.



Figure 2. CAD Textile design and 3D Simulations, Rebecca Porto.



Figure 5. 3D Simulation, Evening dress, Helena Rubenstein, c. 1930, simulation, Kathi Martin.

ent with the technology and also promoting the development of advanced technologies in digital clothing. In the submission below, Heekyung Chang and Chung Chin Chin, Graduate Students in Donghua University, Shanghai, were inspired by the chipaoh (rongpaoh), a traditional Chinese dress. They successfully interpreted it into a contemporary gown using an historic Chinese textile. The DCS also has potential value in illustrating historic dress. Fashion and Digital Media faculty and students at Drexel are currently working on a project to create 3D simulations from selected garments from the Drexel Historic Costume Collection. To fully appreciate a garment it must be seen on a moving body. However, historic dress is fragile and finite and to have it worn by a living person would stress and perhaps destroy the garment. With the DCS we can take measurement specifications from the historic dress, create a pattern for it in DCS, import textile files created from high resolution images and virtually recreate the historic

dress in motion in 3D simulation. Students can then learn the construction of the garment from the pattern and create design experiments inspired by the garment. The example below is a work in progress. We are using Maya software to construct a more accurate body and head. The 3D simulations, along with gowns from the Collection, are planned for an exhibit at the Winterthur Museum, Delaware, USA, the premier museum of the American history of decorative arts.

Our ultimate goal is to have movie quality simulation available to all with an internet connection. Chitarro and Corvaglia identify in most 3D simulation software trade-offs between fidelity and performance, "An ideal 3D garment simulation should be both very efficient (e.g., real-time animation) and high-fidelity (e.g., deformations of cloth caused by the shape of a specific human body, different behaviors determined by the materials of which the



Figure 4. 3D Simulations, Heekyung Chang and Chung Chin Chin.

garment is made).” [2003] DCS has a built in feature to create a video clip of the simulation. However the file size ranges between 50-100 MB, are too large for current use by the general public. Fidelity, performance, and memory compactness are all very important. Fortunately, technology is evolving rapidly to accommodate such needs. Rich technological options will be enjoyed by fashion in the not too distant future.

6. Conclusion

The focus of our research is twofold: to avail the fashion student with the best design tools; and to create the best resources of design inspiration and elucidation. Once created, the 3D artifact can be used for a variety of purposes in industry: internally, for the entire product development cycle; and externally, for promotion of the product. Used in the classroom/studio it has the potential to facilitate the emergence of inventive lines of inquiry and exploration that can seed new avenues of creative expression for fashion design. The material discussed in this paper, beyond that of the description of the software technology, is anecdotal, based on the authors’ practice, observation and reflection. New concepts about the relationship and intersection between design and technological innovation could benefit from empirical investigation of the area of interplay between computer graphics and design vision.

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The use of ceramics within the signage project in hostile and environmental protected areas: the Keller Peninsula Case

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Signage / Ceramics / Ecodesign / Sustainability

The research goal is to measure the suitability of ceramics as a material for manufacturing sign prototypes and support components of the signage system for the Comandante Ferraz Brazilian Antarctic Station, Brazil's main installment in the Antarctic region. The latter represents an environment with particular characteristics, having unique rules of occupation and material extraction and disposal, which demands a special approach when inserting any kind of foreign body to it.

1. Introduction

Environment protection has been one of the main concerns since the beginning of the Brazilian occupation in the Keller Peninsula, Antarctica. Considering the hostility of that region, the promotion of scientific researches depends entirely upon the installation of a basic structure which grants safety and the essential work conditions. Since its first activities year, in 1994, the increasing number of scientific activities conducted in Antarctica demanded consecutive expansion works of the Brazilian main installment, the Comandante Ferraz Brazilian Antarctic Station (EACF). Furthermore the number of station users is also growing due to the ascension of touristic activities (PROANTAR 2012), having direct influence on the density of traffic flow in that same region. Such scenario makes the organization of tracks and routes as well as the instruction of users become essential, when it comes to environmental protection, control over contingent remains production and people's safety.

The goal of this research consists in studying the performance of ceramics as an alternative material for the production of the Keller Peninsula Signage System's components, i.e. the region in which the EACF is located (fig. 1). The area features peculiar environmental characteristics of its own, and is regulated by special international and national protection standards for occupation, usage and disposal of material. As expected, this condition implicates in the need of an unique approach for the introduction of any element sort into the original landscape, pointing out ceramics as the most efficient and sustainable resource to produce the Keller Peninsula Signage System's constituents.

This is an opportunity to investigate new intelligent solutions for occupation with low environmental impact, especially during the reconstruction period of the main EACF installment, severely damaged during a firebreak in the 25th of February of 2012

(MARINHA, 2012). This event presents an opportunity to investigate the use of ceramics in projects designed for the Antarctic continent, in special at the signage level.

2. Theoretical Foundation

A great deal of terminologies is used to refer to signage systems, each one of them having distinct concepts. Amongst them are: *Señalética*, wayfinding and Environmental Graphic Design.

Joan Costa [1992, apud VELHO, 2007] uses the term *Señalética* to name the need of information or orientation caused and worsen by the contemporary mobility phenomena. Miller and Lewis [2000] define wayfinding as multiple processes that support the user in laying down the journey's starting point and destiny. Calori [2007] describes Environmental Graphic Design as the activity that involves a systematic and coherent development of graphic communication of information for a particular place within an artificial environment. The latter author also elicits the terminology "signage" as ready signs.

Within this article "signage" is employed as the description of a system with a uniform identity and sets its goals in educating, limiting and supporting traffic flow in the Keller Peninsula.



Figure 1. Preliminary Signage Studies of the Keller Peninsula, Antarctica. (Picture: ALVAREZ et al. 2005)

The Keller Peninsula Signage System emerges out of the necessity of finding solutions to minimize the environmental impact

on account of human traffic flow and to grant more safety to users of the EACF. The project begins by molding a prototype with ceramics which is to be installed near to the EACF. The prototype creation takes high wind speeds, low temperatures and maintenance challenges into account.

The Antarctic continent is known as the superlative territory (ALVAREZ 1995) because it is considered the most hostile, dried out and sterile region on surface of the planet.

Aiming at the protection of the Admiralty Bay's environment, localization of the Keller Peninsula, a management plan has been conceived which categorizes the defined place as an Antarctic special managed area (AAEG). The purpose of such plan is to minimize and even to avoid environmental impacts, strengthen support and cooperation amongst nations that operate actively at the bay and to spare important and historical characteristics of the original landscape. An AAEG ensures the planning and the coordination of activities in a specific area, keeping to the lowest potential interferences and encouraging cooperation amongst the Antarctic Treaty parties, aiming to minimize environmental impact above all (ALVAREZ, 2006). The management plan along with the Antarctic Treaty – most important legal instrument which regulates every event in that particular region (SCHUCH, 1994) – and the Madrid Protocol – the set of principals under which environmental protection in Antarctica is to be regulated – are clear evidences for the concern of protecting the Antarctic environment, which should be made an obligation to every project representing an interference into the environment at any level.

Regarding weather conditions, all research material sources make exclusive reference to only two different seasons – summer and winter – inferring that there are no intermediate phases, as commonly adopted in Brazil and many other countries. According to Setzer and Romão (2008) air streams that reach the EACF have different geographic origins, resulting in periods of higher and lower wind incidence, and a variation of warmer and colder periods in the year. For instance, the number of events a year with wind speed higher than 110 km/h dropped from 50 registered cases in 2004 to 17 in 2007; and the annual average temperature ranged from -0.8°C to -3.5°C in the transition to 2006, which was one of the warmest, to 2007, one of the coldest years already registered since the EACF.

Based on these data it is possible to comprehend the properties a material must have to endure the extreme features of the Antarctic environment. Amongst the properties, some are highlighted: resistance to corrosion (due to salt air); non-toxic (in case a signage component loosens up from the ground, it is not a hazard to the environment), durability and resistance (minor maintenance cares), flexibility for the shaping of prototypes (aerodynamic forms to resist the pressure by high wind speeds) and resistance to drastic temperature changes.

Ceramics has been chosen as the prototypes' manufacturing

material due to its high degree of elasticity (approx. 45.500kgf/mm²), property which grants the easy shaping of the prototype, doing away with industrial production dependency. Further, according to Ljungberg (2005), ceramics are adequate due to the fact that it is non-toxic, durable and resistant to corrosion. Anyhow it is fragile, its manufacturing demands high levels of electricity consumption and it has low resistance against impact.

3. Goal

The research's main goal is to verify the ceramics degree of adequacy as the basic material for the development of tracks and routes signage project in the Keller Peninsula, Antarctica.

4. Methodology

The methodology of tests management and suitability proofing of ceramics to the harsh Antarctic landscape conditions are split into four stages, bearing in mind that this study beholds the results of the stages I and II.

- Stage I: identification of the ceramics properties in regard to its resistance, review of literature resources on the Antarctic environment's specificities and identification of logistic specificities concerning the Antarctic Brazilian Program (PROANTAR);
- Stage II: information management (feasibility, environmental impact, maintenance, and suitability of logistics); Clay choice, project launching, prototype drafts, clay baking and finally manufacturing of the first prototype;
- Stage III: technical instructions, pieces manufacturing, assembling (tests and adjusts), disassembling, technical changes, strategy of logistics, impacts caused by the assembling of the pieces, human resources, availability of time and final results;
- Stage IV: final results evaluation.

5. Prototype manufacturing

5.1. Material

Three distinct types of clay were used within the prototypes' manufacturing process (fig. 2), being two of them from a local manual production. They are extracted from the Mulembá Valley in Vitória (ES), known as Clay Z and Clay S. The codes have been assigned because these clay types were extracted and cleaned by two people, named respectively, Zezinho and Sidina. The third clay type is terracotta with chamote, from the Pascoal company, produced in São Paulo (SP).

The two native clay types are baked up to 1200°C and present greater flexibility, making the shaping easier. Terracota is different from types previously mentioned because its material is



Figure 2. Clay S, Clay Z and Clay terracota chamote. 5.3 Preparação do protótipo de argila

made up of oven baked clay, which in addition to chamote, demands less water to make it ductile, given that chamote does not absorb water (PASCOAL, 2012). The drying up period is significantly shorter, as well as the baking period. Chamote increases mechanic resistance of the baked clay piece. The terracotta-chamote mixture can be baked up to 1240°C and gains a particular coloration, ranging from creamy colors to red tones. The coloration shows the proportion of iron oxide remaining within the material sample (VITTEL, 1986). Further it constitutes a suitable structure for the shaping of bigger pieces, especially important in the production of spheres and plates.

5.2. The preparation of the clay prototype

Two distinct techniques were employed during the prototypes' shaping process, i.e. 1. Shaping technique supported by a former plate, for the native clay types; 2. Production techniques with plates (FRICKE, 1981), for the *terracotta-chamote* mixture. The techniques mentioned before were chosen because they enable, in practical ways, the development of prototypes with aerodynamic forms, according to the necessities established by the Antarctic environment.

At this point is important to underpin that the shaping technique using former plates finds employment in the production of pieces which must have identical measures and shapes (FRICKE, 1981). Such acknowledgment is essential for this study considering the necessity of some basic components production for the signage project.

The shaping of *terracotta-chamote* prototypes was made using the production techniques with plates in which two equal thick wooden boards – precisely 18 mm – and a roll together are pressed against the clay material, giving form to the signage plates which will make up the signage structure. The water amount consumed in this process is based on the specifications by Atterberg (GRECO, 2012), i.e. the consistency limit, slightly higher than the malleability limit. Figure 3 shows each step of such process.

5.3. Clay prototype dry up

Due to the water loss the phenomenon of shrinkage takes place during the dry up period of solids, changing the sample's original measures. It happens simultaneously to the humidity transport, which depending upon the on the environmental conditions, the material's structure, and even the geometry of the plate, the dry up process can produce cracks, distortion of the shape and in the worst case break the material. In order to avoid such event the prototypes were covered up with newspaper, which slowed down the water loss phenomenon. The prototypes made with native clay and *terracotta-chamote* took respectively one and two weeks to be ready.

In the course of the experiment data on the prototype's weight and dimensions were collected before and after the dry up, noticing that the weighing was made on a mechanical precision weighing balance $\pm 0,1g$, mod. Tríplice 1610, Nwlab company. The results are displayed on chart 1.

Chart 1. Prototypes weight before and after the dry up process

	Clay Z	Clay S	Terracotta-chamote (lid)	Terracotta-chamote (body)
Weight before dry up	480 g	710 g	650 g	1130 g
Weight after dry up	440 g	680 g	615 g	1080 g

It is essential to understand the dry up process of each clay type, given that such information is indispensable for the calculation of the final prototype size.

5.4. Thermal analysis

The baking experiments were carried out using an electric oven, from the Etil company, by 1200°C temperature and 20 hours.

Technique supported by a former plate



Techniques with plates



Figure 3. Detailed summary of the prototype manufacturing. Starting from the top, left to right: 1. plaster former plate; 2. clay material is placed into the former plate; 3. width and surface is brushed up; 4. Wooden boards for the equal thick plates manufacturing; 5. Plates production; 6. width and surface brush up; 7. ready plates and lid production; 8. Joining the two plates resulting in an unfinished single piece; 9. Lid shaped cut plate.

6. Environmental impact

6.1. Water

A great amount of water is consumed in nearly every stage of the clay products manufacturing process. The preparation of the clay follows the Atterberg standards (GRECO, 2012), as previously described, whereas in the brush up phase water is exclusively needed to even the surface of the pieces.

Additionally to the role water plays in the preparation of the clay, it is also used to clean up tools and installments.

6.2. Electricity

On account of the baking stage, the clay preparation demands a great deal of electricity, in particular during the dry up and backing process. For the baking process an Etil electric oven was chosen, considering its special refractory bricks cover, which keeps the heat and optimizes the electricity consumption.

6.3. Toxic resources

Given that the prototypes are exclusively made with clay, with no

addition of enamel of any sort, the plates do not carry any toxic substance in its structure.

7. Logistics

Considering that such projects are usually related to governmental programs, its implementation depends much upon human resources and materials available within the institution, or from complex public bidding processes (ALVAREZ, 2003). In this context, it is essential to make use of clay types which provide clear product descriptions, for instance *terracotta* and *chamote*, making the public bidding process and acquisition easier.

The plates' storage strategy during the transportation is also a huge concern, observing the limited alternatives of shipping goods to the Antarctic continent: land transportation (trucks or similar), ship or aircraft (or both combined), helicopter or boat (or both combined) and eventually the human being. Within this context, each piece has to be wrapped and stored into anti-braking packaging, capable to resist the correspondent mean of transportation and temperature swings. The inside of the pack-

aging must not have empty spaces, avoiding impacts which could damage the pieces.

8. Final results evaluation and remarks

According to our findings, ceramics proves to be an adequate material in the manufacturing of the component for the Keller Peninsula Signage System. The installation of a prototype in that region is scheduled to November 2012 and the test period lasts one year. After that it will be possible to draw the final conclusions and/or work on necessary adjustments.

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History, Design and technology in the leather trade: case studies from India and Britain

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Design for glass: a study of the historical relationship of production with new social paradigms

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How to supply designers effectively with knowledge about accessibility and inclusion?

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Inclusive design / Universal design / Industry / Design activity / Users

The present paper analyses the flaws of current accessibility evaluation tools and techniques compared to the needs of industrial designers. This is part of an on-going research that investigates effective ways to supply project developers with knowledge about accessibility and inclusion. The outcomes based on empirical study conducted with industrial designers underline the need of supportive tools more integrated to design activity.

1. Introduction

Inclusive design is a philosophy that adopts the principle of designing to enhance accessibility and usability for a wider range of people, including the disabled and the elderly. Physical, sensorial and cognitive capabilities decrease with ageing process and thus, the understanding and the use of everyday products become a challenge. In fact, the ageing of population has emerged as a new issue for product development teams. As a result, during the last decades many methods have been developed to inform designers about accessibility and usability problems in new design concepts.

Despite the diversity of methods currently available (Hitchcock et al 2001; Marshall et al 2004; Macdonald et al 2006; VERITAS D4.1.3_v2, 2010; Clarkson et al. 2007) and the value of the information provided by them, the majority is underused in industrial context (Zitkus et al. 2011). In order to understand the design practice and the non-adoption of accessibility and usability evaluation-tools a study was carried out at three British design consultancies. A total of 14 industrial designers (product, packaging and graphic designers with an average of 10 years experience) were involved in the research described here. The methods selected to the study combined observations with interviews and feedback evaluations in which designers were presented back with the findings from the data analysis for their verification and feedback.

The data gathered followed a structured analysis proposed in grounded theory (Corbin and Strauss 1990). The interviews transcripts were added to observation data and then analysed, interpreted and classified into categories. The categories and sub-categories were separated and organized to structure the major themes under analysis. Diagrams were created from the data analysis as a representation media to be presented back to the designers and gather their feedback which was also categorized and analysed.

Techniques	Process integration	Interface	Results	Difficulty of integration
User trials / User observation	Early in the conceptual phase, through similar products, or later through rapid prototypes.	Observation of real users and/or get their feedback after the trial.	Inspiring. Re-assessing the product means to run trials again.	Sample selection, time and ethical issues. Designers have to know recurrent problems to prioritise changes.
Third-Age Suit / Age Explorer		Designers observe themselves with physical restrictions or different levels of restrictions.	Inspiring. Re-assessing the product means to wear the suit again.	Designers have to know the most recurrent problems to prioritise changes. Exclusion is not quantifiable.
Simulation Toolkit				
INCLUSIVE CAD	During the conceptual phase through CAD models.	Simulation of functional demand on lower limb muscles, hip and knee joints.	Results are graphical and interactive. The use of colours facilitates the understanding.	The simulation covers only a limited range of movements and tasks; therefore it is only applicable for a range of physical capabilities and products.
HADRIAN		Virtual interaction with user avatars.	Results are dependent on the accuracy of task performance.	Exclusion is limitedly quantifiable due the range of tasks & users' database.
VERITAS project			Exclusion would be quantifiable due to a broad anthropometric and capabilities database.	Designers have to know how to perform the task.
VICON project		Virtual simulation.		
Impairment Simulator	During the conceptual phase through new concept images.	Simulation of some of vision and hearing capability loss	Results are graphical and interactive.	Exclusion is limitedly quantifiable due to the focus on sensorial capabilities
Exclusion Calculator	Early in the concept phase, through task analyses.	Virtual interaction with a range of applicable tasks.		Designers have to know how the task is performed.

As this study is part of a research in progress, new data has been constantly added to old one and both are constantly scrutinised, interpreted and verified.

2. Available techniques to evaluate accessibility and usability in design process

A previous study explored and detailed the advantages and disadvantages of a range of tools and techniques currently available to evaluate accessibility and inclusivity (Zitkus et al. 2011). Among the techniques are participatory design, user trials, simulation suits, digital human modelling, virtual resources and others. Some of these techniques are described in more details below and table 1 compares them to the designer's needs in industrial context, such as integration into design process and the results each tool provides.

Only one accessibility evaluation technique – user trials – among the nine techniques listed on the table was mentioned by the designers that participated on the study. The study highlighted that designers use other sources of information about accessibility such as guidelines.

2.1. Ergonomics data and guidelines

According to the study, designers commonly find necessary to refer to ergonomics data during new concept development. The use of tables, books and website with ergonomics information seems to be integrated to the design activity.

“There is ergonomic information that you can just go to internet, you know, those that talks about ageing groups and handles positions, size of handles, and things” (27:30 – designer 03)

“We will reference ergonomics tables and stuff like that, but we rely on them (client) affectively.” (18:15 – designer 02)

Competitor analysis is also another way to research alternatives to project solutions.

“Ethen searching on internet or other sources to know about competitors, range of possibilities and sources of inspiration” (02:25 – designer 05)

From the observation carried out, the internet seems to be an agent that supplies the designers with technical information. This information varies from ergonomic data to patterns of materials, internal components specifications, such as measurements, weight, etc.

For project that targets elderly people, designers find a need for more information, then they look for guidelines that could give them directions to cope with usability and accessibility issues. The reliance on guidelines can be noted on the comments below.

“There are lots of standards as well that would define that sort of information (accessibility information).” (43:18 – designer 03)

“I guess there are very clear guidelines... It is on PRC national piece of safety agency guidance on..., so that says the size of text and stuff like that...” (25:30 – designer 02)

The designers rely on guidelines to comply with the accessibility is-

ues of the new concept. However, their comments also underline that they are deficient information and sometimes incompatible to the new concept design.

“The guidelines lose its power when it comes to innovation, it doesn't cover the innovative product features.” (05:00 – designer 08).

Two designers mentioned that they could balance the deficiency of the guidelines by including some user trials assessments.

“There are standards which drive how large a piece of text should be, you can print things out in various sizes and get feedback from the user group.” (38:53 - designer 03)

2.2. User trials or user observation

User trials and user observation are well known design evaluation methods that enable designers to understand user's need and develop empathy to them. The value of these techniques is proved to be high as they fruitfully highlight accessibility and usability problems that designers would not realise by their own assessment. However, although the possibility of involving the users exists, the majority of the interviewees said it would occur very rarely.

“Even when I worked in companies that project things specifically for the elderly, it was rare in the extreme anybody who was elderly would be involved in the process. The users were not part of the process.” (19:50 – designer 02)

“As we know, not every company can get access to (user), then it is probably better if they've got some kind of evaluation.” (37:35 – designer 01)

Even in one case mentioned where one of the consultancies was doing a non-commercial packaging project the involvement with users did not happen.

“So, it was a project that we looked at elderly people and inclusion, but it wasn't a commercial product in quite the same way. It was part of a separated university research project, but we produced some packaging that allow interaction between elderly and vulnerable people and packaging... but we didn't get directly from the vulnerable and elderly people, the target consumer, but we did get the feedback from the experts, because they have lots of experience in interaction requirements and so all points were considered.” (22:47 - designer 06)

2.3. Self Evaluations

This technique is often the most used one applied in the design process. Generally, by trying products or by testing new design mock-ups of their concepts, the designers check its accessibility, usability and other aspects related to the product interaction (Norman, 2002). Self observation of products similar to the one to be developed generally happens before the conceptual design phase. At this point the self-observation has an inspiring role in the design process as the designers can find problems that will bear in their minds when designing a new concept.

As described in the interviews, the participants of the study generally rely on their own assessment.

“A lot of it I would say is based on common sense, we tend to tell to ourselves what is legible or not.” “I think lots of it comes with experience, the way our minds work, it becomes obvious if something is small and illegible.” (35:25 - designer 03)

"I think lots of time that happen, that stuff [accessibility considerations] comes from experience. You are making subconscious decisions of what is good and bad accessibility. So, I think most of that coming from trying and testing ways of doing things." (27:28 - designer 06)

"We've got brought in the same way but just bearing in mind the users we were designing for." (13:26 - designer 04)

3. Testing new design concepts: the difficulties involved in accessibility evaluations

The designers' responses outlined that despite the range of tools (listed on table.1) that seems to be a good support to assess the accessibility of new products, they are barely used in the industry as part of the design process. This indicates that either the techniques do not work according to the design process or that there may be inadequacies on the application interface or on the results provided.

The last column of Table 1 highlights the difficulties related to each technique to be integrated into the process or to deliver accurate results. Most of them rely on tacit knowledge that designer would need to realistically perform tasks or to prioritize problems. The non-use of these methods and tools may be related to the incomplete results supplied by these techniques, as a result of which designers rely on traditional ergonomics data and guidelines.

3.1. The limits of guidelines

According to the study, designers are still looking at the support provided on documents like standards and guidelines, though they recognized their limits and incompatibilities with new ideas.

Past studies indicated some disadvantages of guidelines. For instance, firstly Cardoso et al (2003) spotted that guidelines do not cover all product possibilities or the entire range of features and thus, they cannot tackle the entire accessibility problem that the designers face during product development. Secondly, the deficiencies in the guidelines' theoretical basis hinder their connection and relationship. Although 'the need for internationally coordinated standards' was recognised and actions were recommended by Stephanidis et al (1998), there is still not significant progress in harmonizing international guidelines. Thirdly, other studies indicated that the more the guideline approach is general the lesser it support the design activity (Burns et al. 1997; Law et al. 2008). These deficiencies of the guidelines are confirmed by the participants by underlining the fact that the information given in the guidelines are not sufficient to the designers and, thus, they have to complement with tests and evaluations.

3.2. User trials or user observation barriers

Although two of the interviewees mentioned that they could test the features of a new concept design with the potential users, the majority of the comments along the interviews are that users are not part of the design routine. Even in projects that were targeted specially at elderly. The example mentioned by one of the designers

highlighted the issue: the case of a non-commercial package that "looked at elderly people and inclusion" relied on expert comments about the design features rather than testing the new concept with the potential users.

According to past studies, in industrial context the barriers of involving users in the design activity are mainly related to time and budget constraints (Goodman-Deane et al. 2010; Dong et al. 2004). Time related to selecting and recruiting a representative sample, added to time for organising and running user trials, negatively affect the design process. The more the time a technique consumes, the less probable is its adoption by the industry;

Additionally, other problems such as ethical concern regards recruiting elderly and disabled users should be included. Moreover, confidentiality issues should not be ignored as in industrial context new designs are hidden from the public to maintain its innovative aspects until its launch.

All the above constraints challenges design teams to employ user participation, as a consequence of which many designers opt to their own assessments of new product's accessibility.

3.3. Self Evaluations misconceptions

In order to guide their decisions regarding accessibility and usability, designers rely on their own evaluation of the design features. In fact, their experience and awareness of end-users might support them through the assessments. However, design experience and awareness of end users do not balance the disadvantages of self evaluations.

Firstly, design teams are generally composed by healthy and young adults that cannot feel other individual's capabilities.

Secondly, the disadvantage of using self observation is more evident when the product under analysis is the product being developed by the designers whom are doing the evaluation. In this case, the mental model of the designers is not the same of the users, mainly because they know too much about the product. The familiarization plays a crucial role in this case, which negatively affects their judgment about the problems that can happen when users will be using the product. The team "can no longer put themselves into the role of the viewer" after being involved in the project for a long time (Norman 2002: 155).

Finally, they cannot find a wide range of accessibility problems and thus their decisions are driven by wrong assumptions based on their own assessments.

4. It is time for more integrated design accessibility evaluations

The techniques mentioned above either are difficult to integrate to industrial design process or do not supply the designers with sufficient or reliable information. This means a call for accessibil-

ity evaluations that are more integrated to the design practice.

In industrial context, software analysis has been used for FEM (Finite Element Method), mould flow, stress strain and other evaluations. The outcomes of previous study highlight that CAD and other graphic design tools are totally integrated to the design activity among different design domains. Ideas generated during the conceptual phase are likely produced within computer graphic systems [Zitkus et al. 2012]. Computer graphic systems therefore can be used to inform designers about accessibility and inclusion of some features while these features are being designed in new concepts. This could possibly be done by software evaluations through interactive information.

For example, there are products or interfaces in which text size is too small to be legible or text that are written in certain colours that the background- foreground colour contrast is too low to be visible. These features are common problems in which everyday products' demand exclude people with visibility problems to see and use them. A design advisor [Zitkus et al. 2012] would analyse the input data automatically generated while designers are creating ideas within computer graphic system. Designers would interactively provide additional information, for example the 'reading distance' for legibility assessment. The outcomes would therefore vary according to the values entered in the system. The design under development could continuously be assessed every time changes occur in the design features. This could indicate early in the design process accessibility issues related to physical aspects of new designs. These evaluations would happen with minimal impact into the process.

5. Conclusion

Despite the range of methods and tools developed along the last decades, the findings of empirical studies with designers highlighted that only one method – user trials – is acknowledged. However, involving the users in the process seems to be incompatible with industry interests, such as project timescale and confidentiality. In order to avoid wrong assumptions driven by product developers own judgment, the paper claims the needs for more integrated accessibility design evaluations. A design advisor integrated to computer graphics is proposed to be incorporated to design activity while ideas are generated.

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Online platforms for the co-Design of alternative urban scenarios

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The citizenship construction is a challenge that municipalities have to face. Design can contribute in this task serving its collaborative methods and techniques, such as scenarios, which are strongly empowered by the use of ICT. The paper studies an online platform that our University is developing in collaboration with the Porto Alegre municipality, whose goal is to develop a conversation among the citizens and the different stakeholders of the city.

1. Opening complex systems interpretation

According to Güell (2006), cities are complex systems characterized by non-linear dynamics and great internal variety. Thus, there is not a way to understand the whole system from an individual analysis of one of the components. Moreover, it implies their capability of adapting and transforming in response to the changes that occurred around them. The systems transform themselves in a way that is not always predictable.

This way, we observe that cities are characterized by the uncertainty in relation to future events. In this context of complexity and uncertainty, the challenge is to find ways to reduce the risk towards the future. To this end, the use of scenarios built from plausible relations of cause and effect represent different future possibilities, supporting the decision-making in uncertainty environments (Van Der Heijden 2009).

In this direction, Schwartz (1996) stresses that unexpected changes happen and they demand fast decision-making, so as scenarios construction has to consider their plausibility, but also promote surprising combinations. This way, scenarios are not only useful to forecast the future, but also to react to unexpected events in the future.

The strategic dimension of using scenarios becomes rather clear: offering a comprehensive vision that combines the most relevant elements of the actual situation, their predicted evolution and the principal uncertainties, they help the interpretation of the future and allow a strategic conversation between all the actors involved in the decisional process (Van Der Heijden 2009). As stated by Schwartz (1996), this conversation could be effectively opened to outsiders. The author highlights that

scenario-based in-depth talks with external actors can aggregate original points of view and innovative thinking.

Manzini (2003) corroborate that, to reconfigure their own activities, productive and social organizations have to operate in a systemic way, involving multiple actors who are internal and external to organizations. They called "Design Orienting Scenarios" (DOS) those scenarios that support decision-making specifically during participative design experiences.

Besides serving as an instrument in the decision-making, scenarios technique is very important to open to a large range of actors of a complex system, the strategic conversation about it and its future, i.e., to promote participation.

2. Co-design and online platforms

It becomes evident the importance of external actor's participation during scenario thinking, both in planning or design. It implies aspects such as co-creation, collaboration and interactivity, which constitute the basis for a co-design process.

As Rizzo (2009) highlights, the co-design process goes beyond the involvement of the final client, which traditionally happened by focus group, observations and interviews, characterized by the client's proactive collaboration through the whole creative process. In a co-design process, the "non-designer", using an expression by Rizzo, puts him or herself besides the designer and becomes the leading figure of development and research practices of new product-service systems (see also Sanders & Stappers 2008).

In the co-design approach, Iacucci and Kuutti (2002) observe that scenarios elaborated together with potential users aim at testing ideas, collecting new suggestions and, above all, creating a realistic image of the future situation of use. In other words, designing with non-designers facilitates the projecting dimension of design. After the emergence of web 2.0, the Internet is not just a source of content to be passively absorbed by the receiver. As stated by Romani & Kuklinski (2007), this network becomes an open platform whose construction is given by user collaboration in content generation, promoting a new architecture of participation.

Online platforms capable of inserting users in innovation pro-

cesses and tools that facilitate the storage and the intelligent use of this information are introduced in the productive and social organizations. Also approaching new genders of cultural products, especially the new kinds of media, Rizzo (2009) highlights blogs and social networks as open platforms where this interaction between the organization and the external actors can occur. This way, they are set up as potential co-design on-line platforms.

The use of these platforms is fundamental for the existence of the user's creative collaboration. As Rizzo states, the organizations that decide to include non-designers in the design process shall substantially create a structured model, the online platforms in this case, promoting interaction and generating innovation.

This structure of collaboration over the Internet has on the user the central point of its own maintenance. Through the architecture of participation provided by web 2.0, each time a user creates some content, or performs some sort of social interaction, the network grows and enriches. This way, analysing the co-design process and participation from the online platforms of web 2.0, we observe that this entire context can be applied to scenario co-design. As O'Reilly (2005) highlights the organizations, which are able to use all the potentiality of the new tools of the web 2.0, creating platforms that learn with their users, will have a powerful competitive differential, given the wealth of the shared data.

This data can contribute to the construction of scenarios. In an environment marked by critical uncertainties related to the future, the information that comes directly from the final user can decrease the unpredictability also acting as a relevant support for decision-making. Moreover, the external view can bring information that is totally different from the information the organization is used to catching. This is a fundamental point in relation to scenarios, especially because this different view that originates externally can lead to the breaking of organizational paradigms and the change of mental models. In this context, the sequence of this work will be completed through the analysis of a scenario co-design case applied to urban reality.

3. Research Method

In order to foster a deeper comprehension about how we can innovate the way people interact with each other and with the city, using a co-design approach and web 2.0 tools, such as online platforms, we studied the case of PortoAlegre.cc project.

As presented in the next section, this project really fits to our purpose, because of its general goal, approach, methods and techniques.

The case is successively discussed by using the following criteria:

- Scenario construction: building scenarios as a strategy to deal with complex systems with a certain degree of risks and unpredictability and to develop participatory processes;

- Co-creation and co-design: designing with the user to create shared values and to facilitating the projecting dimension of design;
- Web 2.0: open and online platforms that promote interaction and to facilitate the storage and the intelligent use of this information.

4. The PortoAlegre.cc case

UNISINOS is a university situated in São Leopoldo, a city near Porto Alegre, in the south of Brazil. UNISINOS has recently opened a branch in Porto Alegre to host institutional activities and special courses. In this process, UNISINOS developed together with a company called Lung an action called "Redencao.cc", focused on the appreciation of Redenção Park, the largest in Porto Alegre. The extension "cc" present in the domain Redencao.cc refers to the use of Creative Commons. This action mobilized Porto Alegre citizens generating spontaneous media and stimulating the interest of many public and private agents.

From this experience, UNISINOS, Porto Alegre City Hall and Lung got together to create the PortoAlegre.cc project, that would bring impact to the scale of the city and not only to a specific sight, in which industry, university and government are articulated to reach a common goal.

The main interface of PortoAlegre.cc is an online platform that implements the concept of "Wikicity". The term refers to a digital platform that allows discussion about the history, reality and the future of specific territories.

The platform presents the map of the city of Porto Alegre (figure 1 and 2) in which any user can post a "cause", geolocated in the map by pins. The causes can be critical comments, suggestions or ideas about specific aspects of Porto Alegre, registered and promoted through photos, interviews, films and others.

With the function "My Neighbor", for example, users can identify an influent resident from the neighborhood where the cause was registered so that he or she can try to get some support to the cause and make it visible.



Figure 2. PortoAlegre.cc Platform. A post of a cause

The ways of contact and exchange offered by the project are fundamentally based on the online interface of the platform, connected to a deepening cause blog and amplified through two social networks: Facebook and Twitter. To engage users and stimulate continuous interaction within the community, the causes and even pictures that work as teasers are shared daily in the social networks. In this case, it is a way of contributing with the project called "What place is this?": the user posts a photo of a certain sight of the city so the other users can recognize it and comment about it.

As the initial goal of this project is the collective construction of improvement and new ideas for Porto Alegre, it would not be enough just the existence of a map with indication of the causes connected to the city. The intention of PortoAlegre.cc is also to think about the causes in the best way possible to solve urban problems and generating visibility for the suggestion and the most interesting ideas.

Face-to-face meetings are scheduled and they count with the presence of Lung and volunteers, who have enrolled in the site to join PortoAlegre.cc, participating more actively in the project and getting in direct touch with the organization.

PortoAlegre.cc is a project that keeps growing and is still being updated to obtain even more significant results than the ones already obtained. However, the logic of listening to the city, generating ideas and co-creating an even better city, is still the core of the project.

5. Case discussion

Contemporary cities are no longer made only for stable configurations, but are dynamic fields accommodating processes that refuse crystallization. In the case of PortoAlegre.cc, unpredictability is a constant feature since the project is built by different actors and is only able to happen when citizens, who cannot be controlled, are an effective part of it.

The urban environment that is born from such experiences - processes that consider user involvement - stimulates individual and social well-being (Manzini 2003). When the actors actively interact by negotiating rights and benefits, a sense of responsibility for the urban dynamics they helped to build is acquired (Santos 1988).

This is a self-determined society where government-leading actions are in line with what the community itself projects as a destination. On the other hand, it becomes difficult to determine a collective desire in which the decisions taken should be welcomed as the highest and best expression of each individual's willingness to change.

For Manzini (2003), scenarios could represent this shared future that companies, government and society should seek - if

properly built and promoted. By its own nature, scenario-building processes include a plurality of views as they can be considered an exercise of freedom (Moutinho 2006).

Nowadays, almost six thousand people are active users of PortoAlegre.cc, posting hundreds of cases and debating them through thousands of comments in social networks, all focused on improving the city. In this space, users are able to reflect on the city by challenging existing mental models. The cases posted on the website are a clear demonstration of how concerned citizens are about the city and its future.

Such set of organizers' stimuli and users' posts and replies constitutes an organic vision of the different instances that the project is suggesting in order to change the city and help it reach a better future. Therefore, we are able to notice that PortoAlegre.cc is a scenario that all active organizations in the city could employ to practice scenario thinking and design.

However, when increasing context turbulence and number of actors involved, it becomes harder to build a multidimensional idea of how the city might be (Manzini, 2003). It is necessary to have in mind that Brazil and its cities are growing in a fast and continuous pace, making it difficult to follow such growth dynamic.

Online platform usage - such as the one chosen by PortoAlegre.cc - is appropriate to the context in which the project aims at working, as it generates agility in the process and makes it easier for the participants to engage.

Co-creation is part of the soul of PortoAlegre.cc. It is not directly connected to all decisions related to the project whereas leadership is taken into consideration. Yet, this is a leadership that listens, learns, adapts itself and does not lead the creative process, but encourages it.

When we talk about co-design, the principle of collaboration and talent sharing is the same: designers and non-designers working as a team, counterbalancing each others' ideas, working together even in the creative stages. It is interesting to notice that the organizers get more and more into co-design, considering that the promotion of a series of collaborative workshops with the physical presence of a large number of citizens is set as the goal of the project phase.

6. Final considerations

In a country that suffers from social inclusion problems, the proposal of a platform that guarantees access and stimulates the effective participation of citizens is definitely the main result of this initiative. According to Güell (2006), this open collaborative process through online platforms makes certification and informative transparency possible in decision-making phases on the future of the cities.

PortoAlegre.cc is a kind of scenario that is in constant movement just like the dynamics of cities as it is feeding by posts and replies of an increasing number of users. If properly exploited, this scenario arena can become a network of strategic collective interactions. There is a design technology able to deal with such contemporary complex systems.

Besides that, the participation of local actors in this co-design process creates a social capital, generating a discussion channel that reveals values and the true identity of the city (Güell 2006). The processes and tools for co-design, especially if connected to new information and communication technology, grants to PortoAlegre.cc a broad space freedom to express new ideas and to virally foster knowledge sharing and creativity. From online platforms, it is created a direct channel with the community, facilitating the process of data collection that will be important for the decision-making.

Finally, our study of PortoAlegre.cc shows that the knowledge and competences that design is developing on more collaborative and interactive processes, such as scenario building and co-design, can stimulate advanced interactions between stakeholders and citizens.

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Relationships between Neuroscience and visual perception model Sens-Org-Int contributing to Design practices

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Design / Visual Perception / Neuroscience / Model Sens-Org-Int

The aim of this article is to present the results of an analysis of findings from neuroscience, done with a design point of view, using Model Sens-Org-Int. Results indicate that there are several concepts in neuroscientific studies, especially the ones called visual illusions, that enhance design studies as the ones obtained from Gestalt School, which contribute significantly to design practices.

1. Introduction

The aim of this article is to present findings in neuroscience that may contribute to design practices. As noted by neuroscientists Spillman & Ehrenstein (2004), recent studies from neuroscience may be considered as the updated study of Gestalt. This brings quite a contribution to design practice since findings in the area may determine new concepts to be used in design, such as Watercolour Effect (Pinna et al, 2001), determining figure-background perceptions using colours.

Not all studies from neuroscience may help design so directly, only those related to Org portion of Model Sens-Org-Int. This model was devised by the present author, published and awarded in IVLA's (International Visual Literacy Association) 2007 Book of Selected Readings (Csillag, 2008). The model differentiates the three processes that occur in human perception: sensory impressions, organizing processes, and interpretive processes of visual perception.

2. Visual Perception Model Sens-Org-Int

Sens-Org-Int Model differentiates three processes that occur in human perception: sensory impressions, organizing processes, and interpretive processes of visual perception. The model was devised in an attempt to differentiate which principles or laws of design and art are common to all human beings with normal eyesight from the concepts that are not common to everyone. Those that are not common therefore are learned or otherwise acquired.

In the 19th century, perception was studied as a passive stamping done by exterior stimuli on the retina. It would then reach the visual cortex, the zone of the occipital cortex that receives stimuli generated in the retina, resulting in an identical image (isomorphic) as the primary stimulus.

Modern psychology refutes this notion and views perception as an active process that involves the search for corresponding information, the differentiation of essential aspects of an image,

the comparison of these aspects with each other, the formulation of appropriate hypotheses and the comparison of these hypotheses with the original data (Bruner, 1957; Leontiev, 1959; Luria, 1981). Familiar and non-familiar images can be differentiated by longer or more contracted paths of perception (Luria, 1981).

Telford (1970) differentiated sensation from perception in that the first comprises a simple conscience of the dimensions of experience, whilst perception implies the sensation and the meanings that are attributed to the experience. Thus, for this author, the determinants of perception are: context, constancy, distance, perspective, interposition, brightness, position, direction, accommodation, convergence motivation, emotion, and personality.

Theories about perception tend to emphasize the role of either sensory data or knowledge in the process. Some theorists have adopted a data-driven or bottom-up stance, or synthetic approach, according to which perception is direct: visual data are immediately structured in the optical array prior to any selectivity on the part of the perceiver proposed by Hering (1878), Gestalt theories, and Gibson (1979). Others adopt a constructivist, top-down or analytical approach emphasizing the importance of prior knowledge and hypotheses, defended by Berkeley (1709), Helmholtz (1925), and Bruce, Green & Georgeson (2003).

Visual Perception In Neuroscience

The human brain has been studied in many details, and one way of organizing the study of different functions of the brain, was to divide it in areas. Thus, in terms of visual perception, the most important area is the visual cortex, consisting of the primary visual cortex (also called striate cortex or V1) and the extrastriate visual cortical areas, containing areas V2, V3, V4 and V5.

Visual analysis primarily takes place in the visual cortex, which is performed by specialized neurons (Hubel & Wiesel, 1962; 1963). It has the influence of secondary zones of the visual cortex forming mobile syntheses of visually perceived elements under the modulating and regulating influence of other non-visual zones of the cortex (Luria, 1981).

Before synthesis can occur, the visual cortex must stabilize the image, because when the image reaches the retina, it lasts no longer than 1 to 1.5 seconds if the eye is not moving (Yarbus, 1965). Stabilization occurs by the formation of an after-image in the occipital zone that can last up to 20 to 30 seconds (Zimkina, 1957; Kaplan, 1949). Zeki (1999) identified a small area of cells on each side of the brain that seemed specialized in responding to colour, named V4.

Processes of Primitive Vision considered bottom-up by neuroscientists, which are processes that do not require previous knowledge and are not determined by learning or experience, are the perceptions of movement, depth, form and colour vision. Colour can even be produced experimentally by a magnetic stimulus on V4 causing the “vision” of coloured rings and halos, the so-called chromatophens [Sacks, 2003].

Findings in neuroscience have mapped the visual pathways [Knoblauch & Shevell, 2004; Zeki, 2000] and have determined that perception occurs through a neural cascade, activating areas of the brain that are often very far apart. Thus, perception does not occur through isolated processes in the brain.

Proposed Model And Involved Variables

With the support of scientific evidence, the present model was devised in an attempt to differentiate which principles or laws of design and art are common to all human beings with normal eyesight from the concepts that are not common to everyone. These that are not common therefore are learned or otherwise acquired. Therefore, this model unites the synthetic and the analytical approaches to psychology as well as neuroscientific and physiological explanations on how the brain works, and relates these to classical art and design principles. With this framework, we are then able to tell, from the classical art and design “laws,” which ones can truly be considered a principle valid for all human beings from those that cannot.

The term law sometimes carries the connotation of something that was decided by someone or a group of people. Therefore, it is natural to want to question these for the sake of creativity, like my students always have done. Now, when we consider the model, we can differentiate what truly is a law that cannot be questioned simply because it was not decided by someone. We are talking about the nature of the human eye and the human brain and not about someone’s decision that could be questioned.

The proposed model of Visual Perception is shown in Figure 1. The variables intrinsic to the model are Sens (Sensory Impressions), Org (Organizing Processes) and Int (Interpretive Processes), respectively explained below.

Sens variable is related to the sensory information received through the pupil in our visual sensory organ. This aspect of perception is a phenomenon that occurs in the eye only, still in the form of light, before it becomes neural signs in the retina.

Org variable is related to organizing aspects of perception that occur starting in the retina, including what is considered the primary visual cortex, mostly in area V1 of the striate cortex. Org is related to the bottom-up approaches of visual perception in psychology. The phenomena of perception that occur as Org are what can be considered as laws or principles of design.

Int variable refers to the elaboration of Org in the extrastriate vis-

ual cortex, including approximately areas V2, V3, V4 and V5 of the brain, and moving on to other areas of the brain. This variable refers to the top-down approaches to visual perception in psychology. It is in this moment of perception, that neural cascades occur, which undergo the interference of motivation, emotion, personality, culture, knowledge, etc. This aspect of perception causes variation and interpretation in art and design and in the proposed model, is called interpretive processes.

Common Visual Literacy Mistake

The confusion between Org and Int is very common in the production of images, exposing frail visual literacy from the designer and bringing the risk of not communicating the intended message. To demonstrate, let’s consider the following example.

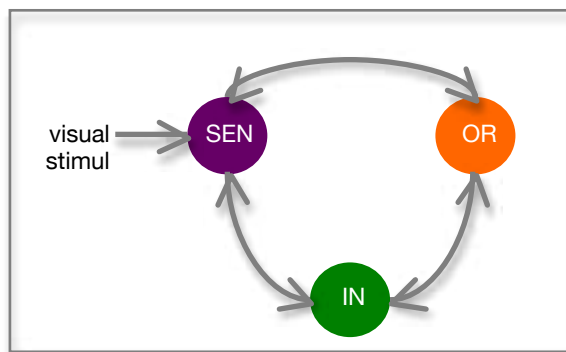


Figure 1. Proposed Model of Visual Perception

If we were to look for images that have visual movement, we may choose the image in Figure 2, which is a photograph of Ronaldinho, one of Brazil’s key soccer players. As we can see, Ronaldinho is in the air, his colleague is looking up at him, and the ball is not touching him. These visual cues not only indicate that he is moving, but also serve as semiotic signs related to the understanding of this image. To understand movement, in terms of these hints, is to see the semiotic meaning in each of the elements, that belong to Int.

If we now look at this image in terms of Org, we can see that it is quite static indeed. To visualize this, we can just trace a line along the major elements, shown in Figure 3. As we know from design principles, horizontal and vertical lines are more static than diagonal and curved lines [Dondis, 1999; Kepes, 1944; Ostrower, 1983; Scott, 1979]. So a better example of movement would be to use Figure 4. And to confirm the plastic forces indicated by a line, Figure 5 shows the main elements in the black diagonal line presented. In terms of Int forces, both pictures show movement, but in terms of Org forces, only picture 4 does.

3. Analysis of Neuroscientific Findings Using Model Sens-Org-Int from a Design Perspective

A bibliographical review of neuroscience authors revealed some interesting results from a design perspective. What neuroscientists call visual illusions, are intriguing for them in terms of how the brain works. Now for designers, some of these studies are



Figures 2, 3, 4, and 5. Photograph Of Ronaldinho (Used With Permission Of Tasso Marcelo.)

in fact information to be used for the design practice. As noted by neuroscientists Spillman & Ehrenstein (2004), recent studies of neuroscience may be considered as the updated study of Gestalt. Analysing these studies, having in mind Model Sens-Org-Int, some of them fall into Org category of the model, which are those that occur primarily in the primary vision, therefore are common to human beings with normal eyesight.

Pinna et al (2001) named one of these visual illusions as The Watercolour Effect. This illusion defines figure-ground background in a different way than Rubin's figure-ground Gestalt law did, for the Watercolour Effect is determined chromatically. This effect may be visualized in Figure 6 and may be defined as a shading of colour through an area that is larger than it actually occupies, as if an area were filled in with watercolour paint.

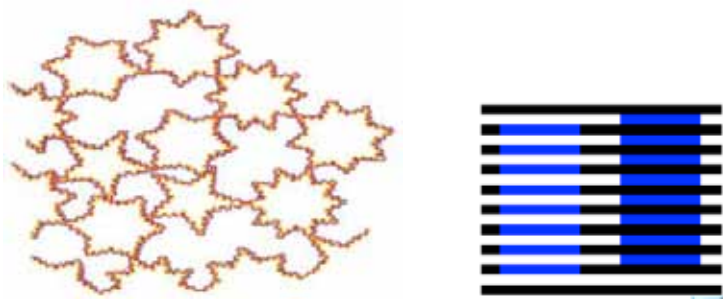
The neurological explanation for the Watercolour Effect is that the combination of a lighter contour combined with a darker contour, over an even lighter background, stimulates neurons that respond only to a contour that is lighter in the interior than on the exterior, or to a contour that is darker in the interior than the exterior, but not to both. The definition of the border is decoded in cerebral portions V1 and V2. Investigations showed that curved wavy lines produce a colour shading stronger than with straight lines probably because wavy lines activate neurons that respond to orientation. The colour that is signaled by these uneven margins should be conducted to other regions of the cortex that cover large areas of the visual camp, continuing the colour spreading until cells that are sensitive to borders on the other side of the closed area supply a barrier to the flux (Pinna, Brelstaff & Spillman, 2001).

Another important neuroscience finding that may be very useful for design practices is the Munker-White Effect (White, 2010). Figure 7 illustrates this illusion, where the blue stripes on the left side seem to be lighter than the blue stripes on the right side, but they are exactly the same shade. It is important to note that this effect is the opposite of what is known as simultaneous

contrast, for the perception of the colour blue is altered in the direction of its context.

The neurological explanation for this effect is called chromatic assimilation (Kelly & Grossberg, 2003). Basically, it refers to the fact that neurons do not send to the brain a fixed, immutable image, like it is physically on paper. They only send to the brain some information like edges, and changes in light intensity. Ganglionic cells have center-surround receptors. An on ganglionic cell works more intensely when the center is lighter than the surround and less intensely when the receptor camp is uniformly illuminated. Off cells behave in an opposite way: they respond when the center is darker than the surround and almost don't send signals when center and surround are uniform. Frequently, light is received on both types of cells, on and off, which could also be called as light and dark photoreceptors. When this happens, both types of cells compete with each other; one part of the receptor wants to be active while the other part does not. This competition causes chromatic assimilation and the sensation of two colours that are the same seem different.

Other illusions will be briefly mentioned here, due to length limitations, which are: De Valois Illusion (fig. 8), Sohmiya Illusion (fig. 9), neon colour spreading (fig. 10), and Anderson Illusion (fig. 11). The neurological explanations will be omitted since the visual explanation is more useful for the designer. In De Valois Illusion (fig. 8), the orange and magenta squares shown in the upper row are actually the same shade of red, and the yellowish-green and cyan squares displayed in the lower row are the same shade of green (De Valois, R. De Valois, 1988). In Sohmiya Illusion (fig. 9) the white background behind the orange waves appears to be tinted orange (Sohmiya, 2007). Neon colour spreading (fig. 10) occurs when crossing points of a black grating in front of a white background are replaced with coloured crosses, and colour appears to go out into the background (Van Tuijl, 1975). In Anderson Illusion (fig. 11), the circle surrounded by the bluish background on the left appears to be yellowish while the circle on the right surrounded by the yellowish background appears to

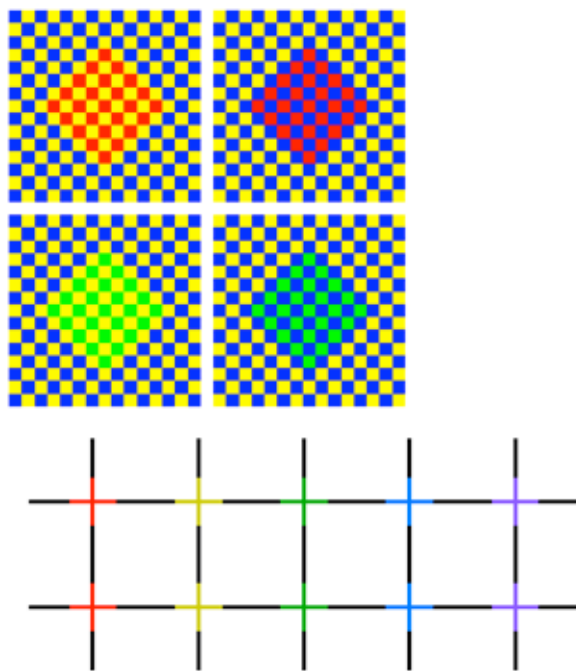


Figures 6 and 7. (from left to right) Watercolour Effect and Munker-White Effect.

be bluish. But both circles are exactly the same colour and texture (Anderson & Winawer, 2005).

There are more illusions, but the ones presented here were selected as being significant for the designer. The illusions showed above may be adapted to other colours and variations, presenting a wider array of options for the designer. Also, it is important to note that this paper focused on recent illusions, considering that older ones like Hermann-Grid (1870), or simultaneous contrast (Itten, 1979; Chevreul, 1854; Beck, 1972) are already well discussed and known.

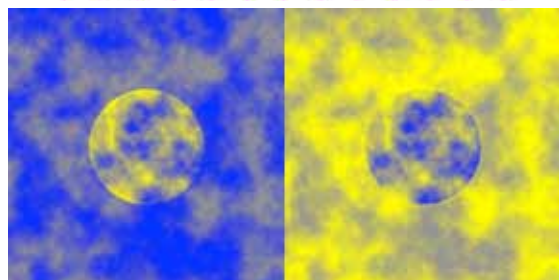
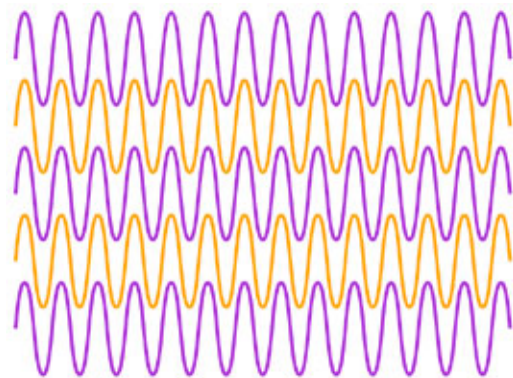
Therefore, this paper presents the results of an analysis of findings from neuroscience done with a design point of view, using Model Sens-Org-Int, and selecting only Org findings. Results indicate that there are several concepts in neuroscientific studies, especially the ones called “visual illusions” that enhance design studies as the ones obtained from Gestalt School, which contribute significantly to design practices.



Figures 8, 9, 10, and 11. (from left to right and top to bottom) De Valois Illusion, Sohmija Illusion, neon colour spreading, and Anderson Illusion.

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The voices of the users: how technology can help in co-innovation

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Design plays a growing role in the public sector. Designers' tools and service design processes have put an emphasis on empathy for the users, creativity, visual thinking, and co-design. The focus of this paper is on how co-innovation with users can be done in the public sector, and how the service design tools – service prototyping in specific – are able to help in doing this.

1. Introduction

Public services need innovative solutions to address the big social challenges that are taking place (Thurston 2009). Due to cost pressures, they need to find more efficient and customer-oriented ways to organize, produce, and develop services (Thurston 2009; Mulgan & Albury 2003). The public sector is adopting the concept of innovation, which was once seen as a private sector interest only to increase profits. Now, the public sector is also interested in seeking out new tools to help ideate and develop better services and solutions to the societal challenges they are facing (Borins 2002).

A growing interest has been recognized among citizens in more active participation in decision-making. Simultaneously, the digitalizations of services and social media have been making new kinds of services and their co-creation possible. Lehtonen and Tuominen (2011) use the metaphor of 'the voice of the user' to refer to information on a particular user's preferences and we argue that this voice is easier to discover and take into account in service development through prototyping and that designers are the key persons in making these voices heard.

The aim of this ongoing project is to create a collaborative model for the public service concept that will boost the efforts to provide better working possibilities to the young unemployed people working in local youth workshops and prevent their displacement from society. The project emphasizes an economically efficient way to organize services via the improvement of the dialogue between different branches of administration, organizations, and individuals. Understanding what kinds of services are interesting from the viewpoint of young people is the core issue. More specifically, our aim is to co-innovate a model for youth workshops and companies for co-operation.

Youth workshops are considered as an important element in Finnish youth service system works on national, regional, and local levels (Kallioma et al. 2004). The development of this

direction is seen as important because the youth workshops, which have earlier been seen as work experience providers for young people, have shifted their focus into preparing them for educational and work life by supporting the development and strengthening their skills of social and life management (Ministry of Education 2006).

The broader goal of our project is to show how the perspectives of users and customers can be taken into account in innovation throughout a value chain and also separately in each organisation participating in the value chain. Our role as design researchers is to bring service design and collaborative working methods into the development process of the youth workshop-company collaboration model and study how these can catalyze the involvement of end users in the creation of service innovations.

2. Public Services, Design and Innovation

Services, in their different forms and characteristics, have developed a fundamental role for the growth and sustainability of innovation and competitiveness. In flourishing innovation studies and policy programmes, growing attention has been given to the role of design and creativity as well as for user-centered approaches (Meroni & Sangiorgi 2011). According to Mulgan and Albury (2003), effective government and public services depend on successful innovation – to develop better ways of meeting needs, solving problems, and using resources and technologies. It should be seen as a core activity to increase the responsiveness of services to local and individual needs and to keep up with public needs and expectations.

Many kinds of barriers to innovation exist in the public sector. Public sector organizations have difficulties in increasing the innovation capacity that could co-exist with the complex processes and operations they perform daily (Hammer Jakobsen 2012). Professionalism can hinder co-innovation, as organizations are very hierarchical and the existing roles and traditions of delivering the service are deeply embedded. Public services are also visible to the public, so failures and mistakes will also be public. Changing the mindset from top-down to bottom-up innovation is seldom an easy or short process (Eide Knudsen 2012).

Service innovation is a complex interdisciplinary effort. Between organizational innovation, where staff plays an active role, and marketing innovation, where users are participating, relationship innovation can happen when both groups work together (Meroni & Sangiorgi 2011: 13). Understanding the users as a driving force, or at least a source, of innovation is not new. We

have noted that practitioners in the public sector are nowadays aware of the importance of user participation, but still lack the skills and tools to practically involve citizens and innovate with them.

Service design might be the key to this problem. Many of the methods applied in service design, originating from user-centered and participatory design traditions, aim at ensuring the users' engagement (Hasu et al. 2011). Service design could have many opportunities in public services, such as building capability from within organizations, creating more meaningful user involvement, and personalizing public services (Thurston 2009).

Understanding of innovation needs to go beyond the traditional 'hard' dimensions of technologies and physical matter; we need to include 'soft' dimensions that are related to people, people skills, and organizations (Meroni & Sangiorgi 2011). Systematic changes to improve experiences won't happen overnight; to create change requires work at all levels. By using service design techniques that enable engagement with users and understanding of their experiences, it is possible to turn involvement into real service improvements (Thurston 2009).

Design has a growing role in the public sector and, simultaneously, the design profession design is changing as design moves toward experience-based co-design (Szebeko 2011). An important characteristic of user experience is its holistic nature: the service and its tangible elements together create the overall user experience. Service design brings a useful set of tools and techniques that enable public services to fully understand the way their service is experienced and make changes based on this understanding (Thurston 2009).

In our experiences, starting with capabilities and ambitions has worked well. We should focus our attention on giving people responsibility again and empowering them to be active in producing the services. We shouldn't look at what people can't do and then just work for citizens by delivering services based on their

incapabilities. In the public sector, not only creating systems, but creating empathic systems should be the focus (Hammer Jakobsen 2012).

Buur and Matthews (2008) point out that enabling users to participate is never a straightforward application of certain methods into new contexts that guarantee a successful outcome. Instead, the methods, as well as the whole process, need to be tailored to work in the context. We aim to develop the ways of co-innovation hand in hand with the research. Our approach is prototyping. According to Blomkvist (2011), service prototyping is essential to service designers' work because it is collaborative, makes services visible, and helps with communicating about the ideas between the stakeholders.

3. Prototyping as an Agile Technique Supported by Agile Technologies

Traditional design approaches emphasize the importance of good background research, planning, and understanding before moving the process further. In the agile development process, which has its roots in software development, this is considered as a 'bad thing,' as stated by Beyer et al. (2004). However, in service design, the prototyping methods aim to compare, combine, and enhance ideas in iterative cycles in collaboration with the stakeholders. Due to several similarities with the agile approach, the term has also been adopted in service prototyping to better describe its rapid methods.

Our research has focused on developing new technology-assisted methods to prototype customer journeys, service moments, and different touchpoints quickly and iteratively. The SINCO (short for Service Innovation Corner) prototyping laboratory concept is an attempt to facilitate experience prototyping with technologies as well as innovative working principles (fig. 1). SINCO consists of the environment and a set of tools, which aim at rapid service prototyping and interaction design. Described more openly, it is a place where you are 'allowed' and enabled to do whatever is needed to concretize and test service ideas.

Concretization of an idea is the main purpose of prototyping in service design (Fulton Suri 2008). SINCO uses technological equipment and digital material such as photos, videos, and sounds to create the atmosphere of actual service moments for prototyping and re-enactment. This helps to concretize different aspects of service concepts and ideas to participating users' by giving them a better idea of what the service experience might contain and feel like.

In the SINCO environment, technological devices like computers, projectors, and speakers, along with other assistive equipment like projector screens and props, support the creation of service experience and concretize the roles of different stakeholders.

Use of digital material is an agile way of prototyping through the ability to quickly build and modify prototypes. However,



Figure 1. Overview of SINCO service prototyping laboratory (Rontti et al. 2012).

technology alone cannot form a prototype of a service. It is the people using the technology who, by prototyping gain experience and insights, get ideas, and enhance those, eventually finding the seeds for all kinds of innovations. In this Youth Workshop case, a portable version of SINCO was utilized for prototyping. It has simplified versions of all the main elements to form the prototyping environment.

4. Case Youth Workshop

The methodology in our project consists of case studies. We apply action and activity research approaches, and emphasize the ways that help the participants of the case organisations to articulate their ideas for service concepts and processes. In this case, we studied the impacts of service design methods – especially prototyping – on participation and co-creation through a youth workshop case study. This paper uses this case study and its nine documented hour-long service prototyping sessions as research data.

The primary mission of a youth workshop is to give young unemployed people a grasp and experience of the working culture and routines of working in a company, but also to serve local small companies better and hopefully do fruitful collaborations, which would in most optimal situations result in the hiring of the unemployed people after their youth workshop periods. The main challenges are the short-term contracts of employment of instructors and high turnover in youth workshop participants.

Due to positive experiences of a collaborative website during an earlier public sector co-design project with users [Kallio et al. 2011], we had a simultaneously running social media platform during the entire co-innovation project. The ideas generated on platform were divided into five main groups: marketing, contract, starting, doing [the work], and delivery, to use as a starting point for prototyping. The aim here was to be as concrete as possible and stay on the practical level to enable open discussion and ideation between different stakeholders.

The prototyping event was facilitated by researchers, two of whom played an active role in the prototyping actions, and the other two focused on observing the situations and interviewing participants after each prototyping session. The participants were able to test and evaluate ideas and give immediate feedback about the quality and suitability of the service enhancements, but also to create new ideas, based on the experiences they got during the prototyping session. The innovation process of the participants was managed, but loosely enough to leave room for new ideas and discussion, which lead the way of prototyping in directions that the prototyping team felt was valid.

Participants in prototyping sessions included thirty-four young people from the youth workshop, seven youth workshop coaches and instructors, two municipality representatives, and three representatives from private sector companies. Also, two other mu-

nicipality representatives visited during the prototyping event to observe the prototyping without participating in it. All the sessions were recorded.

5. Case – Co-innovation Through Prototyping

Prototyping helped the participants to come up with new ideas for the collaboration model. It was also considered as a way to discuss the entire process, making it easy to detect possible challenges to the development of solutions. The SINCO environment, as well as prototyping in general, was considered by participants to be a very demonstrative way for presentation of the collaboration model. Similar advantages in communicating service ideas and concepts between different stakeholders have been recognized earlier in private sector cases conducted in the SINCO environment [Rontti et al. 2012].

The rapid concretization of fresh ideas impressed the participants with the effectiveness of the method. Prototyping made it easier for all participants to share their opinions, discuss them together, and experience and evaluate the ideas from different stakeholders' points of view.

The prototype was built around specific theme of every participating group, so they were able to share their concrete-level views, experiences, and expertise of the workshops' current working model. The participatory working method was harder to make use of for some participants than others. The lights of the prototyping environment were dimmed down to create a safe atmosphere to encourage the sharing of ideas and thoughts for every participant.

Key Findings

Importance of Facilitation The centric role of facilitators was recognized by researchers and participants during the prototyping sessions. Facilitators led the prototyping, concretized the ideas from participants, and stimulated discussion by asking questions and altering the prototype.

Increased Understanding Prototyping in the SINCO environment was considered as a clarifying experience, which helped to understand the service idea better. It worked as an information-sharing tool between different stakeholders, and also gave a better perspective for the participants of the entire service process. Changing roles during prototyping, such as a young unemployed person taking the role of an instructor, helped to broaden the perspectives of the participants too.

Stimulating User Ideation The prototype also helped participants to put themselves into the mood as they behaved as during an actual service. As a result, the participants shared numerous ideas, and several of them mentioned in the interview after the prototyping session that the prototyping helped them to generate new ideas within the prototyped context.

Solution-aimed Thinking The overall attitude in the prototyping groups was very positive, and the ideation that happened during sessions was almost entirely solution focused. This was quite a contrast to the web collaboration platform, in which the discussion was mostly critique and problem led.

Practice-based Innovating The topic of prototyping was in all sessions based on participants' everyday activities, thus making the prototyped situations more or less familiar to the participants. This helped the participants in understanding, but also daring to share their opinions and ideas.

Allowing to Imagine Regardless of the practice-based nature of service prototyping, it also enabled the participants to prototype imaginary service scenarios, like a 'worst case scenario'. Testing out something irrational or improbable is also a method to stimulate creativity, for which prototyping is an excellent tool.

The practical-level approach of prototyping received positive feedback from participants. As one of the workshop instructors said: 'This kind of development work supports Youth Workshop's goals. Prototyping demonstrated well our everyday encounters with customers.'

The prototyping was a success, with more than 120 ideas written down during the prototyping sessions, which were warmly welcomed by the Youth Workshop staff and the Municipality representatives. Also, the researchers learned a lot about the Youth Workshop processes, their ways of co-operating with companies, and the roles and areas of responsibility in the workshop.

Also, the companies' representatives shared good information and knowledge for the collaboration model, especially from their point of view. They also mentioned that they did not have high expectations for the prototyping sessions, but said afterwards that it had been a very positive and enlightening experience for them.

6. Conclusions

Even though the prototyping did not produce entirely new service concepts, it had several positive outcomes. Numerous ideas were gathered to enhance the existing workshops and to help collaboration with companies, eventually helping also with building the collaboration model. Experience sharing between the stakeholders was also considered very helpful for the entire project's goals.

Also, the findings from prototyping were encouraging and received feedback, plus our findings support the decision to use agile ways to prototype with this public sector case. These methods are suited well for both evaluating ideas and stimulating the prototyping participants to share their thoughts and ideas for building a collaboration model. Prototyping revealed similarities in different workshops, which lead to categorizing different workshops in four groups: Product, Service, Digital services and Learning. This will help in developing individual company-workshop co-operation

models and creating co-operation between different workshops.

From the perspective of the utilization of modern technologies, using a social media platform was also considered as a good move to open up the development process of the collaboration model to a broader audience, and also to gain opinions and ideas from people who weren't participating in the prototyping sessions. However, based on our experience, we argue that designing a service that takes place in a physical environment should not be collaboratively developed entirely on web-based platforms, but face-to-face events are also needed to prototype, concretize, and evaluate the ideas and concepts.

The 'quick and dirty' prototyping represents a rapid way to concretize ideas, and when combined with advanced technology elements of the SINCO prototyping environment, it enables agile ways of working in collaboration with end users. In short – it's all about the right tools, and the right way to use them.

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Graphic innovations implemented in the Brazilian press by Julião Machado in the end of the 19th Century

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History of Graphic Design / Brazilian illustrated magazines / Julião Machado / A Cigarra / A Bruxa

The article is a research on the new graphic language implemented in Brazil by Portuguese illustrator Julião Machado in the late 19th Century. For this purpose, magazines *A Cigarra* and *A Bruxa* produced by Julião Machado and Olavo Bilac from 1895 to 1897 were chosen. Several contributions related to graphic analysis of such printings were enabled by microscopic exam of printed surfaces, and it is believed that the information were helpful in understanding the production and printing methods of such printings.

1. Julião Machado and his Graphic innovations

Julião Félix Machado arrived in Brazil in 1894 and began a trajectory of a quarter of a century of graphic work. In 1895, in partnership with renowned writer Olavo Bilac, he founded the illustrated magazine *A Cigarra* (Lima, 1963, p. 964-968).

The analysis of the images produced by Julião Machado in the late 19th Century enabled the identification of the construction process that systematically mingled several lithographic techniques used by the illustrator; hence most part of his production is formed of hybrid images.

His drawing technique was based on nib traces, and at times he used linear schemes characteristic of metal engraving, such as defined hatches and distinct contour lines. The constant use of clean and regular trace became his characteristic, and authors such as Herman Lima (1963) and Lustosa (2005) highlight this aspect which stands out among the Brazilian lithographic production of illustrated magazines of the 19th Century, that enhanced the use of crayon in the creation of drawings doted of smoky nuances.

The strong contour lines of the drawings by Julião were always printed in black, and to fill two colours printed magazines the artist deployed other techniques such as brush, ben day and sprinkled. The brush was used to fill areas of flat colour and lose traces that formed the main image or the background with faded colour inks. It was common in his illustrations to find lose brush strokes forming the background of images and in some cases, even in text columns.

The sprinkled technique was always present in Julião's illustrations, who manipulated spills in different ways, depending on

his intentions for each produced scene. The fill was irregular and the density depended on the intensity of the sprinkles applied by the artist. Often, the sprinkled technique was used as background texture of the produced images and, other times as a fill for nib contoured figures, in which case paper masks were required in order to restrict the area to be worked.

Another method of filling and finishing widely used in the illustrations produced by Julião, especially in magazines *A Cigarra* and *A Bruxa* was the ben day pattern, mainly in reticulated and striped textures. In such case, the technique was applied especially to fill defined areas and contoured by trace. The malleability of gelled sheets used to transfer the patterns enabled them to be applied in areas with different contours because the illustrator simply had to press the previously tinted sheet with a tip over the print matrix and, therefore, his drawing would precisely define the tracing area.

On top of often mixing all methodologies of image construction described above in one drawing, in many occasions the hybridization happened through superposition of such techniques, creating new visual effects and textures. The great differential of Julião's work was the systematic use of this hybridization of techniques, this dynamic of work, which was translated in a unique visual result for that time, which cause the illustrator to stand out in the Brazilian press, reaching a position in which as well as collaborating with several periodic, he also artistically directed two very successful magazines.

According to Lustosa, Brazilian caricature underwent several transformations in the late 19th Century, and such changes are attributed, in many aspects, to Julião Machado. The aesthetics of the so called "smoky" was the common aspect of images published in illustrated magazines so far, following the school created by Ângelo Agostini. The fast, yet relevant, performance of Rafael Bordalo Pinheiro in Brazil has introduced some experiences and innovations. With Julião Machado and his simple and clean traces, a new aesthetic was permanently implemented, using new technologies for the production of lithographic images which were a fad in Paris (Lustosa in Cardoso, 2009, p. 39).

2. Magazines *A Cigarra* and *A Bruxa*

A Cigarra first started to be sold in Rio de Janeiro, then capital of the Republic, in May 9th, 1895 and had a short life, ceasing to be published less than a year later in January 16th, 1896. Its owner was a banker and sportsman Manoel Ribeiro Junior (Magalhães, 1974, p. 189), who had enough resources to ensure that the

magazine had a prosperous and luxurious start. *A Cigarra* had a weekly periodicity and was out every Thursday, counting on the writing by poet and writer Olavo Bilac, illustrations by Julião Machado and famous collaborators.

After the cancellation of publishing of *A Cigarra*, allegedly due to Olavo Bilac leaving the literary direction of magazine after publishing provocations against Brazilian President Marechal Floriano, magazine *A Bruxa* came into circulation. Published in February 7th, 1896 to June 30th, 1897, with a total of 64 editions. The magazine was weekly and was out every Friday. The two publications were advertised as being luxurious, colourful, illustrated and the cost of manufacturing them was high. Both had fixed sections which represented titles composed by drawn letters and accompanied by illustrations.

A Cigarra and *A Bruxa* had two covers in predetermined standard, the headings were composed by their editorial and logos. In addition to the heading on the top of the cover, there was a strict formula for presentation of information, divided into two columns, the narrower one on the left, used for texts, and the one on the right, used for displaying the cartoons by Julião Machado (figure 1). Said structure was accurately followed on the cover of both magazines, except for special editions, when the text column was replaced by a cartoon published in highlight.

The editions were printed in special glossy paper, with eight pages. They followed the common structure for that time, reserv-

ing half the edition for texts (pages 2, 3, 6 and 7) and the other one for illustrations. However, both magazines have represented a transition phase in the integration between images and text, since they did experiments in page compositions, intercalating among the texts different types of images which were elaborated for their personalized titles, their humorous and decorative vignettes, and even caricatures and cartoons. Therefore, the tradition division into text and image pages of contemporaneous illustrated magazines did not become an unbreakable rule for *A Cigarra* and *A Bruxa*. Their pages were malleable and adapted to the available content.

There was a great change in style and finishing of the images published in the magazines produced by Julião Machado. Orlando da Costa Ferreira considers *A Cigarra* a milestone in the transformation of graphic language among Brazilian illustrated magazines:

The cycle of lithographed magazines has terminated, the new cycle was the zincographical drawing by *A Cigarra* [1895-1896], of Julião Machado and Olavo Bilac (Ferreira, 1994, p. 407).

In affirming that the cycle of lithographed magazines had ended, one should take into consideration the change in configuration of illustrations and not the abandonment of the lithographic technique, thesis which will be sustained herein. What several authors understand as the introduction to zincographical drawing in magazine *A Cigarra*, does not refer to the production of embossed zinc clichés and consequential change in the images printing process. In the late 19th Century, the Brazilian press had access to a production method of embossed clichés which enabled the abovementioned innovations regarding the presentation of pages, previously exclusive of textual content, and hence, started to comprise several intercalated images (Werneck Sodré, 1966, p. 253-254). The clichés produced in this way would resolve the incompatibility between the embossed printing of movable types and flat printing of lithographic images.

Such logic seems to be the plausible solution for the start of configuration of magazines that modernized the Brazilian press. However, the meticulous analysis of the collection with the aid of two microscopes that enhance printing points by 25 and 50 times, enabled to unveil the production method of magazines *A Cigarra* and *A Bruxa*.

The first discovery concerns the flat printing of texts, which confronts an obvious production method where mobile types are printed straight onto the paper, through tinting of the embossed surface. Based on the analysis carried out with the aid of microscopes, it was possible to confirm that it was a case of flat printing. There are no traces of pigmented edges that formed with the pressure of the embossed printing on the paper in the magazine texts. Also, all contours of characters are irregular, another evidence that there was transportation of typographic printing to a flat surface.

The images also include flat printings, and, therefore, the repeatedly reported explanations by authors that study the subject



Figure 1. Cover (*A Cigarra*, n.13, 1895).

about the easiness of producing embossed zincographic clichés, which were a fact at the time, do not correspond to the way *A Cigarra* and *A Bruxa* were produced. In relation to the images, besides the analysis supported by microscopes, the gestural and hybrid features of Julião Machado's production shall also be considered, as they do not relate with the embossed clichés of that time, which were less detailed.

Given the new findings, it was possible to understand the production of zincographic pages and the great differential of Julião Machado's work. The images were zincographic, but from a different technique, which employed the lithographic use of the zinc plate. Instead of stone, the printing is made through the metal plate previously assembled. At such time, there were transfer papers, which freed the artist from producing his/her drawings on top of printing surfaces and from having to draw inversely. Thus, Julião Machado produced his caricatures, titles and vignettes in transfer paper, from it the image was transported to the zinc plate, and the printing was lithographic, using the same principle of water and oily paint repulsion.

For the textual part, it was necessary to make the composition via mobile types of text columns, tint it with lithographic ink and print it on the transfer paper; then it would be passed onto the zinc plate, together with the images. This explains the irregular edges of characters, which cannot be noticed by the naked eye. In some pages the graphic stain is thicker or brighter, depending on how successful the text transfer process was, which confirms the hypothesis.

The flat printing of the text enabled the entire magazine to be produced from a single printing machine, and that the beginning of text and image articulation on the illustrated magazine pages happened regularly, becoming one of the most impactful and successful features. Furthermore, the image production by Julião Machado - based on the mixture of several techniques and drawings, rich in details and different fills - was enabled by the great flexibility of lithography, capable of miming the effects of all illustration and texture categories, even equivalent printing modes such as the texts composed of mobile types. In other words, the printing base of magazines continued to be lithography, however, using a zinc plate as a matrix, and several techniques which enabled escaping the aesthetics highly characteristic of lithographic crayon.

From the analysis of previously published magazines, the insertion of xylographic images in the text pages stands out, especially in *Semana Ilustrada* [1863] and *O Besouro* [1878], and also the similarity of the production mode entirely lithographic in *Psit!!!* [1877] magazine. They were relevant experiences and precursory to those identified in *A Cigarra*. However, the insertion of decorated titles and vignettes within all text pages, systematically, was a differential of Julião Machado's publication. In *Psit!!* which, for instance, used lithography for printing the entire magazine, the textual and imagery content was sectorized in pages: images took the top half of the page, whereas texts the bottom half.

Even in the last decade of the 19th Century, composition and print-

ing of pages were lengthy projects, relevant to the success of a magazine, particularly in relation to a magazine containing several images among the text, a detailed and costly work, being the pagination a challenge in every new edition.

Besides the graphic technology, the usage of colours in the production of magazines *A Cigarra* and *A Bruxa* was also investigated, since they were published in two colours: black and an auxiliary colour such as green, orange, blue, ochre. The auxiliary colours were often presented in faded tones, forming the background of pages and filling the images. Normally, the pages dedicated to textual content were printed in black, regardless of having illustrations. According to Cássio Loredano, this system of reproduction of illustrations was named "named colour" or "applied colour", which consisted of production of two printing matrixes, one with the "traced" drawing, which was always printed in black and another one, to apply colour. The process was described by Loredano when he investigated the production mode of Pimenta de Melo's printing plant, in the first decades of the 20th Century. For the similarity between the studied magazines, the following description of the process investigated by the author:

[...] it consisted in the "trace" made by the draftsman, that is, everything that is supposed to be presented in black in the magazine was sent to the shop to produce the cliché; from there, the original would go "up" to the draftsman to point out the colour [s] with washed brush strokes over the "trace"; then it would go "down" for the head of the shop to determine the application of what the artist had pointed out, requesting a new cliché for each colour [Loredano, 2002, p. 60].

Magazines *A Cigarra* and *A Bruxa* did not involve embossed clichés and only two matrixes were needed, one for the black colour and another for the second colour, which functioned as the fill and background of illustrations. On top of the washed brush strokes, a series of fill forms which included brush strokes, sprinkled, ben day and others.

A single edition stands out among the ones printed in several colours or polychromy. It is publication n. 61 of *A Bruxa*, which circulated in April 23rd, 1897, in which all pages intended for illustrations presented six colours, in different tones, which caused such edition to stand out among all others [figure 2]. The perfect chromatic use catches attention, which required technical knowledge regarding the procedures used in the preparation of zinc plates and in the division and fitting of colours in the printing, forming new colours and tonalities.

In addition to the highlight for chromatic experiences, the illustrations were the differential of the publication. The pages dedicated to them were dynamic, enabled other ways of articulating graphic elements and differentiated from the strict structure of textual pages. Besides the exclusive pages used for the publication of illustrations *A Cigarra* and *A Bruxa*, the images were also valued in other pages, with usage of titles drawn in the fixed sections, and often in unique reports, in the illustrated vignettes which were intercalated amongst the text in some editions and the publication of illustrations and cartoons, which took over part



Figure 2. Polychromy (*A Bruxa*, n.61, p.4-5, 1897).

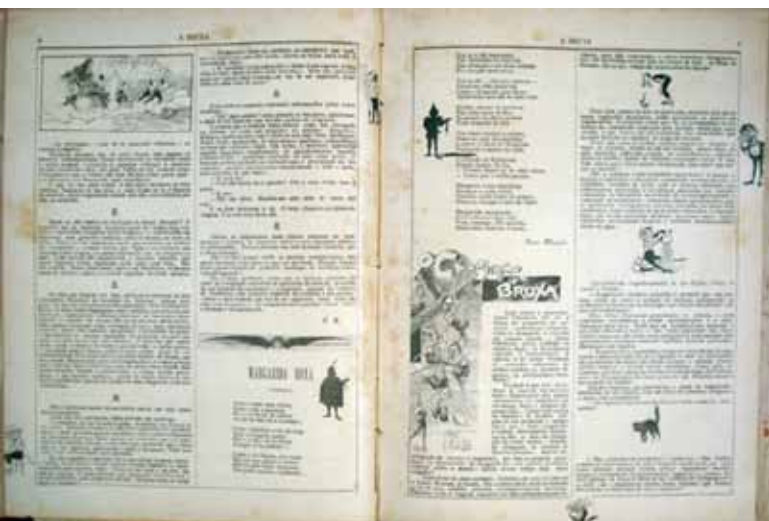


Figure 3. Illustrated titles and vignettes (*A Bruxa*, n.4, p.2-3, 1896).

of a text column. The illustrated vignettes enabled cleaner and brighter pages since they split subjects, functioned as decorative elements and created a white margin in their surroundings, as they often did not take up the whole width of the text column (figure 3). Also, they were relevant elements for the definition of the graphic identity of the periodic, since they were thematic vignettes. These first steps for integration of text and image in the Brazilian press generated several experimentations and publication of unusual pages.

3. Final remarks

The study of the dynamic of Julião Machado's work enabled the comprehension of the changes implemented in the graphic standard of illustrated magazines in the end of the 19th Century. Magazines *A Cigarra* and *A Bruxa* represented an experimental phase and the beginning of transition of the rigid structure of illustrated magazines of such period of time to great develop-

ment of irreverent and well diagrammed illustrated magazines of the beginning of the 20th Century. It is noticeable in the graphic design of the studied illustrated magazines the richness of images and graphic elements, which provided identity to such printings and are evidences that modern visual communication was booming and developing in Brazil. Even though Julião was not considered a designer, a common term in the 20th Century, this was the function he performed in *A Cigarra* and *A Bruxa*, being responsible for the entire visual of pages, the implementation of standards, the execution of vignettes, decorated titles and illustrations which formed his model. There is no doubt that there were projects which oriented the visual construction of magazines, since both presented standard patterns of pages and systematic use of graphic elements which provided personality and identity to the publications.

Analyzing the collection of *A Cigarra* and *A Bruxa* allowed the collection of information never published before, which complemented the bibliographic review, and enabled carrying out a graphical analysis from the viewpoint of design, so we could understand the logics behind the production of such periodics. Many contributions presented in terms of graphical analysis were enabled via microscopic analysis of the printed surfaces and it is believed that the information leveraged helped understanding the production and printing methods of the analyzed printings.

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Firebird: Alex Steinweiss' 78rpm album covers and the letterpress printing process

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Graphic design / Letterpress / Album covers / Design history

In 1940, American graphic designer Alex Steinweiss [1917-2011] began to design album covers for 78rpm records. This paper argues that the letterpress printing process available to Steinweiss directly influenced his work. To this end, we conducted an exercise to reproduce virtually the same process to reprint Steinweiss' album cover for the *Firebird Suite* [1947]. This experiment allowed us to understand a number of technical issues that characterized Steinweiss' work on his early album covers.

1. Introduction

About forty years after the 78 rpm record was invented, the recorded music industry began to effectively develop a visual connection to the recorded musical content of their product. In 1940, the early work of American graphic designer Alex Steinweiss [1917-2011] was a product of this goal as he began to design album covers for 78rpm records while working at Columbia Records.

Steinweiss was not the first commercial artist or graphic designer to design illustrated album covers for 78rpm records. Victor and Decca released a few illustrated covers before Columbia hired Steinweiss [Marmorstein 2007], but he is known for being a pioneer in album cover design, while exploring a semantic association between album covers and the musical content of the record. According to Kohler [1999: 13], 'despite all the designers who quickly followed his lead, whether at Columbia or other labels, it was the work of Alex Steinweiss that created the look of record packaging in the 1940's.'

During the 1930's, 78rpm records were usually protected in simple paper sleeves. These sleeves contained almost no information, at the most, the name of the record label. Because of the limited playing time available on each side of the discs, many selections had to be recorded on more than one disc. During the second half of the 1930's, a set of discs that made up a recording of a selection began to be called an album. Before this, 'there wasn't much to illustrate beyond the tiny circular disk label' [Marmorstein 2007: 333]. The album consisted of a set of sleeves made from thick white, brown or grey paper bound in a hard cover. The album cover and spine bore the artist's name and title of the album printed by letterpress.

Steinweiss' intention was to design new and attractive covers by means of color, form, texture and letterforms and the use of symbolic and archetypal imagery [Reagan 2009: 71]. But, like the

early album covers published before Steinweiss, his covers also had to be printed by letterpress engraved plates. This paper argues that the printing process available to Steinweiss influenced and characterized his work. To this end, we conducted an exercise to reprint Steinweiss' album cover of Stravinsky's *Firebird Suite* [1947] using the letterpress printing process. This exercise was part of this author's Ph.D. research on Alex Steinweiss which brought light to some of the technical issues that characterized Steinweiss' work on his early album covers.

2. The Early Years

Alex Steinweiss was born in Brooklyn, New York – USA on March 24, 1917. In 1930, Steinweiss attended Abraham Lincoln High School. The teacher responsible for the art department also taught graphic design. His name was Leon Friend, a cultured Polish immigrant and co-author of the book "Graphic Design" (co-authored with Joseph Heftner in 1936). According to Steven Heller

Friend's curriculum balanced the fine and applied arts and offered more commercial art courses than most major art schools. He introduced leading contemporary designers and inspired many of his students to become designers, art directors, illustrators, typographers and photographers. [Heller, 2007]

During the 1930s, many European commercial artists and designers immigrated to the United States and their work influenced the forthcoming American production. During this time, Friend was able to invite historically important figures to speak directly to his students. According to Steinweiss [McKnight-trontz; Steinweiss, 2000: 18], it was in Leon Friend's class that he learned to recognize the works of designers like A. M. Cassandre, Lucian Bernhard, Joseph Binder, Herbert Bayer, Jean Carlu, Tom Benrimo, John Atherton, Lester Beall and E. McKnight Kauffer. It was also Friend who introduced Bauhaus to Steinweiss.

Steinweiss grew interested in these European designers as he completed his studies with Leon Friend. He graduated from high school in 1934 and attended Parsons in 1937, at which time he looked for a job as an assistant to Lucian Bernhard [1883-1972], a poster designer who lived in New York City at the time. At the beginning of the 20th century, Bernhard helped to establish the *Plakatstil* (poster style) movement in Germany. This movement focused on the use of flat colors and the visual synthesis of the objects that were represented in those posters. Developing an approach of image synthesis inherited from Toulouse-Lautrec and the Beggarstaffs, Bernhard frequently worked solely on the representation of the object in question, predominately delimited by flat color surfaces and accompanied only by the name of the product brand.



Figure 1. Detail of the "South Pacific" album cover designed by Alex Steinweiss (photo by Andre Novaes de Rezende).

Lucian Bernhard, unable to take on Steinweiss, recommended he work with another poster designer, Joseph Binder (1898-1972) from Austria who, during those days, also resided in New York City. During 1937, Steinweiss began to work for Binder as an assistant in poster design. According to Binder's way of thinking (Binder 1976), a poster should be functionally projected for instantaneous reading. Instantaneous reading occurred by means of stylization. Binder conceived stylization as an act of 'designing in the style of our time', but also an action to eliminate everything unessential according to the optical function of the commercial art.

Alex Steinweiss worked with Binder until 1939 when he learned that CBS (Columbia Broadcasting System) purchased an old plant in Bridgeport, Connecticut where it would open a new company to compete with RCA Victor. It was at this time when Steinweiss was recommended to work as an art director at Columbia Records. This situation was quite agreeable to Steinweiss because of his early appreciation for music. After the record industry was severely hit during the US depression of the 1930's, Columbia Records decided they needed to upgrade production in many areas. Steinweiss contributed by restructuring all graphic materials produced at Columbia Records including the design of the album covers.

Steinweiss' acquaintance with the music, instruments, composers and period in which each composer lived was fundamental in the development of his method in creating the images for his covers. His knowledge of music had been motivated since early infancy, before any professional ambition. Steinweiss managed to produce visual suggestions linked to the history of the works and its composers. Furthermore, however, the printed image also played a complementary function with the music, saturating the cover with color (creating sensitive stimuli), meaningful forms and typography (structuring symbols that performed a double function of both informing and suggesting).

3. Album Covers and the Letterpress Printing Process

In the United States, by the 1930's, album covers were made by letterpress printing from engraved plates (Marmorstein 2007:

334). Offset printing was new and it was still a very expensive technology. Different from the offset process, letterpress was not an ideal process to create overlays of diverse halftone screens in order to simulate diverse color tones. Instead, flat colors were printed individually. Consequently, the process and production cost limited Steinweiss to three or four flat colors with halftones only on one or two plates (fig. 1).

With the experience gained while working for Joseph Binder and his knowledge of poster artists introduced to him by Leon Friend, Steinweiss decided to design his covers as miniature posters. Steinweiss stated that:

The beauty of the music had to be handled visually, and the elements of color, composition, lettering and subjective details had to project forcefully. I, therefore, handled each design as a miniature poster - able, at once, to hint at the subjective contents of the music while attracting the eye of the prospective buyer. (Reagan 2009: 71)

After the miniature sketch was ready, they were enlarged to actual size. If his design was approved, Steinweiss prepared a final version for reproduction. In order to get the final version of his cover ready for print, he would prepare it for camera art¹.

In the late 1930's and early 1940's this entailed doing the key plate on illustration board and the colors in black on individual overlays. The engraver would match his ink colors to the sketch. Then Steinweiss had to teach the engraver's staff how to drop the guidelines between colors so that they would not print. (McKnight-trontz; Steinweiss 2000: 43)

Once the final composition was printed, it was glued on the hard cover of the album. The liner notes and catalogue of the recording label were glued to the inside of the album cover.

4. Reprinting Steinweiss' Album Cover of *Firebird Suite* (1947)

Having gained access to Kevin Reagan's book, "Alex Steinweiss: The Inventor of the Modern Album Cover", I was better able to understand how the letterpress printing process actually functioned for these particular works and, especially, in regards to the separation of colors.

This book presents images, in small scale, which reproduce printing proofs of color separations related to one of Steinweiss' covers (Reagan 2009: 71). This cover was created for the *Firebird Suite* album (1947).

The images reproduced in this book document one of the steps of the printing process of the cover in question. Therefore, they confer a documentary character of a production stage that is not normally available to the end consumer. My hypothesis was that if I could digitalize these color separation proofs, I could, with the digital files in hand, reproduce a type of plate similar to those used by Alex Steinweiss. Thus, the intention was to re-print one of Steinweiss' covers by a process similar to the one originally used (fig. 2).

¹ Camera art could be defined as a sheet of paper that could be shot by a floor standing "Graphic Camera" to produce a page-sized or poster-sized sheet of film.



Figure 2. Correlation between the letterpress plates and color proofs (photo by Andre Novaes de Rezende).

One difficulty in dealing with these “originals” was the inability to fully simulate the camera art process, but having to rely on a scanner to digitalize the images. Another complicating factor was having to rely on small-scale images as the printing proofs available did not correspond to the original scale. Nevertheless, these limitations did not divert attention from the main purpose of this experiment, which was to experience the characteristics of a defunct process and see firsthand, its most characteristic material properties.

To conduct the experiment, I counted on the assistance of Marcos Mello of the *Oficina Tipográfica São Paulo* [São Paulo Letterpress Shop], where the print job was performed. The experiment took place on July 29 and 30, 2010 on a Catu printing press (Minerva type) with manual paper feed. The entire process was documented by means of photographs and film.

A fundamental component of the experiment was an analysis of the order of printing the colors and their properties of opacity and transparency. Since printing inks are opaque, impression starts by choosing the color that remains on the final plane. Because of the opaque quality of the ink, added to the physical characteristics of the letterpress plates, colors won't usually mix during the



Figure 3. Printing proof and register of the colors green and red (photo by Andre Novaes de Rezende).



Figure 4. Final print (photo by Andre Novaes de Rezende).

overlay of each layer of printing. Thus, we started off by printing with the color red, followed by green, beige and black. For the tree trunk represented on the cover, the color brown appears. However, according to the original technical condition, a new plate was not used to print a new color. Instead, we concluded that we had to add a transparent white to the green ink so when it overlaid the previously printed red surface, the resulting appearance is a brown shade (fig. 3).

The printing overlay of each one of the colors resulted in a reproduction of the *Firebird Suite* album cover, with a analogous process used by Alex Steinweiss (fig 4).

5. Conclusion

The results of this experiment brought light to technical issues that may have limited Steinweiss' creative process, whilst also helping him to characterize it. The limited number of colors and physical characteristics of the letterpress plates encouraged him to adopt a certain simplification of the figurative character of the image, so that, in a certain way, it corroborates the visual discourse of the modern poster.

The modern poster, as understood here, originated in Europe during the second half of the 19th century (Edge 1991: 57). It developed as a result of new technical possibilities of color lithograph broadening its commercial applications. Starting from Toulouse-Lautrec, the Beggarstaff and later, the work of Lucian Bernhard and Joseph Binder, it is possible to observe how the simplification of the image progressively manifests itself. Even though the focus on the total visual organization of the composition maintains the center of the discourse of modern posters, and, as a consequence, the simplification of the image tends towards abstraction, certain figurative references remain so posters assure their persuasive function to general public (Meggs 2009: 344).

Even though Steinweiss opted for figurative forms to create archetypical images and assure easy interpretation by the consumer, he was fully conscious of the qualitative aspects resulting from the printing conditions. These conditions characterized the use of color and the way ink was deposited on the paper of the cover.

According to Steinweiss (Reagan 2009: 71) the limitations of the process were actually beneficial since they allowed him to take advantage of the use of vibrant, bold colors. As the tonality of colors was produced by mixing inks, and not the overlay of colored dots, the entire paper surface was covered. The consequence of this implied a specific perception of the phenomenon of light reflecting on paper.

Leon Friend wrote in his book that 'flat areas, through their absence of detail, carry farther and for that reason are used in successful posters' (Friend; Hefter 2007: 306). The perception of this phenomenon is instantly noticeable. When a single color is applied uniformly on a surface, it vibrates with more intensity under the action of light than a color composed by the articulation of polychromatic halftone dots.

While using symbolic and archetypical imagery in his album covers and mastering the design and printing process characteristics, Steinweiss was able to "hint at the subjective content of the music while attracting the eye of the prospective buyer."

With conscientious graphic projects, Steinweiss corroborated a discourse that values the formal and material properties of the

surface of the resulting image. Consequently, this rationale increased the aesthetic value of the record album as a consumer good.

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The presence of the autotype technique in the weekly *Cri-Cri's* graphic design project: traces of the graphic memory in the Brazilian state of Pernambuco

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Autotype / Photogravures / Periodical press / Design history / Print technology

This article provides a historical and analytical study about photograph printing reproduction in the state of Pernambuco, Brazil, during the late 19th and early 20th centuries, focusing on the autotype technique. Historical and formal aspects are discussed regarding to the local practice of design, analysing both evidences of the introduction of the technique in the local industry and the photogravures present in the weekly magazine *Cri-Cri*, 1908.

1. Introduction

The history of the printing industry in Recife, the main city of Pernambuco, has a rich display of artefacts produced in the late 19th and in the early 20th century, with important records about the circulation of images and the introduction of printing technical processes. One such technique was the autotype, locally named *clichéria*. This technique made it possible the development of images on metal plates, producing the matrix called *cliché*, or photoengraving. The autotype established itself as one of the greatest printing innovations of the late 19th century, enabling the reproducibility of photographic image in large print runs integrated with manual and mechanical typesetting. Since the 1890s and along the early 1900s it is possible to identify advertisements of photoengraving services in Brazilian newspapers and magazines and a growing interest in the interplay between text and image (Andrade 2009). It is in this context that arises in 1908, in Recife, the periodical *Cri-Cri – Journal of News and Humor*, whose 18 editions have large samples of photogravures. Despite its recognized historical importance, *cliché* is not studied much and there is little information about the technique in Pernambuco. This study aimed at to gather information on the regional arrival of this printing technology, as well as to seek answers about the influence of the technique on the processes of page composition, and other aspects related to page design in the first decade of the 20th century. We collected information about *clichéria* and photoengraving services both in *Cri-Cri* as in other magazines of the decade. Then, we catalog the photogravures contained in 18 editions of the periodical *Cri-Cri*, registering their basic data and analyzing them.

2. Methodology

The methodology was of twofold: historical and analytical. It was

comprised of 1) acquiring a theoretical basis in order to clarify technical questions about photo developing and printing; 2) literature review on the history of autotype and its relationship with the press; 3) field research, with visits to the Joaquim Nabucco Foundation Collection, having access to copies of the periodical studied; 4) development of a cataloging card as an analytical tool; 5) data analysis and drawing on conclusions.

The cataloging card collected basic data such as dimensions, number of pages per issue, etc., and according to the formal characteristics of each modes of symbolization of Twyman (1979) – the verbal, the pictorial, and the schematic elements – capturing information about color, proportions, relations with the page, function in the editorial project, and themes.

3. Autotype, reticle and *cliché*

What is conventionally called *cliché* is a kind of image matrix obtained with a technique of photomechanical reproduction, in order to be used in the printing industry. This technique allows the printing of images without the interference of the human hand, by a photochemical process on iron or copper plates. Such matrixes in high relief became usual at the time of its development because they made possible to print images in the same texts typographic box, with higher quality, viability and agility than wood engraving. According to Andrade (2009), during the years 1840s and 1850s appeared in Europe the first photograph illustrated periodicals. By then, the photographs were transposed to the wood or stone surfaces by hand. Although the lithographic process gave to the printed material a high standard of quality, it did not allow the printing of images and text on the same page simultaneously as the wood engraving did. It was only in 1860s that the photo wood engraving was created, a process where a photographic image was developed directly on the wood, being later engraved by hand. Soon, between 1870 and 1880, the first experiments with halftone developing techniques came; in this technique, the continuous-tone of the original image is fragmented into small dots, producing its various tones of gray or color. It is from May 9th 1882 the patent of the halftone by Georg Meisenbach. According to Bodo von Dewitz (quoted in: Andrade 2009), these halftones indicate the start of press photography. Yet, according to Andrade (2009), only in later years of the 19th century autotype began to be used in the illustrated press in Rio de Janeiro. This technique became the most common in Brazil after the turn of that century.



Figure 1. [1] Benevenuto Teles Jr. advertisement (Jornal da Indústria e da Agricultura, 1940-FUNDAJ); [2] selling advertisement of used clichés (Revista Moderna, 1906-BPE).

4. The illustrated press

Brazil has debuted in the illustrated press with caricatures of political nature in 1837. It was, however, the advancement of image reproduction techniques – especially lithography – that created the conditions for the proliferation of illustrated publications (Azevedo 2009). In Rio de Janeiro, the phenomenon began in 1844, with the newspaper *A Lanterna Mágica* (Lustosa 2009). But it was not confined to the country's capital, becoming a common event in the major cities of the country. In Pernambuco, magazines such as *O Diabo a Quatro* were known by their caricatures depicting political satires or engagement on the abolitionist cause. Nevertheless, according to Andrade (2009), photoengraving only arrived in Brazil in the 1890s mostly by experimental attempts. Camargo (2003), on the other hand, argues that it was effectively introduced by the major newspapers, being the *Jornal do Brasil* the first to use clichés in 1894.

Not so much is known about the arrival of *clichéria* in Pernambuco. Nascimento (1966) notes that in 1892 the periodical *A Província* would have built a stereotype department for the manufacture of clichés. In this survey, it was discovered advertisements for selling used clichés in the *Revista Moderna* in the year of 1906. The same magazine had also their covers signed by Benevenuto Teles Jr (fig. 1), pointed as a cliché specialist in the work of Agra Jr. (2011). However the periodical *A Revista*, 1910, states that all the cliché service are produced in Rio de Janeiro (Nascimento 1975).

5. The periodical Cri-Cri

The periodical *Cri-Cri* appears in this scenario in the first decade of the 20th century. Launched in August 1908, it lasted 18 issues, ending its trajectory in December. This short-lived period was a common case in the local press. Its format was 19x28cm and it had an average of 20 pages; it was all printed on coated paper, and its cover was always colorful and illustrated. The names *Tillius*, *Rastignac*, *Petronio*, *Rene*, *Altamir*, *Hircio* and *Til*, the artistic writer and graphic designer of some of the magazine covers, were part of the *Cri-Cri* editorial staff. The artists signed as *Guapy*, *Pivot* and

Pierre collaborated with the periodical, publishing their cartoons and caricatures.

From the 8th issue and ahead, their covers started to be signed also by *Benevenuto Teles Jr*. The *Agência Jornalística Pernambucana* signed the graphic design. It is estimated that the print run have been about 5,000 copies. Its contents included especially issues of social life as well as poetry, music, sports and cultural attractions. The magazine has no page numbers. Its sections were: *Folhinha do Cri-Cri*, *A ver quem passa*, *Revista teatral*, *O chic na Rua Nova*, *O nosso concurso de beleza: Qual a mulher mais formosa do Recife?*, *Qual a criança mais bonita do sexo masculino? e do feminino?*, *Gaveta de Cri-Cri*, *Craquis de bacharelados*, *Causticando & Filosofando*, *Monoculando*, *Perfis femininos*, *Música*, *Sphinge* and *Rápidos (sonetos-perfis de moças)*. Besides these, the sections in which generally appeared photogravures: *Na rua*, *Sports*, *Postais femininos e masculinos*, *As criancinhas* and *Recife de Relance*¹ (Nascimento 1975).

Advertisements for the companies *Livraria Contemporânea*, *Ma-noel Almeida & C.*, *Ramiro M. Costa & Filhos*, *Café Cascata de J. Azevedo Mello*, *Café Brito*, *Sul América Companhia de Seguros de Vida*, *Cervejaria Brahma e Antartica* and *Casa Eugenio Goëtschel*, including the *Agência Jornalística Pernambucana* itself were placed in the beginning and in the end of the periodical, perhaps indicating that they were major sponsors during the months in which the magazine was published. *Cri-Cri* was illustrated with snapshots, emphasizing the section *O Recife de relance*. The magazine closed its doors after launching the edition that ran in the first week of December, ending a cycle of 18 editions over a period of five months.

6. Discussion of Results

68 snapshots distributed among the 18 issues of the magazine were cataloged and analysed. It was found that the frequency

1 In a free translation: *The Space of Cri-Cri*, *Watching who walks by*, *Theater Magazine*, *The posh of New Street*, *Our beauty contest: The prettiest woman from Recife*, *The most handsome boy and prettiest girl*, *The drawer of Cri-Cri*, *Bacharels' sketches*, *Being Caustic & Philosophizing*, *Monoculing*, *Female profiles*, *Music*, *Sphinx and Quick ones (ladies profile-sonnets)*; *On the street*, *Sports*, *Female and Masculine Postcards*, *The little children* and *Recife by Sight*.

and the quantity of photographs varied greatly between editions. While the numbers 07 and 18 have no printed photogravures in their pages, issue 13 showed a large amount of photogravures, adding up to twelve pieces published (tab. 1.1).

Analysis of snapshots

The types of work which commonly use snapshots in the periodical *Cri-Cri* was identified as almost entirely journalistic notes. These notes covered specially issues of social life, artistic and sports matters (fig. 2). The theme of these notes generally referred to deaths, wealthy children, famous people on their way through the city of Recife, successful professionals, aristocrats, and people from the art milieu, having been found very few articles actually about journalistic facts.

Little relevant information was identified in the blocks of text surrounding the photogravures about the authorship of snapshots. The only time a possible author of the photographs is indirectly mentioned is in a note from the editors explaining the absence of the section *O Recife de relance* (fig. 3), due to the death of a relative of the “man responsible for the snapshots”. It suggests that the authorship and credibility of the snapshots were not yet relevant enough to put credit on the photogravures in the Recife Press of 1908.

Snapshots use

Of the 68 photogravures cataloged according to the themes and cropping, it was found that prevailed at the time the use of guidelines, frameworks and classical aesthetics, probably remnants of

1.1 Frequency table: presence of photogravures in the editions of the magazine Cri-Cri. August - December 1908																		
Number of photos	5	5	4	4	1	3	-	3	3	3	1	5	12	6	5	5	3	-
Issue	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°

Table 1.1. photogravures frequency in the Cri-Cri editions, August to December of 1908.



Figure 2. (1) Death photogravure, Cri-Cri # 8; (2) Aristocrats, Cri-Cri # 2; (3) People from the art world, Cri-Cri # 3 (FUNDAJ Collection of rare books).



Figure 3. (1) Section Recife de Relance, Cri-Cri #4; (2) Cover Cri-Cri #11; (3) Cover Cri-Cri #12. (FUNDAJ Collection of rare books)



Figure 4. (1) Daily Cri-Cri #1; (2) Object. Cri-Cri #13; (3) Photograph Cri-Cri #2; (FUNDAJ Collection of rare books); Table 1.2: themes of photogravures.

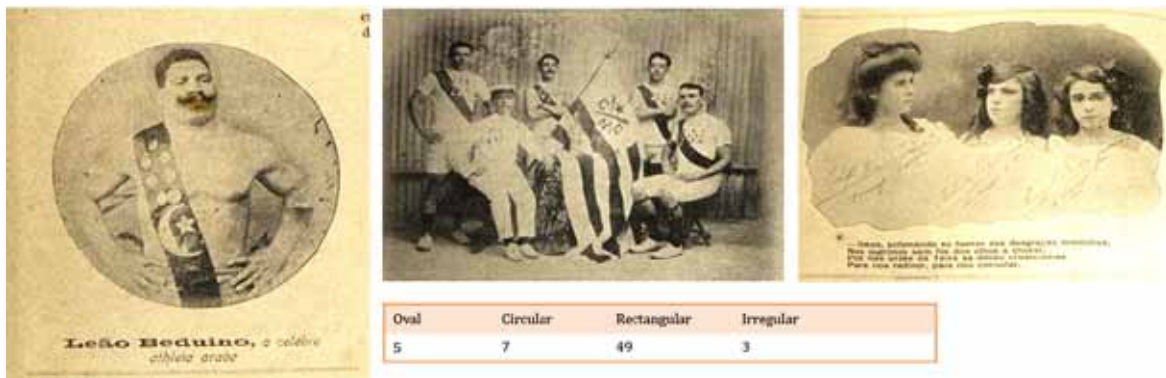


Figure 5. (1) Circular mask, Cri-Cri # 2; (2) Rectangular mask, Cri-Cri # 3; (3) Irregular mask Cri-Cri # 4 (FUNDAJ collection of rare books); Table 1.3: Types of photogravure masks

the current painting techniques of the time. The vertical rectangular format was used mostly for photographing personalities, while the horizontal format was used to photograph groups of people, sports teams, landscapes, monuments, and environments (fig. 4; tab. 1.2). It was found that 19 out of 68 photogravures were edited, in order to generate the fading of borders and backgrounds of the photographs (fig. 5; tab. 1.3). Also, 2 cases were observed in which it was used the image overlay feature, where a rectangular photoengraving received within its own limits other two smaller pictures with circular masking.

Schematic elements in the service of photoengraving

The process of identifying the schematic elements proved relevant to examine the practice and resources used at the time. We hypothesize that by using these elements it was intended to give unity to the design and editorial project. We noticed especially the intense use of borders, frames and bars (fig. 6; tab. 1.4) probably in order to delimit the space/section that belonged to the photogravure. Considering that in most cases the

snapshots were inserted into the page disconnected from the content of the texts and journalistic materials nearby, these elements, as well as the use of ornamentations, supposedly intended to strengthen the photogravure space on page, as well as to give emphasis on subject matter.

7. Final Considerations

The *cliché* arrival in Pernambuco, as well as in Brazil, represented an advance in the graphical practices of the state. It made possible the printing of images, whether they were caricatures, polychromes or photographs, in long runs in a more agile and accurate form, since the *cliché* was set as part of the typesetting, finally integrating text and image on a printing base. The lithography already had quality and accuracy, however, with no integration as straightforward as the *cliché*. Also, the photochemical process of production of the *cliché*, which did not depend on a human creative skill, permitted a pre mechanical approach with greater standard control of the results. Thus, the photograph as



Figure 6. [1] Back cover Cri-Cri # 1, [2] Headpiece Cri-Cri # 12, [3] Circular masking Cri-Cri # 8 (FUNDAJ collection of rare books); Table 1.4 Types of elements surrounding the photogravures.

a graphic resource for the printed page became a reality reflected in the early 20th century, changing the scenario of the production of newspapers and periodicals.

It is possible to recognize throughout the data how the techniques and photographic development processes are inserted as resources. These were used as a language for distinction without necessarily establishing patterns across the issues. Experimentalism and finishing of edges and shapes emerge as a novelty in the composition of the printed page. Possibly, this relates to the figure of the photoengraver, that in cases like that of B. Teles Jr. had featured in the social milieu of his time. They possessed the knowledge of photofinishing techniques, and should probably sell them as resources. So, how would these professionals have influenced the choices and language of photographic images? Had the cliché artists a differential role around the use of these resources, or did they only reproduce the printers and publishers will? These are questions for further research.

It is also possible to see how the picture becomes eventually the main piece of information, taking in its surroundings other graphic elements such as vignettes, which makes it even more distinct among the whole page. Associated with this emphasis, we have the result that 60% of the photogravures found have as a theme pictures of personalities and persons said to be distinct, compared with 19% devoted to everyday images, also of common citizens. It is recognizable what type of use a magazine like *Cri-Cri* made of photographic images, giving us clues of what kind of visual culture would be interesting to the social group that consumed it. We realized that the advent of the cliché matrix allowed the general use of photography, establishing a more diverse graphical dialogue between texts and images. The cliché introduction in the printing industry of Pernambuco during the turn of 20th century also allowed the practice of experimentations in order to establish a specific graphic language, resulting from this new technology.

Acknowledgment

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Dutch maps of Pernambuco from the seventh century: the technique and the metafunctions of the graphical language

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Maps / Metal engraving / Social semiotics / History of graphic design

Research and analysis of gravures in the book *Gaspar Barlaeus – Nederlandsch Brazilië* [1647], printed with metal engraving. We proposed as an analytical tool a form based on the theory of Language and Social Semiotics of Halliday, focusing in the ideational and textual metafunctions, analyzing both geographic and decorative elements. The results led us to understand the reason for the figurative elements and what are their historical importance.

1. Introduction

Brazil – throughout its life as a Portuguese colony – has faced prohibitive laws which hindered its people's freedom. For a long time, the existence of manufacturing was not allowed, given submission of the colony to Portugal. This interdiction included any press activities, would it be newspapers, books or fliers. This fact is responsible for the lack of printing activity in the country region before 19th century. This is also the reason for some printing techniques, such as wood engraving, very common in Europe during the previous centuries, having less impact in our Graphic History. Nevertheless, when the Flemish came to Recife in the 17th century, they produced a number of maps and illustrations in such techniques. The results presented here began with a search in collections in the city of Recife to find evidences of the printing techniques called metal engraving.

With references found on the book *Guia de fontes para a história do Brasil Holandês: acervos de manuscritos em arquivos holan-*

deses [Gallindo et al 2001], we searched the Institute Ricardo Brennand, in Recife, PE. There we had access to the book *Gaspar Barlaeus - Nederlandsch Brazilië* [1647]. Printed in a typographic press and metal engraving, part of the original edition is displayed in the IRB along with other later editions, from the same period.

2. Object of Study

The *Gaspar Barlaeus - Nederlandsch Brazilië* (fig. 1) was created at request of the Count Johann Mauritius van Nassau-Siegen to certify his good governance in the Brazilian northeast and to prove the good investment to the Eastern Indian Company. The work describes the deeds done during the eight years of stay of Nassau and was written by humanist Gaspar Barlaeus and published in Amsterdam in 1647. In the book *O Brasil que Nassau Conheceu* [Silva 1979] it says: 'A magnificent book, [€], one of the biggest achievements of the Lower Countries' graphic art'.

The book is a detailed documentation about diverse aspects of nature, fauna and flora of Pernambuco. It also portrays historical facts of the Portuguese and Dutch domination. Some of its prints were after painted with watercolor, displaying extreme care in the making of the book. Most of the prints are credited to Franz Post, having participation of other artists.

Although we didn't had the chance of handling the original book as it was in exhibition at that time, we could use two publications, quite faithful to the original, printed in an enlarged version and with refined quality. The first book is from 1923, of which we took most of the photos. The second one, the already cited *O Brasil que*



Figure 1. [1] Cover; [2] Back cover; [3] Detailed gravure from the cover of the book *Gaspar Barlaeus – Nederlandsch Brazilië* [Institute Ricardo Brennand].

Nassau Conheceu from 1979, is a compilation of all gravures including relevant commentary to our questions.

Thanks to Franz Post and all of Maurício de Nassau's expedition, the world could "see" for the first time the Brazil of that time. Until then most of the records about Brazil were just reports, while Post and entourage granted 'the vision of America's daily scenery that the Dutch had conquered' (idem).

The expedition had many scholars in the most diverse artistic and scientific areas. Among them, Nassau's friend Gaspar Dias Ferreira, source of various information. The format of the original work is vertical, 42x29 cm, with its typographic portion printed in Joannis Blaeu's typography, having 340 pages, among which there are 56 prints divided in: 24 maps and plants of sites and fortifications, 31 scenes of the Dutch fleet, naval combats, landscapes and marine scenery. Even though they are credited to Franz Post, they were reproduced and executed by artist Jan Broosterhuisen (1596-1650) and some of the naval battles by Salomon Savery, all in copper plates (Gallindo et al 2001).

3. Theoretical background

Intaglio

The practice of reproducing images goes back to Egypt and China, where woodcutting had its first appearances coming from the use of wood to stamp in fabric. With the development of paper in China mid-2nd century, the printing technology started to evolve and became a precursor of the ways of printing. On the west there was a delay until the development of wood printing.

Its evolution only came, as it had happened in the east, from the expansion in textile printing in the beginning of the 14th century. (Reis 2010)

Around 1430 in parallel to woodcutting productions, a new printing technique was developed in Germany: the Intaglio. The difference between metal engraving, as it is called, and woodcutting were the matrices and the way of carrying ink. The technique uses a metal plate, usually copper, where what will be printed is in bas-relief, instead of raised as in woodcutting, where the wood is carved and the higher surface left carries the ink. (Stjman 2000)

The tool used in the work is the chisel (fig. 2), 'tool created to take off the metal, leaving behind it somewhat triangular and thin grooves according to the tool and will of the engraver' (Jorge & Gabriel 1986).

The printing equipment in intaglio work is in a high-pressure level so that the paint, already established in the grooves (bas-relief), gets stamped on paper. To do this, machines with cylindrical presses were used, also called calcographic presses, where the cylinder pressed the metal plate. Because of the great pressure it was necessary that the paper were more elastic, so it could fit to the grooves and incisions.

Among the first generation of engravers, active between 1430 and 1440 in Germany, was the Master of the Playing Cards, one of the first engravers to introduce tone, in other words, the variation in lines frequency to suggest shadowing and contrast differences. (Boorsch 2002). Martin Schongauer was one of the



Figure 3. (1) The 1569 Mercator map of the world; (2) Ortelius World Map "Typvs Orbis Terrarvm", 1570, (from The Library of Congress page).

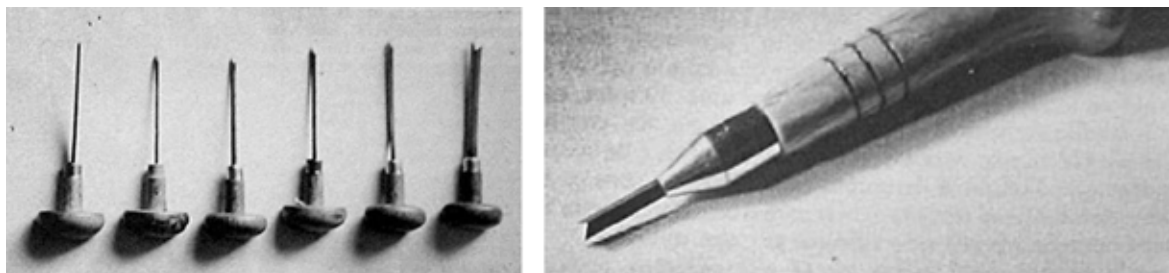


Figure 2. (1) Chisel; (2) Short chisel edge; Extracted from the book *Técnicas de Gravura Artística* (Jorge & Gabriel, 1986).

first to explore the technique and Albrecht Dürer one of the most famous artists from this generation.

Marco Antonio Raimondi, in Italy, was precursor of what we call "reproduction printing", recording artists and cartographer's works. In reproduction printing, the artist-engraver engraves and records images not from his authorship: while the 'original print' is, in itself, a way of the artist's expression. (Reis 2010). At the end of the 16th century we have the use of reproduction printing to record the discovery of the New World, reports of scientific studies on anatomy, botany, zoology, etc.

The techniques of metal printing reach its maturity peak mid-16th century for being easy to reproduce and propagation, besides the value of recording and documentation from the period's culture. (idem)

As far as to the technique development in Brazil, the field is foggy. According to Orlando da Costa Ferreira in his book *Imagem e Letra*, we have some cases recorded before the arrival of the Portuguese court (and consequently before freedom of the press), although most of it is not clear. 'If Volckmar Gusmão's affirmative is exact, the oldest metal engraver in Brazil would have been Jesuit Alexandre Gusmão (1629-1724)' (Ferreira 1994).

Cartography

The development of cartography has accompanied the civilizations' progress. In ancient Greece, the first fundamentals of cartographic science were started by Hiparco (160-120 B.C.). All the knowledge created there is in the work *Geografia* of Claudio Ptolomeu from Alexandria (90-168 A.D.).

The contribution from Ancient Greece, however, kept itself ignored, as said by Paul S. Anderson (1982), throughout the Middle Ages, resurfacing in the 15th century with the so called Ptolomeu's Renaissance. According to Álvaro Mendes Ferreira (2009) until the appearance of the portolan charts in late 1200 the world's cartography proposed itself to chronicle the history of the world's salvation, creation, among other biblical narratives.

From the 15th to the 18th century what is noticed is a progressive abandonment, full of comings and goings, from everything that extrapolates the mathematical scope. Generally, there is the decay of ornamental elements in favor of conventional symbols, without any explicit relation to reality. (Ferreira 2009)

In the 16th century comes the Dutch cartography, represented mainly by Mercator and Ortelius. In 1569 the first Mercator's [fig.

3] map appears and in 1570 is published the *Theatrum Orbis Terrarum* [fig. 3], considering it the first world modern atlas, from Abraham Ortelius (Paul S. Anderson, 1982). As for the process of abstraction itself, Álvaro Mendes Ferreira (2009) says that "the Lower Countries, in their golden century, have become a commercial, scientific, cartographic and artistic hub (E) taken by a compulsion by the number and objective description of things".

4. Methodology

The analytical approach of this research was developed through the following stages:

- Stage 01. Survey of bibliographic references about the manifestation of metal printing in Brazil, specifically in Pernambuco.
- Stage 02. Field research developed through visits to the IRB to gather information and identify works that were up to our expectations. As a result we selected the artifact to be analyzed, focused in our research.
- Stage 03. Photographic record of the 19 first prints in the book *Gaspar Barlaeus - Nederlandsch Brazilië (1647)*, including cover and back cover. The reduced number granted us a detailed analysis and a more focused comparison in different kinds of gravures present in the work.
- Stage 04. A bibliographic research about the history of cartography to base our analyses.
- Stage 04. Preparation of the Analytical Instrument through a form for categorization of the selected prints.
- Stage 05. Graphical analysis of the copies through the Analytical Form.
- Stage 06. Analysis of the data collected and discussion to obtain the final results and conclusion.

5. Analysis Form

We have based on our Analytical Form [fig. 4] in the Halliday research about metafunctions of society's language. We divided the report in two main areas: ideational and textual metafunctions.

The first is about the use of language to portray the environment, the context in which it is present. According to Halliday, the ideational metafunction has as its main role to situate the reader in a context in which the text or print are present, using various methods and communication theory (Vanleeuwen 2005). Our work, as to this metafunction, is to list the ideational mechanisms.

To facilitate, we subdivided the communication mechanisms in three categories: Cartographic Representative Elements, Natural Representative Elements and Historical Representative Elements / Ornamental Elements. In these categories we have listed

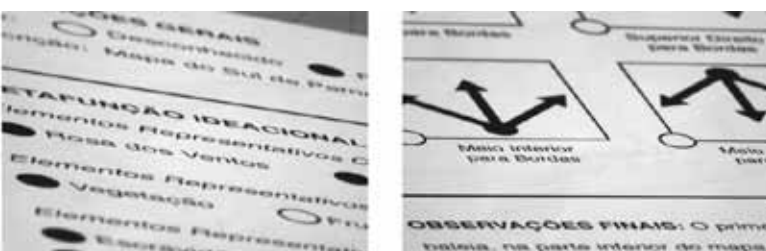


Figure 4. Detailed photo from the analytical form.

the most frequent, although it's important to know that other graphics were found that did not fit in the predetermined patterns, but were also analyzed and accounted for.

The second metafunction is about the composition and how the elements, pictorial or textual, fit in the space and what are their emphasis and hierarchy. We tested those mechanisms by numbering the order of emphasis and trying to analyze possible axes of reading like left to right, middle to corners and top to bottom.

6. Analysis Results

Using a total of nineteen images, two of them being illustrations (cover and back cover), nine maps and eight landscapes about conflict and various exploration sceneries, we have come to the numbers which were useful for us to draw our conclusions.

In the application of the first semiotic metafunction, the ideational, we have compared the presence of natural representative elements (fig. 5), observing if the fauna, flora and hydrography of the region was represented. We could note predominance of vegetation representations. Curiously we had the presence of fauna more frequent in maps and the presence of rivers and lakes images more frequent in landscapes.

Later we have also accounted the presence of historical representative elements such as slavery, battles, buildings and ornamental elements like frames and coat-of-arms (fig. 5). We have noted a great using of such elements in both landscapes and maps.

Of the 9 analyzed maps, 4 of them have the authorship of Franz Post and the other 5 are from unknown artist. Based on this we have also compared the appearance of historical and natural representative elements and what was observed was the predominance of the elements in Post's maps and no references, with the exception of vegetation elements, in the other artists' maps.

From the textual metafunction, it was not observed any organizational pattern of information, however, the lower the uses of

representative elements the lower the variables of hierarchy were encountered (fig. 6).

As for the technique, we have deeply analyzed both prints that introduce the book and in them we could observe the various relative possibilities regarding intaglio, among them the use of lights and shadows formed from line repetition, a common practice in the technique.

7. Conclusion

Based on the collected data and the immersion in the studied object we could conclude that one of the reasons for the finishing quality presented by the object owes it to the improvement that the metal printing has undergone in the period, taking into consideration that its peak happened mid-16th century and the work published in 1647. We could not say that this level of quality would not be possible in woodcutting, but the intaglio certainly allowed for a larger and better production.

Just as André Monteiro de Barros Dorigo says in his article "Esplendor e sigilo: o Brasil na cartografia portuguesa dos séculos 16 e 17": 'for almost three centuries, the Portuguese^{3/4} unlike the French and Dutch^{3/4} virtually didn't paint panoramic views of the region'. We also know that in its production period the world cartography passed through a great evolution and Holland, in particular, was in its production peak at that time. The mathematic

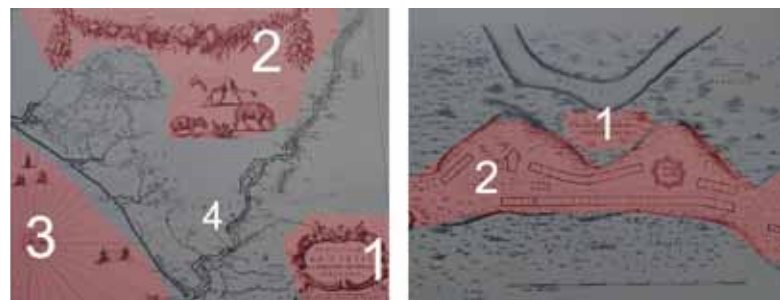


Figure 6. Comparison between information hierarchies in a Franz Post's map (left) and in an unknown artist's map (right).

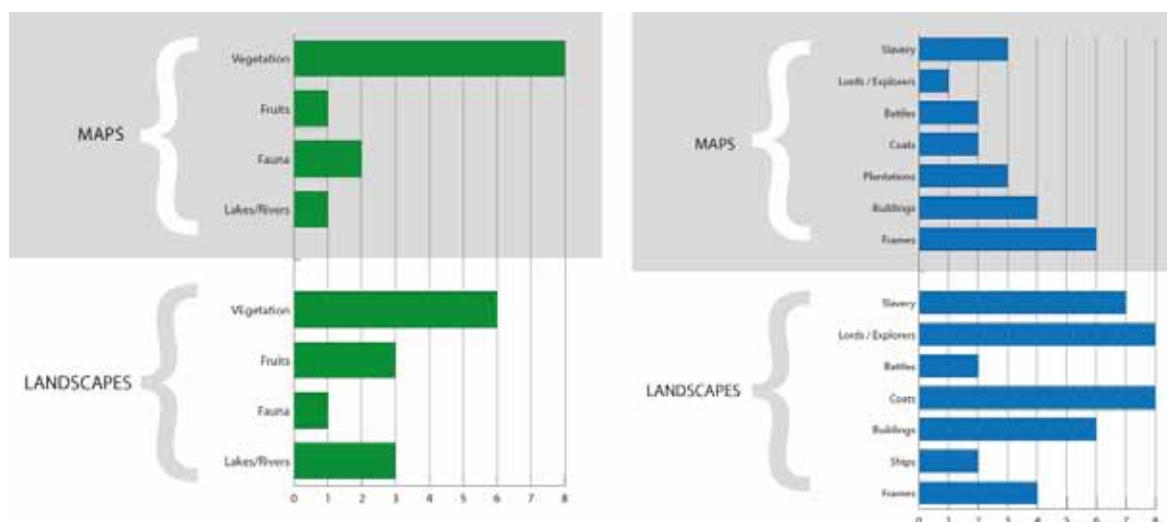


Figure 5. [1] Natural representative elements; [2] Historical representative elements;

cartography present itself in various moments in the analyzed work, however in inconstant appearances.

From the 9 analyzed maps, the 4 authored by Franz Post show large use of ornaments and external references, getting away from the previously cited mathematics. We know that one of the factors to induce such a style are his artistic origins and his strong tendency to illustration and painting, so present in the landscape prints. However, it is remarkable that the maps developed by Post did not record richly detailed cartographical environments, only small parts of the northeastern coast and hydrography. We could then question if the use of Post artistic skills, with all his ornaments, are related to the level of complexity of the cartographic knowledge. In other words, the higher the details and knowledge of the area of the map, the lesser the use of such figurative elements, and vice versa.

Not limiting ourselves to only maps, we know that a large part of the figurative elements was used to accurately represent the peculiarities of the New World. But, how far were those ornaments representing real events and not advertisement of the Dutch expedition deeds? In 4 prints were depicted conquests and battles between Dutch and Portuguese and another 12 regarded slavery. Another evidence is given by the account of André Monteiro de Barros Dorigo: “the decorative sobriety with which the Portuguese cartographers portrayed the 17th century’s Brazil is sharply different from baroque maps of the Dutch occupation, that, on the contrary, would have had the goal of promoting Brazil’s northeast so that more resources would be collected for its colonial enterprise”.

We could then conclude that the analyzed maps are located in a decisive phase of the world’s cartography and that they were important for being one of the first visual records of Brazilian lands. We can deduce too that it is thankful to the metal printing technique that the richness of details, the use of shadows and perspectives could be represented. It is noteworthy that the object of study also gives room for future comparisons and research, confronting the Dutch production with Portuguese productions from the 16th and 17th centuries, as well as the cataloging of its prints and representative elements.

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Co-ordinated design policy and the shift from one-off designs to comprehensive design systems

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*Design co-ordination / Visual identity / Design methods /
Design management / Graphic design history*

During the late 1940s and early 1950s a small group of designers embraced the concept of 'design coordination' in an attempt to unify the visual output of their clients. This shift in emphasis – favouring order over expression – represented a tipping point in the professionalisation of graphic design in Britain, helping to transform designers from individual commercial artists into business practitioners working predominantly in groups.

1. From one to many

Immediately after the Second World War, designers in Britain began to seize upon a concept that had been explored only fleetingly up to this point. This was the idea that by co-ordinating multiple designs to 'sing from the same hymn sheet', clients could gain a competitive advantage over rival businesses and organisations. Central to this approach was the concept of recognisability, i.e. if all of the products and activities of one organisation can be easily recognised as belonging to them, then the 'cumulative impression' of these varied products and activities will far outweigh their individual value.¹

Up to this time there had been an over-reliance on the role of the trademark as a co-ordinating device. But designers now began to consider a far wider gamut of visual tools to demarcate this cumulative relationship. Alongside the trademark, the colour scheme and typographic palette chosen to represent the organisation became critical new components. A third, more ambiguous component, that eluded codification, was what might be described as a palette of visual language; this could typically include patterns, borders and other graphic marking to be associated with the organisation.² These components together comprised what was described in Britain at the time as a 'house style'. This term came from the printing and publishing industries, where the 'rules', or 'style of the house' referred to the particular way in which a publisher or printer produced its work (Unwin 1926: 8).

¹ 'Cumulative impression' was a phrase used by Beatrice Warde to describe the effect gained by standardising the typography of the London and North Eastern Railway (Warde 1933: 8).

² Journalist and designer Alec Davis played a critical role in championing design co-ordination within the pages of various magazines and journals; in particular the Council of Industrial Design's monthly title *Design*. In November 1956 a special issue of the magazine was produced dedicated to the subject of 'House Style'. In it, Davis proposed five 'Factors in house style': colour, pattern, borders, trademarks and symbols, and lettering (1956).

In this paper I will explore the techniques and methods used to plan, implement and control house styles. I adopt the term 'design co-ordination' to describe the technique used to align numerous designs into one coherent, unified whole. The term derives from FHK Henrion and Alan Parkin's seminal text, 'Design Coordination and Corporate Image' (1967),³ which is thought to be the first book dedicated to the subject of visual identity.⁴

The technique of design co-ordination spans the fledgling development of visual identity as a professional activity. Right from the early British notion of 'house style'; through the rhetoric of 'corporate identity' that emanated from North America in the 1960s; up to today's dominant terminology of 'branding'. Throughout these phraseological developments the concept of 'co-ordinating' a number of designs remained, and continues to remain, a methodological constant. I argue that the phenomenon of design co-ordination was far more significant to the development of design as a profession than the canonical examples of early twentieth century corporate identity valorised by design historians.

These so-called pioneers (AEG, Olivetti, London Transport, CCA) often appear in design history surveys like a roll-call of who is who.⁵ But whilst there may be some unity of design in these canonical examples, it wasn't until the 1950s that the technique of design co-ordination really found ground.

In looking at the approaches used to co-ordinate multiple designs, I am distancing myself from the existing debates around representation and perceptions of organisational identity. For this reason I have purposely shied away from the term 'corporate image' – as found in the title of the aforementioned book – as it has been used to refer to the audience perception of an organisation.⁶ Whilst there is an abundance of literature in the field that focusses on the notion of identity, the subject of co-ordination has been largely neglected as a serious area of study. In this paper I will demonstrate how a more thorough understanding of the methodological developments within design co-ordination can provide insight into shifts away from making and towards planning within the graphic design profession.

³ Henrion and Parkin explain that the title of their book was 'chosen to describe the activity which creates a house style' (1967: dustjacket).

⁴ Henrion claims as much in *The Image of a Company* (Bos 1990).

⁵ For example, see Balmer & Greyser (2003: 40).

⁶ Henrion and Parkin define corporate image as 'the totality of pictures or ideas or reputations of a corporation in the minds of the people who come into contact with it' (1967: 7).

2. Non-methodical methods in design co-ordination

The way in which design work was commonly conceived in Britain changed significantly in the aftermath of the Second World War. Whilst in pre-war, designers and commercial artists tended to survive on a series of one-off commissions; in the subsequent period, there began a slow, but definite transition towards 'design programmes'. These programmes, or house styles, comprised of multiple design items conceived simultaneously as part of a comprehensive visual identity system. But these new design systems would require a careful planning and rationalisation process that would draw designers away from the making tasks that they were truly comfortable with.

Towards the beginning of the century attempts were made by so-called 'patrons of the arts' to raise the standards of art and design in British business. Among these individuals were Jack Beddington at Shell, Colin Anderson at the Orient Steam Navigation Company, and most famously Frank Pick at London Transport. Nikolaus Pevsner described Pick as 'the greatest patron of the arts whom this century has so far produced in England and indeed the ideal patron of our age' (1968: 209). Whilst these individuals had a significant effect on the over-riding standard of design in their respective organisations, the role of design co-ordination within their work remains questionable. London Transport has arguably become the most heavily cited example of early visual identity work in Britain, being widely considered the first visual identity scheme of its kind. Design historians have praised Pick's ability to bring unity to a disparate organisation, laying particular focus on the role of Edward Johnston's block-letter alphabet as a co-ordinating visual force.⁷ In order to establish the historical 'seeds' of design co-ordination methodology it is worth considering the methods in which Pick and Johnston operated.

Whilst it is undoubtable that Johnston's lettering takes a central co-ordinating role in the organisation's visual identity today, this was not his intention when the alphabet was designed. There is various evidence that suggests Johnston's lettering was never conceived as a co-ordinating force; but instead, that it was created for one particular usage, namely to appear printed on posters at one inch tall (Howes 2000: 41; Banks 1994: 16). Whether Pick had intended Johnston to create a co-ordinating typeface remains unclear. He did seemingly want to unify the complex transport system he had taken command of – it had its origins in a number of smaller rivals and this led it to appear like a disparate collection of separate operations, rather than one coherent network.⁸ The evidence presented here suggests that if Pick did commission a co-ordinating typeface from Johnston, perhaps he simply chose the wrong man. Johnston himself was strongly opposed to mechanical reproduction and as a calligrapher he saw each letter as

⁷ For example Saler claims 'Pick commissioned Johnston to design a special typeface that would be used to imbue the system with a coherent visual identity'. (1999: 43)

⁸ Forty, referring to Pick, claims that 'it was from him rather than anyone else that the vision of the unified and perfect transport system seems to have come' (1979: 114).

an individual creation. This was in strong contrast to the demands of typeface design, where letters are treated akin to modular components, appropriate for repeated usage within the context of any permutation of surrounding letterforms (Banks 1994: 38). As such, Johnston was not the best placed candidate to create a systematic and flexible alphabet that could be reproduced at various sizes, in numerous materials and in different contexts.

Colin Banks suggests that the alphabet that Johnston created may have become universally used purely as a matter of default (Banks 1994: 26). For once it was designed, the alphabet seems to have been immediately regarded as having been designed for 'all purposes'. Not just for use in print at one inch tall, as originally intended; but also for example on signage made of glass or enamelled iron (Howes 2000: 42). The fact that the lettering actually worked on anything other than posters was extremely fortuitous, as whatever the intentions of the original design, this allowed the organisation to apply the resulting alphabet to a diverse range of forms and materials. And so it was that the typeface resulting from Johnston's alphabet design became a key component of a co-ordinated design policy, but most significantly, it did not come about through a planned act of design co-ordination on his part, but instead by a rather circumstantial series of events.

Lets consider the wider context of London Transport's visual identity for a moment. Describing the design style of London Transport in 1946, Norbert Dutton explained that: 'It is effort, not accident, which has developed the idiom.' But just two sentences later, he goes on to suggest that the 'unifying principle' behind the idiom was: 'so subtle as to have escaped the conscious perception even of those designers who have been most closely concerned in its application' (1946: 98). This seems a remarkable contradiction; if the designers concerned with applying the idiom were unaware of it, this suggests it was in fact altogether unintended. Kempers has suggested that Pick's was a personal policy, distinct from the institutionalised design policies that followed later (Bakker, 2009: 25). Perhaps there is an assumption here that Pick was silently orchestrating his band of designers around his own carefully planned personal intentions. But this seems like no way to implement a comprehensive design policy.

3. Systematic methods in design co-ordination

In stark contrast to London Transport, the methodological approach of Henrion Design Associates (HDA) presents a very different narrative about the way in which designers could engage with the process of co-ordinating design. In the 1967/8 yearbook of the Design and Industries Association, Henrion and his employee Alan Parkin, formalised many of their design methods in a text titled 'Systematic Methods in Design Co-ordination' (1968). Their interest in design methodology reflects the thriving development of the design methods movement in 1960s Britain.⁹

⁹ The first design methods conference at Imperial College, London helped to launch the movement in 1962. In 1965 the Council of Industrial Design published Bruce Archer's text 'Systematic Methods for Designers' (1965) – note the similarity to the title of Henrion and Parkin's text.

Henrion and Parkin's text begins: 'Every designer knows the creative and administrative problems of designing even a single item. But when a task involves hundreds or even thousands of items then the difficulties multiply enormously and a new approach must be defined and achieved' (1968: 33). They go on to claim that the complexity of the vast design co-ordination programmes under their charge couldn't possibly be dealt with by traditional intuitive methods, suggesting that new techniques had to be developed and applied from outside the field of design. Interestingly, Parkin came from a background outside of design, graduating with a degree in Moral Sciences from Cambridge University. Henrion's background was more artistic, having developed stature as one of the top poster artists of the 1940s. In this respect Parkin was seemingly a scientific foil for Henrion, his interest in mathematics and cybernetic theory were in part what inspired Henrion to employ him, for he was not a conventionally trained designer.¹⁰

In the interwar period Henrion had plied his trade as a lone commercial artist bringing a fluid and intuitive approach to his ideas-based posters and other jobbing design work. This was a dramatic contrast to his work after the war, where he became the leader of an international graphic design business, developing a far more systematic and scientific design methodology through his company's work for clients such as KLM Royal Dutch Airlines, Blue Circle Cement and British European Airways. Although the transformation in his career was pronounced, the playful and intuitive designer of the early years didn't completely disappear and can still be seen in the lecture posters he designed later in his life. Nevertheless, Henrion's career path does highlight a paradigmatic shift within the design profession, away from the 'authentic voice' of the maker,¹¹ and towards the rational and objective voice of the planner.

The 'new techniques' that he and Parkin described in their article would 'apply less to the actual design stages, than to pre-design assembling of information and formulation of design requirements, and to design planning, progressing, and implementation' (1968: 34). The four key methods that Henrion and Parkin explored were: making a survey, information storage and retrieval, formulating a brief, and planning and estimating for design developments. Many of the techniques they developed were effectively analytical tools designed to leverage a more thorough understanding of the vast range of items under their command (they mention in passing 5,000 Post Office items under one scheme). These included bespoke indexing systems that would allow HDA to cross reference any one design item with another. This enabled them to understand patterns in the information they were dealing with, allowing them to organise individual items together in groups. Another such tool was a 'specially constructed' display stand that would allow them to collate together hundreds of images that represented the various design items of an organisation. This would allow them to compare all the vehicles used by one organisation. Alternatively they could rotate a single panel of the

¹⁰ Interview with Alan Parkin, 13 December 2011.

¹¹ Tony Heward writes of the 'authentic voice' of modernism as opposed to the 'adopted voice' of post-modernism in which only the imitation or the recycling of ideas is possible (1999).

display to compare and contrast a range of vehicles with a range of stationery, for example. Alongside these physical design co-ordination tools they developed a range of complimentary project management solutions, which although rudimentary, give a clear insight into the complexity of the design processes they were attempting to control.

Many of the techniques that Henrion and Parkin explored in *Systematic Methods in Design Co-ordination* find strong parallels with another burgeoning field; that of design management. In the pages of the monthly title *Design*, Michael Farr took a leading role in championing the importance of this area, stating that 'Design is a unique factor in competition. Skilful management of designers and designing, therefore, becomes imperative' (Farr, 1965: 39). But Farr saw design management as a function to be fulfilled by a non-designer, claiming that 'if designers are good at designing they should not have the time to spare to manage the ramifications of their design projects, regardless of whether or not they are also good managers' (Farr, 1965: 38). But in the case of HDA, it was Henrion who remained at the helm of the firm, overseeing day-to-day operations and presenting himself as the figurehead through which all decisions were channeled.¹²

4. Conclusion

Milner Gray, of the influential British design group Design Research Unit claimed that: *Designers and manufacturers have been unable or unwilling to come to terms with the implications of machine production. The difference between designing for production by hand and by machine is that one is a process of making while the other is a process of planning* (1949: 10).

Henrion typifies this shift in emphasis from making to planning within the graphic design field. Although in effect he was never simply a maker or a planner, the trajectory of his career indicates a pivotal turn away from distinctly intuitive and artistic means, towards more technocratic methods in which the visual identity manual became the ultimate instrument of control. Whereas Frank Pick's personal design policy for London Transport produced design that became more-or-less co-ordinated through good fortune or even a matter of default; the policies that Henrion advocated used design co-ordination as a rigorously planned marketing tool that could provide a competitive advantage for clients along with economic stability for designers. Commissions for design co-ordination programmes went far beyond the piece-meal provision of a one-off design commission, often providing retainer agreements that could last over a number of decades. This enabled commercial artists like Henrion to establish graphic design as a tenable profession of its own, independent of the inter-related disciplines that commercial artists were previously dependent upon, such as advertising and printing.

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From 'Do it yourself' to 'Open design': users' involvement and democratization

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DIY / Open design / Ideological motivations / Democratization

The involvement of users in objects' creation and production has been linked to industrial design democratization. A parallelism between two cases, a DIY project from the 1970s and a current Open design project, is presented to understand how users (creators/producers) have been involved. Design approaches have matured during this period; however, they still have a way to go concerning the development of democratic dynamics of creation and production.

1. Introduction

The last few years have seen a quick development of design strategies to involve users in the creative processes of objects' conception. In this context 'Open design (OD) has brought together ideas of shared creation and democratic access, leading to 'social participatory innovation' (van Abel et al. 2011: 13). Several of its current actors have remarked OD's relationship with previous 'Do it yourself' (DIY) movements (Avital 2011: 57; Atkinson 2011: 26-27). Professional designers' DIY projects from the 1970s are now being re-edited or re-launched. James Hennessey re-edited in 2009 his *Nomadic Furniture* books, co-authored with Victor Papanek in 1973 and 1974. An English-translated second edition of Enzo Mari's *Proposta per un'autoprogettazione* from 1974 was launched in 2002 and 2008. The project inspired Domus magazine and FabLab Torino for a DIY design competition named *Autoprogettazione 2.0*, opened in 2012. Artek is offering the *Sedia 1* from Mari's project since 2010; the furniture company produced a short documentary about the project and exhibited it at the Milan fair the same year.

A raising popularity of the culture of making seems to be one of the trends behind this phenomenon. JWT, a global marketing consultant, shows significant numbers in a trend journal edited in 2009. Entertainment, food, beauty and fashion are some of the areas studied. JWT consultants link this trend to frugality in the recession, to anti-consumerism, a declining respect for big businesses, and to the internet and the strength of connected makers (JWT 2009: 3-4). The Institute for the Future (ITF), a non-profit research center for long-term forecasting, highlighted the results of a 2006 survey pointing out related findings.

A self-motivating, self-educating and self-organizing sector of society is emerging that may define an alternative economy. This sector tends to seek out customized or alternative goods, services, and entertainment-preferring to have a more active hand in shaping their own goods, environments, and experiences in conjunction with relatively small groups of like-minded people. (ITF 2007: 4)

It is not the first time that social phenomena are influencing pro-

fessionals and institutions of industrial design. This study aims to analyze how professional initiatives have tried to 'organize' social initiatives, following ideological motivations. The involvement of users in objects' creation and production has been acknowledged as democratic, as much in DIY as in OD.¹ To explore these subjects, the relationship between DIY during the 1970s and the current emergence of OD will be considered. Social and political contexts will be briefly introduced to visualize the environments that gave them relevance. Designers' approaches will be considered through two case studies. Finally, a brief reflection on the democratization of design will close this report.

2. Do it yourself

The term 'Do it yourself' has been used to define a wide variety of popular practices (Atkinson 2006: 2). Some scholars have acknowledged its varied connotations and specific associated techniques along history. A pre-history of DIY embedded in eighteenth and nineteenth-century women craft for the domestic interior has been raised as a phenomenon through which the development of gendered activities can be analyzed (Edwards 2006). The construction of the image of an active, autonomous modern home-maker during the 1920s and 1930s has been linked to specialized feminine DIY media (Hackney 2006). As a masculine tool for reconstruction in the post-wars period, DIY has been also associated to the development of tools and materials that allowed cost saving home improvement activities independently from professional tradesmen and skilled artisans (Atkinson 2006: 2). Overall, DIY dynamics have been associated to varied social phenomena, being described as leisure, as a hybrid of consumerism, or, on the contrary, as an alternative and emancipative cycle of production.

During the 1970s DIY was associated to autonomy and resistance, it was promoted as a creative act of rebellion against the established circles of culture. This shift of meaning is evident in its appropriation by the punk movement.

The DIY ethic states that punks should not be content with being consumers and spectators but instead should become active participants in creating culture, (€) these media should be autonomous from the culture industry and the "mainstream" media as much as possible, to serve as an alternative form of cultural production (Roberts & Moore 2009: 22).

Anarchist ideals were sometimes behind this search for autonomy and the construction of alternative social dynamics. A trend towards self-building as an alternative solution for housing, also supported by professional architects, was taking place during

¹ Sometimes using the term democracy, as in the case of Atkinson 2006: 5-8, van Abel et al. 2011: 13 and Mota 2011: 279; in other cases acknowledging the horizontal nature of their structure, as in Avital 2011: 49.

the same period.² The initiatives by Enzo Mari and Papanek and Hennessey, both furniture projects for being self-build, were contextualized in this particular contemporary environment.³ Papanek itself raises the importance of developing alternative design structures in 'Design for the Real World', the democratizing aspect of DIY and the wrongness of 'the whole concept of patents and copyrights' are acknowledged (Papanek 1972: xxiii). In this context, the relationship with initiatives now considered open-design related is not only in form (the characteristics of the design projects themselves), but in content, in the discourse behind the actual project. Although each of these initiatives lies over a particular ideological base, they aim to create a direct link with the user, questioning the production and market dynamics of traditional capitalism.

DIY has been linked to democratization in design, as much in the past as in the present. The case of Enzo Mari's *Autoprogettazione?* is of particularly interest to understand the relationship between the ideological aspirations of the professional designer and the reception and meaning transformation by the general audience. His re-edition from 2002 includes a section with some of the public's correspondence to the designer in response to his project from 1974.

Autoprogettazione? includes a compilation of instructions to build wooden furniture 'using rough boards and nails', it aimed to 'teach anyone to look at present production with a critical eye' (Mari 2002: 2).⁴ It states that 'the end product, although usable, is only important for its educational value' (Mari 2002: 5). Therefore, the direct link with the user is only for the construction of meaning; it aims to contribute to alternative perspectives of consumption but indirectly, not by substituting the 'mainstream' product, a scope that is closer from Papanek and Hennessey's work. Mari expects that by the experience of building with his/her own hands the user can 'improve the ability to assess the objects of the market with a more critical eye'. However, Mari himself complains because '99 percent of the times the proposal is not understood or is understood differently' (Mari 2002: 51). Indeed, he highlights that most of the responses he received were from people 'satisfying esthetical needs' or resolving 'real furnishing problems'.

Analyzing this example from the point of view of its democratic value we can identify a motivation for providing non-profit alternatives, getting closer to the user by eliminating corporate intermediaries, and encouraging a participatory attitude from readers.⁵ However, a strong designer-centered approach remains in the project. Mari is not satisfied, even when he receives enthusiastic messages from users, because the objects didn't carry

2 See for example Turner 1977.

3 The projects referred here are:

'Proposta per un'autoprogettazione' from 1974 by Enzo Mari, re-edited under the name 'Autoprogettazione?' in 2002.

'Nomadic furniture: how to build and where to buy lightweight furniture that folds, collapses, stacks, knocks-down, inflates or can be thrown away and re-cycled' from 1973 and 1974 by Victor Papanek and James Hennessey

4 Referring to 'present' as the original date of publication in 1974.

5 Readers are asked to send photos of the furniture built and 'in particular, variations of it', as feedback (Mari 2002: 2).

the meaning they were intended to have. From this perspective, the democratic value of *Autoprogettazione?* is questioned. A democratic approach towards DIY should celebrate the diversity of meanings growing during the participatory process of production. In a period when DIY was embedded with ideas of autonomy, Mari does somehow the opposite, he links the project to his own values and seeks for their permanency beyond the user (and producer).

3. Open Design

Recent transformations of the Web into a participative platform (named Web 2.0) are having significant consequences in society.⁶ The web is considered by many as a symbol of democracy; built from down, where everything co-exists. 'Here is the story of two decades in one sentence: If the past 10 years have been about discovering post-institutional social models on the Web, then the next 10 years will be about applying them to the real world' (Anderson 2010: 63). The collaboration of connected communities is perceived as the next tool for social change, and this trend has arrived to the realm of physical objects.

The term Open Design (OD) derives from the Open Source Software model and refers to the collaborative design of physical objects (de Bruijn 2010). Paul Atkinson defines it as 'the internet-enabled collaborative creation of artefacts by a dispersed group of otherwise unrelated individuals' (Atkinson 2011: 26). Michel Avital adds that the resulting blueprints can 'be adapted at will to meet situational requirements and can subsequently be used by consumers to fabricate products on demand' (Avital 2011: 49). In this context, recent developments in subtractive tools (laser cutters, CNC routers and milling machines) and domestic-scale additive tools (computer-controlled 3D printers) for digital fabrication 'point the way toward a decentralized more customer-centric "maker" culture' (Igoe and Mota 2011: 1). The cultural tendency highlighted in the introduction of this study complements an apparent confluence of trends, associated by some analysts to radical shifts in production dynamics, to a 'third industrial revolution'.⁷

The possibility of a post-industrial, urban, small scale production model associated to OD motivates the ideological points of view of some of the actors involved, acknowledging its democratic, sustainable and anti-consumerist implications. Some of the supportive arguments are the blurring divisions between professional and amateur, a *Pull* rather than *Push* model for consumption, and a particular object-user attachment, contributing to social awareness of our material environment (Mota 2011: 279; Atkinson 2011: 25; Avital 2011: 57; Easton 2009: 45).

Social design approaches in the past were focused in designing for the people; this perspective has been changing to design with the people, and now the relevance of design by the people is being raised. The particularity of OD, in comparison with DIY projects from the 1970s, is the possibility of user involvement in all

6 Citizens are organizing collectively for political uprisings through social networks. Hobbyists are connecting with individuals sharing interests to learn from each other. A critical mass is building popular knowledge platforms.

7 See for example: Anderson 2010: 105.

the stages of creation and production of the object. Professional designers are moving to the position of the meta-designer, designing platforms for objects' collective creation rather than the objects themselves.

An interesting case to visualize how designers are managing these significant changes is *Open Structures*, an OD project created by Belgian designer Thomas Lommée.⁸ The base of *Open Structures* is modularity 'through modular construction you generate objects that can change along time, they can evolve, and therefore they can adapt and become more resilient' (Lommée: 2012). The shared grid is expected to work as a common language, just like html in the diversity of the internet. Lommée is interested in spreading this language; he asked people he knew to design objects based on the grid. Means of transport, simple domestic appliances and furniture are some of the resultant objects.

If we compare Lommée's approach with Mari's there are in fact several shared characteristics. Both projects search for an ideal, they tend to design a social dynamic; the objects themselves are of less significance. The instrumental decisions of the project are embedded in their contemporary environment. However, in general, the implications of OD go beyond the ones of DIY. A decentralized network involves innumerable combinations and collaborations, the dynamics of DIY are just one part of it. Users/producers/creators become more independent in OD, they can take action in several places of the system, rather than being restricted to follow step-by-step instructions. Freedom of action for all the contributors is one of the principles of OD. Forty years have passed and democratization of design looks closer.

Another useful source for understanding the dynamics of OD, in this case independent from designers' approach, is the *RepRap* community. In a thorough study of its activity, Eric de Bruijn acknowledged the horizontal, representative and volunteer-based characteristics of this organization (de Bruijn 2010). The goal of the *RepRap* community is to 'collaboratively develop a low-cost fabrication device that can, to a large extent, produce a physical copy of itself' (de Bruijn 2010: 18). The author describes how individuals collaborate to create parts and exchange files and objects for free and under open source licenses. The explosive growth of the community is highlighted.⁹ An important motivation for joining is to build the machine itself, for the member's own use. The *RepRap* community is coordinated by the core team, whose members are voted on board by unanimous vote. The team can be considered a non-hierarchical group with some level of responsibility of coordinating work (de Bruijn 2010: 20). The motivations for volunteering in the community have been identified as: autonomy, desire of competence, relatedness, and meaning (de Bruijn 2010: 21).

Based on de Bruijn's words, the *RepRap* community seems to

⁸ For more information visit the Open Structures web page: <<http://www.openstructures.net/>>

⁹ The adoption rate increases so fast that new adopters outnumber all those who joined more than 6 months ago' (de Bruijn 2011: 29).

embed all the current internet-based aspirations of democracy. Unfortunately, *Open Structures* is not there yet. If we consider democracy as freedom, *Open Structures* gives creators/users/produces total autonomy for creation and production as long as the grid is respected.¹⁰ Not only there is not an intended meaning for objects, there is not an intended technology to apply or moral principles to follow. Besides freedom, collaboration is encouraged.¹¹ But if we compare the individual approach of Lommée, inviting designers to participate, 'curating' the project as he admits, with the bottom-up growth of the *RepRap* community, we can see design still has a way to go (Lommée 2012).

Rather than originating ruled networks following personal motivations and calling for contributors, the democratic open designers will assist in spontaneously formed communities with common interests. Private benefit is a core subject in projects depending on volunteer contributions (de Bruijn 2010: 44). Communities sharing specific interests or needs are particularly prone to collaborative creation (de Bruijn 2010: 16; Von Hippel 2005). That is how people like to work together and where design actions towards democratization will take place. The role of professionals as designers and meta-designers will be assisting collaborative processes, participating as one more member who has, such as the others, a particular expertise.

4. Conclusions

There is a parallelism between the historical moments when DIY and OD initiatives from professional designers became relevant, searching for autonomy and the construction of alternative cycles of production and consumption are some of the common points. Although the social dynamics encouraged by designers through their projects in both periods have similarities, the implications of OD go beyond the ones of DIY: DIY is just one part of OD.

The cases analyzed in this study illustrate a process of maturity towards users' participation during the last forty years. Nowadays, bottom-up organizations for the collective creation and production of physical objects are developing. However, initiatives from professional designers remain somehow designer-centered. A collaborative approach towards spontaneously formed communities of creators/producers/users with common interests would lead to a real democratization of design.

Acknowledgments

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¹⁰ Besides the employment of the grid, Lommée requests that objects are designed for disassembly and that recyclable materials are favored.

¹¹ The common grid allows sharing parts or redesign new objects re-using parts. An online platform containing all components, developed also by Lommée's initiative, makes this process possible.

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Contributions of improvisation techniques to interactive environment design

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Improvisation / Interactive systems / Environment design / Architecture

This article will present and discuss the concept of improvisational interactive environment as a methodological approach to interactivity in the design of electronic mediated environments. It will analyze methods and techniques of improvisation in interdisciplinary fields of art and science, evaluating the contributions to the practice of interactive environment design.

1. Introduction

The practice of improvisation has been adopted by several artists as an open process oriented to explore innovative procedures and achieve original results in different areas. It can be understood as a spontaneous behavior marked by intuition, adaptation and extremely contextual relationship between players, audiences and environments in real time. For contemporary theorists on interaction design, these aspects are extremely relevant and may be useful for the development of digital systems with more engagement with human behavior. For architects and designers it can be useful to develop better environmental projects, with better synergy with users, accuracy with natural surroundings changes and adaptive feedbacks with context's behaviors. Improvisation techniques may be a good reference to overcome deterministic, linear and pre-defined systems, and also push forward traditional models of interactive automation and reaction.

A primal aspect about interaction on contemporary design practice is the enhanced complexity of digital systems both in terms of: scale (video mappings, displays, urban screens); capacity of apprehend external information (sensors, cameras, microchips); and advanced programming (learning systems). According to Malcolm McCollough [McCollough 2004: 14], the saturation of reality with these devices causes an unprecedented condition of immersion and at the same time demands a theory of place¹ to guide interactive design.

The notion of *place* and *environment* establishes a straight connection with some theories of architecture, leading to a scope of reflection that includes phenomenological aspects, spontaneous arrangements, symbolic values, social connections and fully integrated contextual solutions. Indeed, it is more than practical approach, it is as behavioral approach, which includes all these aspects above and many more.

According to Michel de Certeau, the experience of spaces in our everyday life is strongly non-linear, negotiated, tactical, and

¹ "I have assembled arguments from architecture, psychology, software engineering, and geography to build a theory of place for interaction design" [McCollough, 2004: xv]

intermingled with improvised actions and practices [Certeau 2011]. Certeau dedicates many analyses to deduce that in everyday life human behavior responds to an open logic based on circumstances, and this reflects on our environment.

In this way, is very important that interactive digital systems employed in environmental projects adopt spontaneous behaviors to drive its conception. Many authors and artists consider improvisation a spontaneous behavior and several examples can be found in music, theater, dance, happenings, and even in some electronic performances with cybernetics systems, by Gordon Pask and John Cage. It is important to show some references and clarify the different types of improvisation methods, but is also important to analyze what kind of interaction it generates and in which environmental circumstance it can be used.

2. Improvisation as environment condition

For architects, the idea of environment cannot be separated from its users. Inside an environment we may have innumerable places endowed with many forms of appropriation by the practice of its users. To Certeau these practices are extremely dynamic, heterogeneous, spontaneous and full of improvisations [Certeau 2011]. However, is imperative to point that it doesn't mean random behavior, but rather tactical behavior. To Certeau, tactical behaviors appear in everyday routine, in the streets, places where humans reinvent themselves, where they find contradiction, build relations, and play with the improbable. This kind of mixed environment agglutinates phenomenological qualities, and does not resume a place as a 'space with functions'.

Tactical behavior may be associated with the notion of a *living* performance. Rasmussen seems to agree with the assertion that *living* could be understood as a sort of performance, considering the architect the one who must 'set the stage, which must be adaptable enough to accommodate unforeseen improvisations' [Rasmussen 2002: 12]. Jane Jacobs use similar metaphor when talking about the inherent vitality of cities streets movement: 'the ballet of good city sidewalk never repeats itself from place to place, in any one place is always replete with new improvisations' [Jacobs 1972: 50].

These points of view that consider the environment as something formed by contradiction, spontaneity, improvisations and driven by its users behaviors, were oriented in the opposite direction to modernist architectural thinking based on determinism, rigid and geometric organization, control and standardization of places. Robert Venturi wrote *Complexity and Contradiction in Architecture* questioning the 'selective and exclusive kind of architecture' elaborated by Mies Van Der Rohe, and his 'less is more'

doctrine. (Venturi 1995: 17). Venturi said that in this ideology 'there is no room for the fragment, for contradiction, for improvisation, and for the tension these produce' (Venturi 1995: 17).

Contemporary architectural thinking is strongly influenced by these theories of complexity, ambiguity, difference, and for the importance to acknowledge human environment as a place for exchange, socialization, appropriation and contextualization. We believe that these notions of living environment cannot be neglected in any project develop to mediate human interactions. Thereby, thinking and designing interaction environmental systems should overcome the superficial idea of linearity, automation and reaction, the same way architectural theories overcome geometric and deterministic spatial thinking.

Next, it will be presented and analyzed how improvisational behavior occurs in artistic fields, showing some important features techniques such as memory, dialog, cooperation, environment perception, spontaneity, etc.

3. Improvisation in arts: important references

Etymologically improvisation is rooted in the Latin world (*in providere*, which means 'done or said without any preparation or planning, unforeseen' (Zingarelli 2008) and was initially associated with poetry and musical plays invented suddenly. In fact, deeper analysis shows that many improvised performances do have a level of preparation behind, a structure, or some combined rules that guide and anchor the action. This is called idiomatic improvisation, and refers to a establish vocabulary that preexist the performances and are constantly retrieved by artists. In the case of jazz music, Paul Berliner explains that 'involves acquiring a complex vocabulary of conventional phrases and phrase components, which improvisers draw upon in formulating the melody of a jazz solo' (Berliner 1994: 95). Put differently, it is a set of pre-defined memories that might be combined freely in performance's timeline depending on the performer's will. This is very important to clarify that idiomatic improvisation is a dynamic process of crossing references and, in this case, has nothing to do with pure randomness.

A common technique of idiomatic improvisation in jazz was quotations. Molson comments that jazz musicians might choose to incorporate elements from any of the musical traditions with which they were familiar. The important point of quotations was the creation of a chain of association that engaged the musician's community in an intermusical context of influences (Molson 1996: 127). However, the application of quotes wasn't based on mirroring or resemblance, but on transformation of the reference, conforming a personal and unique shape of the thing resembled. The application of quotes reveals how dependent of memories and references is idiomatic improvisation.

Some authors describe jazz improvisation as 'conversation' (Molson 1996: 73), commenting how musicians develop their

skills by interacting with a community of other musicians in a continuous dialogic system. Molson quotes Bakhtin's internal dialogism to explain this dialog as multiple semantic meanings that vary according to one another and the socio-cultural context (Molson 1996: 87). Bebop musicians frequently met each other in jam sessions to interact in an extremely competitive, free and dialogical environment. At that time, jam sessions could be considered a model to collective interaction behavior, also incorporating cooperation, interdependency and proximity between musicians, audience and environment.

The same dialogic situation occurs in improvisational theater. Spolin observes that improvisational theater is extremely social and demands intense cohesion between actors in the course of performance. It demands also training, reinforcing the idea on the necessity of previous vocabulary to idiomatic improvisation. But what is especially interesting in improvisational theater is the actor's ability to perceive the environment according to three levels of experience: intellectual, related to learning the patterns of environment; physical, relative to the sensorial perception of the environment; and intuitive, relative to the way you respond to instant events (Spolin 2008: 04). The spontaneity is a fundamental ingredient to improvisation actors, and it is a consequence of practice and training as is shown in several methods of learning theater improvisation.

These two basic examples demonstrate that improvisation may have a systematic but flexible and adaptive structure behind the scenes, responsible to coordinate and orient the behavior of performer. The idiomatic improvisation is comparable to a ruled-based system, where artists can perform in a field of possibilities.

However, some performances may have no control, no structure and no rules, what is called non-idiomatic improvisation (Bailey 1993: xii). Non-idiomatic improvisation is most usually found in so-called free improvisation. In movements such as free jazz, developed in the sixties, the investigation was radical in terms of language and also oriented to a more empirical level of sound experience. Berliner commented how musicians made use of unconventional parts of the instrument to create new sounds, textures and dynamics (Berliner 1994: 128-135), playing outside the constraints of harmonic form, using atonally, and commonly being called noise-players. Back in the forties, Lee Konitz became a reference in free improvisation music with a composition called 'Intuition', recorded without 'no plan at all'. Konitz defined this free improvisation experience 'very difficult to really make a fine art out of, but as a procedure, it's one of the very, very important ones, I think, in playing together' (Berliner 1994: 338).

Non-idiomatic is a very procedural method of improvisation. If in one hand idiomatic improvisation has memory and previous references as fundamental database for performers, in the other non-idiomatic improvisation uses what Costa defines as 'a very short memory' (Costa 2009: 86). Costa also interprets free improvisation as a field of virtualities, 'a sort of indiscernible continuum of temporary sound states more or less consistent'.

Based on a deleuzian background, the author considers the *will* the necessary condition to the practice of free improvisation: 'the musician is the medium'. Taking as a given condition the fact that free improvisation is not supported by any reference system, and configure itself as a process of *making* or physical experimentation, it becomes evident that is the *will* that pumps the process (Costa 2008: 90).

4. Improvisation with electronic systems

Some relevant experiments with art and technology were developed in the decade of 1960 with the objective to support improvisation. Based on synesthetic methods, the Gordon Pask's Musicolour Machine was an electronic system elaborated to interact with a dancer in real time. Pask conceived this system sustaining the idea that an 'aesthetic potent environment' was primordial to encourage humans-machine interaction. The basic elements of input and output, a microphone and an image display, were connected to a central processing unit, which converted analog sound signals to digital images projected on screen. Independent inputs analysis filters were responsible to manage the process of transduction.

Pask experiment had significant adaptive and contextual features, and in this way produced relevant results as an improvisation environment. Taking as conceptual reference Edmond Couchot's notions of 'second interaction', the Musicolour Machine had both endogenous and exogenous levels of interaction. Endogenous interaction is the system's ability to acquire information and learn (Couchot 2003: 32-34). Each one of the Musicolours's analysis filters had independent attributes capable to identify sound patterns and adjust itself, or in Pask words 'listen and learn' (Pask 1971). Exogenous interaction is the system's ability to interact in real time with an external agent, capturing spectator actions such as displacement, accelerations, gestures, sounds, vocal commands, presence, etc (Couchot 2003: 34-37). Pask was worried in create a system with variability of responses (outputs), different levels of abstraction, ability to adapt its programs (filters) to context information variation, and provide tacit feedbacks in a dialogical engagement (Pask 1971). Pask wanted, in fact, to create a machine that could improvise at the same time as the dancer, producing a reciprocal feedback between both, a very avant-garde idea to his time.

Haque views Pask's notion of 'underspecific goals' as the key feature to foster adaptation and to establish an authentically interaction environment:

The reasoning behind Pask's interest in underspecified goals is that if a designer specifies all parts of a design and hence all behaviours (sic) that the constituent parts can conceivably have at the beginning, then the eventual identity and functioning of that design will be limited by what the designer can predict. It is therefore closed to novelty and can only respond to preconceptions that were explicitly or implicitly built into it. If, on the other hand, a designed construct can choose what it senses, either by having ill-defined sensors or by dynamically determining

its own perceptual categories, then it moves a step closer to true autonomy which would be required in an authentically interactive system. (Haque 2007: 58)

The human-machine interaction process in Musicolour Machine potentially allows the emergence of synergy, a mutual participation condition in which both sides may change the other's inner structure.

Another group of artists interested in exploring the potential of electronic systems in produce improvisational performances was formed by John Cage, Merce Cunningham and David Tudor. Sharing the same concerns about spontaneity, indeterminacy and chance, they developed in 1967 Variations V, an interactive dance project. The environment structure was based on:

Twelve antennas dispersed around the stage with a certain radius of action. By being invaded by the movement of dancers, sounds were triggered. In their bases, there were solar cells, obtained by Billy Kluver and Bell Laboratories, which could fire various types of sound. All sounds achieved by the interaction of the dancer's movements were controlled by the musicians, who determined the duration, the possibility of repetition, indentations, distortions, etc., using a variety of equipment such as oscillators, recorders, radios short wave, among others. Images produced by Stan Vanderbeek and his assistant, Tom DeWitt, showed parts of bodies, movements and elements of everyday life as a car, building, flying man in space, and other visual references of that time. Many images have passed through the process of distortion under the care of the pope of video art, Nam June Paik. (Santana 2002: 95)

Variations V was a representative example of improvisation performance that included not only electronic devices but also media technology. It was a real time performance based, similar to Pask's Musicolour Machine, in synesthetic elements and the conversion of analog inputs (movements, pressure, sounds) in electronic outputs (sounds, lights, images). Nevertheless, Pask's system was able to reconfigure itself, while Cage's performance was oriented by chance and indeterminate filters. In fact, they had different goals in executing these systems. Pask was motivated to create an autonomous computer improvisational behavior through learning systems, while Cage was searching emergent random stimulus to foster performer's improvisation.

The conception of improvisation was, to John Cage, significantly different from, for instance, jazz idiomatic improvisation. He was opposed to the idea that improvisation should be oriented by memory, intuition and previous references from the performer. His opinion was:

What I would like to find in an improvisation that is not descriptive of the performer, but is descriptive of what happens, and which is characterized by an absence of intention. It is at the point of spontaneity that the performer is most apt to have recourse to his memory. He is not apt to make a discovery spontaneously. I want to find ways of discovering something you don't know at the time that you improvise. (Konstelnetz 2003: 236)

Cage had the intention to destabilize the performer always surprising him with unexpected situations. Both projects, in its specific ways, could be understood as dynamic ruled-based per-

performances with improvisation interaction strategy embedded, and are significant to thinking more engaged environmental systems today.

5. Conclusion

Technically we are accompanying a great leap forward in terms of electronic systems development, but it is necessary to discuss more how these devices will affect our daily life and the places we live. The contemporary thinking of human's environments is strongly attached to dynamic and adaptive behaviors. The notion of contextualization has an increasingly role in orienting our practical, social and phenomenological experience of life. Human behavior is tactical, convenient and guided by several improvised actions that reflect directly in our environment. Many art expressions emerged in the second half of twentieth century incorporating improvisation, spontaneity and adaptation as guidelines to its practice and ideology. It is time to architects and designer explore critically how to built electronic interactive environments less reactive, automatic, controlling and more intuitive, sensitive and adaptive to the improvisations of human behavior.

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Human development design centered: Mexican local case

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Human development / Solidarity Design / Interdisciplinary Collaboration / Social Enterprise

The goal of the research is to establish a framework within design performs as a driver of human development defining guidelines through the method called “amplified” framework of design process. Approach and design participation in interdisciplinary collaborative projects are described by the case study: “Industrialization, Marketing and Sustainable Management of Ten Mexican Native Species”.

1. Introduction

The prevailing situation worldwide and particularly in Mexico, regarding unequal distribution of wealth and the historical social debt of the less fortunate, demands the attention of various actors and different platforms. Design is not an exception; it should direct its efforts in generating proposals, which results in a better future.

The overall objective of the research is to establish the framework within design performs as a driver of human development according to their abilities, ways of thinking and guidelines extracted from the analysis of projects that have proven success in several world regions and in our country, Mexico, especially in the rural context, to raise the level of human development in the region.

The research, to identify opportunities for design participation and define the guidelines for promoting human development, is based on study cases where economically disadvantaged social groups generated productive projects in overcoming their difficulties, and the analysis of strategic programs references, such as the Human Development Reports of Latin America, Mexico and the State of Jalisco.

Worldwide, to deal with problems caused by social inequality many programs had been implemented. Since 1990, the United Nations Development Programme (UNDP) established the requirement of monitoring human development in order to promote freedom and reduce social inequality. The Fourth Report on Human Development in Mexico 2011 provides useful information for design and public policies to promote equity through the main instrument available on the State, the budget. Gives a clear diagnosis, proposes a set of possible goals and suggests some ways to achieve them.

Poverty is threatening the fundamental right of life and the right of development; the social dimension of the crisis is closely linked with an economic dimension, as the 18% of the global population has 80% of the total wealth of the world (UNDP, 1977). But

it should be noted that the crisis is not a problem of economic growth -global GDP has grown 6 times between 1963 and 1993- but in distribution, the 358 richest individuals in the world receive an income equivalent to what they earn, 2,300 million, and seven countries accounts for 75% of global wealth (UNDP, 1997).

The World Bank in April 2006, noted that although there has been improvement in Mexico's economy during the last decade and has managed to significantly reduce extreme poverty, economic growth has not been sufficient to significantly generate jobs. Having this in mind and other several indicators of competitiveness too, the country is lagging behind, especially in relation to the level of income per capita. Given this situation, the same body emits a recommendation that, for Mexico in order to increase its competitiveness, it is necessary to advance the fight against poverty. The challenge is, first, find the social forces that reintegrate the economy into the global context and, second, local social movements to build political alternatives to establish the conditions that satisfy the access to individual and collective promotions to a new sustainable development model.

This perspective of articulation between the global and local is essential for sustainability and provides references for the construction of alternatives. According to Leff (1998), the search for sustainability in the global context passes' [...] the challenge of creating strategies to articulate these local economies to the national economy and global market, preserving cultural autonomy, ethnic identities and ecological conditions'.

There are efforts in this regard that highlights projects managed by local community groups starting by a diversification on their production base (new collective organizations) to promote new products or to find new ways to add value to technologies and traditional goods.

In forestry, global trends indicate that developing countries tend to reduce their stockpiles of wood due to high rates of deforestation with a process that greatly reduces the cover of woods and forests and, therefore, wood stocks in the country.

Mexico, by this means, in the last 10 years has lost between 1.5 and 2 million hectares representing about 30 million m³ of timber per year. To this must be added the losses alteration and illegal logging that is not associated with deforestation¹.

¹ Informe de la Situación del Medio Ambiente en México 2005, elaborated by SEMARNAT
http://148.223.105.188:2222/gif/snif_portal/index.php?option=com_content&task=view&id=50&Itemid=64, [last accessed 29/04/2012]

Social design

Participation in the social design has generally been considered as "honorific"; with the emergence of projects that documented² that 95% of the world's designers focus all their efforts on developing products and services for exclusively ten percent of the world's most wealthy clients so 'nothing less than a revolution in design is needed to reach the other ninety percent' (Polak, 2007:19). On the other hand, Emily Pilloton³, documented 100 products that are changing the lives of people, she expresses her belief that design is a problem solver 'with grace and foresight' and that 'there is always a better way', that humans have an instinct to find new ways and that designers have the tools (and responsibility) to deliver solutions that make these options accessible and improves life (Pilloton, 2009: 10-11).

In 2005, Jim Brown from IDEO, coined the term "design thinking" to refer to the use of feelings and thought patterns of design in business strategies and models of innovation. About the participation of IDEO in social projects, they implemented the methodology of human-centered design (HCD), where the design takes its role to improve the lives of individuals, which may be considered from the perspective of human development.

Design is promoted as a strategic development element, while increased competitiveness of a country is directly proportional to the increase of human development thereof, as defined by the United Nations Programme for Sustainable Human Development (UNDP), as 'opportunities for people to make development more democratic, allowing more income and employment opportunities, education and health and a clean and safe physical environment'. Human development should be participatory, allowing individuals to invest in developing their skills in health and education.

It is time to strengthen the generation of design proposals in coincidence to multiple areas and knowledge (interdisciplinary) and joint efforts from several platforms and agencies (multilateral) working together with people, convinced that the design is a strategic tool to increase competitiveness of the various social groups, not just businesses.

2. Method

Analysis of documents and studies issued by the United Nations Development Programme (UNDP), the United Nations (UN), and the Inter-American Development Bank (IDB), in addition, the study of several cases of design projects with a social focus that rescue experiences of participation in productive projects, determined the creation of a methodology called: Marco "ampliado" ("amplified" framework) of design process, which establishes guidelines for the performance of human development-oriented design as a strategy for competitiveness, by providing options

² Smithsonian Institute (2007). *Design for the Other 90%*. New York: Cooper-Hewitt, National Design Museum

³ PILLOTON, E. (2009). *Design Revolution. 100 Products that are changing people's lives*. London: Thames & Hudson Ltd.

and opportunities to raise living standards, allowing people to remain in their homes, preserve and generate jobs and maintain a sustainable relationship with the environment.

Characteristics of both, approach and design possibilities to participate in interdisciplinary collaborative projects to advance human development, are described by the case study: "Industrialization, Marketing and Sustainable Management of Ten Mexican Native Species", Serial Number: PD 385/05 Rev.4 (IF).

Case study

The University of Guadalajara in conjunction with Oregon State University (USA) and Hamburg University (Germany) developed the current project under funding from the International Tropical Timber Organization (ITTO), headquartered in Yokohama, Japan, which is an intergovernmental organization, founded by the UN that promotes conservation and sustainable management, use and trade of tropical forest resources.

Objective of the project: to acquire the technological knowledge of ten native species of tropical wood, mainly from Quintana Roo, Mexico, to improve productivity and forest management and to evaluate its commercial potential and market. Set to be completed within a period of three years, from 2009 to 2012.

The same rationale is based on that within the tropical forests in Mexico grow several species barely known in international markets or even in domestic markets. These species have commercial potential because of their color, physical appearance, aesthetic and technological properties. However, it lacks of deeper and extensive technological studies designed to generate information needed to properly use these woods based on their characteristics and properties.

Consequently, these species, currently underutilized tropical timber in Mexico, this leads to a highly selective use and, ultimately, deforestation and fragmentation of tropical forests. The generation of scientific and technological knowledge on tropical timber proposals is considered an indispensable need and an excellent opportunity to promote a more profitable use of the woods. Furthermore, it is also important to encourage development and innovation, as appropriate, regarding the use of forest management practices for each species to ensure sustainable resource management.

Design and product development

Participation of design area will be explained through the phases of the method: (*Marco "ampliado"*) "amplified" framework of design process⁴

Initial situation

Overview of issues raised by the forest production chain of Quintana Roo, Mexico, analyzing needs and deficiencies of dif-

⁴ Flores-Magón, H. 2003. *Diseño como Estrategia*. Unpublished monograph. Product Development master programme, Guadalajara University. Mexico

ferent sectors and actors such as common land communities (Noh-Bec, Pet-Ca-Cab and Caobas), industry (sawmills, flooring, doors and furniture in general) and government (federal, state and municipal).

Through the review of documents issued by teamwork members in multiple disciplines, the design area could cognize of the project, its objectives, progress, and determine the right approach required for the participation of design in it.

Influence

Defined as factors, actors and sectors that make up the initial situation, therefore, to understand it, the diagnosis has been made with visits to a great number of stakeholders. This allowed building a "matrix interaction" between the diverse stakeholders to consider the incidental relationship between them and to establish specific strategies to foster their interconnection.

Strategies

Diagnosis made possible to define design strategies; one of main problems identified was the cultural barrier of common land communities associated with the low value of tropical timber, reduced dimensional features, in addition, to base their decisions on the cedar, which is virtually exhausted, and mahogany, that has lost its value appreciation in the market; it became clear there is a need to consider the momentum of the 10 species in question through products developed and presented by prototypes in order to show its commercial and development potential, along with the accompaniment through comprehensive training resource management, wood processing, product development and joint marketing to different forest industries.

Within the definition of strategies and approaches were sought advice on the management of the various species for the manufacture of products such as low inventories of the species under study, small size of the existing copies, physical and structural properties of each species, workability, resistance to weathering and fungal attack.

Some of the key concepts that permeated the product development were fair trade, sustainable forest, community social development, preservation of cultural tradition, promotion of industrial activity, but also: the family business and gender equality, in short: to give value to the forest...

The objective of the design area when defining the design strategies and approaches was to boost the added value of raw materials produced in the area, preserving natural wealth and ensuring sustainable forest productive activities that strengthens the social interaction and different levels of performance with a full participation of the actors in the forest production chain.

Development

To define a design proposal for evaluating the provisions of the strategy phase, a product line was developed with the design of

a collective brand that encompassed all the design criteria previously defined.

The criteria for selecting the product to be developed, was determined according to show the raw material to the potential community buyers -the 10 tree species in study- in a finished product in order to measure the acceptance of the material already transformed. The product design proposals were chosen in order to collect the largest number of criteria defined.

Contribution

The result of the development phase was the design of 4 collections of "pull tabs", with 10 models each corresponding to the tree species. This product allowed the processing and use of small dimensions of raw materials and the possibility of reusing waste and providing a complementary product for the kitchen furniture. A comprehensive marketing scheme allows introducing a high volume of parts with a considerable margin of profit.

Following one of the main problems identified in the initial situation of the forest production chain, such as the separation and disorganization of the links between producers working together to optimize workforce and financial resources to promote the involvement of stakeholders, the developed products should be accompanied by the brand concept to identify the product, highlight the local character and suggest the possibility of a socially sustainable development for the region. The collective brand was developed as an element through which its formal elements communicate the concept of unity and local character, succeeding through the list of items with historic and cultural values of the region.

Confrontation

This phase allowed knowing the extent of the contribution that design makes to the modification of the initial situation and therefore requires confronting the design "contribution" against the circumstances before the judgment of specialists, agencies and individuals involved.

An international fair organized in Expo Guadalajara, gave 2 opportunities of confrontation: in Techno Furniture 2010 with the submission and evaluation of the penchant for the woods of the project and Techno Furniture 2011, that was considered the optimal forum to confront the criteria established with the introduction of attractive and consistent products according with the aim of the exhibition, and its target audience to evaluate the acceptance of the products.

Another activity that allowed confronting the criteria and guidelines established was the opportunity to restructure a proposal for a design competition from a competitive basis to a contest focused on to acquire a concurrency character (solidarity design). This was directed to the community of design students of educational institutions in the metropolitan area of Guadalajara, to contribute, together with all project participants, to potential

product development for manufacturing in the Southeast for the benefit of local communities.

The 100 participating students from 3 institutions were trained in technical management of forest species, and given information from all areas that made the project (stocks and forest management, technological characterization, marketing, potential markets and design). As a result of the competition, 98 prototypes of possible products were obtained.

Evaluation

The considerations for determining whether the results of the design process are no longer the exclusive right of the field of design and are based in the same scope managed to bring the situation to the best initial conditions set as ideal.

As a result of the work carried out to obtain information from the phase of confrontation in Techno Furniture 2011, was carried out a market study in which was found that 73% of respondents are willing to consume products in these woods.

On the other hand, the study of preferences and acceptance of products marked an interesting trend to be compared with the previous confrontation: samples of 10 tree species showed a marked preference for certain species, being found in consumer products and possibility use, the trend has been expanded. Design participation allowed the evaluation of finished products and possible acceptance of all species in general.

As results obtained with the call for solidarity design, 50% of the prototypes are able to be articulated as products with production and commercial viability to begin production and marketing activities, the proposals emphasize the potential of the 10 tree species to produce products extolling their own discourse and visual association of veins with beautiful experiences for the consumer and user.

On regards of productive capacity of workshops and know-how of community stakeholders in the definition of products, it was considered the possibility to start the dissemination phase of necessary elements for reproduction, as well as training sessions for them to acquire quality standards.

Ideal situation

The social problem to be solved, initially, is to improve the income of people dedicated to the exploitation of forest resources, which have been significantly reduced due to low interest (appreciation), cedar price and mahogany hardwoods, traditionally considered of high value.

Based on potential displayed by the project and proposed products, a social enterprise that jointly manage the marketing of products made by the carpentry workshops and community stakeholders must be conformed with possible action integrated of the various instances and institutions involved in the production chain as follows:

Harnessing identified markets, capabilities and expertise of operators, the talents of community members, the installed capacity in communities and businesses, the advantages of having the type of wood to be processed exclusively in the region and the experience of managers and executives. Taking advantage of local markets, and the intention of the authorities to support the productive activities of the state of Quintana Roo along the entire value chain: from the management of forest resources, the sawing of raw material for processing into products (as input for other industries or value-added end product), packaging, marketing, exhibition, sale, and eventually the product purchase.

In the near future, we must seize the opportunities generated by waste sawdust, wood chips and tiny cut -problem locally manageable- looking to establish a social enterprise whose raw material input would be free and will add value to generate jobs and resources. After all, there are many possibilities where waste has value to be converted to electricity, fertilizers, organic fuels for heating and cooking fuel.

3. Conclusions

The potential for tropical timber included in the project, it manifests an interesting alternative to boost production in the south-east, on the appreciation in the market for its natural beauty, by their intrinsic physical characteristics and attributes, for ease and possibility of transformation in quality products. But, the alternative may be considered sustainable as long as it integrates, above all, the correct program and controlled exploitation of the species identified in the appropriate time.

While the possibility of participation of the design for the transformation of social problems in settings that provide opportunities for human development, it is feasible, it is also limited because we recognize that the participation of design, serves as accompaniment to the actors "owners" of the problem.

The main objectives of the performance of design centered in human development should be mostly, activation of growth and equality of opportunities, promoting the satisfaction of needs considered essential such as employment, food, energy, water and sanitation.

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Identity across boundaries: a study conducted by communication designers and social anthropologists

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Communication design / Social anthropology / Multidisciplinary / Self descriptions / Scenarios

In 2011 a multidisciplinary workshop was carried on in the Po river delta region in Italy. The following paper analyses the interaction between urban design, communication design and social anthropology in the workshop with a particular focus on the two latter disciplines. More specifically, it will show how the outcomes of the anthropological survey were successfully incorporated into the work of the designers.

1. Context: the 2008-2009-2010 and 2011 Iuav "Summer School on the Po river delta"

The objective of this paper is part of a field research conducted during the "Summer School on the Po river delta", that took place in Taglio di Po (Northeast Italy, Veneto region, Rovigo province) in September 2011. The Summer School- lead by Iuav University of Venice, Italy- is an intensive study program (IP Erasmus) financed by the European Commission's DG Education and Culture. Since 2008, the workshop consists of a two weeks residential field research, whose participants are students and scholars coming from selected European universities. The purpose of the workshop is to create 'scenarios' for the regional development of the Po river delta.

Defined as a weak territory, the delta is today facing problems like the shrinking of its population, the uncertainty of its economy and the effects of environmental phenomena/disturbances intensified by climate change. Despite this vulnerability, the area offers promising conditions for the development of a series of activities. In this context, the manifold strategies are usually common answers to specific questions that sometimes lead to the development of conflicts amongst the inhabitants. Conversely, constructing scenarios that reveal small and large transformations, and exploring their material consequences, is a way of reducing the uncertainty about the future. Moreover, it helps local society to take informed decisions around potential opportunities (Tosi 2012).

The program's cross-disciplinary approach consists in multifaceted observations carried on by working groups composed of landscape architects, urban designers, communication designers, anthropologists and geographers.

2. The collaboration between designers and other disciplines and its development

When the first workshop started, in 2008, the graphic designers team began by selecting the tools (this term is used in a wide sense: theory and critics, methodology, case studies) at their disposal in order to enhance a multidisciplinary work whose main goal was that of building 'scenarios'. Service design and design for scenarios were two of the three disciplinary branches involved in the methodological framework, because of the ability of design methodology and tools in interpreting needs and data in order to formulate and visualize solutions that are not yet available (Carol 1995, Manzini & Jégou 2006). The third selected disciplinary branch was information design, especially when considering that "information can empowers people to attain goals" if the shaping of the contents "satisfies the information needs of the intended recipients" (IIID in references). In particular, information design was understood as an accurate instrument of research action more than as a pure formal output. Rather than as a vertical procedure, the design process has been conceptualized as a circular communication action of listening to, showing analysis, encouraging public discussions.

To enhance the multidisciplinary approach, the designers have collaborated with a different discipline in each of the realized workshops: in 2008 with visual artists; in 2009 with urban planners; in 2010 with other designers and in 2011 with anthropologists. This one-to-one work with other disciplines led to the necessity of defining a variety of "site-specific" tools in order to face a multiplicity of specific tasks. In particular, one of the main results of the work conducted by the designers+designers group was the realization that the Po delta territory seems to be configured like a system of closed socio-economic groups that do not interact one another. Given these premises the new questions became: "Can this area effectively be represented by a single visual identity, how should it be, and what should it communicate? Do local residents prefer to increase tourism, grow their industrial sector, or something else entirely different?" (Bonini Lessing & Mevis 2011: 71).

The uncertainty that was detected in the 2010 workshop led to the necessity of exploring more intensively some local dynamics. In particular, the way power was distributed amongst the different socio-economic groups - or at least its perception among the resi-

dent people - was not that clear yet. The still partially ambiguous relationships amongst local stakeholders could have had negative effects in what concerned the outcomes elaborated by the whole team. For this reason, it was decided that anthropology should be involved within the last workshop edition in 2011.

3. Collaboration between communication design and social anthropology

Despite their seldom collaboration, the disciplines of communication design and social anthropology seem to have an immediately evident point in common: they are both concerned with 'identity' in the sense of how people describe themselves and their being in the world. From a methodological point of view, they both start by entering in relationship with local people and talking to them in order to reconstruct their perception of themselves and of the place they inhabit. In fact, they are both part of a bottom-up approach that represents a valuable instrument in many interdisciplinary studies. Nevertheless, while in the case of communication design this is usually the first phase of a much longer process, the anthropological discipline puts the majority of the emphasis precisely in this first phase of the study. Much of the anthropological training consists in fact in learning how to interact with the other without imposing one's own categories of interpretation.

Both disciplines consider that people are often unconscious about the reasons for their behaviour and about their deepest interpretative categories. And this is why the anthropologists consider that a long period of participant observation is generally preferred to making direct interviews. This methodological stance, for instance, is one of the main difficulties when conducting any kind of multidisciplinary study. The difficulty is represented by the extended period of time that the anthropologist should spend in the fieldwork, and that is linked to the necessity of gaining insight into the 'native' point of view through a deep involvement with the subjects of the study. On the other hand, if the researchers can spend on site only a limited period of time, they have to adapt to the study conditions without losing the 'spirit' of the discipline. In some cases it means to bypass the purely observational phase and to carry on interviews with a varied range of local actors trying not to impose the researcher's own way of 'reading' the area and its own interpretative categories. For example, in order to understand if the local power plant was perceived as a problem by the interviewed, the team avoided to ask directly "what do you think about the power plant?" In fact, this would have implicitly forced the interviewed to think about it as an issue. For this reason, it was decided to engage in a dialogue with people through an open approach, such as asking them to tell us about their life stories and daily activities. This modality of interaction is quite frequent in urban anthropology (Signorelli 2003). Because of this extreme openness in the structure of the dialogue, it is only while conducting the interviews that specific categories – such as the variety of social groups that are present on the territory – emerge.

In a similar way, one of the aims of the designers' investigating phase is that of pointing out those elements that play a significant role and a symbolic function in the local community. As emerged from the fieldwork, for example, bars appear to be one of the only places where the different social groups possibly interact one another. Highlighting what values and items unite or separate people has been the starting point. The following step consisted in the elaboration of visual tools – diagrams and concepts - that could facilitate the urban designers teams in completing their scenarios.

From a theoretical point of view, another difference between the disciplines of communication design and social anthropology concerns the research phase when the perceptions of the inhabitants are analyzed and re-elaborated. While the anthropologist places a special attention on keeping the contents of the interviews (the emic data) well separated from other types of data (i.e. the etic ones), the communication designer can incorporate other 'objective' sources of information - historical archives, economic data, etc.- in the analytical process without keeping them separated from the formers. The communication designer aims at collecting information and data originating from different sources because this should allow the stakeholders to weight up the most suitable actions following the analytical process. While anthropologists aim at giving a correct portrait of the situation, communication designers are pursuing a project, which is to say: they elaborate tools that could be useful for modifying current assets. This is why designers should be guided by an ethical approach. The role of the designer should be that of saving information and making a visual synthesis accessible and comprehensible to the stakeholders.

In an interdisciplinary effort, the anthropologists decided to translate the content of the interviews in a visual form in order to emphasize certain issues and facilitate transmission. This effort responded to a specific need of building a "bridge" between the different disciplines. Talking about his own experience as anthropologist collaborating with a team of designers, Van Veggel states that "One could say that we just needed to develop a common language – a language in which I wrote my findings, and which the interaction designers could read in terms of functionality" (Van Veggel: 9). And it was precisely because of this need to find/create a common language between the different disciplines involved in the research that the contents of the interviews were immediately translated into diagrams in collaboration with a graphic designer. In fact, although the use of visual tools in anthropology has increased over the last decade (Banks 2001; Pink 2006), it has sporadically been done in specific relation to urban design.

On the other hand, this process of graphic translation is a fundamental step towards the elaboration of a common language between anthropology and communication design, and especially towards the elaboration of a language that should be functional to the needs of the designers. The question immediately posed

by the anthropologist has been: “what – out of all these data – could be useful for a communication and urban designer?”. As the following diagrams illustrate, the complexity that naturally arose from the interviews has been drastically reduced and ‘distilled’. Despite this concern with efficacy and utility, though, special attention has been placed on ‘distilling’ the content of the interviews without losing the point of view of our respondents. In this sense, it is important to underline that we tried to represent ‘perceptions’ and not ‘facts’, even when we decided to represent collective perceptions instead of personal ones. The only allowed generalization has been the condensation of singular perceptions into a collective one. This was a necessary step towards the incorporation of the results of the anthropological study into communication design and - in a further step - into urban design scenarios. The scenarios themselves have been designed for the whole collectivity that inhabits the territory, rather than for only a limited number of them or from the perspective of one peculiar social group.

4. 4. Case-study analysis

The “communication design” team and the “social anthropology” one have started working in parallel since the first day of the workshop. The “social anthropology” team was composed by a group of four students, three of which were urban designers and one was an interactive designer. Guided by an anthropologist/supervisor, who also trained them on how to realize the interviews, the students conducted a number of interviews amongst local inhabitants and they synthesized the results in a number of diagrams (two of them are presented in the next page). In particular, the interviews were realized with the following people: two fishermen, an old farmer, a municipal councillor for cultural issues (‘assessore alla cultura’), the president of the fishing consortium, a librarian, and two students. The outcomes of this preliminary anthropological research were exposed to the “graphic design” team, and the interactive design student who participated in the research began collaborating with the team immediately after, acting as a kind of “bridge” between the two groups.

As previously anticipated, the first step has been to identify - from an emic perspective - institutions and groups that are present in the territory, and to understand how local people perceive them in terms of access to decisional power on local issues (Diagram A). Instead of focusing on the perspective of a single institution or actor, we decided to condense the content of the different interviews into a ‘shared perception’. This generalization was facilitated by the fact that all the interviewed subjects have shown a similar perception on these issues. On the other hand, this strictly emic perspective has generated some anomalies. Indeed, an important local institution, the ‘consorzio di bonifica’ [reclamation consortium] is strangely absent from the scheme. The reason for this omission is that the institution was never mentioned during the interviews. This anomaly could be attributed to the relatively small number of interviews.

The second diagram [Diagram B] that we present in his paper aims at highlighting the main ‘idioms’ – we could call them ‘emic concepts’ – that emerged from the interviews. These idioms were chosen both because they were frequently mentioned in the interviews – they were central categories used by the people in order to make sense of their world - and because they conveyed a particularly thick and unusual [to a non-local point of view] network of connotations.

These two diagrams are shown in interaction with two of the graphics produced by the communication designers team (Diagram A1 and Diagram B1).

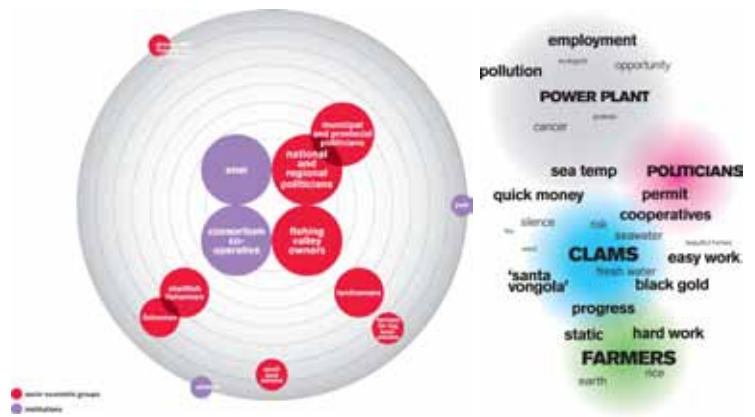


Figure 1. Diagram A: Perception of power distribution. Diagram B: Idioms.

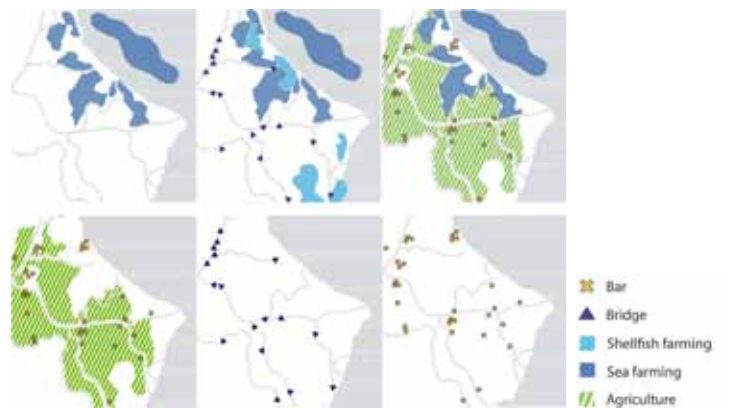


Figure 3. Diagram A1: A day in the Delta

The A1 diagram represents a further “translation” of the anthropological survey aimed at ‘spatializing’ and ‘temporalizing’ the information expressed in diagram A. Each section of the diagram represents the ongoing activities that are taking place in the whole Po Delta area in different moments of the day. One of the outcomes of this diagram is to show how two of the main socio-economic groups – the farmers and the fishermen – do not interact neither physically nor temporally.

The Figure 4: “Diagram” B1 is a symbolic translation of some of the idioms expressed in Diagram B. It represents an ideal ‘kit’ of



Figure 4. "Diagram" B1. Basic elements of the territory

material and affective elements of the territory (fresh water, sea-water, earth, rice pant, rice and air) that local people should be able to bring with them in case they had to move to other parts of the Po Delta region. This kit was thought in relationship to some of the urban planners' scenarios that implied an internal displacement on the part of the farmers' socio-economic group.

It might be useful to remark that the anthropology team did not further intervene in this last phase of programming.

5. Conclusions

From a methodological point of view, we consider that a full engagement of communication and urban designers in the preliminary anthropological phase has proved to be very fruitful because the researchers have literally embodied a peculiar attitude – one which is particularly attentive to the stakeholders' point of view – in their further analysis. This is a strength of this method if we think that this process should allow local stakeholders to take decisions about their future by comparing different figures in a simpler way.

As a result of the 2011 workshop it was easy to appreciate how anthropology and visual design complement each other: if the first one can offer a precious contribution in the preliminary phase of the study, the second one possesses the necessary tools in order to actively intervene in the place. They can both benefit one from the other also by finding out and experimenting the most convenient forms of visual representation, in order to return the collected data in a comprehensible but scrupulous way.

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Digital clothing manufacture: digital innovation and co-Design changing the clothing industry

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Digital innovation / co-Design / Clothing industry / Mass-customization / Digital making

This research uses case studies to describe and explore how the confluence of digital innovation and co-design is enabling new models for the clothing industry. It shows how interfaces for mass customization are being used to give consumers some participation in product development, however mass production methods still limit that. Nevertheless, digital innovation in production and social network used to support and inform amateur makers suggest ways that barriers might be overcome.

1. Introduction

Recently there has been a lot of interest in smart clothing. However, the combination of digital innovation and clothing has the potential to go much further than just the creation of smart garments. Digital innovations can change how and where clothes are made, can alter design processes and skills needed to produce garments and result in different industry business models to those used today. Such changes are being observed in creative industries such as photography, music and graphic design, where the introduction of digital innovations has already been transformative, giving more power, information and skills to consumers. These changes enable consumers to assume roles and activities that were once exclusive to professionals such as designers, producers and editors (Atkinson, 2010; Bunnell & Marshall, 2009; Toffler, 1981). Our research attempts to understand how the clothing industry will be affected when digital innovation is applied in all aspects of clothing manufacture and when consumers assume the role of amateur maker aided by digital technology.

More specifically, our research question is:

How the confluence of digital innovation and co-creation practices can instigate local and personal design and manufacture of clothing?

Our method consists of a mixture of case studies and interventions. This paper reports on the cases studies and findings of the initial stage that have been carried out so far, and provides an overview of the next steps in this project.

Digital innovations in clothing

Digital innovations, in the context of this research, are understood to be new ideas, products, services and systems that with the aid of computing power capture, transmit, process and analyse data,

transforming it into information, services and products. In doing so they challenge the way key activities are realised or implemented.

The introduction of digital innovations in clothing began with the use of Computer Aided Design (CAD) (McCartney & Hinds, 1992; Okabe et al, 1992). Initially, CAD systems were used for technical drawing making the creation, grading and replication of patterns easier (Kazlacheva, 2005; Ondogan & Erdogan, 2006). CAD systems are now used to convert between 2D and 3D, permitting the automation of pattern generation, simulation of garments and fit (Apeagyei & Otieno, 2007; Wang et al, 2005; Kim & Kang, 2002; Lu, et al, 2010; Ashdown & Dunne, 2006). Over the past two decades, research explored how to bring together different technologies. For example, Istook (2000) combined CAD garment design and pattern making, digital printing and machine cutting for creating a system for rapid prototyping of garments. However they believe that the similar combinations could be used in the future for customizing products once the technologies were more established.

Digital technologies now seem to be moving from labs to businesses. For example, 3D body scanners can be used to find the right fit for consumers. Fashion designers are using lasers to cut intricate details onto textiles. Research such as Kitannen's (2006), who created garments using chain-mail like 3D printed structures, led the way for 3D printed shoes, bikinis and accessories.

Computers were also used in production and supply chain management allowing the spread of distributed production across the globe. E-commerce is an established activity in the clothing industry, helping expand businesses networks and increase reach to consumers (Spijkerman, 2008; Daly & Bruce, 2002). Online interfaces now enable users to customise products to their own requirements. Of particular relevance to this research is the use of digital technology at production stages and online interfaces that permit consumers to be directly involved in the creation of products. They enable professional designers and makers to rapid prototype, experiment with new techniques and materials, possibly creating unique and personalized products, as well as permitting amateurs to explore, test and learn through the digital medium before committing to the production.

Co-design

Sanders & Stappers defined co-design as "the creativity of designers and people not trained in design working together in the design development process" (2008: p.6). In our research we use the term co-design for activities when consumers are

involved in the creation of garments and accessories, broadening the definition to encompass the consumer perception of being involved in the design process.

Co-design can be approached as a direct interaction between designers and user. Von Hippel (2005) suggested that organisations worked together to co-design innovations with lead users through the adoption of open innovation approaches. However, co-design doesn't have always to involve designers and user working together collocated and at the same time. Sometimes this collaboration can be mediated by a product, service or system. Toolkits, for example, could be a way in aiding the user in the design activity (Thomke & von Hippel, 2002; Carolan & Cruickshank, 2010).

Another approach to co-design can occur through mass customisation. The term 'mass customisation' refers to the activity that delivers products that meet individual consumers demands but still produced with mass production efficiency. According to Piller (2008), a greater interest in mass customisation was brought by the web 2.0 and social networking tools used in commerce. Piller (2004) identified two factors in adopting mass customization strategies. First, a flexible production process that can cope with modular or platform based production of goods to ensure efficiency. Also, an interaction tool or interface that enables the user to co-design with the organisation. Through mass customization, consumers may have the perception of being involved in the creating of the garment, which adds value to that product. According to Sanders and Simons (2009) value can be monetary, user experience or societal, depending on how early users are involved in the design process.

2. Methodology

As mentioned above, the research involves a mix of case studies and interventions. Case studies have been used to ascertain how businesses in the clothing industry are making use of digital innovations and how consumers are being involved in designing their own products. A methodology based on case studies was considered ideal for providing exemplars of a situation, capturing detailed information (Thomas, 2011) and will help describe what is going on in the intersection of clothing industry, co-design and digital innovations. Case studies are also useful comparing organisations in their "real life context" (Dul & Hak, 2007), using qualitative methods for collecting and analyzing the data to elicit possible solutions for the future. The methodology was divided in three stages, as shown in the graphic below (fig. 1):

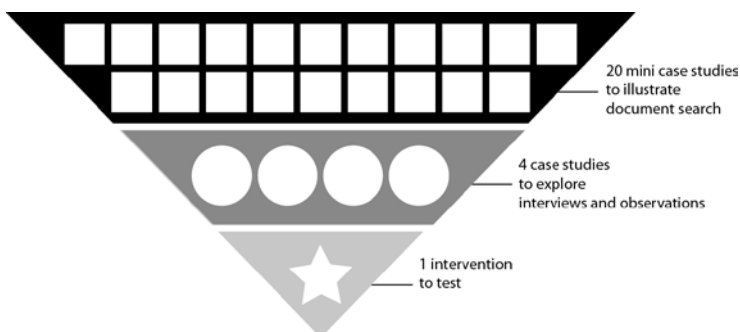


Figure 1. Three stage methodology.

The initial stage consisted in identifying and collating 20 short descriptive case studies that will be discussed in the next section. In the second stage, four cases will be selected for in-depth interviews and observations to capture the breadth of the use of digital innovations and also importantly the role of consumer co-creation in those organisations. The last stage is then the development of an intervention to try out how digital technology and co-creation could be further utilised in clothing manufacture.

3. Stage One: Mini Cases Studies

The first stage of the methodology consisted 20 mini case studies. These cases were drawn from literature and internet searches. To be selected a case must feature one of the following criteria: be a digital innovation, use a co-design approach or make use of digital tools in the design or production of the products/services supplied.

Applying the initial criteria, over 40 possible cases were identified. As the objective of this stage was to produce examples of organisations in the context of the research, case studies were selected for being representative of a type of product or service. Other case studies were selected if they provided any novel characteristics, for example if they provided a combination of digital innovation and co-creation approaches. In addition, factors such as the amount of information and documentation available and the location of the organisations, were taken into consideration when deciding which cases would be included.

The table below lists the current selection:

1	Customised footwear made with digitally printed textile	11	Made-to-measure outdoor garments, patterns and materials for home sewing
2	Laser cut t-shirts for women	12	Customized trainers
3	Toolkits with patterns and materials to make garments for women and children	13	Customized jeans
4	Customised of girl's garments	14	Amateur artwork and peer-curate t-shirts
5	Customised men's shirts	15	Customized teddy bears
6	Software that generate patterns for home sewing	16	Customized sportswear
7	3D printed jewellery, accessories and bags	17	Customized modular shoes
8	Customized t-shirts	18	Women's garments and workshops in dress making
9	Customized modular dresses	19	Haute couture 3D printed garments
10	Customized women's garments with digitally printed textiles	20	Digital printed textiles for home sewing

Analysis

The information was compiled into a table and then individual cards were created for each case. Information concerning the products and services offered was collected including, type of product, if it was a standard size or made to measure, if it was customised and the stage in which the product was sold, for ex-

ample, if it was finished product or a parts to be assemble such as a toolkit. The location of the organisation, range of prices and delivery times were also noted. Next, we used graphics to visually compare and cluster cases. The following aspects were analysed for each case:

Digital innovations

The types of digital innovations used. The information for this analysis was determined from the technologies uncovered through the literature review of this research.

Level of co-design

How far was the consumer allowed to co-design. This ranged from designing and making new forms for products to editing existing options to selecting from existing modules, colours and materials.

Skills for co-design

Looking at skills the consumer needed to interact with the product/service.

Points of customisation

Senanayake & Little's (2010) identified five points where customisation can occur in apparel customisation: post-production, fabrication, fit, features and design. To those categories one extra was added 'after sales' for items that were purchased to be finished or customized by the consumer after the product was purchased.

Interactions

Based on Computer-Supported Cooperative Work (CSCW) Matrix (Johansen, 1988) analyzing if interactions occur at the same place and time.

The image below (fig. 2) is an example of the visual analysis used.

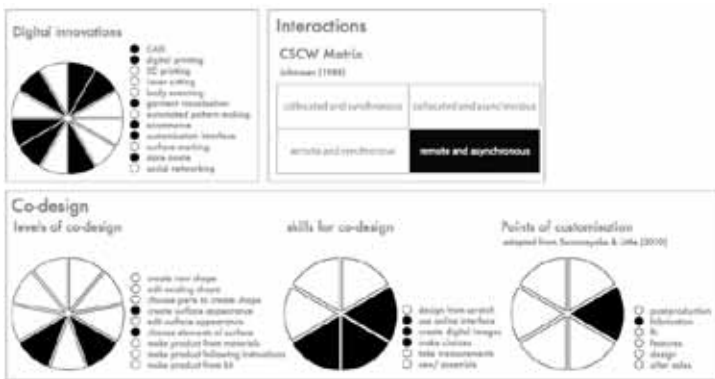


Figure 2. Example of case study analysis

4. Initial Findings

After analysing the 20 mini case studies four clusters emerged (most cases fall in just one of the categories, but some cases present characteristics of more than one group).

Digital innovations in the making process

Organisations where the designer is usually the one leading the process and experimenting with new technologies such as 3D printing, laser cutting and digital print of textiles. This is closer to a traditional approach where the consumer buys ready-made products. In some cases they were produced on demand, but in most cases they were not customisable even though they were being produced individually. Cases: 1,2,7, 10 and 19.

Mass customisation

In these cases, the use of digital innovations was limited to E-commerce and 'Design-Your-Own' (DYO) interfaces that allow the consumer to participate in the configuration of products and place order on-line. Products created this way included t-shirts, shirts, suits, dresses, shoes and denim, some targeting specifically women, men or children and others, a general audience. In most cases consumers could choose from a small range of base products and then customise the appearance of each part of the product. They are still produced using the same processes as mass-production but some on an individual scale. Cases: 1,4, 5, 8, 9, 10, 12, 13, 15, 16 and 17.

Support amateur maker

In this cluster are organisations that supported consumers in designing and making garment. This support was offered through toolkits, software, workshops and instructions on how to make their own garments. Also, through services to access materials and patterns that enable consumers to create their own garments. Cases: 3,6,11, 14, 18 and 20.

Network of makers

Here there are organisations that support amateurs through the creation of social networks for sharing information, showcasing ideas and designs. They offered customers their own online stores selling products they created within their sites. Cases: 1,14 and 20.

5. Conclusion

These first cases show examples of new structures and systems being implemented in the clothing industry. These do not yet replace the main ways in which people acquire their garments, but point to possible ways in which the clothing industry might develop. The increasing number of 'design-your-own' sites for pieces of garments shows that it is possible to produce personalised garments at affordable prices. However mass customisation systems still rely on traditional methods in garments production that limit co-design to configuration of predetermined features. Those that have started applying digital technologies in production (for example, the company that used digital printing to produce consumer created textiles for their trainers) have allowed more consumer input in the co-design activity. The same could be said for those organisations that are allowing consumers to curate products through voting and setting up stores for customer created articles.

A further combination of laser cutting and 3D printing with DYO interfaces might open up the possibilities of co-design, eliminating the need for basic shapes and truly enabling users to create any garments they wanted. However that might mean a too big increase in the complexity of buying clothes, which might put off consumers. In this scenario, what new skills would be required of consumers and professionals? For designers it could mean a shift from designing finished products, to designing services, systems and frameworks to support adaptable patterns, variable materials and different skills level by consumers in the creation of products. For businesses it could mean a relocation of production to shops and consumer's home.

There are also many questions relating to quality and ethical issues that need to be further investigated. What kind of restrictions there might be on offensive messages and images printed on garments? Who would control that? What about intellectual property issues when costumers want to clone garments that they already own? Is there a risk that DYO interfaces replace the designers and managers in product development processes? What repercussions that could have to the clothing industry?

The next steps in this research will be to conduct in depth interviews and observations of four companies select from the pool of case studies described previously. The questions above will guide the investigation and inspire the intervention to test further possibilities of combination of digital innovation and co-design. This project attempts to captures the emerging landscape of digital clothing manufacture. In doing so, it hopes to shed light on areas where professionals such as designers will need to rethink their roles and even reshape clothing design to adapt to this changing world.

Acknowledgment

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How to go from the file to the factory

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File-to-factory / Digital Fabrication / Computer-aided manufacturing

The present paper describes the file-to-factory process of a design object produced through a CNC plasma cut machine as a result of a six-month internship at a steel cutting company called Oxipress. The purpose of this participatory action research was to get a closer contact to the industry in order to find out what architects should know to make file-to-factory process seamless.

1. Introduction

In the past decade there has been an increasing application of computer-numerically-controlled machines in the production of building parts. CNC techniques, originally used in industries such as aerospace and ship-building, has recently started being incorporated in architecture production. However, for many authors 'digital fabrication technologies will not change building production without fundamental shifts in the social and market structures of design practice' [Moe 2010: 164].

As it has already been pointed out [Silva et al. 2009] Brazil has a significant number of computer-aided-manufacturing companies that remain producing traditional mechanical parts due to a lack of demand from architects and designers. If these professionals had a better understanding of the CAM process they could make use of such sophisticated production techniques.

This method of construction, which has been called "file-to-factory", eliminates the necessity of intermediate representations between the designer and the final building components. Authors such as Kolarevic [2003] have proposed that these new fabrication technologies, along with modeling and evaluation performance software, will challenge the traditional approach to design. However, even though architects have already become familiar to digital software to draw and model their designs, they are not ready for dealing with more specific production issues, such as CNC machine parameters, materials' properties, and so on. As a result, the file-to-factory process is usually not so straightforward as it should be, requiring multiple adjustments and often getting stuck due to issues such as file format incompatibility.

This paper describes an example of a file-to-factory process in the production of a design object using plasma cutting. It consists of a piece of furniture with curved lines and an egg-crate structure, something that a traditional metalworking firm would not be able to produce. The paper is part of a trilogy of conference papers in which three aspects of the process are described: (1) parametric design, (2) prototyping and structural analysis,

and (3) fabrication. The work was divided in three parts due to space limitations, but we expect to publish a complete version as a journal paper.

The objective of this part of the study is to show how it was important to get closer to the industry in order to find out which are the most typical difficulties in this type of process, and infer, from this experience, what architects should know to make it seamless. The importance of this approximation has been clearly stated by Kolarevic:

"Knowing the production capabilities and availability of a particular digitally driven fabrication equipment enables designers to design specifically for the capabilities of those machines. The consequence is that designers are becoming much more directly involved in the fabrication process, since they create the information that is translated by fabricators directly into the control data, which drives the digital fabrication equipment." [Kolarevic 2010: 71]

2. Methodology

The method used in the study was participatory action research, through a six-month internship at a local steel cutting company called Oxipress. Although this firm has invested in state of the art steel cutting machines, they are not used for producing complex design objects simply because there is no demand from their clients, its main field being simple mechanical parts (fig. 1).



Figure 1. Parts commonly produced by the company's CNC plasma cut machines (photo by Wilson Barbosa).

During this time, the authors followed the everyday production process, being able to experience from the early stages of the preparation of CAD files, through cutting steel sheet routines, until the final steps of assembling parts and post-processing. The idea was to learn about the capabilities of the machines and introduce a new scope of production in the factory.

The period of study in the factory was divided into two major steps:

(A) Exploratory Stage, which involved the production of a series of experiments to investigate material properties and to learn about

the capabilities of the CNC machines.

(B) Production Stage, which allowed the implementation of the knowledge gathered in the previous stage to complete the file-to-factory process.

The equipment used during this study consists on a Messer Multi Therm 4x14m CNC machine with a Hypertherm HPR 400 plasma source supply capable of cutting up to 60mm stainless steel sheets (fig 2). The CNC machine is basically composed by the following set of parts: (1) a cutting table equipped with a smoke extraction system, (2) a power supply which provides the plasma arc starting circuit; (3) a torch that holds a set of consumables parts enabling an extremely constricted plasma arc and (4) a software that controls the process.



Figure 2. Plasma CNC machine (image by Wilson Barbosa).

According to the manufacturer's 'these system components provide the electrical energy, ionization capability, and process control that is necessary to produce high quality, highly productive cuts on a variety of different materials'¹.

Exploratory Stage

During the development of the Exploratory Stage in the factory, it was necessary to perform a series of experiments related to a range of issues, such as assembly of the parts, thickness of the cuts, and so on. During the fabrication process, many adjustments had to be made in the design to comply with the material's properties. The close contact with the factory's team allowed for a better transition between the original files and the CNC machine files. This experience resulted not just in an original piece of design, but also in an invaluable body of knowledge about the file-to-factory method.

Experiment 1 – Parametric plates

The first experiment was a plasma cut test. The purpose of this exercise was to understand the basic procedures and functionality of the CNC machine, as well as the behavior of three different materials: carbon steel, stainless steel and aluminum. A set of irregular sized shapes was cut in three 400x400x2mm plates to perform the tests.

The designs were generated through a parametric rule using Grasshopper plugin for Rhinoceros CAD software and the 2D information saved as .dxf file format in layer 0. It is important to note that there was no text or dimensional lines in the drawing.

¹ Information available at Hypertherm 'Training and Education': www.hypertherm.com

Then the file was e-mailed to the company's engineering department for the following procedures: check the file for drawing or layer mistakes, check the pieces' size and thickness to match material availability and check machine time consumption to inform the production schedule. These procedures are compulsory for any file submission to this particular CNC machine avoiding software malfunction.

The first material to be cut was the stainless steel plate (fig.3a-b). This type of steel is popular for its corrosion-resistant properties and its hardness. For this reason it is required that a particular set of consumable parts are placed in the torch to match the material's specifications, in order to perform a good cut. Next, the cutting process was performed on the carbon steel and the aluminum plates (fig.3c).

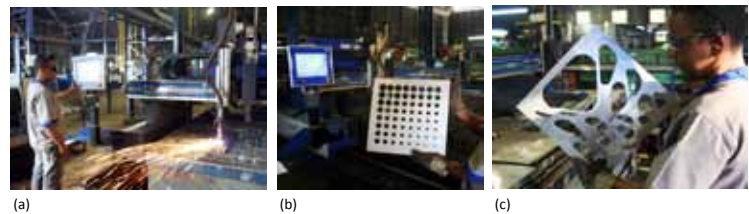


Figure 3. CNC plasma cutting process showing different designs (photos by Wilson Barbosa).

Each of these materials was cut with its specific set of consumables (fig.4a). These consumable parts control the size and the shape of the plasma arc and they eventually wear out and need to be replaced (fig.4b-c). Thus, another important information that arised was the fact that multiple initial piercings, to cut isolated shapes, would cause a higher expenditure of consumables in the torch, shortening its lifetime. This could be a point to be considered at the initial steps of the design process, since the higher the consumables consumption is, the higher will be the final production cost.

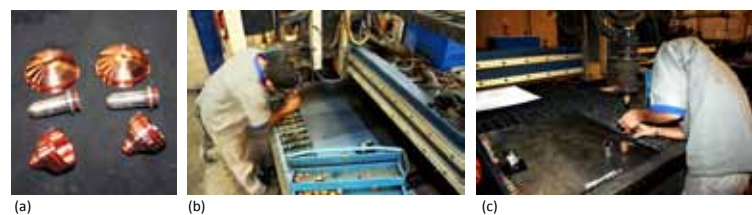


Figure 4. Changing torch consumable parts (photos by Wilson Barbosa).

Moreover, it can be suggested, when suitable to design, that multiple shapes could be arranged to be cutted from a single perforation point, as shown in fig.5.

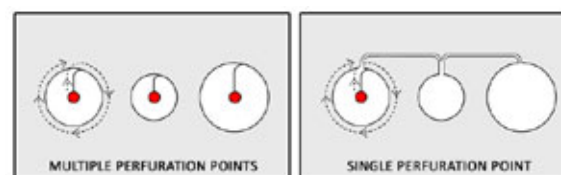


Figure 5. Scheme showing multiple shapes perforation with a single piercing point (image by Wilson Barbosa).

Experiment 2 – Fitting/Egg-grate sample

To evaluate the best connection between two 2mm-thick transversal pieces of plates, a second test was performed. This type of junction between plates is commonly known as egg-crate fitting, where a notch is cut on both parts (fig.6a).

Firstly a 3D model of a simple structure containing notches with five different widths was developed in Rhino/Grasshopper and 2D vector files were produced to be sent to the machine, as described above. Next, each piece was cut in a 2mm carbon steel plate. Each notch in this drawing had slightly different widths, varying from 2.1mm to 2.6 mm (fig.6b).

When the parts were assembled it was possible to observe some relevant issues. Although in the first option the notch was thicker than the material, the parts did not fit. A closer look revealed that the notches were obstructed by the material waste (fig.6c), due to the cutting process, and had to be removed manually with an orbital sander.

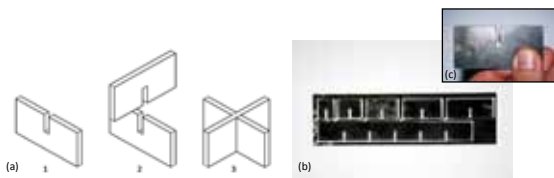


Figure 6. Both virtual model and physical prototype of fitting sample (images by Wilson Barbosa).

Depending on the part dimensions or the number of parts produced it would be too difficult or take a long time to manually fix each of the notches for best fitting. To improve notch cut, a couple of slightly different egg-crate structures were developed.

At this stage, two 3D parametric models were designed with a more complex shape to further evaluate fittings: (1) a small size curved egg-crate sample and (2) a full size egg-crate chair (fig.8).

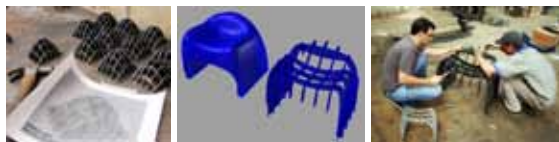


Figure 8. Images of both egg-crate experiments virtual models and physical prototypes (photos by Gabriela Celani).

Both prototypes were made with the same 2mm-thick carbon still sheet used in the previous experiment. However, the notch thickness was set-up as 3mm wide, allowing a correction-free notch and a perfect loose fitting. Then, the parts were assembled and its joints welded together to make a stable structure. Fifteen small size egg-crate samples were made to be submitted to different painting treatments for further finishing analysis.

3. Production Stage

After the completion of the exploratory stage it was possible to transform the gathered information into design principles that would lead to a furniture's quite seamless production process. From now on, the challenge was to design a 3D parametric model that would not only meet the client's brief but also comply with the automated production capabilities.

The major design object was a curved reception counter made of three parts. The pieces that made up the whole object were generated by the intersection between a *loft extrusion*, which led to the curved shape, and both vertical and horizontal *surface planes* (fig9). The parametric model, built in Rhino/Grasshopper, made it possible to create automatic notches in every part. Thus, if the shape curvature or the material thickness were changed it would simultaneously adjust the information in every single part.

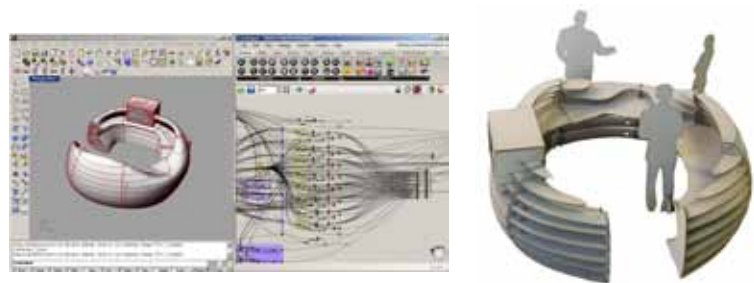


Figure 9. Images showing furniture's parametric model and 1:20 prototype (images by Wilson Barbosa).

The entire object was made from 33 individual parts. The 2D information of each part was saved in a separately *.dxf* file under *layer 0*. Then, the 33 CAD files were e-mailed as a compressed file format package to the company's engineering department for 'nesting' set up and other procedures described above. Regarding material consumption efficiency while cutting the parts, the 'nesting' process can be considered the most important step. The word 'nesting' is defined as 'the process of efficiently manufacturing parts from flat raw material²'. So, the better the optimization of the parts on the material surface is, less will be its consumption and, consequently, product final cost.

Next, the entire file package was imported in a specific nesting software and its 2D information arranged on 1200x3000x2mm thick carbon steel sheets, which resulted in a material consumption of 16 plates. After that, the nesting files were placed inside the 'job order' folder where they could be accessed by the CNC machine operator. The plasma cutting process took approximately 7 hours (fig.10).



Figure 10. CNC plasma cutting process (images by Wilson Barbosa).

² Definition from wikipedia.org

After the parts had been cut they were manually tagged according to design. The pieces were transported to the metalworking shop and then separated by assembling order (fig.11a). Two men were necessary to move the parts and position them for assembling and welding the joints. In order to compensate for the flexion of certain parts of the object, in special the cantilevered parts of the shelves, a metal ribbon was welded underneath them. This part of the production process took 2 days (fig.11b-c).

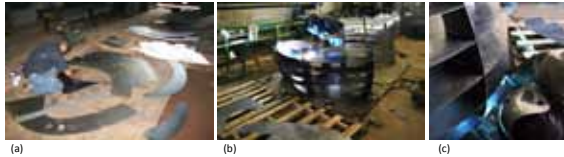


Figure 11. Assembling and welding process (photos by Wilson Barbosa).

4. Discussion

It is possible to conclude that what was learned in the initial experimental stages had an impact the way that the final object was designed, therefore proving that is important to know well the production methods in order to make better use of the resources and avoid mistakes and imprecisions.

With the description of this process we expect to contribute to the popularization of the use of plasma cutting for the industrial production of custom design objects and building parts.

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Space, information and cosmology in today's computer interfaces

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Interfaces / Digital technologies / Cosmology / Space / Interface design

This paper explores the relationship between information and space, as it unfolds on today's computer interfaces. We refer to art and design history to show that our conceptions of space evolve over time and give us tools to turn our informational structures into usable landscapes. We believe those landscapes, even nowadays, carry a strong cosmological sense as they participate in creating a sensible and navigable context for information.

1. Information and space – an approach on computer interfaces

Computer interfaces are an important part of today's mediascape, as we consider their role in organizing hypertextual content structures and the circulation and access of information through networks. Actually, the fact that they organize information in a visual and interactive space makes this term, mediascape, especially adequate, for it is derived from another term, landscape. We will approach today's computer interfaces mainly for their visual attributes, i.e. the interface as image and the image as an interface in digital interactive media – as both expressions and actors on our more general conceptions of space.

The role of interactive media in developing and uncovering different thought patterns has been widely discussed in the works of Lévy, for example, which deal with the approximations of hypertextual structures – their nodes and links – with the way we organize and deal with our conceptual repertoires in everyday life [LÉVY 1994]. Digital technologies incorporate thought and communication processes through interaction, while interfaces are the space or surface in which they unfold and are visually organized, hence their influence in what we could call the thought patterns of our time. We could say that Lévy has been generally concerned with the relationship between technologies for knowledge and our mental structures of memory and language. For our purpose in this paper, we intend to work on a shift on this approach: we will focus on interfacing structures in digital media facing our conceptions of space.

Digital technology gives visibility to the interfacing aspect of every image, since images become interactive tools, giving access to information that is not limited to their surface or their frame. We will argue that our conceptions of space, that are key for us to navigate our world and make sense of it, are all connected to some cosmological sense that feeds many representations, one of them being today's computer interfaces. Therefore, we aim to approach today's interfaces on the face of some traditions regarding our conceptions of space and their role on the

constitution of cosmologies that become part of our thought patterns, as those same interfaces can be seen as a specific breed of cosmological representation.

2. Our conceptions of space – some historical blueprints

In one of his lectures, given in 1967, Foucault brings up a simplified history of our conceptions of space (FOUCAULT 2009). We will relate those to major issues on the representation of space.

In the Middle Ages space was seen as a reflection on some divine order, where each element tended naturally to its own place and the displacement from that predefined order would be the cause of disease or misfortune. The world itself was limited and structured in opposites and that structure itself represented divine logic and purpose: heaven opposing to hell; sacred places to unholy ones.

The representations of space at the time alluded to motives that returned to that order, in a stable pictorial space that did not reinforce depth or movement, where things had their stable places. Because of this general notion of space that is stable and finite, this period of time might be the one that best represents what we would call a classic cosmology, rendering visual schemes that reflect that approach on space and a system of common knowledge present in everyday life. A very strong example of this is the cosmology depicted by Dante, with spaces that did not contaminate each other and had quite complex mirroring and opposing relations, relating to theological order.

Foucault believes that Galileo made the turn from this system into another, not exactly because he brought up the idea that the earth traveled around the sun, but because this implied the concept of infinity, or, more precisely, that space was infinite. Since space now opens up to a new complexity, medieval oppositions become less defining and stable places dissolve. Placement is replaced by extension, in a world where everything moves, and things themselves are a stage of their own movement and only gain some stability and definition by the slowdown [or the framing] of that movement.

A good historical example of corresponding representational forms would be the *linear perspective* as applied to pictorial representations: with that, image and physical space become interchangeable in terms of their proportions and positions in a uniform representational space, measured through the determination of a point of view and lines that aim a vanishing point. Like Jay reminds us [JAY 1988] the pictorial space becomes measurable in physical terms and also becomes a reference

for measuring physical space. This implies a certain uniformity of space in general, so distances and movement could be efficiently measured. Another example would be some of Botticelli's paintings, where he managed to represent only an instant, a specific moment of a more general movement and timeframe.

Nowadays, following Foucault's description, there is the substitution of extension by location, when every location is formed by the relationship with other related places. A location nowadays is defined by taking up a point of reference through which action may take place in space. This new way of approaching and representing space is evident in fields like demography, geography or logistics, where the problem of how things are distributed and circulate in space and their relations take central stage and is subject to endless problematization and rearrangement. Therefore, the issue of location is not solved in finding places for each and every thing, but resides on the management of many variables, time being only another one of them.

The forms of representation that best give visibility to this approach on space are diagrams and maps that point out landmarks, signposts or places of importance and the relation between them; but not exactly their extensions, surfaces and frontiers. Any cosmological notion that could adjust to this perspective on space will relate visually to schemes that can be reorganized according to changeable access points and data frames and will show, for each location, the formation of a network of relationships. This organization of space becomes increasingly visible with digital media and mapping and its access, which November and others call *digital navigation* (NOVEMBER *et al* 2010).

3. Maps, hypermedia and digital navigation

We understand that conceptions of space change along history and so do the ways we represent it and the techniques and artifacts used. Hypertextual access to information may be bringing to surface the fact that our memory is dynamic and non-linear. At the same time, the spatial arrangements described by Foucault for today's approach on space, i.e., space as location, are becoming evident in digital mapping and navigation, and are presented visually on our computer interfaces. So, if interactive media does not by itself abolish physical space (on the contrary, for all we have been seeing with locative media), it is bringing to surface the ancient bond between space and information, i.e., that they are equally built by human assumptions.

November points out some useful issues regarding maps and the representation of territory (NOVEMBER *et al* 2010): firstly, that there is no territory that is prior to a map and, likewise, that there is nothing in the territory that is not on the map. For her, both maps and territory are the result of a perspective regarding the physical world that conceives space as a network of reference points, i.e., a useful perspective for navigation in physical space as well as on maps. Benedikt, apparently going further on that line of thought, writes that 'information in space is space

in information' (BENEDIKT 1996). This strong statement goes to say that, not only there is no ontological prevalence of space over information (like with territory and map), but also that one tends to amplify another and they are both the result of the same navigational perspective.

Therefore, when it comes to our notions of space, images, when taken as interfaces, can be seen as placing together some territory in space and at the same time as being themselves the tools for navigating that space.

4. Cyberspace as *heterotopia*, interface as cosmological representation

Up to now, we have been broadening two concepts: the concept of cosmology and the concept of interface. The term *cosmology* usually refers to the studies about the Universe as a whole, its beginning and end, structure and so on, and as for its visual aspect is often associated with star maps in ancient Greece, the Middle Ages and today's astronomical and astrological maps. On the other hand, the concept of interface, outside the fields of physics and biology, has become quite spread in the communication and design fields as the graphic representation of data and tools in digital interactive media.

We aim to amplify their historical timeframe so that the idea of cosmology can be more current and show that we still look for organized contexts in our approach on information (and not only to celestial bodies), and the idea of interface can be more comprehensive and show that we have long used images as tools to access things beyond them.

Benedikt, as he introduces several aspects of the concept of cyberspace, states that:

[...] a mental geography of sorts has existed in the mind of every culture, a collective memory or hallucination, an agreed-upon territory of mythical figures, symbols, rules, and truths, owned and traversable by all who learned its ways, and yet free of the bounds of physical space and time. [BENEDIKT 1991: p.3]

He believes that this common space, although not essentially dependent of specific technologies, becomes partly visible through those. We will use the terms *cosmology* and *cosmological representation* to refer to that geography of sorts when it comes to the attempts to organize it visually, unfolding space and context. This implies that every cosmology carries within itself some spatial or visual quality that leads to a representation, and at the same time that we feel these representations are necessary because they give us a sense of context.

We come to understand that the sole idea of cyberspace can be seen as a sign of the intimacy between information and space. Nevertheless, the so-called virtual spaces it creates are usually seen as *artificial space outside the physical space we live in*. As Santaella points out, to access this world it seems to be necessary to leave physical space, as that would ever be possible. While discussing locative media, she describes a separation be-

tween 'physical spaces of circulation' and 'virtual spaces of information'¹ and writes that indeed geolocation technology is creating a sort of overflow of cyberspace into physical space [SANTAELLA 2008]. From that point, the idea of exteriority of digital space in relation to physical space (and *vice versa*) becomes quite weak, as physical space is being mapped on digital, in several layers, while digital space comes to recognize physical space.

For our discussion in this paper, it matters pointing out that cyberspace and physical space have both some informational quality that constitutes them, but the digital technologies that are the basis of the first make information more evident on both of them. On the other hand, it becomes clear that what we could manage to call physical space is in fact a superposition and a contamination of several spaces that could not in fact be measured linearly. Foucault, on the same lecture referred to earlier, brings us the concept of heterotopia, which refers to *other* spaces which relate to all places by representing them, putting them face to face, challenging and inverting them. A very strong example would be a town cemetery, which, despite having a geographical location in physical space, challenges and relates to all other locations in the town, being present in many spaces outside its borders, in constant activity and wrestle [FOUCAULT 2009].

Heterotopies, therefore, have always existed and are part of that common foundation of every society, issuing in space a living and historically evolving content of their knowledge, habits and so on. They are like that geography of sorts pointed out by Benedikt, only approached through the spatial tensions they create. We could say that our society has long been prone to unfold heterotopies and to make them visible through devices, analogical or digital, like the cinema and other medias. In that sense, one of the main heterotopies of our time would be cyberspace itself, which, through graphic interfaces, is presented as functional and temporary organizations of every space.

5. The workings of a sensible context – the need for design and gardening

As Cardoso points out, the practice of design started out with a strong commitment to *bring order to the mess of the industrial world*². By this expression he encompasses the industrial production of ever cheaper and abundant consumer goods, their cycles of use and disposal, and also the macrostructures necessary to produce them, which impose a radical change in the ways of life prior to industrialization and also in our relationship to artifacts. Using the example of the accelerated growth of the big cities between the XIXth and the XXth centuries, and the urgent need to organize different flows inside them as well as in and out of them, he highlights the practice of design that creates networks of signs and representations to interlink urban structure, making it navigable. [CARDOSO 2012: p.180-193]

1 Both expressions have been translated from their originals in portuguese: 'espaços físicos de circulação' and 'espaços virtuais de informação'. [SANTAELLA 2008: p.20]

2 Or, as the original sentence in portuguese goes 'O design nasceu com o firme propósito de pôr ordem na bagunça do mundo industrial.' [CARDOSO 2012: p.15]

Cardoso, therefore, shows us how design work must be committed to creating interfaces that link things, and to helping people make sense out of the complex world we live in. On the other hand, and this is central to our approach, we realize that interfaces (especially those on the computer screen) are complex structures themselves: more than one-dimensional access points, network nodes or even frontiers, they gain extension and depth while becoming temporary organizations of sensible contexts, like ever transitory cosmologies that evolve over interaction.

Foucault, in the same lecture referred to earlier, also describes different principles of heterotopia, the third of them being quite useful to our subject: that it manages to juxtapose several spaces, several places that would otherwise be incompatible, in a single real space [FOUCAULT 2009: p.418]. The cinema screen and the space of the theatrical stage are listed as examples, and we could easily add the computer interface. This principle also relates to the access of information in layers of variable complexity and scope, which is typical of digital navigation. It seems that, beyond accumulating several spaces in the same surface, computer interfaces display spatial variables that can be relocated according to the point of access, reorganizing relations.

Foucault also points to the tradition of Persian gardens as a historical example of this principle of heterotopia. According to him, the garden in Persia was a sacred place, which reaffirmed the four corners of the world, with the fountain in the middle as an especially sacred place. It was some sort of happy microcosm where the world would reach its symbolic perfection in a sort of universalizing heterotopia. It was the world's smallest portion and at the same time its totality, by its levels of reference.

Even though this description points out to a relatively limited and stable cosmology, the space Persian gardens unfold differs from medieval cosmology – a structure based on oppositions and right places –, mainly because it dwells on patterns that repeat and add to one another, adding movement and layering the experience of that space. In that sense, the Persian garden would resemble more a grid, a base for multiple arrangements. Its arrangement could easily overflow its borders, as this organizational pattern (growing into a thought pattern), could organize and make visible other relations in the space outside.

This vision on Persian gardens also points out, as does the idea of cosmology itself, to the need for the organization of usable spaces or informational contexts. While the networks of designed artifacts and the meanings and uses we attach to them are constantly evolving, while the speed by which those same artifacts are produced and disposed of, replaced by new varieties, is constantly growing, we keep searching for contexts in which to make sense of it all.

But, like Foucault inspires us to say, our conception of space favors location to placement and circulation over stability. Computer interfaces are, in that sense, a special kind of interface, because in their grids, they organize temporary contexts of content

that are ever changing. Changing in plain sight and immediately, actually depending on interaction and change to function. We can only expect this to become even more defining with dynamic and collaborative content. At the heart of digital technology we realize space is a necessity, for it does, cosmologically, bring sense, use and context to information.

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THE NEW IMPERIALISM:

THE INTERNATIONAL FACE OF DESIGN AND DESIGN HISTORY

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Denise Dantas / Co-chair / University of São Paulo / Brazil

Investigations that draw attention to the nature of design practice and history in the wider world, beyond the orthodox mapping of activity in the mainstream industrialized nations of the west, helping to redraw the world map of contemporary design activity, history and politics.

Frontiers of looking past: a Nietzschean survey of introductions and intentions in Design History

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Design / History / Nietzsche

Friedrich Nietzsche's 'On the Advantage and Disadvantage of History for Life [1874]' identifies three motivations for historical reflection: monumental, antiquarian and critical. From this existential suspicion, this paper explores the introductory chapters, of Pevsner's 1968, *The Sources of Modern Architecture and Design*, Jonathan Woodham's 1997, *20th Century Design*, and David Raizman's, 2004 *History of Modern Design*, as representations of monumental, antiquarian and critical history, in order to chart a post-imperial, post-industrial 21st century frontier for design history.

1. Friedrich Nietzsche and Design History

Friedrich Nietzsche's 'On the Advantage and Disadvantage of History for Life [1874]' identifies three motivations for historical reflection: monumental, antiquarian and critical, writing,

History belongs to the living man in three respects: it belongs to him so far as he is active and striving, so far as he preserves and admires, and so far as he suffers and is in need of liberation. To this triplicity of relations correspond three kinds of history: so far as they can be distinguished, a monumental, an antiquarian and a critical kind of history. [Nietzsche, 14]

From this Nietzschean existential suspicion, this paper explores 20th century design history texts. Introductory chapters, in the works of Pevsner's 1968, *The Sources of Modern Architecture and Design*, Jonathan Woodham's, 1997, *20th Century Design*, and David Raizman's, 2004 *History of Modern Design*, offer existential insight into the evolution of modern design history. Early 21st century complex motivations of mediation, that include interface, interaction and service design threaten the continuity of object oriented design history. Confronted by new definitive challenges I return to Nietzsche and ask again, why look to the past? To monumentalize? To preserve or to overcome the past through demands of the present? Through an existential primacy, history becomes a series of changing 'present' moments unified by a constant struggle to live better. As such, tracing historian motivations expose a common search towards frontiers of looking past, despite divergent directions that animate history with present relevance. Design discourse as mediation that resists a meta-narrative or disconnected pluralism depends on exposed present motivations. This brief interpretation of textual introductions, aims to remind us that the historical look is never neutral or static but always situated and projected in and through a lived experience of time and place.

On the abuse of history, Friedrich Nietzsche warns that,

Each of the three kinds of history is justified in only one soil and one climate: in every other it grows into a noxious weed. If the man who wants to achieve something great needs the past at all he will master it through monumental history; who on the other hand likes to persist in the traditional and venerable will care for the past as an antiquarian historian; and only he who is oppressed by some present misery and wants to throw off the burden at all cost has a need for critical, that is judging and condemning history. Much harm is caused by thoughtless transplanting: the critic without need, the antiquarian without reverence, the connoisseur of the great who has not the ability to achieve the great are such growths which have been alienated from their native soil and therefore have degenerated and shot up as weeds. [Nietzsche, 18]

According to Nietzsche, history that does not affirm, negate or recognize the past in order to affect the present is life denying escapism that stifles humanity. With this assessment in mind, this paper asks, how does design history affirm life? I invoke Nietzsche as a method of reading the texts and in no way aspire to apply existential philosophy to design history. This presentation could have easily been titled 'ways of reading design history.' In this project, my own intention is twofold, first to philosophically interpret the dynamic development of design history and second, to consider models of motivation for writing a design history, relevant to Bangladesh. Although there is a robust selection of history texts to choose from that include Pevsner, Pulos, Banham, Heskett, Woodham, Sparke, Miekle, Walker, Forty, Raizman and many others, I chose these three texts for three reasons,

- First, because each loosely represents Nietzschean motivations of monumental, antiquarian or critical history.
- Second, I sought out texts that, even if briefly, mention William Morris, as a measure to test inclinations of reverent imitation, direct rejection or neutral preservation.
- Third, I was interested in texts that could be used for introductory design history survey courses and that presented a sense of historical continuity and codifying disciplinary visual vocabulary.

As an interpretive method I looked to the introductory sentence of each text as a guideline. Second, as a means of comparison, I compared the treatment of the Arts-Crafts movement in each text. These methods are suggestive of the internal logic operative in each text. The test example of the 'arts and crafts' moment, shows diversity in the internal logic of design history, whereby

for Pevsner the Arts and Crafts movement corresponds to Morris' style, for Raizman the movement was a process of adjustment with mechanical production, for Woodham, the Arts and Crafts model of production was problematic and perhaps incompatible with 20th century design. Texts show the evolution of design history premised on an monumental art historical and diachronic approach of time, to a synchronic place motivated history [Banham, Meikle, Pulos], to theme motivated history [Woodham, Forty], to [Raizman, Spark] texts that combine these approaches. This exploration of motivations for design history help me better articulate my own motivations in writing a design history relevant to Bangladesh.

2. Monumental History: Nicholas Pevsner, The Sources of Modern Architecture and Design

Nicholas Pevsner offers no introduction in his *Pioneers of the Modern Movement*. The title alone admits his attention to a sequence of iconic pioneers in the monumental tradition of art history. The first sentence of chapter one entitled 'Theories of Art from Morris to Gropius' states, "Ornamentation, says Ruskin, is the principle part of architecture." [Pevsner, 19] This opening gesture sets up the study of modern design as an aesthetic evolution beyond ornamentation towards function. The primacy of aesthetic development measured by artists and architects, make design history derivative. Subsequent design texts by historians such as Adrian Forty, Penny Sparke and Jonathan Woodham, among others counter the dependence on monumental moments in architecture and have long ago shattered Pevsner's aesthetic authority. Despite the overcoming of Pevsner in Western design history, the dependence on art and architecture to account for the emergence of modern aesthetics still animate non-western design history, and as such, warrants inclusion in this short list of texts. Written during the 1930s, revised in the 60s and then again in the 70s, the narrative shows surprising little transformation aside for the inclusion of more images. In contrast Penny Sparke's, *Introduction to Design and Culture 2.0* extensively reconsidered the first addition in light of post-modern developments. Pevsner's insistence on a stable sequence of monumental modern figures is consistent with his primary motivation to define modern design as the removal or transformation of ornamentation. This sense of iconic glorification persist in design texts, even if, to a lesser degree. The icons compose visual landmarks that chart a claim of modern cultural evolution. Pevsner begins with the old master Ruskin to defend the progression towards the new modern master Walter Gropius. The evolution validated emergent modern design history by association with art and architecture. Therefore, a monumental approach to design history establishes heroic accomplishments worthy of imitation. The benefit of this approach is the initial validation for a new area of study by identifying heroes or pioneers. For example, design history in developing countries identify their 'firsts in design' as does disciplines like service or interaction design. However, this approach can also easily lead to a form of hero-worship doomed to imitate out of context.

To the Arts and Crafts movement, Pevsner devotes considerable attention in chapter two. His analysis relies heavily on a formal description of style, stating 'What raised Morris as a reformer of design high above the Cole group and Pugin is not only that he had the true designer's genius and they had not, but also that he recognized the indissoluble unity of an age and its social system.' (Pevsner, 48) And, further on, "Morris alone felt that what was needed was the personal example, the artist turning craftsmen-designer himself." [Pevsner, 48] Monumentalizing Morris as an exemplar of modern material honesty and social relevance, Pevsner practices his perspective of past greatness as worthy of present imitation. While Pevsner addresses Morris' theories and process, he gives more attention to the aesthetics of the Arts and Crafts style. The case for modern aesthetic evolution, for Pevsner depends on formal analysis of exemplary models. His interpretation and explanation of the Arts and Crafts movement presents Morris as a essential mediating figure between Ruskin and later Bauhaus developments. The need for a validating association between art, design and architecture is evident in his account of the movement as a collective and continued effort to redefine ornamentation.

3. Antiquarian History: Jonathan Woodham, Twentieth Century Design

Jonathan Woodham's, *Twentieth Century Design* (1997) begins with the humble confession, "The writing of a comprehensive single volume on the history of twentieth century design is a daunting prospect, not simply in terms of the seemingly limitless range of products and associated meanings from which such a text might be fashioned but also in terms of the considerable geographical scope which might be encompassed." [Woodham, 7] My suggestion that Woodham's words are evidence of an antiquarian motivation by no means imply that his text is antiquated, isolated or frozen in a moment of preservation. Rather, I find his motivation, like many 20th century design texts that include the works of Sparke, Meikle, Forty, Walker, Banham and others, defends contextual conditions broadly understood as the source of modern design rather than historical continuity. The antiquarian motivation appreciates the past as relevant but not repeatable. Woodham's narrative presents thematic discussions that include issues of production, reception, distribution and social resonance. The opening sentence conveys the expansive field of the design history, rather a Pevsnerian evolution of celebrity designers. By doing so, Woodham, along with others, carves a field of design history, connected yet independent from the fine arts and architecture. This form of history relies on contextual conditions rather than conceptual or aesthetic continuity. The benefit of this approach is the attention to specific lived experience interpreted thematically or geographically. The drawback, however, is precisely as Woodham confesses, in the difficulty of offering a single 'comprehensive' volume on history. Nevertheless, this approach finds much resonance in time, place or theme specific histories that overcome a conceptual and universal dependence on Western design heroes.

In a section entitled 'The problematic legacy of the Arts and Crafts Movement,' Woodham writes, "However, their nineteenth-century predecessors, such as William Morris, had generally identified the mass-production process itself with the dehumanized working conditions prevalent in a majority of manufacturing industries. Their problem was how to marry, on a scale sufficient to provide affordable well-designed goods for the majority....."(Woodham, 14) The thematic, rather than aesthetic unity of Woodham's history gives narrative structure with open interpretations. By discussing Morris' problem of good design for all, rather than his aesthetics, Woodham converts a style into a theme. This conversion is indicative of his context specific rather than concept specific approach to design history. Where Pevsner presents Morris as the modern heir to Ruskin, Woodham presents Morris as identifying a specifically modern problem related to machines and craft. The antiquarian motivation of history preserves a past condition, as a lesson to learn from but not repeat.

4. Critical History: David Raizman, History of Modern Design

I found no examples of design history that directly and antagonistically dismisses history. As such, this section offers only critical gestures in current design history. Towards a motivation of critical history we find Raizman's 2004, *History of Modern Design*. Contemporary design writing that include text based readers and project based anthologies, present the critical opposition to history more emphatically. Raizman, begins to offer a critical account by asserting a normative sequence of design history, while including an antiquarian attention to conditions and critical questioning of both iconic pieces and contextual interpretations. His first sentence, much like Forty and Woodham, offer a broad topography of design history. Raizman writes, "Whether in relation to fashion, software, information, or an array of household products, the term design regularly enters our vocabulary to describe some of the most common aspects of our everyday experience." [Raizman, 11] The exploration of meaning in the ordinary, in the everyday, in shared experiences expose a complex political motivation. In this way, his text moves beyond service to future designers and approaches design history as world history. Critical history is the opposite of a Pevsnerian search for continuity, rather Raizman, Sparke and others seek out the sources of social change. Design efforts eager to promote sustainability and social responsibility can use this approach to look to history with an eye on change, instead of aesthetic validation or postmodern contextual recognition. However, this approach also remains dependent on design discourse arising out of monumental and antiquarian motivations.

About the Arts and Crafts movement, Raizman writes, "One might say that the Arts and Crafts Movement was directed toward process and in ending or at least reducing the alienation between an artisan and the product of his or her labor. In theory at least, manufacturers and buyers would support such an aim

as an expression of social responsibility." [Raizman, 111] In this sentence he articulates the commercial problem and also the social appeal of the movement. He expands out of Pevsner's focus on Morris the person and Woodham's focus on the collective craftsmen of the movement to include the difficult reception of the arts and crafts movement for people who were not invested in the ideal. The critical approach does not necessarily negate the movement but problematizes it as a larger social problem exposed by design. From a solution model to a specific model of production to design as social reform, Raizman appeals to history to interpret present society from the perspective of products made and used. Indeed, Raizman's detailed chapter considers the history of the movement, the related disciplines and products, as well as the movement's perhaps more commercially successful conversion in the U.S. A. In this way, he maps complex discussions surrounding the Arts and Crafts movement relevant to conversations about craft, machines, labor and social responsibility, today.

5. 21st Century Post-Industrial Design History

In my search for a model design history text that would appropriately address design in Bangladesh, this Nietzschean perspective lead to me the following questions:

- A. Do I look to artists? Architects? The heroic producers of design?
- B. Do I look to the themes, such as machines, materials, distribution, promotion or market? Or, receivers of design?
- C. Do I look to design discourse, specific projects or alternative approaches? Interpreters of design?

Interpreting design texts through the Nietzschean lens shows an interdependence of motivations whereby the critical exists against the monumental, and the antiquarian exists as mediating the critical rejection and monumental glorification. Frontiers of design history in the 21st century emerges out of dialogue, such as this conference, where our motivations are articulated, accountable and reviewed. Just as the designer is invested and implicated in the production of design, the design historian is invested and implicated in the reception of design. The differing approaches to the Arts and Crafts movement expose interpretive investment into the aesthetic, the contextual and the political. Whether design history begins with art, technology and craft or is invested in personality, process and consequence, the examples make the past relevant through present concerns. Based on this Nietzschean interpretive model, I can begin to draw the contours of a design history in Bangladesh that includes, monumental, antiquarian and critical approaches to history. I would have to include discussions of consequences along with the heroes and movements of Western design. An agenda for a design history relevant to Bangladesh would then include, design heroes, investigations of contextual constraints and possibilities and a critical

assessment of design consequences both local and Western.

Returning to our test case example of historical intentions, I ask, how would I discuss Morris in Dhaka? I can follow Pevsner, Woodham and Raizman's lead and present Morris the man, then Arts and Crafts as a problematic design and social movement. The monumental, antiquarian and critical models offer ways to relate to the past. However, in Bangladesh and developing countries, at least another mode that considers local implications is demanded. Whether, continuous, discontinuous, isolated, the Nietzschean intentions all assume a single history, a dominant history to imitate, subvert or preserve. In the case of Bangladesh, and other post-colonial countries, the challenge is to find global resonance without direct dependence on Western models. Considering the Arts and Crafts movement in Dhaka, for example, would require that I relate the problems of craft, machines, labor and materials philosophically, while noting the local implications of the Arts and Crafts problematic. In Bangladesh, a lecture on the Arts and Crafts movement would call for references to NGOs, local craft and cottage industries, cheap human labor, materials, traditional crafts, political and social implications etc. But, Morris in Dhaka is a story for another time.

In conclusion, a Nietzschean reading of design intentions and motivation exposes the dynamic of continuity and change that animates design history with present relevance. Monumental,

antiquarian or critical attention to motivations help us resist conceptual reification. Furthermore, design history becomes an active tool for reconceptualizing design problems and solutions today, rather than mere narrative. And, as such, from accounting for the past, design history becomes a discipline accountable for future frontiers across the globe.

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Design, histories, empires and peripheries

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Design History / National / Global / ICDHS / ICSID

Several concerns have emerged since the first ICDHS conference in Barcelona in 1999. Recent texts such as *Global Design History* (2011) have sought to distinguish between what is portrayed as an ICDHS desire to address 'world themes', provide an 'overarching narrative' and attempts 'at comprehensively mapping the history of design in all its geographical nooks and crannies', and global design history's position as 'not a topic but a methodology'. The 8th ICDHS Conference in São Paulo provides an opportunity to redefine aims and future agendas.

1. Introduction

This paper seeks to address several major concerns that have emerged since 1999 when the first the first International Committee for Design History and Design Studies (ICDHS) conference was held in Barcelona. Organized by Anna Calvera and other Barcelona colleagues, it proposed a counterpart to the disciplinary dominance of predominantly Anglophone or Euro-American design historical perspectives. Entitled '*Historiar des de la Perifèria, Historia I Historias del Disseny*' (Calvera 2001), the conference established a coherent voice for design history and design studies in the Spanish-speaking world, leading to the subsequent organization of conferences in Havana ('The Emergence of Regional Histories', 2000) and Guadalajara ('Coincidence & Co-incidence', 2004). In a number of ways such initiatives answered growing concerns for a re-mapping of design history to embrace a greater understanding of characteristics of design practices, manufacture and consumption outside the prevalent orthodox representations and geographical limitations of the history of design and design studies. However, the third of the ICDHS conference series held in Istanbul ('Mind the Map: Design History beyond Borders', 2003) marked an additional desire to make visible the design history of countries generally excluded from mainstream histories of design for reasons of linguistic 'invisibility'. This also underlined a widening of the ICDHS agenda to bring in from the periphery many countries whose design heritage has been obscured either by the dominance - or obscurity - of particular languages. Time will not allow reconsideration of the bibliometric analysis of leading histories of design of the late 20th and early 21st centuries that I had employed in an examination of the place of 'local', 'national' and 'global' in design histories (Woodham 2005) or the ways in which a wider understanding of the complexities of design in parts of the non Anglophone world dominated by major languages such as Mandarin Chinese and Hindustani or, indeed, minor, widely inaccessible languages such as Slovenian, spoken by less than 5 million worldwide, that tend to ensure that design activity in such countries remains less than well-known.

2. Recent initiatives in the design of design history and design studies

There are a number of publishers engaged in the proliferation of new discipline-based handbooks, encyclopedias and introductory readers by established scholars. In the fields of design history and design studies, the major publisher is Berg whose large-scale investment and ever-increasing number of texts has taken on imperial proportions. Their *Design History Reader* (Lees-Maffei & Houze 2010) for the most part follows a traditional format with generally well-known textual extracts accompanied by short essays promoting a fairly conservative view of the field. However, the General Introduction states that

One of the most pressing issues facing design history today is the need to globalize the discipline. This situation is reflected in the *Reader*. Therefore, while the core texts largely concern the UK, the US and Western Europe, the *Reader* closes by heralding future work in design history with its dedicated section 'Local/Regional/National/Global, on issues of global design history. (Maffei 2010: 3)

Published a year earlier Berg's *Design Studies: A Reader* (Clark & Brodie 2009) encompassed both Design History (Section One), subdivided into Design Histories and Design History as a Discipline, and Design and Global Issues (Section 6) subdivided into Globalization, Equality and Social Justice and Sustainability. Interestingly, in considering issues such as 'The State of Design History as a Discipline', the editors commissioned a fresh essay (Clark & Brodie 2009: 55-63) by Denise Whitehouse, a design historian from the Faculty of Design at Swinburne University of Technology, Australia. This provides a concise but incisive view on the question of 'A World History of Design', referring to the ICDHS conferences as mechanisms for

...drawing together scholars from all regions: Western, non-Western, postcommunist, postcolonial, Asian and Southern Hemisphere. These scholars are advocating a new geography of design that critically rethinks the impact of Western Capitalism's dissemination of the idea and practice of design. (Clark & Brodie 2009: 61).

However, Whitehouse also provides a thoughtful critique of the positions adopted by a number of design historians in this context, as well as providing a thoughtful way forward in a subsection entitled 'The Issue of Specificity: the Building Blocks of a Global Design History'.

3. International design organizations and their windows on design in a global design context

At various phases in the development of history of design the attention paid to national design organizations has often been criticized as representative of state propaganda and aspirations

and somewhat removed from the realities of design, manufacture, marketing and consumption. However, such criticisms have often been directed at histories constructed around materials in the public domain - such as commissioned reports, policy documents and related media and design promotional materials. The latter only represent the tip of the iceberg rather than the often highly revealing mass of archives, and thus primary research materials, below the waterline, full of differences of opinion, conflict with government departments and negotiations with other organizations, institutions and individuals; they were never envisaged as being open to the scrutiny of historians during the lifetime of the often vociferous participants in debates safely and discretely carried out behind closed doors. Nonetheless, the meteoric rise in the number of national design organizations and policy initiatives over the two decades since the early 1990s (Woodham, 2010, 46) have considerable potential to reveal insights to the roles played by design in a global context in the period.

To a more limited extent, but nonetheless highly revealingly, the archives of professional design bodies concerned with the global significance of design provide valuable insights to a variety of attitudes to its practices, processes and protocols in different geographical locations, within a range of social and political contexts and stages of economic development. The intricacies of internal organizational politics are also revealing and there is still much to learn about the ways in which the design profession sought to establish itself internationally alongside the different preoccupations facing designers in different parts of the world. Two important organizations in this context are the International Council of Societies of Industrial Design (ICSID, 1957-), with membership in more than 50 countries, representing 15 organizations worldwide, and the International Council of Graphic Design Associations (ICOGRADA, 1963 -), representing 200 organizations in 67 countries and regions. The archives of these associations represent two of 18 collections held in the University of Brighton's Design Archives in the UK and provide an invigorating platform for insights into global design debate over the past 50 years.

This is not the place to do more than sketch in a brief reminder about the development of ICSID from its establishment in 1957 as an organization that sought, through collaboration, to promote and protect the status of the industrial designers and raise design standards through education and training to its status as a more sophisticated organization that sought to promote design as a means of enhancement of the social, cultural, economic and environmental quality of life. Its more recent preoccupations have included the foundation, with ICOGRADA, of the International Design Alliance (IDA) with a mission to 'bring the benefits of design to world bodies, governments, business and society, as well as the establishment of the World Design Capital programme – Turin 2008, Seoul 2010, Helsinki 2012 and Cape Town 2014.

ICSID grew rapidly and, in little more than a decade from its 1957

debut, represented more than 40 member organizations from over 30 countries, having also established a special consultative status with UNESCO. In parallel with the membership of its visual communication counterpart ICOGRADA, ICSID also embraced societies from the European Eastern bloc and other non-capitalist countries during the Cold War years, thereby widening an understanding of the variety of meanings and implications of design activity in often complex political, economic and social contexts. Further dimensions of its outward facing role may be gleaned from a number of ICSID Regional Working Groups active in the late 1970s and early 1980s including the Asian, Mediterranean, Latin-European and Nordic Groups. Also visible within the archives for this period are papers and correspondence relating to the Asociación Latino Americana de Diseño Industrial (ALADI) which had been founded in Bogota in November 1980. Under an Executive Committee with representatives from Colombia, Brazil and Cuba, it brought together designers from Latin America and the Caribbean for the promotion for the institutionalization of industrial design as a technological discipline needed for the social, cultural and economic development of the region.

The activities of Asian Regional Group (ARG) were formally initiated at its first meeting in the World Trade Centre Building in Tokyo in May 1979 [ICSID, 1979]. Participants were prominent members of leading design organizations, both public and private, in Australia, Taiwan, Hong Kong, Japan, South Korea, and the Philippines. They were well also well aware of the recent Ahmedabad Declaration that had been a major outcome of the first United Nations Industrial Development Organization (UNIDO)/ICSID joint conference five months earlier. This had been held at India's National Design Institute, established by the Government in 1961 in the wake of the 1958 India Report by Charles and Ray Eames. Amongst a number of ambitious aims the Declaration proposed the establishment of design promotional organizations in developing countries, the need for such bodies to underline the need for improved design education and training, as well as the importance of instituting systems of cooperation between design bodies in the developed and less developed world. It had also argued that international organizations, ranging from ICSID, UNIDO and the World Health Organization (WHO) through to the Asian Development Bank, the African Development Bank and other financial institutions, should provide active support for such initiatives. [For another reading of the implications of the Ahmedabad Declaration for developing countries, see Margolin, 2006].

At the May 1979 ARG meeting Arturo Luz, the Executive Director of the Philippines Design Centre, highlighted the mismatch between the needs of developing countries and the understanding of the developed world in respect of the training of industrial designers. He also reported on the deficiencies of sending small groups of designers abroad for such education, pointing out that the average cost was \$26,000 per annum and that the training was of minimal value in terms what his country was trying to achieve. The other alternative of bringing in external design expertise - as had the Japanese in the later 1940s and 1950s - was also seen as 'most

unreliable' as the design experts 'varied in quality, intent and personality'. There were a number of other negative points raised by fellow ARG participants, including the fact that most countries in the Asian region had an inadequate awareness of the special cultural and social requirements that had a bearing on design, that technological advancement of a country was no guarantee that its designers would develop regional sensitivity, and that no mechanisms (with very few exceptions) existed for the comprehensive education of design promoters. On the other hand there also positives: it was felt strongly that the necessary resources needed already existed in the region and could be effectively unlocked through shared access. It was felt that Japan was well equipped in terms of high technology training, with other countries able to offer design experience and training for more immediate applications of design including design training at village level.

From this grew the idea of establishing an ICSID Asian Co-operative University and a detailed proposal with an initial level of practical detail was formulated. There is not time to explore such ideas in detail but the potential scale of such a collaboration was considerable. In its outline form the Co-operative University was to be formed of Asian ICSID Council member countries that included Australia, Hong Kong, Japan, the Philippines, South Korea and Taiwan with possible future members to include Indonesia, Malaysia, New Zealand, Singapore, Sri Lanka and Thailand.

Such initiatives as these, whether realized or not, set along side ICSID's long history of biennial Congresses held around the world from 1959 to the present day open up many areas for debate. Similarly, the globally dispersed ICSID General Assemblies, Seminars, Interdesign workshops, numerous Working Groups and the emergent World Design Capitals merit further detailed examination as important ingredients in an understanding of the complexities of design practices, protocols and policies in a global context.

4. Global Design History: a new concept?

Recent texts such as *Global Design History* (2011) have sought to draw a distinction between what is contentiously portrayed as an ICDHS desire to address 'world themes', provide an 'overarching narrative' and comprehensive 'mapping the history of design in all its geographical nooks and crannies', and global design history's position as 'not a topic but a methodology'. Although such an unsophisticated and wilful reading of the complex themes and methodologies adopted by several hundred diverse ICDHS contributors over the past 13 years is fired from a quality branded gun (the 2011 book has been produced in the context of the MA History of Design joint course of the Victoria & Albert Museum and the Royal College of Art, an Arts and Humanities Research Council network on 'Global Arts' between the V&A, the University of Warwick and the Ashmolean Museum, Oxford), the majority of the scholarly contributions to *Global Design History* would not appear exceptional as papers at any ICDHS conference. The editors of *Global Design History* seek to privilege two significant approaches to global histories: connections and comparisons. However, such ideas

have been evident as ICDHS conference themes over the years as in Guadalajara's concern with 'Coincidence & Co-incident' in the 4th Conference in 2004 or Helsinki and Tallin 's consideration of 'Connecting: a conference on the multivocality of design and design history and design studies' at the 5th Conference in 2006. Redrawing a world map of design activity in all its complexities should not be seen as synonymous with any commitment to construct yet another Master Narrative but more as a means of establishing an evidence base on which to explore a variety of approaches.

Today the complexities of design in a global context are signalled by considerable shifts in economic power as evidenced by the considerable rise of the BRIC (Brazil, Russia India, China) economies and the ascendancy of those in countries such as Thailand, Vietnam and Turkey. Furthermore, India's ambitious National Design Policy was endorsed by its Government in 2007 and followed up by the Department of Industrial Policy & Promotion (DIPP)'s support for the establishment of the India Design Council to implement it in 2009. China is beginning to mature as a country where originality in the design of manufactured goods is fast becoming a more widespread reality, supported by a massive increase in the provision of national training in art and design, whilst in Europe we have experienced the geographical separation between design expertise and leadership at home and distant sites of manufacture abroad. This, the 8th ICDHS Conference in São Paulo provides further opportunities to understand and contribute to local, regional, national, international and global design activity and its history.

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Mythification of national discourses in Poster Design: rethinking expressions of Chineseness in the globalized world

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Poster Design / Chineseness studies / National identity / Post-colonial studies / Cultural studies

This paper takes the position of post-colonial and cultural studies theories, with particular focus on Rey Chow's (1998) discussion of Chineseness. The author borrows Chow's critiques, along with other works on the studies of Chineseness, as a framework to interpret the different identities projected in posters by designers from China, Hong Kong and Taiwan awarded in Hong Kong International Poster Triennial, from 2001 to 2010.

1. Introduction

The Asia-Pacific Posters Exhibition 1997, jointly presented by the Provisional Regional Council and the Hong Kong Designers Association, marked the international vision of the Council "to establish Hong Kong as a leader in the Asia-Pacific region in the area of collecting and promotion of poster design" (Yim 1997: 5). Its successor event, the Hong Kong International Poster Triennial (HKIPT), first held in 2001, established a pattern of hosting an event every three years and will achieve its fifth triennial in 2013.

This unique event—with entries from all over the world (the majority from China, Hong Kong, and Taiwan) and a carefully selected international judging panel—has the perfect materials to contribute to the national/ethnic discourse of "cultural China" (Tu 1994), through both the eyes of the international jurors (the West) and the designers (the Chinese), on the self-presentation of identities in response to the region's geo-political setting. Thus, this paper uses materials found in HKIPT events to argue that the interaction of different viewpoints between the West and the Chinese has often resulted in mythifying national identities in a binary system. In this case, I use different constructions of "Chineseness", from China, Hong Kong and Taiwan, as the center for articulations within this binary system.

Chineseness is embedded with rich possibilities for theoretical critiques of post-structural, post-colonial and internationalized cultural studies. Naturally, this paper perceives it is most appropriate to employ theories from these platforms, in particular Rey Chow's (1998) discussion on Chineseness, together with other works. With scholars in these fields pointing to the internationalization of cultural studies and hybridized identities (i.e.: Ang 1992, 2003; Abbas & Nguyet 2005; Shome 2009; Chow 2011) with the rise of Asia, this paper's argument leads to a rethinking of the expression of Chineseness in a globalized world.

2. Theoretical considerations & studies on Chineseness

Rey Chow is one of the foremost scholars in the fields of post-structural, post-colonial and cultural studies. *Postcolonial Studies*, the first journal to specialize in this theory, dedicated a special issue—*Rey Chow, postcoloniality and interdisciplinarity*—to her in 2010 to recognize her contributions. In the article by Paul Bowman (2010), he points out that Chow is "at the theoretical and political discourses of 'Western' cultural studies, poststructuralism and feminism" (p. 248), particularly on "the way that 'China' and 'Chineseness' are figures" (ibid). Chow's disavowal of any essentialist thinking, such as on Chinese ethnicity and theories of "otherness", along with her skepticism towards cultural translation, are her trademarks. As Bowman (2010) comments, she holds a "rather different form of problematization of ethnicity" (p. 246).

This position can be evidenced in her article, "Introduction: On Chineseness as a Theoretical Problem" (Chow 1998), in which she points out "the habitually adamant insistence on Chineseness as the distinguishing trait in what otherwise purport to be mobile, international practices" (p. 3). Such "collective habit" (p. 3) by both Western and non-Western people is, in fact, the result of "issue of ethnic supplement" that can be traced back to historical factors and the hegemony of Western culture. In addition, such continual obsession with "Chineseness" is "a kind of cultural essentialism," or "sinocentrism" constructed "imaginary boundary between China and the rest of the world" (p. 6).

This article outlines this "imaginary boundary", such as "the logic of wound" or "victimization" (p. 6), the "standard Chinese" issue (p. 10), "binary oppositions" of ethnic difference (p. 13), and "mimeticism" (p. 18). Chow's critiques on Chineseness in response to readings between both the West and the Chinese provide this paper with a crucial frame of reference for the analysis of Chineseness. Chow's works on Chineseness or Chinese ethnicity grow out of the Chinese diaspora community in the United States, and can be described as debates of identity and representation (Cheung 2011) in cultural studies. Together with other scholars' works on modern diasporic Chinese from different parts of the world like Canada, Australia, Singapore and Malaysia, Chow's efforts strengthen theoretical and cultural issues of this topic at the international level.

In China, this notion of Chineseness caught the attention of scholars across the humanities disciplines in the mid-1980s, then, with

the increase in foreign (Western) cultural goods, raised concerns that the future of Chinese culture may be deserted, generating a wave of quests for the roots of Chinese culture along with heated debates. Regretfully, the 1989 Tiananmen incident ended those debates, although debates about Chineseness made a comeback shortly afterwards, and even caught more interest from the public and the government. Cheung (2011) alerts us that, “[a]s soon as cultural politics is pressed into the service of nation-building and supporting the rise of China as an international power, the question of Chineseness becomes more complex, and, in some perceptions, even dangerous” (p. 44). Cheung’s concerns regarding China’s nationalistic sentiments over Chineseness are precisely what Chow (1998) has been theoretically resisting on the notion of “standard Chinese.”

This paper utilizes the above discourse framework and critiques borrowed from Chow (1998) to examine contemporary posters designed by Chinese designers and awarded in HKIPT events from 2001 to 2010. It argues that these works testify Chow’s theories on mythifying national identities within a binary system between the West and the Chinese. To resist notions of “standard China” or “sinocentrism”, this paper includes Hong Kong and Taiwan, as these three locales are inextricably connected geographically, politically, economically and culturally. Unfortunately, this paper must omit discussion of Singapore’s Chineseness due to an insufficient number of samples. Singapore is regarded as the first symbolic universe of cultural China as defined by Tu Wei-ming (1994), the renowned Chinese philosopher; thus, Singapore’s voice is equally important in the notion of Chineseness and should be examined in another venue.

3. The mythification of Chineseness in poster design

Following the basic structure of the Asia-Pacific Posters Exhibition 1997, each HKIPT has its own theme for the show. Each triennial is structured into three parts: competition, exhibition and symposium held at the Hong Kong Heritage Museum, and the events claim to observe the guidelines endorsed by the Icofrada (International Council of Graphic Design Association). According to the statistics of the organizer, from the first to fourth HKIPT, recorded entries came from more than 60 countries, with an average of more than 2,000 pieces of work submitted.

This paper finds that most of the awarded posters by Chinese designers are either constructing identities according to how “Chinese” is viewed within their own “national” context, or trying to resist the “antiquity privileges” (Chow 1998) in the essential Chinese elements with new international style visual language and messages. Here I argue that such constructions are insufficient to erase the established “cultural essentialism” in Chinese posters, and are mythifying national ethnicity. However, those works are able to create individual voices to resist the standardi-

zation of Chineseness and display the creative flair of Chinese graphic designers.

From ethnic supplement to the logic of the wound: the Chineseness of the PRC China

In light of Chow’s critiques, it will not be surprising to find posters from HKIPT filled with antiquity elements capturing the West’s imaginary images of Chinese. Throughout the 1970s to 1990s, designers from Hong Kong and Taiwan adapted such visualization approaches in their graphic design work. China, as a late-comer in the late 1990s, joined this creative strategy, diversifying cultural Chinese elements and surpassing what both locales had achieved previously.

Chinese films produced in China, such as those directed by Zhang Yimou, received negative comments for being “exoticized China” (Cheung 2011, p. 43) from Chinese critics in the beginning. However, such critiques changed after Zhong’s films won international awards, with Chinese critics then agreeing with the West in praising the Chineseness. Cheung comments that it “reflected with cruel irony the incapacity of Chinese critics to break the cultural hegemony of the West, and was an unmistakable symptom of ‘shiyuzheng’ [aphasia]” (ibid). Consequently, when posters by mainland Chinese designers came into the international sphere later in the late 1990s, the public and media only cared about what international awards they had won.

Fang Chen’s poster entitled “Victory” (figure 1) won several major international awards, including the 9th Chaumont International Poster, 11th Colorado International Invitational Poster Biennial, the 4th Trnava Poster Triennial; later, this poster also won the Gold award in 2001 HKIPT in the ideology category (HKIPT 2001). Unlike his colleagues with work appearing in the late 1990s, Chen rejected the use of antiquity elements. He picked up a universal theme, creating imagery that can be communicated ideologically across borders. This image shows a hand with three fingers blown away and the second and middle fingers intact, forming a “V”, an internationally recognized sign for “victory”. Here, I would argue that the conceptualization strategy of this poster is not much different from using antiquity elements. It is still structured within the “logic of wound” in Chow’s term.

Theories for studies of Chineseness are problematic because it is becoming a challenge to distinguish the set of binary oppositions held by the West and the Chinese. Chow (1998) points out, “what is Chinese is often imagined and argued as completely distinct from its counterparts in the West, even as such counterparts are accepted in an a priori manner as models or criteria for comparison” (p. 13). In this case, we can praise the genius of this poster, but knowing that a mainland Chinese designer created it expands our imagination to its implications suggesting freedom for China, or its association with the “V” sign that students in Tiananmen Square held just a decade before this poster was created. It suggests what cannot be spoken outright, which is possibly understood by the Chinese and definitely fits the West’s perceptions of

repressed and suppressed communist China. This is the ultimate reading of this poster.



Figure 1. Title: Victory, designed by Fang Chen, Gold award, Ideology Category, 2001 HKIPT.

Because this work won so many international awards, it received lots of publicity in the national printed design magazines and the local media where Fang Chen was teaching at that time, Shaotau University. With the international recognition that Chen received and the geo-political setting away from the central government in Beijing, this poster “Victory” is one of the rare, exceptional, risk-taking creations to be found in China. To close this story, Chen moved to North America in 2001 and has taught at the PennState University in the USA since 2002.

On resistance of being standardized: the Chineseness of the SAR Hong Kong

In Chow’s [1998] article, she states that the official national spoken language, Mandarin, “inevitably surfaces as a problem” (p. 10) and “is a not a straightforward parallel to a language such as English” (p. 11). Because Chinese populations in China and Chinese diaspora communities all over the world speak different languages, and language is strongly connected with ethnicity and cultural values, Mandarin or Putonhua is a form of central hegemony constructed by the government and the West. In the case of Hong Kong, Cantonese, a “dialect” spoken daily in Guangdong province, was (and still is) shaping everyday local culture, ranging from literature to popular culture.

The work by Stanley Wong (a.k.a. Anothermountainman), entitled “everywhere kowloon king. everywhere redwhiteblue. the code of kowloon king” (figure 2), received the Gold award in the ideology category in 2010 HKIPT (selected by juror Kenya Hara) [HKIPT 2010]. This work took two vernacular elements of Hong Kong—high-density polyethylene commonly made in the colours red, white, and blue; and calligraphic graffiti by legendary Tsang Tsou Choi (1921–2007)—as the main visual elements of the poster. These two objects are widely identified by people in Hong Kong as part of the unique ethnic identity of Hong Kong.

The first object, this tarpaulin material known as Red-White-Blue (RWB, or Hung-Pak-Nam in Cantonese), is widely used in daily life in Hong Kong. The designer, Stanley Wong, first used this material for his poster series for the Hong Kong Heritage Museum in 2001 as a tribute to Hong Kong’s hardworking spirit. Since then, Wong has used this material in his other creative works beyond poster design along with enthusiastic creative communities including artists, photographers, students, and Cantopop singer Sam Hui. Jonathan Thomson [2005], the Hong Kong contributing editor for *Asian Art News*, captured this RWB fad with a report on the 2005 group exhibition with RWB theme.



Figure 2. Title: everywhere kowloon king. everywhere redwhiteblue. the code of kowloon king, designed by Stanley Wong, Gold award, Ideology Category, 2010 HKIPT.

The second object is the calligraphic graffiti of a mad old man, Tsang Tsou Choi. A man with little formal education, he drew messages with black ink in Chinese proclaiming himself “The King of Kowloon” in public places throughout Hong Kong over a period of two decades. His scripts were viewed as graffiti and seen as a nuisance, but later became part of the cityscape of Hong Kong. His work even traveled to Venice Biennale in 2003, sold at Sotheby’s, and was featured by *Colors Magazine* [Li 2011]. Tsang hand his graffiti became a legend in Hong Kong, and he passed away in July 2007 at the age of 86.

Wong’s award-winning poster at 2010 HKIPT borrowed these two magical elements signifying the cultural identity of Hong Kong. He not only made a tribute to them, but also reflected how the “binary oppositions” of ethnic differences are accepted in the

West and among the Chinese people of Hong Kong. To Western readers, the usages of RWB in such a wide context are different within their own cultural context, and the Chinese in Hong Kong proudly embrace such differences as part of their identity. Tsang's calligraphic art can be understood as spray-painted graffiti, which can be found in most Western metropolitan cities, but with the difference that it was in Chinese. Again, these binary positions are easy to identify and associate with their equivalents within one's cultural context.

The one-country, two-system remedy allows Hong Kong to continue whatever practices were left behind from colonial rule, including the preservation and solidification of its own cultural identity. Scholars who have studied the identity of Hong Kong commonly agreed that the city has its "indigenous culture without direct national imperative," as Eric Ma (1998) puts it; or as Allan Chun (1996) notes, "Hong Kong represents a distinctive variation on the theme of 'Chineseness'" (p. 120). Under the hegemony of sinocentrism, it is impossible for Hong Kong to claim or foster the antiquity cultural China identity because of the lack of ethnicity supplies, its geographic location and political past. These lowbrow, tricolor-striped tarpaulin and graffiti made by a mad, uneducated "artist" seem to speak for Hong Kong as its identity, which is located in the margins and continues to be insignificant after 1997's "15 minutes of fame" was over.

The insignificance imaginary boundary: the Chineseness of the ROC Taiwan

Compared to Hong Kong, the national identity issues of Taiwan are even more complicated. The little island has a multiple colonial history, with rule by Dutch, Spanish, Qing Chinese, Japanese, and Republic of China from 1624 to present. Comparative Literature Professor Shu-mei Shih (2003) pessimistically points out the "impossible" about Taiwan. In her own words, she argues it is "because Taiwan is always already written out of mainstream Western discourse due to its insignificance" (p. 144). Taiwan's situation is "similar to that of Hong Kong, which became a significant object of study only when the lightning flash of history accidentally shone upon it" (ibid), referring to the threats Taiwan is facing with the rise of China. She urges, "[t]o put Taiwan on the map, so to speak, necessitates the deployment of Western-centric critical idioms, be it globalization, postmodernity, post-coloniality, or what have you, so that Taiwan as such becomes legible" (p. 145).

It is not difficult to imagine the identity crisis and anxiety that people in this little island are facing daily from geographic tensions with China and international political isolation. In response to the island's quest for identity, the graphic design community launched the thematic poster show series *Taiwan Image* back in 1992 (Wong 2001). In the *Taiwan Image* poster series, designers explored indigenous imagery of the island as a visualization strategy to construct its national design identity. While similar creative strategies can be found among the

HKIPT award-winning posters, designer Lee Ken-tsai took a different approach apart from Taiwanese vernacular inspiration and embraced the global world. His poster series, entitled "My name is Lee Ken-tsai" (figure 3), was selected in the 2007 HKIPT (HKIPT 2007).



Figure 3. Title: My name is Lee Ken-tsai, designed by Lee Ken-tsai, Finalist, Ideology Category, 2007 HKIPT.

He created this series of posters while living in New York City chasing his dream and new experiences (Lee 2005). The multicultural environment inspired him to design a series of typographic posters with his name in different languages. Then, he put individual posters up in different locations in New York City, and used it as the background for the final design in his poster series. In this series of works, Lee expressed that he wants to have his "15 minutes of fame," once said by Andy Warhol, by having his name visible in different languages throughout New York City so that the whole world will know him. Obviously, this is an intentional plan of self-initiated "globalization" that can be seen as an insanely indulgent act of identity quest. Such a radical move may be necessary for Taiwan to break away from the "difficult question of identity vis-à-vis China" (Shih 2003, p. 147).

Following the changed political climate in Taiwan in the mid-1980s, the presidential election in 1995 marked an important turning point for "Taiwanese cultural sensibilities" (Shih 2003, p. 146), and the concept and identity of "Taiwanren" (Taiwanese) pushed further under ex-president Chen Shui-bian. Here, Lee—a native-born Taiwanese whose education and experience were all gained within the island, with little firsthand exposure to the international world farther away from Asia—represents the courage to take a step forward from the recov-

ery of Taiwanese cultural sensibilities. The designer made himself instantly multilingual, symbolizing engagement with the global communities. Lee's previous work also frequently sought inspiration from the antiquity cultural China sources and vernacular elements of Taiwan, but with stimulation from a new environment, Lee transplanted himself into a new dimension. For Shih (2003), globalization is the survival strategy for Taiwan to enter a brave new world of New Taiwanese ethnicity. However, breaking the imaginary boundary of sinocentrism and superficial China cultural link may be less challenging than continuing to be viewed as insignificant by the West.

4. Closing remarks

From the above poster examples, the author consciously selected those works with ideological qualities to argue the existence of three different themes of Chineseness—PRC Chineseness, SAR Chineseness, and ROC Chineseness—to demonstrate the problems with viewing Chineseness as a single ethnic entity. Referencing the critical discourse by Rey Chow (1998), this study concludes that such constructions of visual expression of cultural China ethnicity cannot escape mythification within the existing binary system. Although the examples chosen here are not reinforcing the exotic eyes of the West on cultural China, they do not have enough power to de-mythify perceptions of Chineseness in the West and even among Chinese.

This paper selected samples of posters either aimed at an international audience or attempting to construct an international self. The PRC Chineseness by Fang Chen, the "Victory" poster perorated against the official preference of Chineseness of the government, but welcomed by the West for its subtle ideological reference to China's restrictive political regime. The SAR Chineseness by Stanley Wong seized the vernacular identity for international approval but is actually careless about fitting into orthodox sinocentrism. The ROC Chineseness by Lee Ken-tsai could not wait to construct its own new Taiwanren identity.

While Chow (1998) called Chineseness a theoretical problem, other scholars such as Chun (1996) and Cheung (2011) questioned whether Chineseness is even important. Ien Ang (1998) also situated her discourse around the essentiality of Chineseness and opened up directions of hybridized identity. Along the proposal of hybridization theory, Raka Shome (2009) also suggests internationalizing cultural studies to respond to today's globalized world. To close this paper's discussion, with all these examples here, I suggest rethinking the expression of Chineseness within a globalized world and encourage further investigation on the hybridization issues on national ethnicity. In an increasingly internationalizing world, it is simply impossible to have a fixed and pure ethnic identity, particularly of Chineseness.

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Towards a digital batavia: resonances of the VOC in the New Colonialism of the Internet of Things

TAYLOR Damon / Dr / Technical University Delft / the Netherlands

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Questionable translatability: the Contested notion of 'Japaneseness' in the craft and Craft Design of the Japanese Empire

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Untranslatability / Globalisation / Japaneseness / Craft Design / Japanese Empire

This paper discusses the issue of untranslatability through a case study that examines the notion of 'Japaneseness' in design in the context of inter-East Asian craft design from 1930s Japan in East Asia. It aims to address the issue of globalisation of an academic discipline and untranslatability, and explores the way forward in thinking about globalisation of design history where translation has been identified as key for connecting and engagement.

1. Introduction

Translation has raised some diverse critical issues that have recently attracted interdisciplinary approaches in response. A leading critic of translation studies, Emily Apter, identifies a 'translation zone' where language wars created a 'critical engagement that connects the "l" and the "n" of translation and transNation' (Apter 2006: 5), and in this zone we see translation as (1) a perpetually on-going transnational linguistic flow of communication that resembles a Chinese whisper carrying sound and transmit some meaning (Hall and Maharaj 2001: 36) and (2) as a creative work that involves translator as a cultural broker equipped with both creative subjectivity and inter-subjectivity, that ends up not pointing to the original once translated (Apter 2006; Bal and Morra eds. 2007: 5-11). Translation also invokes issues of translatability and untranslatability, and translation provides a discursive context for discussions about globalization (Apter 2006). In this debate, the problematised issue is untranslatability and incommensurability. It was argued as a configuration problem in terms of methodologies within academic disciplines that sought to address 'globalisation' (Elkins ed. 2007), and described as 'in-between-ness' (Bhabha 1994) and 'resistance' that 'refuses to be translated as the "untranslatable" difference' (Hall and Maharaj 2001: 45) from a postcolonial diaspora perspective. Equally it was also positioned as a problem of problematizing 'untranslatability' that is only relevant to a Euroamerican monolingual centric point of view of 'globalisation' (Kesner 2007). Informed by these critiques of translation, the focus of my paper is the translatability of the theories and critique of national identity and tradition in design as a discursive construction and invention that can be tested out in Euroamerican academia. At the same time I discuss untranslatability in the complexity of modernities in non-Euroamerican locations (Japan, China and Taiwan) and their multiple directional power relations, in order to develop further thoughts over the framework for the 'global' studies.

2. The Context of modern craft development and export crafts

Since the 19th century, craft design has been modern Japan's national obsession for its trade and economy, for its national cultural identity as well as for the development of 'Japanese design'. In the 1930s, the Japanese empire expanded into North East China, and after the outbreak of the Sino-Japanese War in 1937, the development of 'daily life folk products for export' for the market of Asia and the Japanese empire became a single intensive national agenda. Japanese craft and design experts were assigned to lead this development and encountered multiple and different shades of Orients within the empire. During the course of this the notion of 'Japaneseness' was contested by different Orients, and was complicated by its effort to redefine itself as part of 'Orientalness' and the location of its identity within the three way positioning of Occident-Japan-Orient.

A 1938 radio broadcast round table discussion on export crafts focused on the question of how to break off the stagnant and declining situation of export crafts after the outbreak of the Sino-Japanese War of 1937. The central topic discussed was how to proactively design 'Japaneseness' taking a long-term view —this 'Japaneseness' should not only be understood by Japanese, but it should also be modern and universal, something in line with design by Bruno Taut (invited in 1933-36) who successfully demonstrated how the idea of 'simplicity' and 'sturdiness' with 'Japaneseness' could be combined.

3. Japanese Views on 'Chineseness' and 'Taiwanese' in Crafts of China (North East/Manchuria) and Taiwan in relation to 'Japaneseness'

The idea of 'Japaneseness' was articulated further in design terms by the design experts involved in export craft design at the national design research institute K gei Shid sho (Industrial Arts Research Institute: IARI) and other organisations, when they encountered the crafts of China and Taiwan.

For example, Nishikawa Tomotake, a senior designer who was sent by IARI to Manchuria in 1939, and his colleague Koike Shinji, a design critic who was also sent by the IARI to other parts of China in 1942, were both fascinated by the folkcrafts. They also identified 'Chineseness' with 'sturdiness', 'universality' and 'long sightedness' in Chinese design. Nishikawa stated these qualities could be learned to improve Japanese 'weakness' in design, and were important in connecting Japan to this 'Chineseness' as part of Japan's historical roots (Nishikawa 1939). Koike noted that the

great thing about the standard of Chinese design is that it is based on the functionality of *nichiy zakki* [daily utilitarian objects] (Koike 1942), and that idea is in line with the European Modernist ideal whereby 'form follows function.'

Sugiyama Toyokichi (Professor Tokyo Higher School of Industrial Arts -Tokyo K t K gei Gakk) paid closer attention to the products of Euroamerican large-scale craft industries in China, such as hairnet and lace in Zhili, carpets in Tianjin, embroideries and carvings in Beijing. Interestingly, designers either didn't pay these objects much attention, or dismissed them as bad taste or without 'Chinese innate beauty' (Yanagi 1941), but his idea suggests 'Japaneseness' should be addressed as part of these Oriental-Chinese designs imbued with Euroamerican taste. This notion of 'Japaneseness' as a reflection of Euroamerican taste and defined through 'Euroamerican eyes' based on their idea of 'Orientalness' is in common with other designers such as Mizumachi Wasabur (Designer of ceramic at National Ceramic Research Institute) who was sent to North and South America in 1940 by the Trade Bureau to observe the trends and taste for marketing Japanese crafts for their reference. Mizumachi concluded that the future direction for Japanese crafts should be in line with Modern American design, saying the modern American trend 'has simplicity' and has reached 'the sophisticated aesthetic of the tea room—and there the East and West shake hands' (Mizumachi 1941: 173).

Terasaki Tsuyoshi, chief of the research department of IARI was sent to Taiwan in 1943 and his report emphasised the limitless natural resources that would form the basis for a potential new craft industry (Terasaka 1943). His colleague Toyoguchi Kappei, chief designer of furniture from IARI who was also sent to Taiwan in 1943, promoted the Modernist design aesthetic for Taiwanese crafts, and praised Charlotte Perriand's excellent use of Taiwanese bamboo stools for her exhibition in Japan (Toyoguchi 1943). Toyoguchi was also fascinated by new crafts produced by Japanese-led craft industries, that included hats, bags, wood crafts and lacquer products. In IARI's view, in the creation of these new crafts the 'Japaneseness' was revealed as a unique quality that emerged from Japan's leadership. Director Kunii Kitar talks of this demonstrating model products that not only replace things imported from Euroamerica, but also construct the East Asian standard for daily household products (*seikatsu y hin*) with 'function and beauty' informed by a 'profound aesthetic and excellent modern scientific knowledge' (Kunii 1942)

4. The 'Japaneseness' is a digest of the 'Orient'

During the course of these designers encountering with China and Taiwan, the main discourse of 'Japaneseness' emerged, that is the 'Japaneseness' is a digest of the Orient, only revealed through its appropriation and hybridisation of Oriental designs, in particular, Chinese design. This discourse also became inspiration for designers to create hybrid design.

Example 1: Chairs

Almost all designers pointed to 'sturdiness', 'universality', 'long sightedness' and 'healthiness' as characteristic of Chinese and Taiwanese design, but also proposed these as guiding principles for improving what they saw as weaknesses of Japanese design – which could now exhibit 'sturdy durable design'. Kawai Kanjir's experiment with bamboo furniture is a typical example which realises this idea. This set of furniture was made by Taiwanese craftsmen in Kyoto, using Kyoto saga bamboo to improve the weakness of Japanese bamboo craft in which he had noted a neglect of the intrinsic nature of bamboo and an overmanipulation of material (Kawai 1941; Kawai, Yanagi & Shikiba 1941). Kawai described the work as having both 'the skills coming out of the bodies of the Taiwanese craftsmen' and 'vernacularity' which has 'a distinct flavour of mainland Japan' (Kawai, Yanagi & Shikiba 1941).

The creation of 'Oriental' or 'Greater-Asian' or 'Japanese' chairs are powerful examples of the hybrid design. Chairs were introduced in modern Japan as a symbol of western modernity, and had been the focal point for the Japanese adoption of western culture and lifestyle since the 1910s. The chair design evolved in three stages in Japan, firstly a mixture of use of western-style chairs with floor sitting, and secondly Oriental-style chairs following the model of Chinese chairs. The second solution becomes visible since the 1930s, when Japan had become increasingly interested in China and the Oriental culture. Unlike Japan or Korea, China has a tradition of chairs within the Orient. Kenmochi Isamu at IARI was an important chair designer from this period as can be seen through his creation of 'Oriental-style chairs'. Interestingly he classified western chairs as 'kairaku gata' (pleasure-type) which, because of their flexible back design, creates comfort and offers pleasure in seating that ultimately makes people lazy, while, Oriental chairs (ie Chinese chairs) were classified as 'kugy gata' (ascetic-type) and were designed 'to restrict comfortable pleasure seating to the point of just one step before pain.' His project aimed to create the latter type Oriental chairs with something like this design from 1950 (Kenmochi 1942). The Mingei activist Yoshida Shya also designed an Oriental-style chair inspired by the Ming-style chair. These Oriental-style chairs evolved into Japanese-style or 'Japanese modern' chairs in the 1950s-60s, at the third stage of this evolution of chairs. Their characteristic is an extremely low height. For example Sakakura Junz's 'bamboo basket furniture' (*takekagoza*) has applied a bamboo basket weaving technique to the seat cushion which itself has been fixed on to a low height wooden frame (regarded as suitable for Japanese people (Miho Kenchiku 1949; Ch 1979). Other examples include those of Sakakura's disciple Ch Daisaku's who made 'Teiza chairs'. (low height seating chairs).

Example 2: Taiwan/Oriental Panama hats

The 'Taiwan Hat' often called 'Tanshui [Danshui] hat' or 'Taiwan/Oriental Panama' became the most successful local Taiwanese craft industry that had been supported by Japanese investment.

Similar to chairs, hats were icons of modern Western fashion, but hats in this context came to symbolise not only young and modern Taiwan, but also the progressive modern Japanese empire. Different kinds of propaganda posters symbolise the progressive image of vernacular craft: one shows a Taiwan hat (the Oriental panama) and battleship advancing to the South, and another shows the Asian cultures and races endorsed by multiculturalism within the Greater East Asia Co-prosperity Sphere—all protected by the hat.

5. Conclusion

In the 1930s to 1945, Japanese professionals of craft and craft design encountered the new world of wider Asia—their Orient. The early 20th century discourse of ‘Japaneseness’ set against the Occident was complicated by the introduction of ‘Chineseness’ and ‘Taiwanese-ness’. What is immediately noticeable is the slight reservation and overwhelming sense in the Japanese statement in respect of ‘leading East Asia’, in particular the case of China. This reservation also manifests itself in their focus on dealing with folkcrafts and daily household products, rather than with historical fine crafts that have been the models of sophistication to which Japan had long aspired as the ‘original source of the Oriental crafts’ (Sugiyama 1939, 8, 13). The shadow of old China as Japan’s model for sophistication and advancement lingered even in the colonial context.

Unlike China, Taiwan was a land of Barbarians for the Japanese (Kikuchi ed. 2007). The knowledge of Taiwan was predominantly informed by anthropological studies on primitive aboriginal people and culture, led by the scholars trained in European science, and Taiwanese crafts have been mainly associated with primitive crafts. This contrast between higher ‘fine art’ in China and lower ‘primitive art’ in Taiwan also seems to have influenced the views of the people involved in craft design development from the 1930s through to the War. Rather than learning from Taiwan, the Japanese found some existing primitive crafts from which they could extract ‘local colour’ in order to construct brand new Taiwanese craft design. After all Taiwan offered greater opportunities because of its abundance of natural resources. Japanese designers freely experimented with Modernist design ideals to produce functional utilitarian daily household products, thus setting the main discourse of ‘Taiwanese-ness’ as distinct from ‘Chineseness’.

Relative to the perceived ‘Chineseness’ and ‘Taiwanese-ness’, the main design discourse of ‘Japaneseness’ as the best collective essence of the Orient emerged. The essential discursive component is the modern taste for ‘simplicity’, ‘functional beauty’ and scientific knowledge which had been informed by Euroamerican Modernism, thus, the Japanese aesthetic for simple and functional daily products were relative to Euroamerican values. At the same time, ‘Japaneseness’ was also only measured by the notion of ‘advancement’ and ‘primitiveness’, again in relation to western positivism. Therefore, the question of ‘Japaneseness’ is trapped in entangled discourses. Nevertheless, this elusive

discourse of ‘Japaneseness’ was a digest of the Orient inspired designers to explore their design experiment on the new hybrid Oriental design. In the context of design history in Japan, we can observe the trajectory from western-style to hybrid Oriental design and finally to the Japanese Modern design of the 1950s. The 1950s idea of Japanese Modern ‘good design’ championing simple, natural, healthy, functional beauty expressed through local materials would not have materialised without this prewar experimental design.

Moving back to the issue of translatability, the discursive formation of the notion of ‘Japaneseness’ itself is a translation as is Japanese construction of ‘Chineseness’ and ‘Taiwanese-ness’. The discursive component of the universality of the ideas of function, simplicity and truth to materials for universally conversant ‘Japaneseness’ are evidence of translatability. The design history methodology and approach on discursive construction of cultural and design identities are applicable and productive. It also brings a successful methodological engagement connecting non-Euroamerican cultural identity formation with Euroamerican centred modernity and its representation of Other. However, the fuzziness and multiple levels of relative values in the nature of this elusive discourse of ‘Japaneseness’ presents a space of untranslatability. The territory of *seikatsu y hin* (neither fully defined by ‘crafts’ or ‘design’ in English term) through which design discourse is narrated contained local culturally and linguistically specific values and information. As I argued elsewhere, craft and craft design in East Asia is one area that reveals ambivalent aspects of engagement and disengagement with the Euroamerican framework (Kikuchi 2008; 2011).

Recalling Emily Apter’s translation zone, which is demarcated by the extreme presumptions of ‘nothing is translatable’ to ‘everything is translatable’, we find that a fuzzy temporal space exists. In her linguistic examples there are many ‘Other Englishes’ which have some English derivation but they have developed their own semantic system and accents. In turn they have become autonomous languages such as ‘Spanglish, Japlish, Franglais, Greeklis, Pan-Swiss English, Hinglish, Pinginglish and Singlish’ (Apter 2006: 231). My case study of the notion of ‘Japaneseness’ in the 1930s inter-East Asia craft design context forms the similar traits of Japlish. The interrogation of Japlish informs fragmental mosaics that form a tentatively sustained ‘Japaneseness’. This informs and challenges the making of a ‘global’ framework for design history studies. Studying these ‘Other Englishes’ needs patience, because they are illegible (from English centric point of view they are grammatically ‘wrong’), too complicated, and perhaps dull and alien compared to more familiar clear cut cases in Euroamerican modernities, however, to look into the design history cases like ‘Other Englishes’ also seems to be one way forward for global design history studies.

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Eastern craft in Orientalism and Modern Design

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Chinoiserie / Japonisme / Japanese Design / Scandinavian Design

This article focuses on furniture inspired by Eastern culture in Orientalism and modern design and clarifies the acceptance of the East not only as exoticism but also as inspiration for new design and theory beyond century. Eastern craft often offered new images from the eighteenth to the twentieth century, and this historical process is easily seen. Therefore, with regard to craft, the East was not an “other” as Said has suggested.

1. Introduction

According to Edward Said, the Orient signified a system of representations that were politically framed by the Western world and existed as a separate, eccentric, backward, and silently different world of paintings, literature, and so forth. The Orient existed for the West and was constructed by and in relation to the West. Moreover, it was a mirror image of what was inferior, an “other” to the West.

The Orient represented in crafts, however, was different. Orientalism, such as Chinoiserie and Japonisme, were popular and inspired the new design of furniture. Although they were generally accepted as exotic, they also inspired new design and theory in both the West and East, a point evident in both Orientalism and modern design. For example, English designers reconstructed Chinese images in furniture or discovered lost craftsmanship in Japanese style; French aristocrats regarded the Turkish sofa as a refuge from the mechanized West; and Japanese designers regarded the harmony of the West and East as aesthetics of standardization. Finally, Chinese or Islamic chairs offered Scandinavian designers a prototype with a strategic and practical design.

Historically, Eastern crafts have offered new images beyond century and border. Thus, this article clarifies that Eastern craft existed not as an “other” but as a creative inspiration for the West and East.

2. Eastern craft in Orientalism

Design by Chippendale: Exoticism as reconstruction of symbol

The early trend of Eastern craft in the West was called Chinoiserie. One example is English designer Thomas Chippendale (1718–1779) who designed some Chinese-style furniture.

The chair often had distinctive fretwork on the back comprised of geometrical lines (fig. 1, left). The cabinet also had a high-pitched

roof and door with a lattice pattern similar to the back of the chair (fig. 1, right). Because part of their design derived from traditional Chinese architecture, their design was different from original Chinese furniture. For example, the Chinese chair had a back that was one curved slat with minimal fretwork. The cabinet was a simple box that had no architectural decoration (however, there were some examples that had pediment or cornice in the original Chinese cabinet importing Orientalism in the nineteenth century). The exoticism portrayed by Chippendale was, as it were, a collage of Chinese architecture.

In 1754, Chippendale published *The Gentleman and Cabinet-Maker's Director*, which shows Chinese style governed by his logical method of design. He took Chinese architecture apart once, chose some of its symbolic parts, and then reconstructed them in Rococo style. Therefore, with regard to images of exoticism, his furniture was stronger than original Chinese furniture.

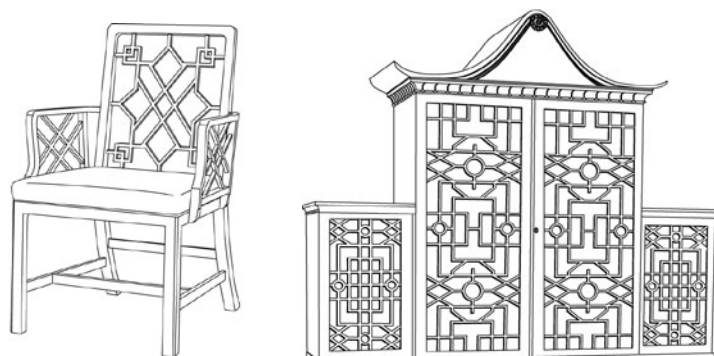


Figure 1. Chinese-style chair and cabinet designed by Thomas Chippendale.

Exoticism as fantastic anti-modernism

Exoticism faced a new phase. The Eastern style offered a refuge from modernization in the nineteenth century. The refuge had two aspects: the decadent dream for aristocrats and the pure beauty for craftsmanship. Sigfried Giedion pointed out lifestyle differences between the East and West:

Mechanized man in the nineteenth century yearned for an atmosphere other than that of his own surroundings. In the East everyone, rich and poor alike, has time and leisure. In the West no one has. Western life tends toward strain; Eastern life toward relaxation.

Such lifestyles can be seen in the French interior of aristocrats such as Louis Philippe, whose double bed with a rudimentary arm or backrest occupied the center of the room, offering a place where aristocrats could relax during parties. Eastern furniture, such as the Turkish sofa, facilitated their pleasure-seeking lifestyle. Walter Benjamin criticized such lifestyles as follows:

The Persian carpet and the ottoman, the hanging lamp and the genuine Caucasian dagger. Behind the heavy, gathered Khilim tapestries the master of the house has orgies with his share certificates, feels himself the Eastern merchant, the indolent pasha in the caravanserai of otiose enchantment, until that dagger in its silver sling above the divan puts an end, one fine afternoon, to his siesta and himself.

This description elicits images of Oriental products as representations of a decadent life. The interior was a private universe like a dream of “Phantasmagoria” written in his essay *Paris: capital of the nineteenth century* (1939). Because the Orient was different as an “other” in contemporary capital culture, it could be their means of escape from the real world.

Design by Dresser: Exoticism as representation of craftsmanship

As mentioned above, to seek refuge from mechanization showed other aspects as well. As mechanization and mass production increased, so too did the interest in decorative art in handicrafts of the medieval age. Christopher Dresser (1834–1904), for example, was interested in traditional Japanese design: grotesque in the shape of man or animal seen in the cabinet or vase. He also regarded it as design free from Western artistic canons that were believed to be a pure, childlike acceptance of nature. His design of the chair also reflects this idea. He designed cabinets that had stenciled frogs, flowers, fish, and birds on black (fig. 2, left) that were inspired by *Maki-e*, which is Japanese lacquer sprinkled with gold or silver powder on a black surface of *Urushi*. The height and width of the seat, back, and legs varied. The chair had a geometrical pattern on the low seat, and the back was derived from Japanese craft (fig. 2, right).

The longing for Eastern craft could be equated to the Arts and Crafts Movement of England that respected medieval craftsmanship. Dresser studied graphical patterns of animals and plants seen in the wallpaper designed by William Morris. Various patterns in his design can be regarded not only as a representation of the Orient, but also as creativity of the past. This ambiguity signifies a point of contact between the East and the West. He discovered the past of the West in the Orient.

As previously mentioned, Chippendale created furniture as a collage of Chinese elements. It was intended not to reproduce original Chinese furniture but rather to emphasize the different image as an “other.” Not only did Dresser reproduce it, but he also discovered past Western creativity in Japanese craft and designed the furniture inspired by it.

3. Eastern craft in modern design

Loss of traditional design and philosophy in Japan

The Japanese craft that inspired Dresser is not exactly traditional. Orientalism in the nineteenth century resulted in Japanese craft being produced for commercial and export purposes. Established in 1874, *Kiryu Kosho Kuwaisha* was the first Japanese

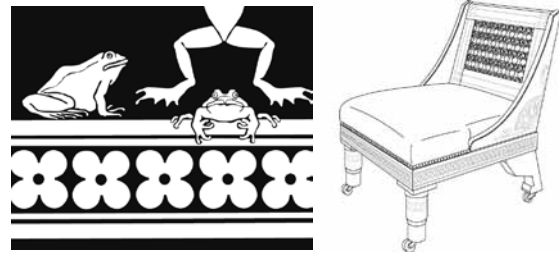


Figure 2. Stenciled frogs and flowers of cabinet and low seat chair designed by Christopher Dresser.

manufacturing and trading company, and it encouraged the Japanese industries until 1891. Their products, which ranged from paintings to furniture, were extremely decorative, portraying to the West a rare exoticism. For example, the cabinet had relief of bamboo at the front door. Crown molding like pediment, which was not provided with the traditional Japanese cabinet, were in the shape of many birds. Orientalism also changed conventional philosophy. Japanese products had conceptually unified several types of products as *Odougu*, a concept that included tools, implements, instruments, utensils, kits, outfits, and so forth. Further, art and craft had not been conceptually separated. There were differences between *Jotemono* and *Getemono*. The former means a refined product that is elaborately decorated; the latter means a plain product having no decoration. However, these unifications were lost when the western concept of “craft” was introduced.

Birth of modern design and philosophy in Japan: Harmony of various cultures

Crafts, an export industry, were still a vital slogan of the government in the late 1920s. Product designer Toyoguchi Katsuhie (1905–1991) established *Keiji-Kobo* (Workshop for Physicality) with others in 1928. The main purpose of their activity was the standardization of the whole life space, and it led the post-war Japanese industrial design movement. Although *Keiji-Kobo* spontaneously disappeared in the 1930s, Toyoguchi attempted to recover new aesthetics that fit the standardization. He said that our lives should comprise a formative mixture and “the elements of the mixture should be old, new, ethnic, mechanic, handmade, dynamic, and static, and must be unified by a sense.” His masterpiece, the “Spoke Chair” (1962) (fig. 3, left) shows his philosophy with its thick legs so as not to damage the traditional Japanese rush floor and a low and wide seat that is in line with the Japanese custom of sitting cross-legged on the floor. In the style of English local chairs, this chair also has a simplified Windsor back. The above characteristics illustrate the harmony of cultures as he described.

The Spoke Chair, compared with Dresser’s chair, has no decorative pattern on its surface and has no intention of showing exoticism or craftsmanship. The Spoke Chair offered a harmonious blending of West and East, creating a practical lifestyle for the general user.

The same concepts are evident in works by other designers. In

1984 product designer Riki Watanabe (1911-) designed the “Riki Rocker Chair” (fig. 3, right), which has a rocker and back inspired by Shaker’s rocking chair made in America in the nineteenth century. The seat that was originally made of weaving wooden tape is a low and wide cushion similar to the Spoke Chair.

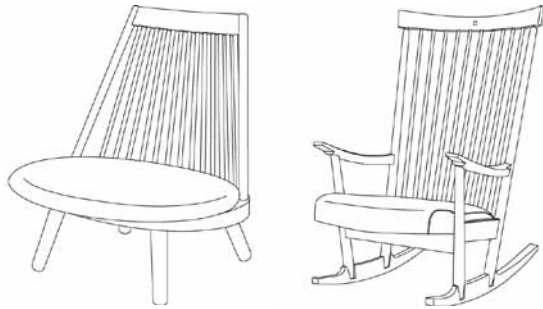


Figure 3. Spoke Chair (1962) designed by Toyoguchi Katsuhei and Riki Rocker Chair (1984) designed by Riki Watanabe.

Eastern furniture introduced by Scandinavian designers: Balance of practicality and beauty

Danish designer Hans Wegner designed the “Chinese Chair” (fig. 4, left) in 1943. A redesigned version of a Ming dynasty Chinese chair, it has swollen, curved armrests and carvings in the seat frame. The armrest has a swollen, curved line, and the mahogany seat frame and the reddish-brown leather pad are identical in color. Due to the effects of its color, this chair appears balanced and harmonized. The section from the backrest to the armrests is finger-jointed. Later, it developed into two chairs: First, by eliminating unnecessary lines, “The Chair” (1949) (fig. 4, middle) achieved ultimate simplicity in its structure. Each element serves a logical and important function. The seamless finger-joints on the back reclining part, the flowing lines of the front legs, and the slight curve on the seat frame produce a decorative effect in its simplicity. Second, the “Y-Chair” (1950) (fig. 4, right) was designed to make the production process more efficient and aimed to sustain high quality while achieving lower costs by automated mass production. Its front legs are shaped with a woodworking lathe, and its back legs actually form a two-dimensional curve but have a very convincing three-dimensional look as a result of shifting its center slightly during the assembly process. Although this chair seems highly labor intensive at first glance, the production process is strategic and

highly efficient. Wegner’s friend, Borge Mogensen, was also inspired by Eastern craft. He designed the “Spanish Chair” in 1959, which was his interpretation of traditional chairs found in areas influenced by ancient Islamic culture. He modernized the shape, however, eliminated the elaborate carvings, and designed broad armrests that provided a place to put a cup.

Some modern designs created on the basis of Eastern culture focused on practicality. Eastern craft was poisoned as a precedent balancing actuality and beauty. Designers discovered a modern method in it. Therefore, Eastern craft was not an “other,” even for the modern West.



Figure 4. Chinese Chair (1943), The Chair (1949) and Y-Chair (1950) designed by Hans Wegner.

4. Conclusion

Eastern furniture historically offered several inspirations: a collage of foreign culture, fantastic anti-modernism, representation of craftsmanship, harmony of various cultures, and a balance of practicality and beauty. After examining the process of the above designs and theories, we now know that they are not only various but also contrast as fantasy and practicality. This indicates that Eastern furniture served as a core inspiring a wide variety of creativities.

As the following table shows, the Eastern craft has been strategically accepted in both the East and West. Although some furniture styles, such as Shaker furniture or the Windsor chair, influenced contemporary styles of furniture and modern designs, such styles that were inspirational over time and across nations were rare. Therefore, one can conclude that Eastern furniture was the “self” for the frontiers of designer.

Chronological Table

	The West	The East
1754	(England) Chippendale publishes <i>The Gentleman and Cabinet-Maker's Director</i> , which demonstrates Chinese styles of making furniture.	
1800's		(China) Chinese furniture influenced by Orientalism appears. Western furniture did not influence these styles due to efforts by the ruling elite to limit trade.
1843	(France) <i>Un Hiver à Paris</i> is published. The author, Jules Janin, writes that a relaxed posture facilitated by Oriental furniture is accepted in high society.	
1874		(Japan) Kiriū Koshō Kuwaisha (the first Japanese manufacturing and trading company) is established (closed in 1891). It deals in craft that is intentionally "exotic" for the purpose of exporting it.
1876	(England) Christopher Dresser travels to Japan.	
1876		(China, Japan) The Centennial International Exhibition is held in Philadelphia, U.S.A. Both countries exhibit their craft. Japanese craft is managed by the Kiriū Koshō Kuwaisha.
1922	(France) <i>Les Meubles de la Chine</i> , written by Odilon Roche, is published, and is the first technical book in Europe on Chinese furniture.	
1928	(France) <i>Einbahnstraße (One Way Street)</i> is published. The author, Walter Benjamin, criticizes the aristocrats' pleasure-seeking lifestyle by describing the Oriental-style interiors.	
		(Japan) Keiji-Kobō (Workshop for Physicality) is established by Katsuei Toyoguchi and others in order to study the standardization of products. He often determined "Eastern beauty" for export purposes.
1932	(Denmark) <i>Type of Furniture</i> is published. The author, Ole Wanscher, introduces the Chinese chair that inspired Hans Wegner's "Chinese Chair."	
1943	(Denmark) The "Chinese Chair" designed by Hans Wegner is released. "The Chair" and "Y-Chair," which were both inspired by it, are released in 1949 and 1950.	
1962		(Japan) "Spoke Chair," designed by Toyoguchi is released.
1984		(Japan) "Riki Rocker chair," designed by Riki Watanabe is released.

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Mapping Cup & Saucer Design in the 21st Century

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Mappin tells the history of graphic design in São Paulo from 1913 to 1939

TEMIN, Wilma Ruth / Master / Universidade de São Paulo / São Paulo

Graphic Design History / São Paulo / Mappin Stores

This work has as its focus the rich reminiscent archives comprising printed ads, catalogues and invitations of Mappin Department Store, which was in business in São Paulo for more than 80 years. Particularly from 1913 to 1939, the store produced printed materials of impressive beauty and quality, which, targeting the city's elite, portrayed the sophistication of English taste. The study of this archive is part of São Paulo's graphic design history.

1. Introduction

The English department store Mappin was, for decades, a synonym for elegance in the center of São Paulo. Particularly from 1913 to 1939, it published countless and different product catalogues, many of them with impressive graphic quality, in addition to ads almost every two weeks in many newspapers and magazines. The art nouveau style was the favorite to show a store where sophistication was the theme. It was in that period that São Paulo's rising graphic industry went through strong development, along with the growing number of illustrated books and magazines. There were typography, lithography and cliché print shops.

The catalogues and ads analyzed herein comprised a well-organized documentation center kept by Mappin until its bankruptcy in 1999. Today, they belong to *Museu Paulista da USP* (São Paulo Museum of the University of São Paulo). The images, except where indicated, were digitalized from their originals before the stores went out of business. The analysis of their language, theme and the outlets where the ads were run at the time, makes it possible to visualize a broader graphic field.

2. About Mappin Stores: English taste and class at *Praça do Patriarca*

The trajectory of São Paulo's first department store, Mappin Stores, starts in 1774, in northern England. There, Joseph Mappin started a business that offered silverware and other fine goods for presents. It later moved to London, where to this date they sell exclusive merchandise.

South America looked like a promising market. In 1911, Mappin & Webb opened a branch in Rio de Janeiro and, in 1912, in São Paulo. Both branches sold the objects and perpetuated the style and class of their London headquarters. Its owners were the Mappin brothers, Herbert and Henry, partnering with Henry Portlock. It was them who, in 1913, in association with John Kitching, opened São Paulo's first department store, on XV de Novembro

Street, next to Mappin & Webb, under the name of Mappin Stores. It was shortly before World War I, when the country was governed by General Hermes da Fonseca and the population of São Paulo was 375,000 inhabitants. Those were, above all, years of changes and fast growth.

A cosmopolitan atmosphere emerged. The elite were eager for consumer goods. They wanted and consumed products from Paris and London, capitals that dictated their taste based on the trends of European fashion. This elite was the faithful clientele of Mappin Stores.

The store opened in November 1913, employed 40 people, and had 11 departments that only sold imported goods. It was then a store targeted at women, as it is possible to see in the time's departments: white clothing, layettes (baby clothing), blouses, curtains, stockings and gloves, lace and ribbon, collars and necks, notions, in addition to scarves, handkerchiefs, fans and purses. For men, there was the waterproof and umbrella department.

With the increase in the number of departments and customers, the store needed more space, and, in 1919 (ALVIM, 1985: 60), they rented a new building designed by Ramos de Azevedo, on the corner of the streets *São Bento, Direita* and *Quitanda*, the so-called *Esquina das quatro cantos*. A corner formed by perfectly right angles, the only one in the center of the city, facing today's *Praça do Patriarca* (see Figure 1).



Figure 1. Façade of Mappin store, celebrating the crowning of King George VI in 1936. *Museu Paulista da USP*

The daily 'five o'clock tea' was a meeting point for high-class ladies. And the fashion shows announcing new collections, held at the tea room with live models, were well-attended and the sub-

ject of the local press. Newspaper ads invited people from São Paulo to see the displays in the award-winning shop windows, which were the talk of town. And to make sure everything was good quality, there was a specially hired professional: an English set designer and fashion designer who had worked for London's Harrods.

Mappin was part of the every-day life of the city and its sales were true happenings. The Brazilian writer Zélia Gattai describes these events in her memoirs like this:

Just once did I see my mother lose her temper: it was in Mappin's great sale, after the huge fire that almost destroyed São Paulo's largest, most renowned and most elegant department store, when Mrs. Angelina went on a shopping spree, buying pretty things for a bargain, true bargains. She spent up all of the house's savings, money that had been being set aside for emergencies and was kept behind a huge picture – an anarchist allegory – that decorated the dining room (GATTAI, 1983: 86).

Until 1939, when Mappin crossed the viaduct and opened its doors at *Ramos de Azevedo Square*, there was an extensive production of ads and prints. Every day, they ran newsletters or ads showing their products and, periodically, catalogues of the sales and new collections, invitations, and programs.

3. An overview of graphic production in the early 20th century, in São Paulo

The first decades of the 1900's years in Brazil, and in São Paulo particularly, were marked by the decline of coffee, which, combined with the difficulty to import because of World War I, gave momentum to the process of industrialization. At that same time, the many migratory waves brought in professionals, who, with their experience, contributed to the development of the field of graphic design and the arts too. They opened, for example, Max Schappe & Cia in Joinville which, in 1905, imported the first lithographic machine. In 1901, in São Paulo, the company *Empresa Lythographica Hartmann-Reichenbach* was founded, later called *Companhia Lytographica Ypiranga* which, in 1913, had 13 large printers, 60 accessory machines and 120 workers (CAMARGO, 2003: 42) (see Figure 2).



Figure 2. Detail of the proof section of *Sociedade Técnica Bremensis*, in São Paulo (In: PAULA & CARRAMILO NETO, 1989: 61)

The color images could have up to 12 colors and followed the personal taste of the master lithographer who defined the number of colors according to the need or intensity he wanted to reach in the work. The preparation of stones, sorting, transportation, and other operations took from one to six months. The most difficult part was to work with colors, because there was no chromatic scale and inks were opaque, with full coverage. A blue mixed with yellow would not result in green, because the second color would cover the first.

On the other hand, newspaper companies had mechanical typesetting for the printing of texts; had imported the letter-setting and line-setting machines Monotype and Linotype; housed book-printing sections and other sections for the manufacturing of image stereotypes. In São Paulo, newspapers like *O Estado de S. Paulo*, *Correio Paulistano* and *Diário Popular* printed portraits, allegories, illustrated ads and cliché-ads, in their own zincographic print shops.

There were also illustrated magazines featuring opinions, humor, charges, covers, and color illustrations. In March 1906, *O Malho* printed 40,000 copies, as many as the leading newspaper of the time (RAMOS, 1986: 20).

The technical advances were reason for pride. The magazine *Revista da Semana*, for example, was the first to print trichromatic clichés in South America. It was also the first to use photography as illustration, serving as a standard to all others.

Headquartered in Rio de Janeiro, Pimenta de Melo & Cia was the leading Brazilian publisher of magazines then. In 1926, it published the first Brazilian magazine in offset, *Cinearte*. In 1924, it had two flat lithography printers, one offset, and fifteen typographic printers, one of them with five colors. In addition, it had fourteen linotypes, one monotype, and eight copying cameras (CAMARGO, 2003: 50).

Cliché, lithography, and halftone photography, along with typography, were the support for Mappin's catalogues and ads, sometimes using all resources in the same piece, other times using one to get to the reality of the other. According to Cardoso (2009: 140), when one talks about photography of the time, "Gravure sought to simulate the alleged photographic realism and, sometimes, photography got the treatment of illustration". Visual quality ranged from the cosmopolitan and rich art nouveau language, on the covers of catalogues, to the simple and small drawn ad with side-by-side image and text.

4. Mappin's ads in newspapers and magazines

These were Mappin's prints at the time: European influence for the local public. These prints reproduced drawings copying photos and halftone photos printed with flat colors: on the outside sophistication and art nouveau style; on the inside direct and simple language.

Certainly the most interesting and surprising ad is the one for the store opening, published as a storyboard, in sequence, taking up the entire cover of the newspaper *O Estado de S. Paulo*. The use of two planes and art nouveau's sinuous and insistent contours from European posters are clear. In the foreground, there are female figures, an elegantly dressed lady and a girl, which we can relate to the merchandise for the female public that the opening store offered; on the background, the façade of the store, drawn (see Figures 3 and 4). The same layout which we see in Hohenstein's ad for A. Calderoni Gioielliere (see Figure 5).



Figures 3 and 4. Ads published on November 18 and 29, 1913, at the time of the opening of the new store. Museu Paulista da USP



Figure 5. Ad created by Adolfo Hohenstein in 1898 (In: FALABRINO, 2001: 67)

The use of the visual metaphor, in which an object stands for an idea, was very common in political cartooning, but not so common in ads; maybe because of that, these examples become even more interesting. We associate the opening of the store to the opening of curtains in a theater play.

In São Paulo, as of the beginning of the 20th century, newspaper ads gained larger sizes and fixed places, concomitantly with the emergence of print shops specializing in the production of copper and zinc clichés to print them (see Figure 6).



Figure 6. Examples of ads of different sizes, using typographic families and many images. Published in 1917, 1920 and 1931. Museu Paulista da USP

Through this small excerpt of the book about Assis Chateaubriand (MORAIS, 1994), it is possible to see the status of advertising in Brazil in the 1920's, especially with regard to newspaper ads:

[...] Even the large Brazilian newspapers still lived in the Stone Age of advertising. The Country did not have half a dozen advertising agencies... They had only gone as far as the figure of an individual advertising agent, a type of broker who took the rare ads to newspapers and won a commission on sales. The composition of ads was done by typographers in the print shops of newspapers... Advertising done with 'stereos', name clichés were known for, was very rare. Foreign factories installed here were an exception – and, among them, the American General Motors opened its own in-house 'agency', called Advertising Section, where five people worked, whose job was to create, produce and provide posters and leaflets to dealers (MORAIS: 1994: 142).

Mappin, following the English tradition of department stores, as of the 1920's, also had its own advertising section. It was headed by Luiz Sequeira, a Portuguese who, during the period from 1924 to 1951, was in charge of all the store's ads. This is an evidence of the store's concern with the publicity of its products and offers.

Newspaper ads provided information about the merchandise being sold at the store, and occasional merchandise, like the sale of flags of the Allies during World War I, or those that could be found at any time of the year, like boy's clothes with detailed drawings, and English ties. They could inform opening hours and changes of address or telephone. The merchandise for sale at the store was faithfully reproduced in trace drawings, transformed in printing clichés. The store logotype took the upper margin of the ad, thus creating an identity.

5. Mappin's catalogues, specific for sales and sophisticated for new collections

Mappin's catalogues were first published in 1919. Until 1935, they were published annually and sometimes also for sales.

They presented an organized display of the products available at the store and their prices. They could be ordered by telephone or by mail. After choosing the product, it was possible to buy it through the mail order service offered by the store.

There was clear refinement in the covers of those publications, whose language was based on art nouveau style posters. There were general catalogues, whose four-color covers printed in lithography reproduced delicate drawings of elegantly dressed ladies, always on the forefront standing out from the background. For example, it is noteworthy the richness of details and refinement of the model illustrated on the catalogue published in 1930. In some editions, there were formally dressed gentlemen, and others featured cars, symbols of power and status. The background could be a color, a European landscape, or the building of the store, faithfully reproduced, like in the 1925 catalogue, features which made catalogues similar to those produced in Europe at the time [see Figures 7,8 and 9].



Figure 7. Catalogue cover 1925. Museu Paulista da USP
 Figure 8. Catalogue cover 1924. Museu Paulista da USP



Figure 9. Catalogue cover 1930. Museu Paulista da USP

Catalogues were books with 60 pages or more, distributed in sheets, fastened together by staples. Internal pages displayed the merchandise for sale, with a brief explanation about the product and its price. Differently from the cover, these pages were printed in black by the typographic system. There were

detailed drawings, transformed in clichés to print the hundreds of merchandise available, and prices and specifications were typeset.

The colorful covers displayed on the foreground elegantly dressed models, sinuous lines and large areas of flat colors. Internal pages were monochrome. The insertion of Mappin Stores' logotype in every page created unity in the graphic language [see Figures 10 and 11].



Figure 10. Catalogue cover of 1934. Museu Paulista da USP
 Figure 11. Internal pages of catalogue published in 1923. Museu Paulista da USP

It was not rare for daily newspapers to publish notes complementing the publications. In contrast, occasional catalogues, like the ones for sales and Christmas, did not have the same features as the regular catalogues. Sale flyers were printed in two colors, black and a second color. They used lower quality paper and books could be stapled together, or folded once or twice with different sizes. The covers featured reproductions of the building's façade, from different angles each time, at sale times. The other was color red, a simple and effective resource. Drawings used halftone and the composition of figures was done creatively. The types used were simple and direct, without serif. The contrast was the strong point of the image [see Figure 12].



Figure 12. Cover and internal pages of fliers published at sale time in 1932 and 1933. Museu Paulista da USP

On the other hand, the fliers created for Christmas were even freer from graphic standards or direct influences. They had different sizes and folds; the colors – black and a second or third color – were lighter colors than the red for sales. Christmas graphic motifs looked like candles, gift wrapping bows, stars. Mappin's building again appeared on covers as a graphic symbol. In this example, it is possible to see the photographic reproduction, closer to a more modern style, cleaner and with unusual cuts in images [see Figure 13].



Figure 13. Cover and internal pages of folder for 1938 Christmas. Museu Paulista da USP

The folder printed for 1933 Christmas made an interesting use of the diagonal line in its layout. The title, products and reference texts are in angle, a reminder of the straight and synthetic lines of constructivism. The cover features a montage of photographic images. Mappin Stores' building rises powerful over the city. On the back cover, it appears illuminated, seen from an upper angle, in the middle of the city. The products offered were printed in clichés based on photos, not on trace drawings, which resulted in halftone images [see Figure 14].

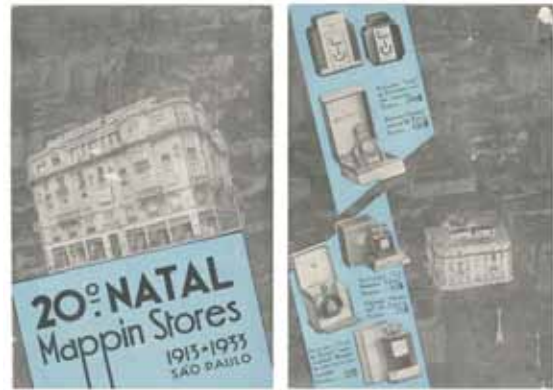


Figure 14. Folder for 1933 Christmas. Museu Paulista da USP

The folder that announced the Carpet Fortnight features on its cover the image of a carpet valuing the decoration of a room. A clean and modern image. Opening the vertical fold, there was a text about the qualities of the angora carpet and the large inventory of the store. Opening the horizontal fold, there was not one space of the page that was not covered by carpets, or lists of prices and sizes, on white rectangles with a similar shape to that of carpets, as if playing with the theme of the fortnight. From the formerly prevailing sans serif typography, now "Mappin Stores" started to appear as if handwritten, which would become the store's logotype in the 1950's [see Figure 15].



Figure 15. Cover and interior of folder for the Carpet Fortnight, 1930's. Museu Paulista da USP

6. Final Considerations

When observing the examples of the printed production of Mappin Stores between 1913 and 1939, it is possible to note, especially in the covers of catalogues, a high technical printing standard in the delicate transition of color nuances. The clean and refined language is valued by the refined technique. There

is, undoubtedly, an agreement with the visual language in fashion in Europe, the center of style and place of origin of the store. The combination of different techniques for the cover and heart reminds us that each piece was planned to make the most of the graphic resources available.

The ones produced in the 1930's, already with photographic resources, in turn, have a visual language incredibly similar to those printed today because of their originality and clarity of information.

The array of ads exemplifies the care with visual identity in the repetition of the logotype and consistency in language. The fact that all fliers were always produced or oriented by an in-house department helps explain the single identity.

Mappin's graphic production, encompassing both in quantity and quality, exemplifies the diversification and richness of resources in the graphic field in the early decades of the 20th century in São Paulo.

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“Go you too to Amazonia”: analysis of a poster designed by Jean-Pierre Chabloz for the “Rubber Campaign”

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Poster / Jean-Pierre-Chabloz / SEMTA / “Rubber Campaign”

This paper analyzes one of the posters designed by the Swiss artist Jean-Pierre Chabloz during the period he worked for SEMTA [Special Service of Mobilization of Workers for Amazonia] in 1943, in the context of the Second World War. The poster, which covers the moment of departure of migrants for Amazonia, will be analyzed in comparison to photographs of that time which also depict the subject.

1. Contextualization

In 1942, during the Second World War, Brazil and the U.S.A. signed agreements in order to reactivate the rubber production in the native plantations of Amazonia, so as to meet an enormous need for this material by the allied armed forces. Having received huge financial support from the Americans, the Vargas government committed to undertake what became known as “the rubber program,” a big plan which was expected to send several thousands of workers, mainly from the Northeast region of Brazil, to work in rubber production in the Amazon region. Among a number of organizations created to operate this program, there was SEMTA [Special Service of Mobilization of Workers for Amazonia], which held the functions of mobilizing, selecting and routing workers to the Amazon rainforest. Jean-Pierre Chabloz (1910-84), who was in charge of the advertising division of SEMTA, produced rich material with the purpose of persuading potential workmanship to migrate to Amazonia and getting public support for the Vargas’ project. This advertising material can be currently found at MAUC [Art Museum of the Federal University of Ceará]. Among this material, there are four posters, which are studied in my Masters thesis research on Visual Arts.

Born in Lausanne, Switzerland, Jean-Pierre Chabloz studied at the Geneva School of Fine Arts (1929-33), at the Florence Academy of Fine Arts (1933-36) and at the Milan Royal Academy of Fine Arts (1936-38). Due to the Second World War, he moved with his family to Brazil in 1940. In late 1942, Chabloz was invited to engage in the “rubber campaign” as an advertising designer of SEMTA. He worked in this occupation from January to July 1943.

As the theme for this paper, I decided to analyze one of the four referred posters, the second one designed by Chabloz for SEMTA. This work of political advertising focuses on the moment of departure of the recruited men, when they started their long journey towards Amazonia, as it can be seen through the following pages.

2. Designing the poster

The idea for the poster *Vai também para a Amazônia, protegido pelo SEMTA* [Go you too to Amazonia, protected by SEMTA] (fig. 1) seems to have been conceived in January 1943, as we learn through notes in the first diary Chabloz wrote in the period he worked for SEMTA. Through the reading of the same diary, we realize that, besides the title, the poster originally had a subtitle, “Why hesitate?”, which was suppressed in a later stage of creation of this work, for reasons not mentioned by the artist.



Figure 1. Jean-Pierre Chabloz’s poster *Go you too to Amazonia, protected by SEMTA* (1943). Lithograph, 67.3 x 111.3 cm, MAUC (photo by Ana Carolina Moraes).

A great sketch for the poster, done in charcoal and colored chalks, would have been carried out between the first and the second day of March, 1943. On March 5, Chabloz would have begun to prepare the *layout* of the work, what he would keep doing for the following fourteen days.

A shoeshine boy named Raimundo would have served as a model for the main character of the poster, the man who, leaning against a wall, watches the departure of his companions. Chabloz reported having created, on March 7, a portrait of Raimundo in the pose of that character.

The trucks would have been drawn on tracing paper on March 9, and, on the following day, they were drawn in color on the poster itself. Also on March 10, Chabloz would have amended the bust of the main character of the composition, for having considered it too short initially.

The title of the poster would have been drawn between the twelfth and the fifteenth of March. On the seventeenth day of the same

month, Chabloz would have presented the *layout* almost finished to his boss, Paulo de Assis Ribeiro, who would have approved the job and allowed the artist to finish it the next day.

A month and a half later, on May 4, Chabloz was confronted with the finished versions of the first and the second posters he had designed for SEMTA, printed by lithographic process in Mendes Júnior printing company in Rio de Janeiro. His reaction was of outrage and indignation. The artist believed that his elaborate designs would be printed by means of photolithographic process; instead of that, however, they had been lithographed manually. Chabloz felt betrayed and greatly upset with the final product of his work, as he recorded in his diary:

Treason! Shallow, academic, “Arts and crafts,” plane, without vibration of color: all my shades “enamel”, impressionists, were suppressed: work of laborer without spirit, without art: men of pay and not of Faith! [...] But these badly reproduced posters will fall on me! Competent people will judge me through them! Patience! Until I can do all by myself, from A to Z, vigilant and demanding to achieve Perfection! (Chabloz 1943a)

In the collection of MAUC, I found about a dozen copies of the finished version of the second poster, but I did not come across any record of the *layout*, the work that, on itself, bore the “marks of the artist’s hand”. Thus, I can only quote the complaints of Chabloz, without, however, having the chance to compare the lithograph to its corresponding *layout*.

3. Images of departures

In the poster *Go you too to Amazonia, protected by SEMTA*, a human figure is shown in the foreground. The right side of his body is directed toward the viewer, while his face turns to the opposite direction. The young man with brown skin, big body and large bare feet, leans against a wall at the left side of the composition: right leg resting on the floor, arms and left foot slightly pressing the wall.

The man has a faraway look, which leads the viewer to the image background. In this most remote part of the composition, we see several men on a green truck bed. Most of them are sitting with their backs to the viewer, being identified only by their yellow hats. Two of them, however, stand out: standing on the truck bed, they stare at their companion who observes them and they wave to him, with outstretched arms. To the left of that vehicle, there is the front part of another similar truck. On its bed, we see only a man – upright body and left arm outstretched - who also waves to the colleague that, from a distance, observes the group.

The poster in question covers the moment when men recruited by SEMTA departed for Amazonia. Sitting or standing on the truck bed, they then began a new stage in their lives. Some of them stretched out their arms in a demonstration of courage and hope. Others kept sitting, waiting for what was to come.

As Chabloz lived in Fortaleza, where he had seen the departure of trucks for Amazonia, it is very likely that he sought to situate the

scene of his second poster in the capital of Ceará. The flat landscape with sparse vegetation differs considerably from the thick forest of the poster *Mais borracha para a vitória* (*More rubber for victory*) (fig. 2), the first one designed by Chabloz for SEMTA, as well as from the bucolic scenery with lush vegetation of his third poster, entitled *Vida nova na Amazônia* (*New life in Amazonia*) (fig. 3). The open-air landscape of the work studied here, where the soil seems hot and the flora is sparse, indicates that the scene was built on the starting point of the workers’ journey: the Brazilian Northeast, which, according to government rhetoric, should be abandoned because of its infertile lands. On the other hand, the two other Chabloz’s posters above mentioned were already located at the arrival point of the migrants’ journey: the bountiful lands of Amazonia where the so-called “rubber soldiers” should produce a large volume of that material for the success of the allied forces in the war. The contrast of landscapes between the image that represents the starting point and those which show the arrival point is quite revealing of the contents of the official discourse uttered at that time.



Figure 2. Jean-Pierre Chabloz’s poster *More rubber for victory* (1943). Lithograph, 67.3 x 109.3 cm, MAUC (photo by Ana Carolina Moraes).

Figure 3. Jean-Pierre Chabloz’s poster *New life in Amazonia* (1943). Lithograph, 99 x 66 cm, MAUC (photo by Ana Carolina Moraes).

In his diary, Chabloz reported he had seen the departure of the first group of workers from Fortaleza for Amazonia, which took place on the first of February, 1943. The artist also recorded he had made several sketches of the episode for possible later uses.

In a letter addressed to a friend, named Moser, dated February 6, 1943, Chabloz also referred to the departures of migrants:

This week has been busy: Monday, the 1st. hour of the morning, the first contingent of men departed for Amazonia: 235 men, in six trucks, plus a truck for luggage and supplies. [...] Tuesday, second departure, similar, and at night, arrival, at 17 or 18h, of a troop of 330 Cariocas and many others: people from the hills, from the slums, sambistas and angry “faquistas” ... [...]

Wednesday, departure of the third local group, and Thursday, of the majority of cariocas. The rest will depart on Monday. These departures are very impressive: although well maintained, and supported, surrounded until the end and even at workplaces, these men are going to meet a serious adventure and some of them will most likely not return... (Chabloz 1943b)

It is important to point out that the romanticized tone of Chabloz's letter is consistent with the earliest moments of his performance at SEMTA, when he was still excited about the findings and expectations regarding his work. In a few months, however, this view would suffer profound changes, marked by Chabloz's successive disappointments with SEMTA's malfunctioning and the little appraisal high officials of the firm showed for his work.

During the research that resulted in the book *Vai e vem, vira e volta: as rotas dos Soldados da Borracha (Go and come, turn around and go back: the routes of the Rubber Soldiers)*, Lúcia Arrais Moraes interviewed, in Fortaleza and in Manaus, thirty-five former rubber soldiers, gentlemen who, by the time of the interviews (occurred in 1996 and 1997), were between seventy-four and seventy-eight years old. The author emphasizes the solemn tone with which her interlocutors referred to the days of their "departures". After more than half a century, they were able to report the event with details. As Moraes points out, in the memories of those gentlemen, the "departure" was not identified as the moment they left the parental home to stay in the SEMTA's "pousos". Actually, the date they stressed as the day of the "departure" corresponded to a later time, when they left those "pousos" and officially began their long and slow journey towards Amazonia (Moraes 2002).

In Fortaleza, the first departure of migrants has been widely documented by photographers of Abafilm. Copies of those photographs can be found at MAUC and some of them were reproduced in the book *Mais borracha para a vitória (More Rubber for Victory)* (Gonçalves and Costa (Eds.) 2008: 206-243). One of the images shows a diagonal view of the seven trucks that made up the leaving convoy (fig. 4), the same number referred by Chabloz in the letter above quoted. In the photograph, standing men are gathered on the trucks. They raise their arms and wave with their hats in hand. We witness a real hubbub of migrants, who are aware of the camera that photographs them. The convoy looks like a motorcade, and the migrants behave as celebrities.



Figure 4. Seven-truck convoy, in Fortaleza, on February 1, 1943 (photo by Abafilm).

Another photograph shows a fragment of the lateral part of one of those trucks (fig. 5). In this image, a group of men is distributed in a disorderly way. Some are facing the front of the truck, while others are clustered on the left side of the vehicle, smiling and waving to the photographer's lens. Their poses convey joy, satisfaction, trust. They bear in their faces and bodies the necessary elements

for us to see them as victorious and satisfied individuals.



Figure 5. Aspect of one of the trucks (photo by Abafilm).

In both photographs commented, we see a kind of apology of the departure: it is seen as the great moment of triumph of that group of fortunate men. These images were intended to illustrate periodicals from that period. In newspapers, the departure for Amazonia appeared as the moment of glory of Vargas' migration project.

Other photographs lead us to question the authenticity of expressions and gestures of models in the images above mentioned. I point out two photographs worth being compared. In one of them, in which a very big group is distributed along the Mucuripe harbor, in Fortaleza, all men face the camera, smile and raise their right arms, showing the letter "v" with their index and middle fingers (fig. 6). It was the first letter of the word "victory", often present in official advertising of that period, as can be seen in the poster *More rubber for victory*. Once again, the portrayed men build, through their postures and attitudes, an image befitting the mood expected from them at the moment of departure.



Figure 6. Migrants in the Mucuripe harbor, in Fortaleza, on February 1, 1943 (photo by Abafilm).

Another photograph of the same group, however, comes to question that state of mind (fig. 7). Taken just before or after the previous image, this photograph shows the same individuals in radically different body postures and facial expressions. The third man in the middle row, for example, is casually smoking a cigarette, while the sixth one in the same row has crossed arms and a serious face, staring at us as if to challenge us. All those motivation and confidence that the men convey in the first image fall apart when we look at the second one. "Such a serious and sullen group would really be looking forward to leaving?", we can ask. The second image seems to emphasize the artificial nature of the first scene, in

which, therefore, men would be clearly posing for the photograph, most likely after the request of some SEMTA's employee.



Figure 7. Migrants in the Mucuripe harbor, in Fortaleza, on February 1, 1943 (photo by Abafilm).

Another image recorded during the first departure makes us doubt of the feeling of collective euphoria shown in the first photographs I mentioned. We see in this picture a diagonal view of the right side of a SEMTA's truck, where there are some sitting men (fig. 8). One of them is asleep; his right side neighbor has a contemplative and distant look. Just two of the men, the only ones who seem to be aware of the camera, or minimally care about being depicted, show with their fingers a very timid and unconvincing “v” of victory.



Figure 8. Aspect of one of the trucks on a Fortaleza's street (photo by Abafilm).

We see, therefore, a sharp contrast between the photographs taken to illustrate periodicals and those which depict migrants at more casual moments. Indeed, the most painful aspects of departures - sadness, loneliness, fatigue, uncertainty - were not exploited by press or by official advertising.

The poster *Go you too to Amazonia, protected by SEMTA*, as official advertising, obviously emphasizes the joy and euphoria of migrants, who had then been turned into national heroes. Although many of them are sitting in the truck, those who stand out are the ones standing and waving to their distant companion. This one, in turn, is directly affected by the poster's textual message, which invites him to do the same as their fellows in the trucks: migrate to Amazonia, under the protection of SEMTA.

The poster is intended to dismiss possible doubts and hesitations by potential migrants. What is being said through its image and text is: “If so many people decided to migrate to Amazonia under the tutelage of SEMTA, it is because that is a really good opportu-

nity. Thus, why don't you do the same?”. The duality between the internal environment, in which the man in the foreground is situated, and the outdoor environment, where the departure scene takes place, seems to enhance the invitation, presenting the migration to Amazonia as an attitude of freedom.

In this way, the analyzed poster emphasizes the glorious aspects of the departure: the joy and vibration of migrants, the patriotic nature of their attitude, the sense of freedom associated to their gesture. However, by comparing photographs taken during the first departure of men from Ceará for Amazonia, I highlighted the dual aspect of that ritualistic act: the official version of events *versus* another version, not made public at that time, seen in images that show faces and bodies of migrants expressing feelings of uncertainty, distrust, tiredness, loss. Perhaps both versions have their share of truth, given that contradictory feelings such as joy and pain, excitement and fear are often simultaneously associated to those rites of passage.

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Organic Design, MoMA 1940: the breath of modernity reaches Latin America

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Design pioneers / Modernism / Microhistory / Hegemonic history

MoMA, in 1940 summoned American designers to present their best furniture designs, inspired in a new trend: organic design. Also another historical event in modern design appears, calling for proposals for a new design contest to the American continent's nations. This paper analyzes the participants, shows the progress in design of each country, the award's expectations, and the following events showing the possibilities and reality of the USA and Latin America.

1. Introduction

Why analyze a design competition that happened 72 years ago in a country like the United States of America, and challenge what historians have written about this fact so far?

In principle, it has to be done to elucidate why a country like the United States of America, a model of capitalist production in the mid-twentieth century, called for all Latin American countries to participate in a design competition through a major cultural organization such as the Museum of Modern Art in New York City. At that time, industrial conditions were very different, and, apparently, in Latin American countries, no professional designer was able to compete in the same circumstances as designers in the United States.

Such an analysis should be done to learn both about the performance of those professionals who competed and about the consequences of this historic event, now mentioned in almost every history book on modern design in the Western world. However, the case of American designers has always been studied, but never, until now, has the one about the participants in the twenty-one American republics been analyzed. The first impression leads us to believe in an attitude of superiority and disdain, but having promoted the call shows an inclusive position; therefore, the event poses a series of questions about a documented and contextualized moment in time, which allows us to establish a historical scheme that may be closer to reality, in view of the tensions and contradictions that a modernization process of design in the Americas raised.

2. The Historical Fact

In 1940, the young Museum of Modern Art in New York launched a call for a design competition, named Organic Design in Home Furnishings, which was aimed at discovering a group of designers capable of creating a "useful and beautiful living environment for contemporary life in terms of furniture, lighting and textiles" (A. A. Rockefeller Albums The Museum of Modern Art Archives, New York). The idea of the contest, originated from the initiative of Eliot Noyes, a disciple of Walter Gropius —founder of the German Bauhaus school—, who had recently been hired by the Museum of

Modern Art as the first director of the new Department of Industrial Design. In the competition catalog, Noyes defined the terms of the competition by stating "Ea design may be organic when there is a harmonious organization of the parts within the whole, according to structure, material, and purpose. Within this definition, there can be no vain ornamentation or superfluity, but the part of beauty is none the less great—in ideal choice of material, in visual refinement, and in the rational elegance of things intended for use." (Noyes, 1941: second lining)

Likewise, Noyes defined the terms that the museum had set by agreeing sponsorship of the contest with Bloomingdale's, the biggest department store in New York City, and eleven other major retailers in various parts of the United States, in addition to the sale and promotion of winning designs, which would be produced by several manufacturing companies participating in the project. (Bruce, 2006: 66)

But Noyes did something else, which took the competition objectives of the museum to extremes, since among other things, from its inception in 1929, this organization had been founded in order to "Epromote and to develop the study of modern arts and their implementation in manufacturing and practical life" (Pulos, 1988: 68). Therefore, in addition to attracting the best designers in the United States, he also decided to take the invitation beyond its borders. He asked designers living in twenty-one Latin American countries to participate in the competition. However, considering the asymmetry that might have existed due to industrial development and cultural-aesthetic modes of expression between his country and the rest of the invited nations, the competition was divided into two independent sections. As for the second, "Ethe purpose of the Latin American contest was not primarily to procure designs for production in this country, but to discover designers of imagination and ability and bring them to New York to observe and study the work being done here." (Noyes, 1941: 39).



Figure 1. Left: Organic Design Contest catalog, 1941 (Clara Porset Archive, UNAM, Museum of Modern Art, NY)

Figure 2. Right: Industrial Design Competition for the 21 American Republics. Catalog, 1941 (Clara Porset Archive, UNAM, Museum of Modern Art, NY)

The objective was met because the museum received proposals

from seventeen countries. While, in the United States, the proposals put forward by Charles Eames and Eero Saarinen went beyond the expectations of the call. They presented a set of chairs for the *Seating for a Living Room* section of the exhibition, solving the problem of generating organic forms, but accomplishing such a challenge by means of innovative technology, which allowed for a light structural shell consisting of layers of plastic glue and wood veneer molded in three-dimensional forms that had not been created until then, thus, in a novel manner, integrating the legs of the seats presented by means of a strong resistance accessory-free structure. [Jackson, 1991: 36]



Figure 3. Left: First place winner chairs, contest Seating for a Living Room. [Museum of Modern Art NY, catalog]

Figure 4. Right: Prototypes of Charles Eames y Eero Saarinen. [Museum of Modern Art NY, catalog]

As a result of the call to Latin America, five awards were given: two projects to Mexico, one to Brazil, one to Argentina and one to Uruguay. The contrast with the invitation specified to the United States lied on the emphasis given to the inclusion of raw materials found in each home country, particularly those which had not been used so far. Also, handcrafting was allowed. This clearly showed evidence of the existing vision regarding the state of production in Latin America, but it raised the future possibility and hope of furniture designs being marketed, at least in New York City. The integration of the winners was quite unusual because three former students from the Bauhaus school —before it was closed— were competing for Mexico: young Michael van Beuren, Klaus Grabe and Morley Webb; all working in Mexico on the initiative of Van Beuren, who had decided himself to accept the design and production of furniture in Acapulco since 1936, and later in Mexico City. Soon, Grabe and Webb returned to the United States, where they pursued a career in design, but van Beuren decided to stay in Mexico for the rest of his life, becoming a successful businessman in the furniture industry. They presented a *chaise longue* that certainly stood on the issue of organizational design; it was made from natural materials endemic to Mexico.

The other award to Mexico was given to a *sui generis* couple formed by Xavier Guerrero and Clara Porset. Guerrero was a prominent Mexican painter who worked with the famous Mexican muralists Diego Rivera and David Alfaro Siqueiros, and, because of his family, he was also familiar with interior design. Clara Porset, Cuban born, arrived in Mexico in 1936 and developed her career there until her death, creating extensive work based on a design that addressed almost all modern styles,

including organic design. Porset, disciple and a friend of Josef Albers and Hannes Mayer, combined the development of both, craftsmanship and mass production. For the first time in Mexico, her designs received royalties from a firm called DM National.

The project presented during the MoMA competition was created by the couple, but only on Xavier Guerrero's name, as Clara, for personal reasons —as she mentioned during an interview years later— was unable to register. They presented a set of furniture that “Ewas conceived as peasant furniture, to be made of pine with webbing of *ixtle* on the cot and chair. The wall case has screening of jute in the sliding doors and at the end.” [Noyes, 1941: 40] Porset and Guerrero were the only participants who did not follow the organic style expected, but they were distinguished for having used natural fibers and integrating the set they presented.

The Brazilian project was designed by Bernard Rudofsky, Austrian architect who, before the contest, lived in the city of Sao Paulo, Brazil, for three years, so he was able to register on behalf of this country. He presented a furniture set made out of a wood and metal structure, incorporating fiber fabrics such as jute, caroa, and hemp. After the contest, Rudofsky remained in New York, where he resided until his death. He had a close relationship with the MoMA through exhibitions and publications on design for decades.

From Argentina, architect Julio Villalobos won, also with a *chaise longue* proposal that integrated wood and textiles only used by farmers in the north of his country. The last award winning participant was Uruguayan architect Román Fresnedo, recognized for a pair of seats structured with rattan wood, metal tubes, and leather strips, which apparently competed against the best organic style designs from the United States and Europe. However, it is not possible to know today if they could have offered the comfort and functionality expected by the market.



Figure 5. Left: Winner project of Van Beuren, Grabe and Web [Catalog Museum of Modern Art, NY. Clara Porset Archive, UNAM].

Figure 6. Right: Winner project of Guerrero and Porset. [Catalog Museum of Modern Art, NY. Clara Porset Archive, UNAM].

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The MoMA was generous by managing the purchase of the materials from each country of origin that were needed to build the winning projects, or by importing the already-made prototypes for display. However, that was when information about the participation of Latin America began to disappear.

3. Consequences

The Organic Design in Home Furnishings competition had a very wide course in newspapers and magazines of local and national delivery, and the catalog publishing the results had a circulation of 10,500 copies, a huge distribution at that time. The center of interest was on the prize-winning design projects from participants residing in the United States, mainly those by Charles Eames and Eero Saarinen, which soon were a success for the modern Western world for their contributions in the application of new technologies and ergonomic adaptations in the structure of their seats. Virtually, none of the pictures in the exhibition of the winning products in the MoMA shows the designs of Latin America; instead, a large area was spent in order to show the development of the most famous new seating concepts in the previous two decades, beginning with those of the Bauhaus and ending with those of Eames and Saarinen. This interest is complemented in the catalog, by using texts and photographs, with a detailed analysis of the manufacturing process of the winning team's chairs. The expectations were not mistaken. In the following decade, those designers showed their talent by incorporating innovations into the world of design with the use of fiberglass reinforced plastic, and the combination of plastic, metal and upholstery to generate some of the most renowned design concepts worldwide.

Beyond the scope of Latin American participation, we would have to review the repercussions of the contest due to the entry of Latin-American products in U.S. markets. The first thing to note is that several participants were architects, who did not really make a living doing furniture design, so, after the event, both Julio Villalobos and Román Fresnedo returned to their usual occupation. As I said, Bernard Rudofsky remained in New York, and later, he was renowned for his work as a professor, as a censor of the cultural system, curator and writer in different parts of the world.

The only winners who continued the design of furniture were those from Mexico. Michael van Beuren, founded Domus, a furniture company that survived for more than half a century. Through this firm, he developed a large number of products which embodied a combination of early Bauhaus learning and traditional techniques and materials of the country that had welcomed him, leaving an imprint on the history of design in Mexico, which, until recently, had not been documented.



Figure 7. Left: Clara Porset (Clara Porset Archive, UNAM)

Figure 8. Right: Plate DOMUS of Grabe and van Beuren, applied to their furniture. (Photo by Oscar Salinas).

Probably, the most relevant case is that of Clara Porset (Salinas, 2006: 22-23), paradoxically, the only contestant that did not register, as already mentioned. She is the only person in this group that, in the following two decades, undertakes restless professional work that leads to almost 1,300 produced and marketed projects, and exports her own furniture to the United States through the prestigious Artek-Pascoe firm, founded in New York by architect and designer Alvar Aalto. Also, through his agent and friend, Esther McCoy, who promoted her furniture in magazines such as *Arts & Architecture* and *Los Angeles Times Home Magazine*, her designs were marketed in the State of California.

Also, Clara Porset was the only Latin American participant, along with her husband Xavier Guerrero, who presented during the following MoMA competition in 1948, *Prize Designs for Modern Furniture* (Kaufmann Jr., 1950: 72). For this contest, the call went beyond the Americas; therefore, besides the United States, there were designers from Germany, England, Italy, Switzerland, Finland, Norway, Denmark, Japan and Mexico.

For the occasion, Porset presented a chair with a continuous structure made out of metal rods and plastic strings for the seat and the back, which then served to develop a set of outdoor furniture that was marketed in Mexico. Although not an award-winning design, it was recognized by appearing in the competition catalog along with professional designers who would eventually be highly praised, such as Robin Day, Ilmari Tapiovaara, Marco Zanuso, and the well known Charles Eames and Marcel Breuer.

Still, in the following decade, Clara Porset continued to promote her work by participating in the 1957 Milan Triennial Exhibition, winning the silver medal for furniture that she had made for the Pierre Marques Hotel in Acapulco (Salinas, 2001: 37), but the presence of pioneers of furniture design in Latin America was diluted in the face of the current international environment, which was mainly focused on North America and Europe. What originated such a situation?

In the final analysis, we found a clear contrast between the United States and participating countries from Latin America. If we accept that design practice is part of the project of modernity, and therefore rests on the development of the capitalist production system, it is from this relationship that the discipline

has been marking its own limits; however, the process is not linear, but holistic, and it implies such a degree of complexity that comparing the work of both regions is simply not possible. What happens in developing countries lies on a different reasoning, in line with an industrialized context and a different culture. That is why the design proposals presented were quite different: as for Clara Porset, her designs succeeded in some spaces of American culture only because of her understanding and knowledge of design and production in developed countries, and based on the fact that she had designed products emerged from the cultural foundations of her surroundings. In the case of Eames and Saarinen's proposals, any similar could have come from participants from Latin America, just because they would not have been possible because industries that generated the new technology that enabled the shape and structure of the new designs could only be found in the United States. Surely, Eliot Noyes foresaw the possible future, so he wisely separated the competition into two completely different sections.

4. Conclusion

In researching the historical facts of the exhibition of 1940, and trying to document the performance and life of the designers who participated on behalf of Latin America, it is evident from the information obtained [Salinas, 1992] that, in Latin American countries, since the beginning of the discipline in the 60's and almost up to the end of the twentieth century, there was not a serious interest from the local educational and cultural institutions in disseminating and promoting the work of such founders. Only after 1990 did the first design historians begin the task of analyzing existing data in order to build a corpus that would support the theoretical knowledge of the discipline of design. Likewise, only after the early years of this century have the domain of historiography and studies from other disciplines created the opportunity to link up with design, thus, initiating the construction of those "other histories", which exceed the contempt of the old imperialist vision and widespread ignorance coming from their own design professionals who were not able to explore their own territory.

If we want to be acquainted with history in real terms, while studying such scarcely-documented cases like this, not only is it important to complement what has been said or what has happened, but it is also important to clarify what has been omitted from original sources of information and testimonies left by protagonists who, after having been analyzed within the context of their historical milieu, allow for new interpretations and better understanding of the mechanisms that drive the emergence of a new history of design; one that helps to overcome the hegemonic history that still prevails.

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Modern design meets Latin America: the role of pioneering design magazines *Habitat* and *nueva visión* in Brazil and Argentina

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Modern Design / Design criticism / Habitat / nueva visión / Latin American Design

The introduction of modern design in South America took place in the early 1950s and had amongst local protagonists Tomás Maldonado and Pietro Bardi, founders of *n/v nueva visión*¹ and *Habitat* magazines, respectively. These publications were defined by a modern discourse in tune with graphic arts and industrial design and here is observed how they emerged and contributed for the dissemination of modernist paradigm in Brazil and Argentina.

1. Introduction

The early 1950s sets the introduction of modern design in South America. Buenos Aires and Sao Paulo were spreading anchors of the new design model at that part of the continent, acting as a gateway to the rush of modernization promoted by the European avant-garde as well as the innovative precepts about art and technology developed at Bauhaus and the Ulm School of Design.

Amongst the local protagonists of that movement were the Argentine architect Tomás Maldonado and the Italian journalist and curator Pietro Maria Bardi. Maldonado, who would become director of The Ulm School in 1954, founded *n/v nueva visión* magazine (1953), in Buenos Aires, which focused on mapping the development of architecture, art and modern design in the Americas and Europe.

Bardi, director of the Sao Paulo Museum of Art (MASP), created *Habitat* magazine (1950) in partnership with his wife, Italian architect Lina Bo. The publication provided a critique of Brazilian architecture and emphasized the importance of training design professionals in the country by following constructivist guidelines.

Stated thus, this paper aims to explore how *nueva visión* and *Habitat* worked for the introduction and dissemination of modern design concepts and projects in those two countries. Structured as a literature review, this article is a result of a doctoral research in progress at Federal University of Pernambuco Design Program (PPGDesign/UFPE), based on comparative-historical methodology and cultural studies theory.

¹ According to its original spelling, some modern Argentine projects are written here in small caps.

2. Modernity and editorial market in Buenos Aires

During the government of Juan Domingo Perón, started in 1946, the state played a decisive role in the economy, stimulating the production of consumer goods for the domestic market. Associated with this industrial growth, economic redistribution in favor of disadvantaged sections of the population and the expansion of urban areas led to a change in consumption habits (De Ponti & Gaudio 2008). In the field of culture, the emergence of concrete art and the growth of publishing and film industries complemented the landscape that allowed Argentina to join in modernity in the 1940s.

Art defended the industry and production as vectors of modern design, in line with the European abstraction and the avant-garde Latin Americans. Amidst that background, it is the concretist group of artists who will publish for the first time in Spanish texts of the Swiss Max Bill, leading exponent of abstract art internationally. In 1942, the Austral Group, formed by architects linked to Le Corbusier, will launch the magazine *Técné*.

A landmark in the beginning of the 1950s was the foundation of the first local design offices, axis and Cicero Advertising, and the publishing house ediciones infinito. Specialized in projective disciplines, infinito was headed by the architect Carlos Méndez Mosquera, who founded the journal *ciclo* in 1948 and in 1963 would still create the leading design and architecture magazine *summa*.

Cultural magazines in Buenos Aires: the Maldonado's trajectory and *nueva visión*

In the Argentine context, studies indicate visual arts and architecture as essential providers of publications that best translated the ideals of the modernist era. *Arturo: abstract arts* magazine is one such example. Launched in Buenos Aires in 1944, housed in an avant-garde desire to total transformation, focusing on overcoming the bourgeois structures and the consequent union between art and life. Its first and only issue was a development of young artists and poets Carmelo Arden Quin, Rhod Rothfuss, Gyula Kosice and Edgar Bayley. With woodcut on the cover designed by Tomás Maldonado, *Arturo* rejected figurative art and reformulated international artistic debates through regional Latin American connections (García 2011).

It was, however, the group Asociación Arte Concreto-Inventiva that more strongly established links with design, and specifi-

cally with its graphical aspect. And it was from that experience that Tomás Maldonado began the journey that would make him one of the main organizers of modern design in Latin America and Europe from the following decade.

After dropping out of Fine Arts, Maldonado was soon interested in Cubism, Constructivism and Neoplasticism. In 1945, he founded the Asociación Arte Concreto-Inventiva with the accession of artists like Alfredo Hlito and Lidy Prati. Besides promoting exhibitions, they released two issues of a journal, in 1946, under the title *Boletín de la Asociación Arte Concreto-Inventiva*. Amongst the fundamental ideas of the *Manifiesto inventivista*, published in the second issue of the journal, the breaking with figuration and the affirmation of the values of the concrete art were defended [Perazzo 1997]. For Maldonado, the desire to merge the arts to a greater whole meant to keep in touch with the architecture, urbanism, industrial design and typography. And given its Marxist orientation, it is understood that the urgency in the extinction of the figurative and mimesis complemented the need for revolution, as pointed Devalle:

Founding a new kind of art that rejected the artistic conventions resulted comparable to the creation of an otherwise productive form, which would not repeat the industrial model of organization or the productive relations of capitalism and that would see the world from another consciousness. [Devalle 2006]

In this sense, it is not surprising that, in 1951, Maldonado would rescue the bauhausian expression coined by Lazlo Moholy-Nagy to baptize his new magazine: *nueva visión* (new vision). Before this project, however, he would still collaborate with magazines like *ciclo* e *Boletín del Centro de Estudiantes de Arquitectura* [cea].

According to Perazzo [1997], the year 1948 was decisive for the activities of the Asociación Arte Concreto-Inventiva, mainly due to the exhibition *Nuevas Realidades*, based in Buenos Aires, which brought together artists from all directions within the non-figurative art. Amongst this group was Ernesto Rogers, editor of *Domus* magazine, and it was through him that Maldonado made contact with Max Bill, culminating in his first trip to Europe later that same year. There, Maldonado personally meets Henry Van de Velde, Bruno Munari, Gillo Dorfles, Max Huber, Georges Vantongerloo and Max Bill, leading architects, designers and concretist artists that will, in all this experience, cause a break in his vision of the artistic act, leading to a growing interest to other creative territories as design and typography.

On his return, Tomás Maldonado takes the art direction of *ciclo* magazine, dedicated to art, literature and modern thought. Its editions were published in 1948 and 1949 and marked the transition from Maldonado to the field of architecture and graphic design. The second issue of the magazine is the one that actually presents major graphic innovations, including the use of modern typefaces, brought from Europe by Maldonado, in rigorous and controlled composition, incorporating principles of universality, synthesis and readability. Also appears in that issue the first Spanish translation of a Moholy-Nagy's essay and an article by

Max Bill. That period of Maldonado's production concludes with his participation in the second edition of *Boletín del Centro de Estudiantes de Arquitectura* [cea 2], in October 1949. That issue featured a text of his own, *Diseño Industrial y Sociedad* [Industrial design and society], considered the first published article on design in Argentina.

The ideas that were incorporated from these publications were critical to the design: culture was defined as communication, paths have been flagged for projectual teaching with the dissemination of Max Bill texts on HfG Ulm, a look at the Chicago School was provided, the page was designed with excellence of whites and typographical uses. [De Ponti & Gaudio 2008: 29]

The 1950s, in turn, will bring to Maldonado, apart from an invitation by Max Bill to join the faculty of the Ulm School, the creation of *nueva visión*, in result of his partnership with artist Alfredo Hlito and old friend Carlos Méndez Mosquera. It's understood that the concept of 'good design' developed in Ulm became a paradigm for innovation, quality and the synthesis between aesthetics and function, and *nueva visión* spread these new ideas to a more public realm beyond the university and artistic fields.

Published at irregular intervals between 1951 and 1957, *nueva visión* had nine editions and its editorial staff included artists, critics and architects such as Aldo Pellegrini, Jorge Romero Brest, Jorge Grisetti, amongst others. The first edition's cover was "slightly expressionist" and stamped a photo of pioneers of the visual arts synthesis: Alvar Aalto, Henri Van de Velde and Max Bill. It also presented the article *Actualidad y porvenir del arte concreto* [The present and future of concrete art], in which Maldonado addresses the perspective of the modern artist's work that links aesthetics with society [Mosquera 1997].

In January 1953, the second and third issues appeared in a double volume. Under the new subtitle: "arts/architecture/industrial design/typography", the magazine's avant-garde approach was emphasized and other major graphic alterations occurred as well.

Certain "deficiencias" in the design of the first issue of *nueva visión* were immediately remedied by Maldonado in the subsequent issues. The cover photograph was eliminated, design was minimized, and only one flat color was used on the cover, which changed with each issue. [Suárez 2011: 21]

Suárez still [2011] draws attention to the fact that apart from architecture in Argentina, *nueva visión* hardly considered the significant changes that were taking place in Latin America, with exceptions such as the article on the construction of the Museu de Arte Moderna in Rio de Janeiro. In a profound investigation on the maturing of graphic design as a discipline in Argentina, Devalle concludes on *nueva visión* after analyzing its most emblematic articles:

In it we find a new conception of space, a problematic of what we would consider today visual language (there intended as visual culture) and the disturbing question about *forma hecha sentido* [form made sense]. For these reasons, in our work, it is considered the first enabling discourse on design in Argentina. [Devalle 2009: 252]

3. Design magazines in Brazil and the appearance of *Habitat*

Modern design was introduced in Brazil under similar circumstances to Argentina's. With the backdrop of a strong effort of industrialization and economic development plan captained by President Juscelino Kubitschek, the alignment of culture to the international arena has become a government priority (Melo & Ramos, 2011). In turn, concrete art not only introduced Brazil to modernity but also had a strong influence on the institutionalization of design teaching (Leite 2008).

The foundation of the Institute of Contemporary Art (IAC) at MASP, led by Pietro and Lina Bo Bardi, was also a vital initiative on the process of arts and industrial production modernization in the country, especially in Sao Paulo. There, between 1951 and 1953, European teachers and lecturers as Max Bill collaborated in the training of professionals capable of "designing objects compatible with the industrial culture" (MELO & RAMOS 2011: 244). In consequence, IAC trained the first generation of modernist Brazilian designers, including Alexandre Wollner, Emilie Chamie and Antonio Maluf. In addition, following the disclosure of the course, many articles on industrial design were published in *Habitat*, perhaps the first ones in Brazil to speak of the discipline as heir to the modernist traditions (Leon 2006). Subtitled "the magazine of the arts in Brazil", *Habitat* apparatus consisted of an education that envisioned the refinement of the "artistic taste of the local elite" (Leon 2006: 31). Education in a modern perspective, that presupposed not only the fine arts but also the industrial design combined with household objects, the furniture and visual communication.

Habitat was published from 1950 to 1965 and its first 15 issues had Pietro and Lina Bardi's editorial signature. The couple came to Brazil in the 1940s after working extensively for editorial projects dedicated to the arts and architecture in Italy. P. M. Bardi had already edited *Belvedere* and *Quadrante* magazines and was a correspondent of famous French journal *L'architecture d'Aujourd'hui*. Lina collaborated for *Stile* magazine, founded *A* magazine and edited *Domus*. Bardi met South America for the first time in the 1930s when he came to Buenos Aires to produce an exhibition on Italian rationalist architecture. But only in 1946 he was invited by Assis Chateaubriand to organize and direct the MASP.

Habitat's editorial project privileged different areas of the cultural field. The magazine tried to bring closer the arts to the ordinary life, proposing a new role to modern society. At that time, it was important to understand the new Brazilian industrial scenario and its possibilities and in face of that *Habitat* presented and believed the arts, architecture and industrial design from a rationalistic perspective (Stuchi 2007). Therefore, the magazine showed off the IAC courses on graphic and industrial design, fashion, cinema and textiles, emphasizing the need to incorporate professionals with that kind of expertise to local industries.

Exchanges: *nueva visión* and *Habitat*

It should be noted that interrelations between Brazil and Argentina

within the framework of modern design also took place amongst journals and periodicals, following a series of interactions unfolded around abstract art since the 1940s involving the Institute of Modern Art in Buenos Aires (IAM), MASP and the Museum of Modern Art (MAM-SP).

By drawing the interest of the magazine's agenda, Brazil was periodically featured in *nueva visión* (García 2008). In its first issue, for example, Pietro M. Bardi signs an optimistic article, *Diseño Industrial en Sao Paulo* (Industrial design in Sao Paulo), where he introduces to the Argentine readers the new IAC design course:

Public reaction will certainly be good and cancel forever the old story of the unpopularity of the new. The experiment takes place in a city that - as distinct from the European ones - does not have specific traditions of taste and is ready to accept with enthusiasm the daring news. (Bardi 1951)

This same edition of *nueva visión* featured as well a brief note on the exhibition of Max Bill's work at MASP and an advertising of *Habitat*. The Brazilian magazine, on the other hand, publishes in its Chronicles section, in issue #6, the following:

Buenos Aires has gained a new journal of visual culture directed by Tomás Maldonado. It will be published every three months and by our side we wish to find large numbers of readers in Brazil. The summary of the first issue is testimony of the interest to the problems of visual arts today, includes several essays, [...] and in addition an unpublished article of P. M. Bardi on industrial design in Sao Paulo and how much is being done in order to gain a taste of the masses. (Habitat 1951)

Aside covering developments on concrete art and modern architectural projects in the region, Europe and North America, both magazines seemed to recognize each other as part of a significant broader modern project that was taking place in their countries.

4. Conclusion

This panorama provided a reference point to better understand the broad context that preceded the emergence of magazines such as *nueva visión* and *Habitat* in the early 1950s in Argentina and Brazil. It took into account brief commentaries on the social, economical, cultural aspects of those countries at that time, setting the architecture and the arts as important fields for propagation of modernists ideas; the role of the architect Tomás Maldonado in publications associated with the avant-garde movements, both in the position of art director, author and editor of emblematic writings of that period; the creation of *Habitat* magazine by Pietro and Lina Bo Bardi and its role in educate on and reflect about modern design in Brazil; and some interactions established between *nueva visión* and *Habitat* magazines. Featuring as literature review, the ideas presented here will be further deepened to point out new and more precise statements on those design publications, authors and its broader implications.

Habitat and *nueva visión* are the most noticeable sources of design criticism in Argentina and Brazil as modern design was introduced in those developing countries. It is possible as well

that other editorial projects, still little recognized, integrated that network dedicated to the dissemination of the assumptions and achievements of industrial design at the time. Resuming those writings and getting immersed in the circumstances in which they were produced and assimilated could contribute to the systematization of a domestically elaborated modern thinking about design and give visibility to a facet of this somewhat forgotten history.

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Lina Bo Bardi and Aloisio Magalhães: other strands of Design in Brazil

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Lina Bo Bardi / Aloisio Magalhães / Brazilian Design / Culture / Modernity

The paper analyzes, from an anthropological perspective, the proposals and trajectories of Lina Bo Bardi and Aloisio Magalhães, observing how their perspectives are related to the construction and consolidation of the Brazilian field of design, and trying to understand how they take on main roles in the field's institution, at the same time they point to 'signs of divergence' related to the ideas that majorly guide that process.

1. Discussing the Brazilian Design building matrixes

This paper introduces part of the discoveries of the doctorate research, concluded in the Graduate Program in Social Anthropology at the National Museum (UFRJ). The resulting thesis (Anastassakis 2011) makes an analytical comparison between the propositions and the professional trajectories of Lina Bo Bardi (1914-1992), Italian Architect that lived in Brazil since the late 1940's, and Aloisio Magalhães, designer from Pernambuco (1927-1982), looking at how their perspectives relate to the field of design developing in Brazil in the half of the 20th century, and trying to see, in the relationships established between those two agents and the professional field where they act, how they take on leading roles in the process of institution of the field, at the same time they point to 'signs of divergence' (Nobre 2008) concerning the main ideas behind that process.

This way, this paper intends to show how Lina and Aloisio accommodate 'other approaches' (Souza Leite 2006) from the field of Design in Brazil, in face of what could be considered a so called hegemonic approach, which, according to some authors, supposed crystallized from ESDI (Escola Superior de Desenho Industrial). From this movement, it is proposed that the discourse and the practices that formed the first moments of the discipline, or at least what could be called a critical awareness of the discipline, are much more polyphonic than (even if pretentiously) univocal.

Seeing as Lina and Aloisio are key agents for the foundation of the two of the first design schools in Brazil – her, at the MASP's Contemporary Art Institute (IAC), in the early 1950's, and him, at ESDI, at the beginning of the following decade -, and since the two of them soon manifested their critical thinking about what was proposed as a teaching model in those schools, Lina and Aloisio tell us of many views for what could be Design in Brazil – already adopted by them and so many others, in their sociogenetic moment.

Hence, the acquisition process of a critical awareness about a possible autonomy of design in face of the other material culture planning and creation domains (to which they associated, at first), although, in the Brazilian case, grew closer to a German conceptual matrix (via Bauhaus and Ulm), demonstrates, by means of Lina and Aloisio's activities, to be much broader and more diversified.

If some agents who were more directly linked to the German matrix had any intention of depositing a hegemonic perspective for the design practiced in Brazil, from Lina and Aloisio we can see that this alleged hegemonic proposition is fairly ambiguous. And that the criticism to what was attempted to adapt, from Europe, came not only from external agents to the professional networks and institutions responsible for bringing it closer to the German perspective, but, simultaneously, from central characters to those networks, such as the one from Italy and the other from Pernambuco.

2. Analyzing Lina's and Aloisio's professional trajectories

By observing their trajectories and production, we can see that both invested, each on his/her own way, in discussion of the relationships between the economical, technological and cultural development processes, always pulling away from strict projective practices to articulate broader cultural actions. In this sense, both question the development models adopted in the country, both in relation to industrialization or the institution of a professional disciplinary field guided towards industrial creation (industrial design or design), when it comes to the consideration of the cultural issues.

Those discussions, which they fond of since the late 1950s, gain new outlines throughout the second half of the 70s, when it is noticed that, in spite of the growing interest by the government on design – or, maybe, for that very reason -, the productive processes in the country can't be transformed through design. With the indication of a political opening in 1974, the discussion expands, becoming more evident.

At this moment, it is possible to identify some common aspects in their propositions, and it is even possible, when first reading them, to mix up parts of one's proposition with the other. However, one must highlight that, in face of the political context that was being outlined at the time, and even though sharing a universe of very common interests, they chose to take different paths when it came to spheres of activity and accomplishment of their projects.

He chooses to act in conjunction with the federal government, in an already established sphere (Elias 2000). Although involved in projects sponsored by city governments, she only works with the government after the democratic regimen is reinstalled, in the 1980's. Even so, more often than not, Lina ends up breaking free from the contractors, adopting an *outsider* position (ditto).

Starting in 1975, they both go through transitions in their trajectories: she goes from retreat by the development of the military regimen after 1968, towards large-scale projects that involve restoring historical heritage property, cultural program and social action; he gradually pulls away from design, moving towards heritage and cultural public policies.

From this point on, they adopt very different positions as to the possibility of acting together with official bodies during the military regimen. If both are interested in public projects that involve consideration of sociocultural issues and ambition to change the country, Lina hollers, while Aloisio negotiates. Therefore the greatest difference between them seems to lie in the different ways they find to position themselves politically, in face of the political picture that starts to creep up 1974. However, it is possible to state that, in spite of the different positions they adopted in face of the political regimen in force, they shared the "same structure of feeling a revolutionary Brazilian identity" (Ridenti 2005: 97) a feature of the transition from the 1960's into the next decade.

Since their movements in the second half of the 1970's were guided towards a more substantive involvement with cultural contextualization issues – that unfold, in both trajectories, closer projects to preservation and promotion of the historic-cultural heritage and planning of cultural actions, than to design and architecture in themselves, it seems that they went that way as design and architecture *per se* were not enough places from where it was possible to handle national socio-cultural issues, which did interested them both.

In this sense, it is possible to state that they were deeply modern. That is, what may seem as a critical separation from the strict design and architecture practice does not represent a rupture with the issues that guided their previous professional actions. On the other hand, it seems that the involvement with issues of another nature, in an extended sphere of activity, is, precisely, a declaration of commitment with something that was the very thing that had lured them to design and architecture, in the first place.

Therefore, could we identify the common denominator between them as a cultural perspective of the modern project? If we followed this hypothesis, we could say that they both adopted 'another approach' (Souza Leite 2006), more committed with the idea of a 'design with a national identity' (Souza 1996), and, for this very reason, represented some of the 'signs of divergence' (Nobre 2008), that, guided by a 'broader cultural view' (Cara 2010), tried to 'assimilate the popular culture' (Borges 2010) in

projects of participative nature that intended, through a 'cultural contextualization' (Lessa 1994) of design practiced over here, to help the autonomous development of the country.

3. Comparing Lina's and Aloisio's trajectories to the Brazilian Design field ones

Before discussing the modernity regimens outlined by them, however, one needs to look at their trajectories, either with each other, or compare them both with the constitution of the disciplinary field of Brazilian design. This way, it is interesting to see how the different offsets were processed (Faria 2002: 123) in their trajectories (Bourdieu 1996), which is attempted here, through a comparative analysis between Lina, Aloisio and the disciplinary field in which they were inserted.

The analysis is guided around important moments of certain inflections experienced by both throughout their life stories (Faria 2002: 137). The intention with this is to create subsidies for the deposit of other views about these two agents trajectories, as well as the trajectory of the field. That way, there is an attempt to reclassify certain discussions, harming the balance of a series of units and arrangements already natural to the field of design in Brazil.

If, between 1975 and 1977, Lina is dedicated to a process of critical review that encompasses since her stay in Bahia in the previous decade to the questioning of the very concept of design, one must bear in mind that this happens at the same time the Italian architect spends four years without a single job offer. Aloisio, involved since 1975 with the creation of the CNRC (National Center of Cultural Reference) (Anastassakis 2007), goes through a gradual separation from his professional field of activity, which ends up pulling him away from design for good, towards the broader field of the cultural policies, process made official in 1979, with his appointment for IPHAN.

Between 1962 and 1963, with ESDI and FAU-USP, design teaching in Brazil is instituted at the higher education level. However, we must remember that, at FUMA, in Belo Horizonte, an industrial design course in the technical level has been in operation since 1957. Besides these initiatives, which continued (FUMA originated the UEMG design course), it is important to have in mind that Lina was elaborating, in Bahia, the creation of a School of Industrial Design and Crafts which never was implemented. However, if the institution of the field of design in Brazil has, as a landmark, the first years of the 1960's, when, besides the courses, comes the first professional association, ABDI (1963), we must emphasize that it rehearses, from the first years of the previous decade, with countless initiatives, in the market and teaching level.

If the time between the fifties and the sixties in the twentieth century defines the first moment of the constitution of Brazilian Design, we can also think of a second moment, that started at the second half of the 1960's, when we come to a crisis which

comes from a series of scattered movements that try to insert industrial design practice and teaching in the Brazilian cultural context.

In 1963, Lina lives the climax of a stage that begins in 1958, with her move to Bahia. Lina, who had arrived in Brazil in 1947, settling down in São Paulo, starts, in 1958, a season in Bahia, that lasts until 1964, when, due to the military coup d'état, she is forced to leave her position at MAMB. Until 1977, Lina experiences moments of isolation, which even include jail time and some time spent in exile. Her definitive return, which happens in 1977 with the beginning of the work at SESC Pompéia, had been rehearsed since 1975, when she sets up the exhibit "Repastos" at MASP. Therefore, while, in 1963, Lina experiences a moment of professional accomplishment, where, in a new context, she is successful in a series of actions that are different from the ones she took part in, throughout the 1950's, in São Paulo; between 1975 and 1977, she tries to get back in the scene, after a period that she was forced to stay away from it.

Aloisio, on the other hand, also experiences, in 1963 and 1976/77, two very distinct moments. In 1963, he was in Rio, where he had opened, three years before, a design studio, and joins the group of professionals that first create ESDI. In 1975, he starts moving closer to issues related to cultural policies, which would lead, in 1979, to his appointment to be the president of IPHAN. Therefore, if at first he starts of as a designer, later on, an acknowledged professional, he starts alternating his time in the studio and the development of projects that end up bringing him gradually closer to management of public cultural policies.

In the 1950's, Lina is involved, as a lead character in the attempt to implement design in Brazil, attempts made amidst the universe of modern art and culture, still considerably interwoven. Aloisio, in turn, hovers over the modern art universe, but in universes unattached from the centers from which Concretism slowly enters, movement which Lina joins, at first. If then, Aloisio is a little out of place in face of the main axis of universalist modernism insinuated here, it does not keep him from joining, still as a plastic artist, from the modern arts circuit, in which Lina is inserted, so much so that, according to what was discovered, they possibly met in the 50's, in art events, probably in São Paulo.

In 1957, however, Aloisio is in touch with the North-American Design, which leads him to a rupture with his artistic identity, something that becomes stronger after he visits the construction of Brasília, in 1959, and with his resulting move to Rio, where he opens up a design studio. Simultaneously, after failing to conquer a position at the FAU-USP, and witnessing as her project for MASP is interrupted due to a political disagreement between Chateaubriand and the São Paulo government, Lina leaves São Paulo, seeking to develop, in Bahia, another proposal of cultural action that, while still organized around a modern museum, tries to create new acting parameters, thus rehearsing for the development of a modernity project, which some critics named hybrid.

Between 1957 and 1960, however, it is possible to identify a movement in their trajectories that is caused by frustration with a context in which they were inserted towards a new configuration, in new contexts, of ideas that, up until that point, that been dispersed. This way, at that time, both of them formulated ideas that would be milestones in their trajectories in the course of their next years.

The military coup d'état, which transforms the socio-political structure in Brazil, affects Lina and Aloisio in very different ways. While she is forced to retreat, rebuilding her field of action, now limited to cooperation with theater and films, and, thus, far away from bolder attempts; he starts a series of works in a joint effort with government bodies. Therefore, while, to Aloisio those years meant professional growth, to Lina the years following the military coup would be years of survival.

Between the years of 1975 and 1979, which by no coincidence was also the time of a gradual political opening, Lina and Aloisio start towards new professional stages. He, who has just left a successful career in the field of graphic design to the public management of cultural policies, which leads to his appointment to the Department of Education Culture Secretariat, in 1980; she comes from a long period of forced retreat to return to action, now leaning towards programs such as the project of SESC Pompéia and, later, in the 1980's, in conjunction with the government of Sao Paulo and Salvador.

The 1980's are marked by Aloisio's death, and by Lina's cooperation with cities managed by politicians associated to left-wing parties, such as Mário Kertész, in Salvador, and Luiza Erundina, in São Paulo. In 1992, ten years after the former dies, the Italian passes away too. However, the issues raised by them are still open, and their propositions still inspire discussions about other possibilities for Design and for the country.

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The graphic translation by the designer's sensitive rationality

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This article aims to analyze how was the sensitive rationality of a designer in creating a brand that translates into an imagery way the knowledge internalized. Your thought process is related to the Design Thinking, of which the knowledge organized by Demarchi (2011), will be presented here. The translation of this knowledge helps in integration of external and internal public to the organization that has the same understanding about it.

1. Introduction

The aim of this paper is to analyze how was the sensitive rationality of a designer in a brand creation that translates into an imagery way the internalized knowledge. The translation of this knowledge helps in the integration of the external and internal public to the organization, that have the same understanding about it.

The article is based on the theoretical proposal of sensitive rationality, from Maffesoli (2008), which provides a tool capable of translating the current reality of cultural movements and the transformation of society's mores. The author praises the sensitive rationality over the rationalism and gives a new perspective on a wisdom ever known, post modernity, looking back with a new look, more sensitive, in applying this. This new knowledge is sensible, uses a sensitive rationalism and checks the creator emotions reflected in the form created.

Modern society, rationalist, made scientific methods were more important than the thing itself investigated. Thus, the rationalism standardizes the scientific process. In contrast to this, the Maffesoli theory relies on sensible reason, intuition, metaphor, common sense and experience. The Post-modernism is a complex age, mutant, which changes every relationship, fluid. The use of standards is an indication that society is living, not stagnant, it is not within or against or in favor of power.

The technology provides knowledge that creates power. This power creates technology, and thus create a cycle. Modernity emphasized the power, enhancing the conceptual expression (theory). Postmodernity favors the imagery expression and the set of forms, rather than theory, therefore, the power. This is the ideal community, ie the reflection of the collective thought, which brings people such as social networks. The postmodern is impregnated by passion, by emotion, the affection, the human phenomenal, spirit of respect for the human soul understands morality and vitality proper to each thing, because everything has life. Do not rationalize why most things happen, but how they happen. Do not theorize, but it is under-

stood in a more human, more accessible. There is a chaos, but we must not question. It remains for us to order it, decorate it, adorn it; shape it. It is equally natural that we report to the concept and reducing it requires. The concept is formed by the knowledge that is produced, integrated, which is then reduced, so it is the tenth part of the generated knowledge.

To illustrate this approach will be analyzed how was developed a project of a visual identity system for an elementary and middle school of the city of Londrina, Paraná, through observation and analysis of reports of the involved designer. It is intended, therefore, to understand how was the graphic translation of his choice, because the graphical form becomes the translation of the organization through the eyes of the designer and, therefore, it is necessary to understand how he does it. Thus, this paper explores new territory as it examines the creative process and design thinking of a designer, intending thereby expand the limits of knowledge of Design. The designer's thought process related to the Design Thinking, of which the knowledge, organized by Demarchi (2011), will be presented.

2. Sensitive rationality

The cultural, religious, social, technological, economic and power relations, not meanings modulate the matching prior, evident today, become indicative of the emergence of a new society. This reality requires a confrontation of the truth of what you do not want to see, this is needed to instigate change in establishments rooted. Even if it bothers, Maffesoli (2008, p.14) suggests that to overcome the modern thought, must be prepared "to answer a thought, the best way, the audacious contradictions of a world in pregnancy," when "the appearance, common sense or experience "resume their importance.

The author suggests that "the sensitive issue" may be the hallmark of post-modernity, leaving the knowledge aware of the power of social phenomena, its growth and its posture, denying reducing concepts already established in other times, but looking at the energy used and presents the new social phenomena, by means of a new scientific method that balize the best social energy.

Studies in emotional design and affective design show how design has been used as organizations' competitive strategies tools, making it possible to succeed in evoking emotions, making the purchase of the product and its use in situations of a pleasant experience (Zerbeto: 2011), capable of evoking positive feelings and explain the value of products contributing to an

emotional attachment with the consumer. The pleasure afforded by the forms allows it to be operated so as to generate aesthetic experiences that improve their quality of life, leaving the desire to be repeated.

The aesthetic pleasure it provides a sensitive rationality reason is subject to the perception that people interpret messages. For Damasio (2000) people conduct their lives in search of pleasant emotions and ways lead to any reaction. If this reaction is positive aids learning and curiosity, extending the reasoning and creative thinking (Norman 2004). In postmodernity, only the functional and usability do not meet the current demands of most consumers (JORDAN, 2000), who left to purchase only products and services, but products that can add an emotional experience (Crossley, 2003), taking to prefer one brand to another, even if the product is the same, since "the emotion aroused is not only the product itself, but by the meaning that this product gets in line with our expectations" (DESMET, p.124, 2002). According Damasio (2000), emotion, even if under the influence of reason, is present in the process of decision making.

A challenge of postmodernism: as it gets more access to information, has, paradoxically, less able to generate knowledge from them.

3. Innovation

Innovation, according Chesbrough (2012), is the implemented invention and brought to market. Therefore, innovation is not invention. Besides the innovation is disruptive innovation, which modifies the social practices (how to live, learn and work), and that presents great challenges. For the author, there are ways to take customers and users ideas (Internet allows the laboratory to attract customers as co-producers, joining their practices and their voices to guide a prototype modeling), which takes advantage of both the explicit knowledge as tacit knowledge, which manifests itself when they start to use the prototype. Creativity is a practice to stimulate innovation, and therefore is not innovation (OECD, 2007).

According OECD (2007), innovation is a new product implementation (or service), or significantly improved, or a process or a new marketing method (which includes iconography and design in general), or a new organizational method business practices in the workplace organization or external relations. For Christensen and Anthony (2005), technological solutions for simple and straightforward can be more efficient than sophisticated solutions offered by market leaders: "The important thing is to separate jewelry conceptual ideas merely different." (Christensen and Anthony: 2005, p.68).

The innovation is a propose that an improvement product, process or service. Assumes the new, provided it is implemented. This includes creating demands. In an era of sensible rationality, we must beware of creating demands, since it was conceived more consumption for consumption at a time when people were

still hungry and concerns about the planet sustainability. Design is there to improve the life quality and at post-modernity that can mean communication with emotional value. Whereas innovation is to propose an improvement in a product, process or service, a proposal for a visual identity implemented, is an innovation that brings noticeable gains.

4. Design thinking

Design thinking means to do like a designer, and is considered the key factor for organizations to innovation by being a source of competitive advantage. For Ilipinar et al. (2008), is a creative process based on the construction of ideas. If there is no judgment, it eliminates the fear of failure and encourages maximum absorption and participation of people at the problem solving process.

Brown (2009) states that design thinking starts with skills that designers have learned over time, such as to align the human needs beings with the technological resources available at organization, intuition, the ability to recognize patterns, ideas construction that are meaningful both emotional and functional, and the ability to express otherwise than in words or symbols. Among their skills is to work in an interdisciplinary way, in which the ownership of ideas is collective. It is common, nowadays, designers work with psychologists, ethnographers, engineers, among others.

The below table lists the steps of divergence and divergence transformation from the design process, which occurs the knowledge production with the of knowledge management tools, strategic design management and design thinking done by Demarchi (2011), to facilitate the objective knowledge creation that demonstrate the organizations cultural nature.

5. The sensitive rationality in creating a visual thinker

Design was applied as differentiation tool for through corporate identity created for a private elementary and secondary education in the city of Londrina, PR. A professional building designer who has the skills of visual thinker, developed the brand and mascot redesign (Fig. 1 and 2) a private university and corporate visual identity building, including signage and some promotional pieces. The redesign was needed from the problems detected in the sense of reading and most importantly, the image that the institution wanted to transmit. For this, there were changes in the informational hierarchy and symbol, and further studies of color and typography. The work of the designer was based on methods that define values for the brand, seeking be impregnated, humanization to the public by inserting the character and value-added corporate by the new image conveyed.

The interview Results

The blue jay, a typical Parana bird, is the main disseminator of Araucaria, also typical vegetation and an important icon of the

Etapas do pensamento do designer de Jones (1978)	Modelo de criação do conhecimento Nonaka e Takeuchi	Gestão Estratégica do Design	Habilidades do design thinker	Métodos de gestão do conhecimento	Ferramentas do designer Baseado em Martin,
DIVERGÊNCIA	Compartilhar o conhecimento tácito	<ul style="list-style-type: none"> Auditoria de design ou diagnóstico inicial Diagnosticar a situação da empresa, seus produtos e tecnologia em relação aos concorrentes: <ul style="list-style-type: none"> Definição dos eixos de atuação em termos de tecnologia, produtos e mercado. Definição dos pontos fracos, forte, oportunidades e ameaças. Buscar de oportunidades para inovações de design. Definir a imagem requerida. Identificação das necessidades dos consumidores Briefing 	<ul style="list-style-type: none"> Interage com grupos sociais para sistematizar vivências sem julgamento Focado no futuro É empático Integrador (interdisciplinar) 	<ul style="list-style-type: none"> Brainstorm Braiswriting 635 Observação direta Narrativa Imitação Experimentação Vídeo etnografia 	<ul style="list-style-type: none"> Observação empática
TRANSFORMAÇÃO DIVERGENTE	<ul style="list-style-type: none"> Criar conceitos Justificação dos conceitos 	<ul style="list-style-type: none"> Definir estratégia de design. Geração de conceitos Definir responsabilidades e liderança atribuída ao design e sua contribuição para a cultura organizacional. Identificação de representações construídas pela organização. Gestão de recursos (criação de conhecimento e a formação de designers 	<ul style="list-style-type: none"> Criatividade Colaborador Assumi risco Experimental (trabalha com 	<ul style="list-style-type: none"> Sinética clichês e os provérbios Metáfora Storytelling (narrativa) Visual thinking protótipo 	<ul style="list-style-type: none"> imaginação
TRANSFORMAÇÃO	<ul style="list-style-type: none"> Construção de protótipos 	<ul style="list-style-type: none"> Definição de elementos visuais. Desenvolvimento de identidade Definição de estratégias para a construção da imagem 	<ul style="list-style-type: none"> Visual thinking (se expressa de outra maneira que só com palavras) 	<ul style="list-style-type: none"> Protótipos Cenários Butterfly test 	<ul style="list-style-type: none"> configuração
CONVERGÊNCIA	<ul style="list-style-type: none"> Nivelamento do conhecimento 	<ul style="list-style-type: none"> Avaliação Transformação em procedimentos Aprendizagem e re-inovação 	<ul style="list-style-type: none"> Constroem colaborativamente Experimental Criatividade 	<ul style="list-style-type: none"> Cenários Storytelling (narrativa) Visual thinking 	

Table 1. Relationship of the strategic management design, knowledge management and design thinking, in Demarchi (2011).



Figure 1. Character stylized blue Jay for application in several visual manifestations of the organization, in Londrina (illustration by Camila Carmona).

state. In the fall, when it bears fruit, the crows stocked pine nuts to eat later, forming thus a new tree. They are the true Brazilian pine plantation. Linking this concept to a rich elementary school student seemed quite appropriate for the emotional association and future seed tree, and bringing the concepts of the tree itself (which it is useful: shade, fruit, leaf, root, and others things).

Identify the problem and helps to increase the chances of improving the alternatives and reach a better result. Characters



Figure 2. Blue jay with concepts for application in wall, in Londrina (illustration by Camila Carmona).

enchant children and establish emotional bonds. Use it in an educational institution was needed. The image acts as a reflective and creative language. Besides the very image that allows the association of children with the dissemination of knowledge, as with the blue jay with the araucaria, there is the issue of territoriality. A local institution using and appreciating the local culture. This fact causes an emotional experience in both parents and children, who want to be like the blue jay. They also link to the bird, free, flying high.

6. Conclusion

The needed for a strong brand is a fact, because the branding becomes one of the most valuable asset of a company. In a competitive market with several corporations offering similar services, differentiation is critical for the choices of users who fall into that provide them with greater emotional value. The design contributes to this differentiation, adding intangibles aspects to the visual identity. Currently, the business world considers the focus on a brand as a condition, a relationship of co-authoring user-sender of the message, a partnership in which the user participates in the production of value creation, or what is interesting to him, ie, the designer must interpret what is the vision of user value, making it a partner and co-producer of creation that results in innovation.

Global trends in consumer behavior highlights the postmodern consumer, based on mindtypes, returned to the aesthetic sense, the sensory, and pleasure in everyday experiences. In an age of sensitive rationality and knowledge-based economy, the design makes the difference. In the case of communication directed to educational institution costumers, the character creation is effective, because they attract the attention and populate a child's imagination, providing an emotional experience, which can be permanently related to the company's brand.

A sensitive rationality and the skills used by the designer (observation, empathy, imagination, and finally the configuration), as well as their specific competence, knowledge and attitudes in this case were crucial to this innovation. It possible to translate the character and graphic elements the value expected by customers, who associate this value to the organization, which turns into a positive emotional experience.

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The design of Manoel Bandeira: a historical view of periodicals in the the 1930's in Pernambuco

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Graphic Memory / Design History / Periodical Press / Manoel Bandeira

This paper aims at to approach an unexplored face of the graphic artist Manoel Bandeira, which has emerged as one of the most prolific and versatile professionals in the Graphic Editorial area of the first half of the 20th century in Pernambuco, Brazil. We are going to discuss aspects of design activity observing from his origins and education, his work and creations for the three editions of the *Anuario de Pernambuco* [for 1934, 1935, and 1936].

1. Introduction

Man, you are the bigshot!—Manuel Bandeira, from Santa Thereza, says to Manoel Bandeira from here, concerning the Pernambuco edition of *O Jornal* [A *Província* journal, 1928].

This article intends to carry out an overview of the career of Manoel Bandeira, the graphic artist, from the investigation of his origins and initial training in the *Liceu de Artes e Ofícios* [Lyceum of Arts and Crafts], and giving evidence to an important part of his work, the three volumes of *Anuario of Pernambuco for 1934, 1935 and 1936*. Although M. Bandeira has achieved national prominence between 1920 and 1950, there is often confusion with his namesake, the poet Manuel Bandeira. Therefore, it is first necessary to dispel the image that the two Bandeira would be the same person. Then propose a new perspective on the history of design in Pernambuco from his origins, training and legacy in his collaboration with the printing industry in the state.

Why investigate the history of the design of Pernambuco?

This research that unfolds in this article intends to work to remedy the current lack of information about the history of design in the state of Pernambuco, one of the first provinces to have printing activity in the country. Even though this activity goes back to the second decade of the 19th century, a considerable number of questions under the perspective of design are left without answers.

2. Methodology and process

In the exploratory stage, in the collections of the Joaquim Nabuco Foundation, State Public Library and State Public Archive Jordão Emerenciano, it was discovered a wealth of concentrated

journals from the 1930s. Manoel Bandeira collaborated in some of these, especially the *Anuários de Pernambuco for 1934, 1935 and 1936*. Beyond the research in the collections, we consulted the publication of Luiz do Nascimento, *História da Imprensa de Pernambuco (1821 / 1954)*. With 14 volumes, the book gives an overview of each newspaper or periodical of the State during the given period. Then, a bibliographical support was gathered from exhibit albums, newspaper articles, dissertations and theses, with emphasis on the work of Marcelo Mac Cord *Andaimes, Casacas, Tijolos e Livros: Uma Associação de Artífices no Recife, 1836 – 1880*. This work describes and analyzes the origins of the Lyceum of Arts and Crafts in Recife. We also had, in the end of this stage, access to the personal collection of the family of Manuel Bandeira. Next, we performed an observation and cataloging of his production in the pages of yearbooks. We produced a record with a list of criteria to be observed in the material collected, considering formal characteristics (size, shape of the printing area, compositional elements of form, color, lettering); functions of the elements (vignette, cover, illustration, infographic, advertising); and thematic of the compositions (landscapes, typical vegetation, industry). From these, we collected results on the graphic solutions found by the artist, his own patterns and graphic languages to highlight aspects of the design activity.

3. Manoel Bandeira, the Graphic Artist

Manoel Bandeira was born in May 2, 1900, in Engenho Limoeirinho, Escada - Pernambuco. His father was manager of the mill, which he left because of financial disagreements, going to work at Great Western, then in Pernambuco Tramways. His family had a modest life. His mother, Suzana Magalhães Bandeira, was a widow from the first marriage, having already two daughters. In the second marriage, she had three sons, the youngest being Manoel [Bandeira 2012]. Manoel Bandeira joined the *Liceu* at 11 years old without his father knowing. There he had ornament drawings and geometric design lessons, also sculpture course. M. Bandeira comments about the prestige that the *Liceu* had in his time, as opposed to the year 1937 in which he attributed its decline to the rise of the *Escola de Belas Artes* [School of Fine Arts] in the early 1930s, where he soon would become a teacher [Borba 1937].

The *Liceu* and the brotherhood of St. Joseph of Ribamar

Bandeira found in the *Liceu* a little more than basic training. According to Cord [2009], its origins begin in the brotherhood of St. Joseph of Ribamar, from the late eighteenth century, around

which a group of craftsmen, black freedmen, organized themselves to defend values like job well done, honor, training, skill, and intelligence.

These men had basic objectives as the professional development of the members with theoretical classes, and mutual aid. With a grant from the Government since 1844, in 1850 they were already entitled Society of Mechanical and Liberal Arts. And in 1870, the name changes to Imperial Society of Mechanical and Liberal Artists, culminating in the founding, in 1880, of the palace of the *Liceu de Artes e Ofícios*, which would be administered by the same staff. (Cord 2009)

It was in this environment, where the teaching of technical finesse of artistic crafts was privileged, combined with solid moral values as elements of social distinction, that Manoel Bandeira had his first training. Many craftsmen would have the ability to conduct works “under his own plan,” as says Cord (2009). The history of the Brotherhood, that throughout its trajectory sought to keep the practices of the so-called mechanical arts in consonance with the contemporary liberal ideals, proved to be a craft that demanded intelligence and artistic and projective skills, unlike the existing conventions.

Prelude and career

In 1915 Bandeira started as a designer in the company The Propagandist. Owned by Franklin Silva Jardim, the company, also an important lithographic industry (Agra Jr. 2011), would be a precursor of advertising agencies. In May 1917 Bandeira started as a designer in Pernambuco Tramways. He married in 1920 with Emma Michellot Bandeira, and from then on, divided himself between the job in Tramways and his studio set up in the living room, at Visconde de Suassuna Street, 894, Santo Amaro district. In 1924, Bandeira illustrates for the *Revista do Norte*, owned by José Maria Carneiro de Albuquerque Melo (Emerenciano 1967). In 1925 he illustrates, invited by Gilberto Freyre, the commemorative publication for 100 years of the *Diario de Pernambuco*, *O livro do Nordeste*. For Gilberto Freyre, he also illustrated *Sobrados e Mucambos*, *Nordeste*, *Assucar* and in 1939 the *Guia Prático e sentimental de Olinda*. Between the years 1928 and 1930, he contributed to the journal *A província*. Yet in 1928, he works for the special editions of *O Jornal*, owned by Assis Chateaubriand, dedicated to Pernambuco and Minas Gerais (Cavalcanti 1982). He collaborated also with the *Diario de Pernambuco*, and then for the group of the companies *Diario da Manhã* and *Diário da Tarde*.

Bandeira also participated collectively in some events of Arts like the *Grande Salão de Pintura da Exposição Geral de Pernambuco* (1924), the *1ª Exposição de Arte Moderna* (1927), among others. He also takes care of the decor and the booths of Pernambuco in large fairs and national exhibitions, including the artistic part of the *Feira de Amostras do Estado de Pernambuco* (1939), at the invitation of the governor Agamenon Magalhães (Cavalcanti 1982). Later, between 1940 and 1945, he illustrates

the maps of monuments and curiosities of Olinda, Goiana, *Curiosidades da Guerra Holandesa em Pernambuco*, and of Recife. In 1946, Bandeira wins the competition to redesign the coat of arms of the Pernambuco State Government, being of his authorship the lasted official adjustments made until this day. He also developed stamps, brands, other coat of arms, promotional materials, *ex-libris*, diplomas and certificates adorned with gold. He had, throughout his career, a group of regular clients: State Government, Lima Cavalcanti & Co. group, the *Diario de Pernambuco*, and the Sugar Museum.



Figure 1. Covers of *Anuários de Pernambuco para 1934, 1935 e 1936* (photo by Sebastião Cavalcante).

4. The yearbooks (Anuários)

In this gathering of his production, where Bandeira transits within the artistic environment, advertising, set design, and documental illustration, the part of his portfolio which is less commented about are his contributions to the periodical press. Besides the *Revista do Norte*, Bandeira illustrated for *Revista de Garanhuns* (1930), and collaborates with the periodical *Mauricéia* (1937). He also contributes to the magazine *Pra Você* from 1932, and also takes over the covers and other elements of the *Anuários de Pernambuco*, both part of the group Lima Cavalcanti & Co., owned by the Cavalcanti brothers. The group starts with the *Diario da Manhã* in 1927. In 1928, they launch the *Diario da Tarde*. In 1930 they started *Pra Você*. And in 1934 *Folha da Noite* begins. In the same year, they released their first annual supplement (Nascimento 2008). A descriptive and statistical summary of state activities throughout the year, the three editions of the *Anuários de Pernambuco* had the format of 21x30cm, with an average of 350 pages. The 1934 edition is properly paged, the 1935 edition is unnumbered and the 1936 edition used the sections paging feature. Varying a little bit, his summaries contained useful informations of official sectors, commercial, agricultural, liberal professionals, financial information, personalities photographs pages, buildings, and landscapes. The editorial propose has sections as: “Calendar and useful information”, “Literature” “Municipalities of Pernambuco,” “Finance”, “Industry and Trade”, “Agriculture and Livestock”, and “Arts and Sciences.” (Nascimento 2008)



Figure 2. Promotional materials in the *Anuario de Pernambuco para 1934* (photo by Sebastião Cavalcante).

5. From the results

Thirty-two graphics elements were produced by Bandeira for the yearbook of 1934. Of these, 11 vignettes, 14 illustrations, 5 advertisements, a comic strip and a cover (fig. 1). This cover, under the theme of the typical vegetation of the *Sertão* of Pernambuco, where Bandeira develops a stroke style that reminds us of typical xylography (wood cutting) of Cordel literature, features which seem like wood grooves, forming nuances of shadow and volume (fig. 1). He also focused the use of color filled areas and the absence of contours. The series of 11 vignettes (fig. 3) remains the subject of regional cover. His lettering is devoid of serifs and arranged in upper case.

Among the illustrations only one has the shape of the irregular printing area, which forces a different layout of the three columns of the page. The composition features resemble the characteristics of the vignettes, which denotes a characteristic gesture, amid the figurative need of personalities drawings and aspects of the colonial architecture. Advertisements developed by Bandeira (fig. 2) is used in three colors with full-color tones, having a synthetic style in which the forms do not touch themselves. Just as in the vignettes, there is predominance of Art Deco lettering. There was a concern in maintaining a graphical unity, in this case by the theme and colors chosen for the cover and vignette. The graphical style is maintained with small variations that harmonize themselves as a whole, as well as the lettering, of simple shapes, which make us remember, among others, the Bifur type, from A. M. Cassandre. The two ads for the *Lloyd Brasileiro* also make a clear statement to the poster *L'Atlantique* (1931). The effort to maintain a certain graphical unity makes clear the intention of Bandeira to produce a language that distinguished the sections covered in its entirety.



Figure 3. Vignettes from *Anuario de Pernambuco para 1934* (photo by Sebastião Cavalcante).

The cover of the *Anuario de Pernambuco para 1935* (fig. 1) has as its theme the urban landscape. The rectangular center of the cover is framed by a composition of geometric elements formed by thick contours in 3 colors. There are only five vignettes, with the repetition of the *cashews* theme, found three times in the yearbook of 1934. Bandeira interferes more in this edition by infographics (fig. 4) and pictures of tourist landscapes of Pernambuco (fig. 5). He develops 8. All have the same format. They were printed on coated paper always in pairs in front and back. Have the same stroke style, synthetic, with its forms in two full-colors. Only the cotton theme used pointillism to give an idea of volume. It has a style of composition close to the cover, although with different themes. The illustrations have the same themes and synthetic style of the cover in three colors. With a minor participation in this yearbook, the infographics and illustrations are the highlight of the cover, and the use of the color is the difference in the even more synthetic graphic style. The presence of M. Bandeira in the edition of 1936 is even less, having seven elements all together. The cover illustration (fig. 1) has a similar theme, with a different structure. While the two covers of the 1934 and 1935 edition had rectangular shapes, this edition proposes a structure in which a circle, flanked by two palm trees, focuses attention to the landscape that resembles the historic site of Olinda. Above and below, the lettering is maintained on the same line of the previous graphics.



Figure 4. Infographics of the *Anuario de Pernambuco para 1935* (photo by Sebastião Cavalcante).

There are almost no Bandeira elements in the body of the 1936 yearbook. With a highlight only on the back cover ad with *Peixe guava sweet* (fig. 6). In this image silver ink is used instead of what would be a shade of gray, not a feature yet used in the *Peixe* ads in the two earlier yearbooks.



Figure 5. Illustrations of the *Anuario de Pernambuco para 1935* (photo by Sebastião Cavalcante).

6. Final Considerations

In 1824 an echo of Eurocentric tendencies reflected in the new constitution, which transferred to the Brazilian Federal Government the responsibility of managing the teaching and regulate of mechanical arts. In Recife, a group of craftsmen adapt their speech, taking on the liberal ideals, and adding them to their own values, dedicated to position them socially, by the value of their work. They bothered to train their members to demonstrate that their practices held specific skills with the use of intelligence and design concepts, reformulating the concept of servile and artisanal practice of their work, in accordance with contemporaneity. They are the basis of the *Liceu de Artes e Ofícios*, which brings implicit ideals of freedom, dignity and economic and social statement, in a prior process of the abolition of slavery. It is in this context, before the importation of the German Bauhaus teaching model, in the second half of the 20th century, that the graphic artist Manoel Bandeira was formed.

With this formation, Bandeira becomes an absolutely versatile artist, capable to act in diverse areas, from the artistic metier to fully accurate universes like machine drawing, descriptive research, and technical analysis. He transits in various professional circles and ends up being invited to teach at the *Escola de Belas Artes*, stronghold of the considered to be greater Arts. This is an emblematic fact considering his modest origins and his formation, which were not academic, but in the mechanical arts. As well as the origins of the *Liceu* group, Bandeira ascended socially through his work, being recognized in his historical moment for his skills, which are in no way inferior to a contemporary graphic designer, obviously keeping in mind the difference of technological resources available. These skills are demonstrated by his production in the three yearbooks. Although the effective presence of his work divides the space between collaborations of other artists, such as Mário Nunes, Percy Lau, Nestor Silva, J. Carlos, Martiniano, Roberto Rodrigues, J. Ranulpho, Luiz Teixeira, Augusto Rodrigues, Luiz Soares and Massagver, Bandeira develops a graphical line of his own and of clear expressiveness that stands out as a unity of language, beginning at the cover. He explores lettering and forms of contemporary international influences and resolves well his compositions, either with 1 or 3 colors, with full mastery of the relations between figure and background, as well as the details of light and shadow, in a concise or more complex form, dialoguing with regional references, as the example of his strokes which resemble xylography and its carved lines.

It is important to elucidate his path, because we believe that it is a case of valuable features for the memory of design in Pernambuco, even before the official arrival of the graphic design in Brazil. It brings references of great value in a graphic point of view, and several issues concerning the graphical practices and its economic and cultural developments around the design. Concepts such as the identity of Brazilian design and innovation practices, which unfold in contemporaneity between other concepts of the so-called creative economy. Finally, the importance of further investment in the area of research in memory^{3/4}including the preservation and safeguarding of this cultural heritage^{3/4}is con

firmed, through the maintenance and modernization of institutions. And also incentivize the full availability of these collections to the public, so that we are always in touch with our history, understanding, valuing and reformulating it.



Figure 6. Advertisements of Peixe Guava Sweet: core of the *Anuario para 1934*; *Anuarios 1935* and *1936* cover (photo by Sebastian Cavalcante).

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Brazilian Graphic Design in the '20s and '30s: Modernism and Modernity

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Brazil / Graphic Design / Modernism / Modernity

Modern Art Week, which took place in Sao Paulo in 1922, was a starting point for Brazilian modernism. In graphic design, this meant avant-garde books and journals that exemplified formal innovation. These are compared to popular magazines and books of the same period that are modern without breaking new formal ground. The relation of modernism and modernity in graphic design is a dynamic that can still be discerned today.

1. Brazilian Modernism

In a statement for an anthology *99 Poets/1999*, the poet, critic, and translator Haroldo De Campos wrote:

Brazilian Modernism (Avant-Garde) started in 1922, the year of Eliot's *Waste Land*, Joyce's *Ulysses*, and Vallejo's *Trilce* under the influence of both Italian Futurism and French Cubism.¹

If we are to recognize Do Campo's argument for modernism's arrival in Brazil, we should recognize that modernism for him was closely identified with a European definition of 'modern' that allied it with the creation of radical new aesthetic forms in art and literature. In characterizing Brazilian Modernism, De Campos followed the polemic of the poet Oswald de Andrade in his rejection of foreign influences and the assertion of a distinctly Brazilian aesthetic. If we accept Do Campo's designation of 1922 as the starting point for Brazilian modernism, we would inevitably identify it with the *Semana de Arte Moderna* or Modern Art Week that was held in São Paulo that year. The artists involved rejected a nostalgic nativist art by defining modernism with a Brazilian

character, not only in painting, sculpture, and applied art but in architecture, literature, and music as well. This intent was evident even in the design of the catalog cover by Emilia no Di Cavalcanti, one of the Modern Art Week organizers, which featured a loosely rendered ink drawing of a nude woman on a pedestal surrounded by foliage and decorative forms. The nude, of course, was a classic icon of European painting but Di Cavalcanti combined it with tropical plants and other forms that suggested Brazilian folk art.

Leading artists and theorists besides Di Cavalcanti who participated in the Modern Art Week included the poet and polemicist Oswald de Andrade (1890-1954), author of the manifesto *Pau-Brasil* (Brazil Wood) of 1924 and the *Manifesto Antropófago* or Cannibal Manifesto of 1928; poet, novelist, art historian, and critic, Mário de Andrade (1893-1945), a poet, novelist, critic and

musicologist who published the seminal novel *Macunaíma* in 1928; the painters Anita Malfatti (1889-1964), considered to be the first Brazilian artist to introduce modern pictorial ideas from abroad, and Tarsila do Amaral (1886-1973), and the poet and painter Paulo Menotti Del Picchia (1892 —1988). These artists formed the Group of Five, which remained central to the Brazilian modern movement in the 1920s. In his *Pau-Brasil* manifesto and the *Manifesto Antropófago*, Oswald de Andrade characterized Brazilian modernism by its ability to cannibalize European culture for its own ends. With this argument, he and others associated with the Brazilian modern movement were asserting simultaneously their desire to be modern and their refusal to adopt European precedents.

The art critic P.M. Bardi has noted that the new visual ideas which were introduced in the Modern Art Week exhibition soon began to penetrate the world of book and magazine publishing and consequently had a considerable effect on popular graphic styles. Following the event, some of the organizers including Mário de Andrade launched a cultural review, which they called *Klaxon* to signal their intent to noisily proclaim the advent of a new culture. The review, which lasted for only nine issues, radically introduced the visual rhetoric of the Russian avant-garde, particularly the design of the cover with its large A that ran the vertical length of the page. The way the cover design incorporates a single letter in multiple words recalls Russian designer El Lissitzky's idea of visual economy.

Klaxon published articles and poetry in various languages and brought numerous examples of European avant-garde writing to the attention of its Brazilian readers. However, the editors, among whom Mário de Andrade was a central figure, were adamant in separating themselves from any particular avant-garde movements. "Klaxon," they declared, "is klaxonist." The review's advertising was also innovative and even included a parody ad for a factory that produced sonnets, madrigals, ballads, and *quadrinhas*, a poetic form with four verses. Thus, the Constructivist rhetoric of the cover was mingled with a Dada spirit that was evident as well in the occasional page with an eclectic mix of types.

We might well compare *Klaxon* with other small literary magazines of the same era whose designers created novel visual formats that corresponded to the experimental literature they published. We can think of numerous European magazines such as *Der Dada* and *Dadaco* in Germany, *Literature* in France, and *Irradiador* in Mexico. *Klaxon* and several other avant-garde reviews that followed it, *Terra Roxa e Outras Terras*, which appeared in 1925, and Oswald de Andrade's *Revista de Antropofagia*, which came out in 1928, were the Brazilian publi-

1 "A few quick notes on Brazilian modernism," <http://www.writing.upenn.edu/~bernstein/syllabi/.../Brazilian-modernism.pdf>

cations of the 1920s that best represented an interest in avant-garde typography. The first issue of the *Revista de Antropofagia* featured de Andrade's *Manifesto Antropófago*. In its initial phase the review lasted for ten issues after which it became a tabloid and was circulated for a brief period on a weekly basis by the newspaper, *Diário de São Paulo*. In this form, the editors also experimented with the typography, featuring isolated quotes in large bold type as well as a mix of typefaces within the orderly two-column layout.

Avant-garde books produced by the Modern Art Week participants include Oswald de Andrade's 1925 book of poems *Pau-Brasil*, which was illustrated by Tarsila do Amaral who also designed the ironic cover that featured a vertical Brazilian flag with the name Pau-Brasil inside the flag's blue globe. A number of other notable book designs, particularly covers, were also created for writers associated with the Brazilian modernist movement, particularly Oswald and Mario de Andrade, the poet Raul Bopp, the critic and essayist Guilherme de Almeida, and Antônio de Alcântara Machado. One of the most intriguing of these was the cover and layout design that Antônio Paim Viera did for Machado's novel *Pathé-Baby* in 1926, perhaps the most original layout done during the 1920s. The title was taken from the name of a small home projector that was first marketed by Pathé Frères in 1922. It influenced the structure of the book, which was designed to recall the atmosphere of a movie theater. Paim Viera created a fold out cinematic sequence of drawings that humoristically depicted a musical quartet who disappeared progressively as they accompanied a silent film. With the coming to power of Getúlio Vargas in 1930, the climate for intellectual cosmopolitanism and political irreverence changed and the avant-garde impulse to create a modern expression of "Brasildade" (Brazilianess) subsided.

I characterize the books and journals presented in the preceding section of this paper as examples of Brazilian modernism, which I distinguish from the term 'modernity'. The difference between the two is that 'modernism' denotes a particular formal quality associated with the new, while 'modernity' is a broader term that characterizes a sense of something that is of its time without necessarily possessing an innovative formal aesthetic. Following this distinction, one can agree with Haroldo Do Campos that Brazilian modernism in its first phase was associated with a particular group of literary, visual, and musical works of art and graphic design. We can therefore consider other works as examples of Brazilian modernity - works of art and design with characteristics that are widely recognized as modern without formal experimentation as a core element of what they are. In Brazil, visual modernity was especially evident in many popular magazines as well as in selected book covers, illustrations, and layouts.

Among magazines, the strongest design influences were French. This began in the 19th century with magazines such as the *Semana Illustrada* that Henrique Fleuiss published in São Paulo beginning in 1860 and the *Revista Illustrada*, which the Italian cartoonist Ângelo Agostini launched in Rio in 1876. The relation

to French graphic styles continued in a different form after the turn of the century when Art Nouveau decoration, particularly in lettering design, made a strong impact. Although Art Nouveau waned in Europe by about 1905, it continued to influence the look of some Brazilian publications, particularly book covers and layouts, for years to come.

The first illustrated magazines of the 20th century included *O Malho* (The Mallet), and *A Careta* (The Grimace). Rather than relying on fine artists, these magazines, which strove to depict modern urban life, counted heavily on a new generation of caricaturists who drew covers, illustrations, and cartoons. Prominent among them was J. Carlos, who served as the principal illustrator for *A Careta* from 1908 to 1921, when he left to become the art director as well as an illustrator for a company in Rio de Janeiro that published some of the major illustrated magazines of the time. Other major figures who drew for the popular magazines were Calixto Cordeiro, who signed his work K.Iixto and Raul Paranhos Pederneiras known simply as Raul. According to art historian Rafael Denis, these two and J. Carlos formed the "golden trio" of Brazilian caricature.

2. Modernity in magazine and book publishing

A new generation of magazines appeared in the 1920s. Some continued the style of the preceding period, while others adopted aspects of the Art Deco style, then popular in Paris and New York. Among them, *A Maçã* (The Apple), which first appeared in 1922, rapidly became Rio's most popular weekly. It was a satirical magazine whose popularity was due at least in part to its lively design, which was influenced by the French fashion publications but included original elements as well. The most impressive graphic quality of the magazine, however, was the lively page layouts, which ranged from line drawings that framed the columns of type to title pages that integrated the printed copy into symmetrical ornamental designs.

Modernity was also evident in book designs although not as extensively as it was in magazine publishing. At the end of World War I, the book trade in Brazil was still not well developed. In fact, some books by Brazilian authors were published in Europe and then distributed at home. There were few bookshops or other outlets for selling books and this made distribution difficult. Art Nouveau and occasionally the Arts and Crafts aesthetic of William Morris were strong influences on the design of book covers and some layouts. The man who is often credited with launching modern Brazilian publishing is José Bento Monteiro Lobato, an author and journalist, who was also a staunch nationalist. Monteiro Lobato began to develop a publishing enterprise, which he revolutionized in a number of ways. One was to focus more attention on the cover designs, which at the time were mainly reproductions of the books'

title pages on gray or yellow paper. He also modernized the layouts of his books, changing from crowded page designs to cleanly designed typographic spreads. Most of the artists, caricaturists,

and illustrators he commissioned to design his book covers were already known at the time as contributors to Brazil's popular magazines. They included Antônio Paim Viera, Mick Carnicelli and Benedito Carneiro Bastos Barreto, known as Belmonte.

The design and printing of Brazilian books had reached a low ebb by the end of the 1920s with the exception of Monteiro Lobato's publishing venture. Among the few other publishers who appreciated Monteiro Lobato's commitment to design was José Olympio, who published a wide range of political and literary works in the 1930s and 1940s. The reputation of his press for handsome books was due to Tomás Santa Rosa.

An aspiring artist, Santa Rosa had moved to Rio de Janeiro from northeast Brazil and began designing books to earn a living. His first book designs were for Ariel Editora. Two were for novels by Jorge Amado, who was also from the northeast. For Amado's novel *Cacáú*, Santa Rosa created a cover that integrated the bold expressive lettering of the title with a lively illustration and the author's name underneath. He also designed the layout, which revealed his attention to the total integration of typography, margins, line spacing, and the placement of illustrations. While Monteiro Lobato also had a sense of the relation between a publication's cover and its interior, Santa Rosa brought a more coherent sensibility to book design, one that made his designs distinct.

In 1935, Santa Rosa began to work for José Olympio, where he demonstrated how a designer could create a visual identity for a publisher. He developed distinctive visual identities for the various Olympio series, which then contributed to the publisher's overall identity. For the cover of Graciliano Ramos' seminal novel, *Vidas Secas* (Barren Lives), which chronicled the poverty of northeastern Brazil, Santa Rosa featured a black and white illustration of a peasant sitting against a stark backdrop with a bare tree and a mountain range. The illustration was placed on a reddish brown surface, perhaps to represent the parched earth. Beneath it was the title in large italic letters. The format was part of a series whose covers featured comparable illustrations with text underneath.

Besides the few publishers in Rio de Janeiro and São Paulo who understood the value of well-designed books and covers, there were several in other parts of Brazil who also believed in the value of design. Prominent among them was Livraria do Globo in Porto Alegre, a city located in the southern province of Rio Grande do Sul, where many Germans immigrants settled. Though founded in 1883, Livraria do Globo only began an active book-publishing program in the late 1920s. In 1929, the firm also started to publish a magazine, *Revista do Globo*, whose cover designers often adopted an Art Deco style similar to other Brazilian magazines of the period.

The firm's major designer was Ernst Zeuner (1895-1967), a German who immigrated to Brazil in 1922. As a student in Germany, he attended the Leipzig Academy of Graphic Arts and Book Design, where he preceded the young Jan Tschichold by several

years. Besides beginning to study in Leipzig, Zeuner worked there as a calligrapher and illustrator and was exposed to the latest developments in printing technology.

When he arrived at Livraria do Globo, Zeuner found a traditional approach to book design that he was able to modernize. With his multiple talents in illustration, layout, and typography, he created book covers and illustrations for novels as well as vignettes and other graphic elements. To handle the broad range of graphic design projects that Livraria do Globo was becoming engaged with, management created a Design Department and put Zeuner in charge. Few Brazilian artists were trained in the range of activities that the Department undertook and Zeuner served as a mentor to numerous young designers. By the end of the 1930s, the quality of work the Design Department produced was of a high level. Under Zeuner's guidance the book covers of Livraria do Globo always displayed an appropriate balance of expressive lettering and striking illustrations.

3. Conclusion

The interplay between modernism and modernity in Brazil was not as evident in the 1920s and 1930s as it was in parts of Europe. In Germany, for example, Jan Tschichold drew heavily on the Russian, German, and Dutch avant-gardes to formulate the principles of his "new typography," which strongly influenced the design of books, magazines, and posters. In Brazil, however, some of the artists and illustrators who designed experimental modernist publications also worked for the popular magazines and presses. Thus, the distinction between modernism and modernity was not strictly adhered to. Brazil was one of the few countries in Latin America during the interwar period where there was any significant response to the avant-garde activity in Europe. The combination of new aesthetic forms with a firm stance to adopt them for a new expression of Brazilian identity, most likely reduced the motivation to seek connections with like-minded artists in other parts of Latin America such as Manuel Maples Arce in Mexico or Juan Torres-García in Mexico. The result, however, was a robust engagement in all forms of visual communication within Brazil that continued in the ensuing years in the Brazilian concrete poetry movement starting in the 1950s, the pioneering corporate identity work of Aloiso Magalhães, the Ulm-influenced posters of Alexander Wollner, and the energetic and colorful range of graphic materials that many Brazilian graphic designers are producing today.

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The Design of book covers in Brazil during the sixties through the covers by Marius Lauritzen Bern

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Book cover Design / Graphic Design / Design Histor / 1960s Design / Brazil

Marius' book covers analyzed in this article were made in the 1960s under specific circumstances at that time in the Western world, such as the ways through which book covers were created and the production processes that were available at the time. These particularities help to understand the final result of the visual discourse on the graphic design of Marius Bern's covers.

1. Marius Lauritzen Bern and the *Civilização Brasileira* Publishing House

Marius Lauritzen Bern was a self-taught designer who began his career in visual arts. He was both painter and photographer, worked as a cartoonist for the *Jornal do Brasil* and had a part in the foundation of the *Ateliê Coletivo* in Pernambuco, in the 1950s. His artistic background contributed to his production in the field of graphic design. Marius Bern later opened his own studio - the *Estúdio Gráfico* - and focused his attention on all areas of graphic design. While he kept working in his studio, Marius Bern began his partnership with the *Civilização Brasileira* in 1965, through its visionary publisher Ênio Silveira. He joined them right after designer Eugênio Hirsch had left the company, and from 1965 to 1970 he stood as its chief designer. The owner of *Civilização Brasileira* - Ênio Silveira - was considered an important Brazilian intellectual in the national cultural field and also an important figure in the fight against the military dictatorship. He was also the staunchest supporter of the changes adopted by the company in its book designs. After getting in contact with some distinguished American publishers during a trip taken to the USA, he returned to Brazil with the intention to innovate book design. Ênio Silveira believed that the design of book covers played a key role in attracting the reader into buying books. His publishing house took a bold stand at the time by producing not only books intended for the elite consumption, but also publishing paperbacks which provided a larger number of people access to literary consumption. The titles for its catalog were carefully chosen, and the house was known for its strong opposition to the oppressive regime. According to Hallewell, the *Civilização Brasileira* was the main channel for Brazilian modern literature in the 1960s. (Hallewell 2005)

The historical context of book design in Brazil during the 1960s

Changes in education and production technologies affect the graphic results obtained by a designer, once they are, along with the designer's actions, means to achieve the final creation. De-

spite the existing differences in the form of teaching design and in the production technologies between Brazil and other more economically developed countries in previous decades, it's in the 60s that Brazil starts to reduce the existing gap between him and these other countries in the field of graphic design. This process was made possible due to the foundation of the ESDI¹ [Escola Superior de Desenho Industrial] and the arrival of the latest offset printing machines, particularly those used in the publishing field (Camargo 2003 : 126).

The 1960s are marked by a rupture with the conventions of graphic publishing culture on the Brazilian book market. This is a period accounts for a great growth in the demand for higher education and, consequently, an increase in the number and quality of readers. These readers showed an inclination towards graphic innovations, thus allowing designers and publishers to experience greater freedom in their work. To please the new consumers, the Brazilian publishing industry invested on book design², that played a major role on the success of the book sales. The design should make the book stand out on the shelves of bookshops in order to attract the readers' interest. Paperbacks became the best way to propagate literature due to low cost. In England, paperbacks started being published in 1935 by Penguin Books. In the US paperbacks were heavily purchased by college students at a reasonable price. Paperback quality was not as good as that of hardcovers, so the graphic design of books was essential to ensure their success. The 1950s and 1960s were the golden age of paperbacks, both in Brazil and in the US (Drew 2005). In the US, design played a key role in marketing campaigns, with books being long-time considered commercial products, differently from Brazil, where little was invested to insert the literary publications on the market: in 1967, 40% of the publishing houses didn't invest any part of their budgets in advertising (Hallewell 2005 : 545), therefore indicating how this field completely neglected by Brazilian publishers.

The implications between national and international graphic design can be measured not only in terms of production technology, but also on the visual aspects - how the works were visually executed and how the aesthetic choices were made. In the 1960s, the search for a more unrestricted graphic design began free from a modernistic style characterized by grid patterns and neutral typography. The design was more authorial, illustrative, and influ-

1 In 1962 FAU-USP added design to its curriculum, an initiative that contributed to the teaching of design in the country.

2 This affirmation does not ignore previous attempts by other publishers regarding the commercial aspect of the book, like the case of Monteiro Lobato, however, comparatively, investment in the publicity and design fields was much more aggressive in the 1960s.

enced by the mass media. The American Push Pin Studios was one of the most influential group in the expansion of this new visual style. The combined uses of drawing and typography became the trademark of the studios and also of the generation of contemporary designers that followed. In Brazil, Eugênio Hirsch - a leading exponent of book design – heavily influenced the work of book designers that followed his footsteps with his aggressive style and bold use of typography.

2. Production at the *Civilização Brasileira*

Like in other Brazilian publishing houses of that period, the *Civilização Brasileira* divided book production into sections, with their parts being created separately. The cover designer created the cover and spine, while other employees with technical knowledge of typography were in charge of the body layout, flaps and back cover. At the time Marius Bern was working at the *Civilização Brasileira*, covers were considered the artistic part, and the typesetting of the body the technical part of production (Escorel 1974). Production processes also differed as covers were printed in offset and the body usually in linotype and typography (Mariz 2005). Typefaces used on covers, title pages and back covers did not always match, thus causing aesthetic incoherence between the different parts of the final product.

Besides the separate design of the book parts, the high number of books also affected the production of covers by the *Civilização Brasileira* – on average 20 new titles were produced monthly from 1964 to 1968 (Vieira 1998). To meet demand, Bern had to create the covers in a very short time. In order to make the cover, the designer had to have access to the content of the book, which he could learn from the complete text, summary and extracts, or through an oral description, which was a very common practice. He could also design the cover based only on its title and, in certain cases, on a copy of the original version so that he could use its cover as a reference for the Brazilian version. Despite many difficulties, Ênio Silveira gave designers great freedom to create the covers, rarely interfering or rejecting a layout.

3. Marius' Covers

The seven covers selected for this paper are a sample of a total of 230 collected covers, created by the designer. This selection presents some of the most representative visual solutions adopted by Marius Bern on his covers, and allows us to draw some conclusions about some aspects of his work. Bern created designs in a vast spectrum of styles mixing varied stylistic sources. Some have received a pictorial treatment while others show high contrast photographs (frequently incorporated into the graphic design of the 1960s). The visual technique of contrast can be found in most covers and was intended for visual impact. The spirit of the 1960s can be found in the graphic design of that period and, therefore, it is depicted on Marius Bern's covers.



Figure 1. Front Cover of *Caiu na Vida* Civilização Brasileira, 1966 (Photo by Carina Naufel)

Figure 2. Front Cover of *O Homem Contra o Mito*. Civilização Brasileira, 1966 (Photo by Carina Naufel)

The cover of *Caiu Na Vida* [Fell in the Life] (Fig. 1) establishes a relationship with the Pop Art through colors, line drawing, and a sequential construction of three illustrated scenes. The bright and saturated colors combined with line printing in black spot color produce contrast in the composition. The illustration of a human silhouette without any details completed with some filling imperfections reminds us of the silk screen printing technique. The empty space - generous in the first frame – shocks as it contains no textual information, leading the observer's eyes to the bottom of the cover where the author's name and book title have been written, slightly deslocated from the horizontal axis, providing the composition with some movement. The photo composition technique available at that time allowed this kind of intervention in the typographic composition. The color of the title is the complementary of the magenta background. A visual reading, similar to that of comic books, suggests scene by scene action and correlates with the content of the story that provides the title to the work. The story is about a character that is ran over several times.

For the *O Homem Contra o Mito* [Man Against Mith] (Fig. 2) Bern chose a more abstract approach and gave the image a more pictorial treatment. The painting gave the cover a hand-made look that contrasts with the condensed characters. The designer gave the title an irreverent spin by horizontally rotating the letter "O" and placing the first character of the title on the opposite direction from the other characters. With a reduced color palette, he integrated typographic elements with the image applying the same color on different elements of the cover: magenta was used for the sphere and also for the book title, and yellow - in a similar shade to that of the background - was used for the author's name and the publishers' logo. The weight of the text on the left is compensated by the mass of the sphere on the right.

For the book *Sobre Todas as Coisas* [Above All Things] (Fig. 3) by Carlos Heitor Cony, the colors and ornamented shapes that compose the cover strongly indicate a dialogue with psychedelia. Areas fully completed with over saturated red and orange are placed side by

side in the central image composition, causing some discomfort for the eyes. The typography used for the title reminds us of a famous font known as Artone, by Seymour Chwast, probably taken from a lettering catalog. The shape of the character "c" on the title seems slightly altered when compared to the original font, making us question whether the font used by Bern is in fact the Artone, or a modified version of the original. The main image located below the title and right aligned is composed of two elements. An enlarged red ornament is used as a background to a human figure in vivid orange. The shape of the ornament seems to have been inspired by one of the font characters used in the title, or it may have been drawn based on the curvilinear shapes of the font, so that there is a continuance between the typography of the title and the main image. The author's name and the subtitle are in sans serif condensed font, differing significantly from the ornamented letters of the title, ensuring this way contrasting shapes in the composition. Opposite to what occurred on psychedelic posters, the designer avoids excessive visual information for it could confuse the reader. Bern's effort in creating a design that could be easily absorbed by the readers resulted in a less intense use of elements on the composition of covers.

The cover of *Lutando na Espanha* [Fighting in Spain] (Fig. 4) is composed of a figurative drawing from the original photo, by Robert Capa, and geometric graphic elements. The transparent red circle over the face of the man's figure has a dramatic effect on the depicted scene. Bern's concern in maintaining a good text hierarchy can be observed not only in his font choice, but also in the use of graphic elements that help organize the information. The rectangles located below and above the title contribute to the hierarchy of textual information, separating and distinguishing the main title from the second title. The red elements [the rectangles in the title, the circle, and the publishing house logo] are grouped together to create visual unity in the final composition of the cover.



Figure 3. Front Cover of *Sobre todas as Coisas*. Civilização Brasileira, 1968 [Photo by Carina Naufel]

Figure 4. Front Cover of *Lutando na Espanha*. Civilização Brasileira, 1967 [Photo by Carina Naufel]

In *Vietnã Norte* [Vietnam North] (Fig. 5), Bern's visual choices emphasize the theme. The photo conveying a tragic message has been positioned in the center and framed by the title, with the cover area fully filled by the composition, keeping the viewer

staring at the image. The white circle located at the top of the photograph and in the middle of the cover highlights the area of greater semantic impact. The use of typography not only as an element of textual information but also as a graphic element can be noticed in the repetition of the title in uppercase and big size displayed around the image in horizontal and vertical reading, emphasizing this literary work's theme.

On the covers produced by the *Civilização Brasileira*, the place for the company's logo depends on the design of each cover, which gives the designer more freedom to create them and helps show his intention in the final composition. On this cover, the logo is positioned at the bottom corner of the photographic image and displayed vertically, along with the title, placed in the same direction.

For the *O Pagador de Promessas* (The Payer of Promises) (Fig. 6), a similar resource to the one applied in *Vietnã Norte* is used: the center of the photograph - where the scene of greatest impact is displayed - is illuminated by a drop-shaped white area, while the rest of the image is coloured with a transparent red layer, adding more intensity to the image content. The use of high contrast photos, a resource frequently used in the 1960s as a way of printing the photography, removes the halftone from the image, reducing this way the amount of visual information and increasing the contrast in the composition. The textual information is given using a hierarchy close to the most conventional one [title and author's name in justified alignment, one above the other, at the top of the cover, and centered in the vertical axis].



Figure 5. Front Cover of *Vietnã Norte*. Civilização Brasileira, 1967 [Photo by Chico Homem de Melo]

Figure 6. Front Cover of *O Pagador de Promessas*. Civilização Brasileira, 1967 [Photo by Carina Naufel]

On the cover of *Angola* [Angola] (Fig. 7) the title has been written twice, in a similar way as that on the cover of *Vietnã Norte*. Although the title in the background is in lower case, it has been written in large font size, nearly filling the available area, while the smaller title, in uppercase, is placed on the right, together with the other textual information. The background title has been separated into syllables and placed one above the other. The Display font, help to see the typographic composition as a composi-

tion that goes beyond its textual role and provides a visual solution - the use of typography as image (Giacomelli 2010: 91). The text block on the cover's right lower quadrant allows the viewer to spot the title-image in the background, despite the superimposition. the designer presents a neat composition, that stands out for its simplicity and its strong effect.



Figure 7. Front Cover of *Angola. Civilização Brasileira*, 1967 (Photo by Chico Homem de Melo)

4. Conclusions:

From an illustrative style to an abstract composition, Marius Lauritzen Bern had no limits. Despite his ability and freedom to create, in his design of book covers he always kept the hierarchy of information and respected legibility. Although the number of book covers analyzed is small, we were able to identify some recurrent features in Bern's production. Visual solutions typical of that period, such as high contrast, the use of displays inspired by psychedelia, saturated colors, the aesthetic influence of Pop Art, and a great freedom in typographic composition are some of the key elements of his vocabulary. From mass media images to paintings and drawings created by him, Marius Bern explored the cover design in such a unique way that his creations can be easily identified among many other covers from the 1960s.

Marius belonged to a generation of designers who broke the tradition and valued literary works using design as a tool. The graphic results of this generation deserve further analysis and understanding.

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The design of Fred Jordan

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Fred Jordan / Graphic Design History / Graphic Design in Brazil / L. Niccolini Calendars

The paper examines the development of graphic designer Fred Jordan's professional experience in Brazil describing the different phases of the creative output against the historical background. It demonstrates the significance of Jordan's work and how his projects allow us to understand the transformation of the graphic design discipline and industry, from his use of technology, techniques and themes, meeting the needs of the industrial revolution and the diversified consuming public.

1. Firsts steps

Fred Jordan was born on June 23, 1927, in Berlin- Wilmersdorf, Germany. At the age of nine, he migrated to Brazil with his parents, Leon and Betty Jordan¹. His father, a Polish Jew, was a violinist and worked as a musician in Berlin. As a result of Germany's policy adopted in 1933, and due to the Nuremberg Law [Nürnberger Gesetze, 1935], Leon lost his German citizenship and his right to work. Afraid of the Jewish persecutions, they decided to leave Germany. In 1936 the family moved to São Paulo, Brazil.

At the age of 14, Fred dropped out of school and tried to enroll in the School of Fine Arts in São Paulo, with the intention of becoming an illustrator. He was accepted under the condition of not being awarded a diploma, since he had not finished his regular education. He attended the college for a year and a half, and then abandoned it. He started working part-time as an apprentice in the ceramics studio owned by Giuliana Giorgi and Gerda Brentani, while studying in the School of Fine Arts. It is during this phase that his interest in graphic design, in commercial art, began. In order to compensate for not having a formal education, Jordan read and studied extensively about art, art production related to commercial arts and graphic design, mainly from Europe and the United States.

His incursion in publicity began in the early 1940's. His first job was at Lintas Publicidade². There, he worked under Gerhard

Wilda³, the agency's art director, developing layouts, adapting creations to the several media, shapes and sizes. After World War II had ended, Gerhard Wilda was invited to work at McCann Erickson⁴ and took Jordan with him. During this time, Jordan met and interacted with Darcy Penteadou, Guilherme Valpeteris, Victor Ballot and Charlotta Adlerová, who provided their services to the agency. Jordan recognized in these artists a distinguished formation, which contributed to the creation of an innovative visual language that privileged the technical quality of the projects. Jordan's first contact with Alexandre Wollner⁵ happened also around that time. During the mid 40's, Wollner had an internship at McCann Erickson as an assistant designer.

The job market in São Paulo in this period was restricted, and networking, to a certain point, was limited. Thus, the professionals that worked in São Paulo knew each other, and circulated among the same agencies. Such connections awarded nominations to new positions, and that was how Jordan became the art director at *Publicidade Prado*, an agency founded by an American, Marjorie Gage Prado. According to him, Marjorie was a visionary, an entrepreneur and engaged in the artistic scene and cultural life of the city of São Paulo. Jordan admitted that working as the agency's art director demanded boldness, some creativity and a lot of luck. Hence, as art director, he hired professionals such as Gèza Kaufmann, Georges Rado, Dorothea Gaspary, Charlotta Adlerová and Gunter Flieg to develop his creations. This earned the agency the market's recognition, and, without a doubt, the acquaintance with a group of characters from a specific cultural universe, actors in the evolution of the graphic arts, design and publicity in Brazil. The same way the agency was established and grew, suddenly it was closed. So, Jordan opened a small studio, in the back of the *Jardim de Modas* shop (for which he created some projects, especially window displays). This experience got him, in 1948, the 1st place in the display contest organized by the Jockey Club, whose theme was the *Cidade de São Paulo* Grand Prix racing. In the same year, Jordan entered a poster in a contest for the *XIV Salão Paulista de Belas Artes* (São Paulo Fine Arts Show), and was accepted by the organization's committee. He was also invited to participate in the *1st Salão Nacional de Propaganda* (National Advertising Show), held in December 1950, in the *Museu de Arte de São Paulo Assis Chateaubriand*, MASP, then based in the *Edifício dos Diários Associados*. The creator of this exhibition was Pietro Maria Bardi. Gerhard Wilda was responsible for organizing and selecting the professionals who would take part in the exhibition.

1 Fred Jordan's birth certificate, his Familienstammbuch (Family Book) and his School Report Card from the Ginásio Oswaldo Cruz, Ide Leib Jordan is registered as his parent, born on January 16th, 1907, in Tomaszów, Poland. Leon Jordan's labor card indicated another birthdate: January 3rd, 1901. His mother, Betty Rotziegel, was born in Berlin on April 29th, 1907. They were married in June 27, 1924, in Berlin-Steglitz, Germany.

2 Lever International Advertising Service, house agency initials, from British Unilever in the 1930's. The British head office, Lever Brothers, was founded in Bolton, England, in 1884 by William Lever and brothers. The Brazilian Lintas was established in 1931 by a team of European professionals, but due to the lack of specialized labor, the agency's activities were interrupted until 1937. See GESSY LEVER: história e histórias de intimidade com o consumidor brasileiro. São Paulo: Unilever, 2001.

3 Gerhard Wilda (1915 - 2006), German citizen from Hamburg, was one of the first art directors in Brazil.

4 McCann-Erickson agency office was set up in Brazil in 1935.

5 Designer, one of the pioneers of this field in Brazil.

With his projects, awards and his participation in the Show, Jordan was consolidated as a professional. It is during this time that he begins to create labels, packages and brochures for pharmaceutical companies. It is also during this period that he initiates his relationship with *L. Niccolini Indústria Gráfica*. He began working at Niccolini as a designer and printing technician, under Kurt Eppenstein's orientation (technical director and head of the company's creation studio, where they created and developed the packaging projects and the promotional materials for the company and its clients). The relationship with Eppenstein was decisive for Jordan's formation. Likewise, the professional experience and technical learning also influenced the language and graphic solutions found in his projects, which made Jordan's style peculiar and his creations technically unique.

2. Niccolini and the influence of a master

Jordan learned the printing reproduction techniques with Eppenstein, at the beginning of the 1950's. Kurt used to apply different impression techniques in the same project, and to improve the photomechanical processes. The mixture of reproduction techniques and, traditionally, the design or reproduction of images printed with lithographic pencil, brush and greasepaint, carbon or phototype, were then used to contour the reproduction limits with photolithography. These experiments with reproduction techniques were not without purpose. Kurt had studied in Germany during the 1930's, and when he returned to Brazil, the technology, printing equipment and technical resources were limited, sometimes even unknown. He tried, therefore, to adapt the techniques he mastered to obtain results that were adequate to his reality.

His dedication and interest in professional development gave Jordan a certain freedom in the company, which allowed him to participate in every step of the development and production of projects – from creation to finalization. His discipline and strictness required him to study diligently every step of printing production, the relation between images and colors and the images' reproduction processes. One of Jordan's stories illustrated the experiments they conducted in the studio and printing production workshops, and the involvement of the staff: "One day, I drew not on stone, but on a sheet of offset, made of zinc back then. We came up with some chemicals to 'fixate the image' and printed, very excitedly, a uniform print run of three thousand sheets with lithography flavor."⁶ The result was the first of a series of illustrations printed on the Niccolini Calendar for 1952, *The Blue Horse*. This was the first of a series of 47 calendars created for Niccolini.

Fred Jordan divided the 50-year-old relationship with Niccolini in three major phases. The first, which he considered the "best" phase, was the moment he had the most creative freedom. This was the time when he learned and tested the technical possi-

bilities of printing production and was promoted to art director. The second phase represented the period in which he had great responsibilities in the company: he was groomed to substitute Eppenstein, who died at the end of the 1960's. Thus, Jordan took over the technical board, as well as the position as art director. He remained in this position for more than ten years. During the last phase of his long relationship with the company, in the mid 80's, he worked for the company as a consultant and technical supervisor and also as designer, until his death, in 2001.

During this long period of dedication to Niccolini, the designer watched the progressive movements that transformed techniques and printing technology. In his first years, he got to know typography, lithography and participated in the introduction of offset and photolithography equipment. In the 90's, he witnessed the incorporation of electronic and digital processes in all stages of production. The fact that he had participated in the evolution of the printing industry in Brazil gave Jordan unique knowledge and experience. Despite not resisting the technology boom, never accepted subordination to the new equipment. He never dismissed intellectual work and freehand drawing. His preoccupation with exploring printing technological resources available in each period of his work is also genuine. His creation is directly linked to the technological possibilities. Jordan's global knowledge of administrative organization, his understanding of the rationalization of the production processes and printing quality allowed him to have a more articulated vision of the company's interests, creation and project development. To Jordan, there was an intimate relation between the company's needs and the visual manifestations that could represent Niccolini's business goals. This practice was incorporated in the creation of the projects developed by Jordan.

In the first phase of his work in the creation department, Jordan executed a series of brochures and cartridges for the pharmaceutical industry. They presented the diversity of illustration techniques, from linear drawing to photomontage, in addition to "accurate printing". The selection and the combination of these elements are based on the existing reproduction techniques and the feasibility of their production. The use of photography, for example, wasn't always possible. Sometimes, the immediate reproduction of drawings and illustrations to the printing matrix, typography resources and printing quality were decisive in choosing the visual language, which gave expressiveness to the creations. The same thing can be observed regarding the use of the artist's calligraphy instead of typography or photomechanical texts. This gave personality, language and style to the advertising creations. Such resources were not only used in the brochures for the pharmaceutical industry, they were not restricted to a period of time, nor were exclusive or pioneer solutions by Jordan. The extensive use and articulation of these elements and techniques can be seen in the entire production of the designer, but also in the works of other professionals, both in Brazil and definitely abroad. In photography, the reproduction of continuous shades was incorporated in the projects, in accordance to the technical and economical feasibility, from the mo-

⁶ Excerpt of the author's text dated December 1991, extracted from the Niccolini Calendar 1992, entitled Cor 8: Möbius prismática. The project is dedicated to the memory of Kurt Eppenstein.

ment that reproduction technology allowed for such a solution. But illusion as a resource, replacing literal representation, was well received in the pharmaceutical industry and by physicians.

Fred Jordan was concerned with the visual identity of the projects he was involved in. His intention was to achieve a unity in the products and companies for whom he worked, using standardized elements and organizing graphic components and formal language, an integral part of developing visual identities. The attention to organizing the messages in order to create an identity that is immediately recognized is inherent to the designer's work. This was very important in building the visual manifestations for Niccolini's advertising.

There is also a unique style in the definition of Niccolini's visual identity, in the series of promotional packages used to hold souvenirs and gifts for clients or used as showcases. More than the distinctive language and singular design, Jordan also used distinguished materials and supplies, and several printing and finishing techniques. The series of promotional packages created for Niccolini displays the technical mastery of its author, both in design and in mastering different techniques. Jordan confessed that this was Niccolini's role: to produce in compliance with the clients' demands. In Jordan's opinion, the combination of both defined the quality of the services they provided – printing excellence, Niccolini's greatest goal, starting with the initial planning all the way to the final product delivered to the client. Therefore, graphic creation enhanced these qualities. This was an axiom in Jordan's work, on which rested the definition of the design business and the role of its professionals.

The Niccolini Calendars were created with this purpose. They followed the identity created for the printing business, showcased the resources and quality of the printing and finishing. For the Calendars' project, Fred Jordan also developed exclusive visual identities to some of the series, such as Projeto Cor (Project Color), carried out between 1985 and 1992. For this series, he created certain elements and standardized pieces, such as packaging, envelopes and print patterns. The graphic language was evident in the layout, the use of colors, of typographic fonts and of his own calligraphy. Most of these projects included a presentation letter, flyer or folder, with texts on the theme chosen and "Complementary items" – graphic pieces delivered during the year, whose goal was to illustrate, explain or suggest experiments from the Calendars' proposition and theme, elements that showed Jordan's theoretical research, considerations and concerns on varied subjects. In Niccolini's Calendar series, especially those created between the 1980's and 90's, Jordan used Goethe's conception of the color prism and color theory, presented in the book *Theory of Colours*. The author tried to grasp the relationship between colors, and between color and men⁷. This same concept was expanded in the articles published on Jordan, and their authors suggested the discussion about the relationship between man, time and

space, thus amplifying the analysis on the Calendar. From studies of natural phenomena referenced in the Calendars, Jordan exploited, through his illustrations and illustrated essays, the meaning of the "relationship with" others and society. For him, nature's balance depended on the connections in the world, on the evolution of Universe, on the History of Humankind, objects of his interest. It is important to point out that Fred Jordan's Calendar projects also became a means to a study on colors, optics and phenomena in the universe. The same is true for the research and experiments on the processes of printing reproduction of visual elements, illustrations and drawings. His research on colors and optics, as well as his interpretation were based on Goethe's research, that questioned the theories of Isaac Newton. In the formulations of Time/Space, the formation and transformation of the Universe, the author mentioned studying, for example, Albert Einstein's Theory of Relativity, and, beyond that, reveals the Strings Theory. Fred Jordan established the relationship, the simultaneity and connections between events and intended to explain simultaneously the past, the present and the future.

In the Niccolini Calendars, the narrative does not describe History. Jordan worked with the lyrical, revealed his poetic subjectivity and saved the task of interpreting the narrative for the observer. He suggested an immersion in his own world, full of emotion and sentimentality: we ourselves write History. To him, time was an element of creation which transformed his calendars – seemingly mundane objects – into insights about the world and the permanence of mankind.



Figure 1. Main Illustration from Niccolini Calendar from 1952 *O Cavalo Azul* (The Blue Horse). (photo by Alberto Ghiurghi).

⁷ Excerpt from the letter written by Fred Jordan to Millôr Fernandes, apud FER- NANDES, M. 1990. Pausa para a eco-poesia. *Jornal do Brasil*, 21 apr. 9.



Figure 2. Niccolini Calendars that are part of the Projeto Cor, 1987 - 1992's. (photos by Alberto Ghiurghi).

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Domestic technologies and modernization of women in Chile between 1945 and 1970

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Gender / Modernization / Consumption / Advertising / Domestic technologies

The present text forms part of research and recent publication titled *Domestic Mechanics* that examines the modernization of woman and home technologies in Chile between 1945 and 1970, through the incorporation of new devices and domestic technologies. In the proposed analysis, the common and uncommon grounds that took place between these modernized goods and the homemakers' embracement of this "modern" essence were raised, amidst a scene of productive rationalization of the home during the twentieth century.

1. Introduction

The period 1945 and 1970 meant a key instance for the development of an industrialization process and urbanization in the country within the framework of an economic model of "inward development", that responded to the necessity to be inserted in the new conditions of the world-wide economy of the West¹. Also, the consolidation of a culture of masses –that had been foreshadowing since the decade of 1920's– on par with an increasing phenomenon of massive consumption in the cities of greater industrial and commercial development, that began strengthening from the second postwar period. This instance caused unprecedented practices of consumption associated to self-care, hygiene, eating habits and the introduction of new technologies in the domestic field. As part of this modernizing rise, home automation was comprised of two projects of greater reach: at international level, the activation of the industry related to technical advances of postwar period, and in our country, the beginning of a policy of industrialization by substitution of imports destined to internal consumption.

In this new postwar period scene, new social subjects had greater roles associated with aspects such as rationalization of production, modernization of the urban habitat and the communication of masses, among other twentieth century practices. The Chilean women, who conformed one of these social subjects, constituted themselves as "objects" of modernization, as a result of the changes that affected their previous ways of being women in matters like education, the opening of new labor spaces, administration of the family and home automation; and

¹ This economic model sought to cement the basis of national modernization with strong development in industrial infrastructure under the central role of the State, through the replacement of imported products for locally manufactured ones. However, this was a debilitating process, among other reasons because of the increase of imports and dependence on technologies from Western nations.

at the same time in "subjects" of modernization, to the extent in which they were acquiring conscience of their sexual gender and their position within society.

Thus, the feminine conception of the period was associated to one of a dynamic and practical home for work, that unlike men's work routine it had to take in an uninterrupted way, which also implied the handling of a series of novel domestic devices destined to the maintenance and rationalization of the family space². In this panorama of social, technical and cultural transformations, the modernizing project of woman fueled by the advertising practices, we will find a market of great importance in the female demography when constituting itself as a decisive agent in the election of modern goods and products for the family and the home.

2. The new and unknown universe of electrical appliances

During at least two thirds of the twentieth, the house was considered like a metaphor of all that is feminine and in this space the kitchen and dining room, were soon was defined like the main stronghold of all domestic operations. This way, woman could be represented through private field; referring to the concrete space (the house) and to the activities of maintenance that were developed (eating habits, childcare, cleaning) and the symbolic space (the home) like a place of privacy, affection and protection. The house operated then like a complex unit of management, providing services and definition of social status, where also the architectonic design of anything domestic reinforced the particular qualities of each home.

The domestic interior like "modern space" was the result of the manifestation of an industrial production system that it promoted, on one hand, the improvement of the standards of life in habits and customs, and on the other, structural modifications of the home, such as the installation of potable water networks, pipes and electric systems. Once advances of mechanization and hygiene in the bathroom were introduced in the first decades of the twentieth century, the transformations began moving towards the kitchen service, especially as of the second postwar period, moment at which development and massive impact of representations of "living" and "living modern" took place. It is important to clarify that it wasn't a matter of simultaneous instances of crea-

² In Chile some concepts of productive organization, like "standardization", "rationalization", "fordism" and "taylorism" as possible ways of applying new plans of industrial development for the pragmatic modernization of fabrics and materials were already known since the decade of the 1930's.

tions of representations (many of them had already been noted spreading in previous decades), but rather within the broader context of diffusion of these same ones.



Figure 1. Exposure to electric washing machines, Palace of Light, Compañía Chilena de Electricidad, 1929 (photo Archive Chilectra).

The creation in Chile of a massive market of home electrical appliances had its origin in the decade of 1940's, although it was a slow and gradual process. Initially, some durable goods gave an attractive cost-benefit relation for the mid-level or average sectors, like symbols of home automation: the radio, that played a preponderant role in the kitchen and the dining room; the sewing machine that usually appeared like "woman's best friend"; the iron, in its mechanical and electrical versions; and the polisher, popularly well-known in our country like "*chancho eléctrico*"³. This last one would turn out to be a very useful appliance for many women, especially for cleaning, who could have the first versions of such a valued appliance equipped with three rollers, and with brand names like Electrolux, Fakir or Sindelen.



Figure 2 (left). Announcement dishwasher U.S. company General Electric, 1950 (Zig-Zag magazine).



Figure 3 (right). Announcement vacuum cleaner model Robot-Fakir, 1957 (Confidencias magazine).

Another household electric appliance, whose benefits were complementary to those of the "*chancho eléctrico*", that was also very welcome in some sectors of the Chilean population was the cylindrical vacuum cleaner. In some households it was introduced as early as the decade of 1930's. Equipped with a series of suction accessories, it prevailed in homes where there was a lot of furniture and corners, and their attributes, to the extent in which this electri-

³ Around 1940, when the polisher began its massive scale sale, it was this that would be baptized and known as the "*chancho eléctrico*", by analogy with the classic broom which was used a few years back to do the waxing and polishing.

cal appliance had a greater availability in the market, it would be celebrated by local advertisement directed to the female segment: "Ask for a demonstration of this wonder of technique and you will be amazed with its brilliant efficiency". Thus the promotion of new domestic appliances through mass media would help define differences, aspirations and responsibilities of gender, transferring to these products the significance that sometimes exceeded their qualities or use with the objective of achieving a narration of identity through desirable domestic scenes.

The symbolic representation of the domestic space in mass media would have the implicit idea to free itself of all past references – from there the insistence in making comparisons between old and new domestic appliances– placing the ideal image of the modern home in a sort of iconographic limbo unrelated with the different stages of reality, such as political, economic or social conditions. Appliances such as the polisher, for example, promoted technological change, gradually leaving behind the old coal apparatuses, by a using a modern version of the product, whose temperature could be regulated by a thermostat.

The inclusion of new technologies and domestic appliances commonly appeared as a value linked to the economy; saving time, effort and money in which the myth of speed was raised in terms of efficiency and efficacy. For that reason appliances like the juicer replaced human work, understood as saving physical effort, and were made more evident since it allowed to process foods in much more effective way.

In the following decades, the expansion of household electric appliances in the home took place simultaneously with the appearance of new modern and flexible spaces, like the living room, instance that promoted the idea of an efficient and rational administration of the home and the convenience of having auxiliary appliances that lightened the heavy domestic routine, as it is possible to read in a kitchen magazine article: "It is not privilege of modern times to consider the kitchen like one of the most important rooms of the house. Now, of course, we have in our favor the inappreciable aid of electrical appliances, true devices robots that help us with our tasks in wonderful ways".

Other more costly technologies and appliances that are not always portable were the electric and paraffin stove, the electric and gas stove, the electric washing machine and the refrigerator. From 1926 the first models of stoves and electric radiators made by General Electric that imitated braziers and chimneys, in addition to upright and built-in stoves, with systems of temperature regulation were commercialized in the country. In the proximate future, paraffin and liquefied gas stoves made their appearance in the market, some of them of national manufacture.

Less dangerous than the stove, but of more delayed incorporation in Chilean homes, the electric washing machine was introduced in 1931. The first models were imported from the United States (General Electric and Universal, mainly) and had a little products acceptance because of their high cost and by the habit hand



Figure 4. Instruction booklet for using the pressure cooker Marmicoc, circa 1955 (author archive).

washing clothes, that remained unaltered well into the decade of the 1970's. From the 1940's semiautomatic versions of washing machines were commercialized, some made in Chile, and then in the 1960's, dryers, automatic centrifuges and machines that allowed to wash and rinse clothes. These appliances were supported by an intense promotion that emphasized its character of associated technological innovation to the creation of a modern woman archetype.

Initially considered goods that were not accessible to the average and popular sectors, the refrigerator symbolized, on one hand, the traditional aspirations of home modernization and allowed, on the other hand, the product availability of different seasons and climates for its conservation thanks to the electrification technique of cold temperatures. In our country, the electric company Chilectra would boost promotional campaign of electric refrigerators in 1929, using the slogan "cold like the pole", and from the mid 1950's, Fensa Company mainly initiated the manufacture of refrigerators in Chile, offering an alternative of economic products to supply machines predominately made in the United States.

In order to warm up and to prepare meals, along with the incorporation of the kitchen into the house, the introduction of electric stoves in 1930 allowed eradicating the traditional isolation of homeowner, and habits related to the times of purchase and food preparation were being modified. As a result of the expansion of the electric system and gas consumption, these first versions were introduced to the public as "stoves without fire"; however the majority of the Chilean population continued using wood stoves, portable stoves and the furnace. With the implementation of new actions to promote these products (newspaper advertisements, signboards, home fairs, etc.) the growth in the sale of stoves, bath heaters and heaters was well-known, especially from the second postwar period, appearing as the ideal complement for the modern home.

This way, and since the new operations center of domestic life took place in the kitchen, it is here where these modern appliances were mainly located, which defined the new standard; a set that, from the mid 1940's and throughout the two following decades included the stove, refrigerator and the washing machine, as well

as other smaller automatic appliances that were previously introduced in the market. For that reason we can affirm that the total technological modernization of the home in Chile does not become generalized until well into the decade of the 1960's, at which moment a first generation of portable domestic appliances, like the juicer, irons, polishers, pressure cookers were introduced; and then a second wave of modern goods, bigger in size, complexity and cost (electric washing machine, television, refrigerator) were incorporated to the home in massive form.

3. Diffusion and assimilation of domestic technologies

The introduction of new home domestic technologies generated problems and disagreements when replacing customs, procedures and ways of relating to tools and inherited practices of family tradition. Initially, appliances as the gas stove generated "fear"; pressure cookers were regarded as "dangerous" and the electric mixer "a source of manual (hand) accidents". It demonstrates that the advertising announcements only were effective when the user had embraced the culture of the consumption having made their own the imputed symbolic meaning of these devices, which made these objects desirable and soon necessary goods. For that reason, at first the aesthetic aspect of these products was not the central reason for preoccupation: it was more important to learn to handle them to avoid accidents. The pressure cooker, for example, produced distrust because it exploded if it were used incorrectly. However, in spite of the initial apprehensions that these appliances produced, its energy saving aspects and the economy that it generated because of reduced cooking times, it would transform it into a common and indispensable appliance. Presented like an essential and modern good, it allowed maximizing the domestic yield in other tasks, a simultaneous way to prepare meals, which determined an acceleration of the domestic routine and a new problem: "the need to always be in a hurry" (Matute, 2001: 20).

On the other hand, the possession of certain durable goods like the refrigerator, in addition to being a form of access to the modernity of the West, it granted a factor of social distinction, reason for which in some Chilean homes of the mid twentieth century it was located in the dining room, later being permanently located in the kitchen. Being one of the domestic technologies that caused the most impression amongst homeowners, these durable goods, which had no direct precedent (before food was not refrigerated), evolved into a domestic identity. The common arguments in the supply of these appliances were their height, its sealed condition, its storage capacity and the security that it granted in the conservation of fresh food, besides reducing the daily trips to the supermarket or the market. For that reason Vance Packard, one of the most influential authors of American advertisement of postwar period, described it like "a refrigerated island of security", in reference to the fascination and security that provoked in the consumer to whom ironically they referred to as "Mrs. Middle Majority" (Packard, 1980: 120).



Figure 5 (left). Package of household cleaner, 1940 (National Institute of Industrial Property, Inapi Chile).

Figure 6 (right). Photograph of Tricaloric kitchen model of the Chilean company Mademsa, 1964 (author archive).

Under the aegis of maximization of domestic tasks and the domestic configuration of the home in its more modern expression, all kinds of domestic equipment were introduced and promoted, like mechanical extensions of the modern homeowner, at least from the magical window offered by advertising announcements. In such sense, it is possible to mention that Chilean advertisement immediate to World War II not only emphasized the woman but also household appliances like the main protagonist of the announcements, emphasizing its technological and aesthetic features in a more pedagogical way. And in some cases these appliances are not the central argument of the message, but the electricity whereupon they function; the important thing is not that “she” understands the complex process of electrification, but to state that it is a symbol of progress that will transform her into “a modern” woman.

The appropriation of these new and unknown goods carried with itself a series of new experiences, like the time and disposition to assimilate the emotions that these new products generated, as well as to understand and learn how they worked. Therefore, its use and appropriation became a personal process and a subjective experience that depended on certain rooted customs and the disposition to accept new technologies and forms to inhabit the domestic space. Like part of the universe of these new technological appliances associated with woman, particularly the household electric appliances meant an alteration in the perception of the time and the amount of work and energy that was invested in cleaning, organization and preparation of foods.

4. Conclusion

Although the changes especially introduced in the bathroom and the kitchen allowed for time saving, mainly with respect to the tasks of food storage and home cleaning, these new technologies did not manage to modify in drastic way the domestic role of the Chilean woman; on the contrary, the images and representations of this technological modernity, emanating from diverse mass media sources, urged women to spend more time in their traditional domestic habitat, particularly in the kitchen.

Somehow, the transformation of these spaces and the arrival of



Figure 7 (left). Advertising company Califonts Mademsa, 1969 (Paula Magazine).

Figure 8 (right). Announcement of new 11-foot refrigerator, 1965 (Saber comer y vivir mejor magazine).

household electric appliances, helped to reinforce this dominant ideology in urban homes and the mid-level income sectors: vacuum cleaners, juicers, washing machines and refrigerators were transformed into new forms of female subjection, although it not necessarily meant an obligation or a pre-established norm for married women. What at first sight appeared as a form to facilitate the “natural” occupations of woman, in many cases it would end up being transformed into a sort of prolongation of the female body, indispensable for her daily activities and permanent object of desire. Thus, the promise of liberation of these new appliances proportionally progressed towards the increase of home standards, situation that contributed to guarantee the flow of new consumer goods, like part of a vast process of industrial modernization, which incorporated in its production a more classic diffusion of Capitalism values: saving time, money and effort.

Local advertisement, which revolved around a pseudoscientific speech, appealing to a woman’s traditional role, made up with the cosmetic effect of new technologies, outlined a profile of willful and efficient females. For that reason, the access to consumption and the possession of modern goods were a requirement to accede to modernity. Although these visions, emanated from the public sector towards the private sector, it influenced the decision making and construct of an imaginary female associated with the consumption, leisure and well-being of the family. This did not imply that a homogenous mass of Chileans adhered to these representations without restrictions, especially middle class women that having reasonable access to consumer goods, worked and could have maids or domestic service or work simultaneously inside and outside the home. For these reasons, the pretension that the domestic appliances carried out a fundamental role in women’s liberation is somehow disproportionate if we consider that, whereas it considers women “natural” users of these appliances, instead of releasing them from their domestic role, when in fact what they did was to reinforce it.

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La Escuela de Artes y Oficios de Santiago EAO (1849-1976)

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Itineraries for a Design Culture in Uruguay

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Design / Field / Uruguay / Policies / Industry

We will discuss the emergence and consolidation of a Design Culture in Uruguay by means of three episodes which allow us to visualize challenges and issues in the constitution of said field, recognize territories with unstable overlap and articulation borders in various dimensions, as well as formulate a series of hypotheses for the construction of different histories of design

1. Introduction

The aim of this paper is to discuss the emergence and consolidation of a design culture in Uruguay by means of the presentation and analysis of three episodes which we consider allow the visualization of some of the challenges and issues in the constitution of this field (Bourdieu 1983).

In the context of a wider research project¹, some of the concrete experiences which have enabled the formulation of a series of hypotheses –which led us to name the studied cases as episodes– will be analysed. We consider that its mapping would permit to construct several design histories (Calvera 2010).

Our starting point is that the growing presence of design in the development agendas of developed countries and in those with economies regarded as emerging² has raised awareness about a diversity of objects of study according to the perspective, the assumptions and the conception of design from which to implicitly or explicitly approach it.

Also, these objects have made possible the recognition of territories with unstable overlap and articulation borders in many dimensions:

- socio-economic aspects which articulated public policies and private initiatives.
- institutionalization of the teaching of design.
- art-handicraft-design relations.
- trade-industry-design-technology relations.

From this approach, we intend to detect the local specificity in a number of agents and events with diverse degree of cohesion, produced by actors in different circles who co-related material

1 "Cultura del diseño y comunicación visual: perspectivas histórico-críticas para la formación de un campo del diseño en Uruguay", Comisión Sectorial de Investigación Científica, Montevideo, 2011-ongoing.

2 Like many categorizations utilized to ascertain the degree of regional-national development, the notion of emerging economies has drawn criticism.

and visual repertoires with political, economic, technological and industrial visualization strategies in which the practice of design and its derivations occupy a central role. We expect for the progressive denaturalization of the objects of study to make possible the relativization of essentialist, normative and teleological looks; of productions de productions admitting of interdisciplinary, diverse and co-existing, contrasting and complementary, theorizations and historizations.

2. Art School

In the early twentieth century, in the two terms in which José Batlle y Ordoñez was president of Uruguay, a reformist democratic policy, which is considered the second modernizing phase of the country, was encouraged (Caetano 2008).

The agro-export model was severely questioned, and a heated debate developed which involved the government, a set of private actors and teaching institutions. At the core of this debate was the question of industrial development as a paradigm of progress and as a means to increase productive capacities.

By the end of the nineteenth century, an industrialist mind-set had already appeared. The government sent observers to Europe to collect experiences and articulate state policies based on those ideas considered leading edge. Several chronicles recorded these visits to various European industrial exhibitions. Pedro Figari travels to Europe between 1886 and 1893 as an inescapable requisite of the education of Uruguay's governing elite.

A multi-faceted protagonist of his day, Figari presented in his capacity as House Representative a Bill for the creation of the Fine Arts School in 1900. This School would fill the gap left between the Mathematics School, which had an academicist leaning, and the Arts and Crafts National School, aimed to satisfy industry's need for labour. It produced a handcraft-artist profile oriented to a wide scope of applied arts, which according to his view included industrial products, of which he stressed their artistic dimension. His rationale also pointed at the social aspect, at the development of the middle reaches of society through independent medium-scale handcrafted work, and its counterpart in small industry, as an economy-dynamizing agent.

This law was not passed, but in 1905 the Circle for the Promotion of the Fine Arts was created by a private initiative, which included in its evening courses the training of artisans and which shortly thereafter implemented a program of "art applied to industry".

In 1908 the government decided to further the Arts and Crafts School, which falls into the orbit of the Industry, Labour and Public Instruction Ministry. As a member of its Council, Figari presents a 'Programme Project and Regulations'. In it he proposed to orient the training of 'artist workers (€) competent workers with judgement of their own' (Anastasia 1992) modelling the student's ingenuity rather than his handicraft, opting for general training instead of specialization. He based his position on the situation and outlook of national industry even though that ran counter to the vision and interests of the industrial and government sectors.

In 1915, he takes office as acting director of the Industrial School (which belongs to the Arts and Crafts National School), which enables him to put his ideas into practice. The 'active school' notion, centring on technical-industrial teaching, was conceived as developing reflexive and creative skills and the workshop as the site of experimentation and training.

He introduced radical changes in teaching methodology, favouring creation and ideation. Designs were made bi-dimensionally on figures of local flora and fauna, which then were materialized in workshops like that of "women's handicrafts", stained glass, wood and ceramic sculptures. In a note addressed to the Industries Ministry Figari expresses in 1917 the 'fundamental need to have all twenty workshops teach how to build and conceive integral objects with practical value' (Peluffo 2006 : 42)

In the project for the Program for the Reorganization of the Arts and Crafts School, in 1910, Figari states:

The teacher sets out the solution to a given difficulty, or proposes the construction of something more or less simple, such as a candle stick, a clothes hanger, a chair, etc; the disciples draw, model or present their solution and the teacher then examines and judges critically the proposed solutions(€) heightening price, originality and character of the piece, as well as its adaptation (€), the teacher expressing the rationale for his critical judgement as clearly as possible (Peluffo 2006: 43)

In one year and a half, over one thousand pieces were produced, whose inventory is in the archives of Gomensoro's Auction House, and exhibited in the school. This shows the intention to disseminate the results, commercialize the products and receive support from the authorities.

Most of the objects had the home as final destination. Without ignoring functional aspects, they abide by typologies and forms reflecting the taste of eclectic turn-of-the-century bourgeois imports. Figari is also attentive of the design and application of new "rational" criteria, like constructive and ornamental simplicity, meaning it should not compromise the basic geometry of the object. In the production of furniture, the search for "practicality" is seen in their multi-functionality: several uses are conjugated in one object in order to evidence the ingenuity and reflection that went into the conception of the device.

As to industrial objects, the emphasis was on making the utilitar-

ian and symbolic functions compatible, aware of the difficulty in achieving this objective. Figari states in 1912: 'it is so hard to draw a line between what is superfluous and what is necessary that it would require to proceed to a neat circumstantial investigation so as to determine where the necessary ends and the superfluous begins' (Peluffo 2006: 64).

He defines a rational aestheticism not idealizing or evoking, but creative, establishing the difference between the liberal arts and industrial or craft design. Concerning expressive resources, he endeavoured to free them from European influences and achieve their autonomy. The use of local and regional materials was a priority, and an Americanist design started to be essayed.

3. As and the record industry

The 1950's and 1960's in Uruguay constituted a critical period which culminated in the coup d'etat of 1973, a history shared with other Latin American countries. When the expansion of the structural crisis left no room for "shortcuts" (Caetano 2008) and the breakdown of the Batlle model and the difficulties of Uruguayan society –'a buffer'³ 'hyper-integrated'⁴ society– for agreeing on alternatives were evident, some manifestations questioning it appeared, looking for new imaginaries for the construction of new national projects.

In this context, Uruguayan popular music was a cultural and social response which emerged in the 1950's committed to the search for roots which was occurring in nearly all of Latin America. There appeared some youngsters⁵ who left an indelible mark on Uruguayan music with their folk-based songs, Latin American rhythms, murga [carnival band of street musicians] and an anti-establishment attitude towards the political situation of the country. It spread through different channels: concerts, contests, festivals, publicity; especially hoardings, as the ideal medium for mass communication and television⁶, by means of Discodrómo, a pioneering show in supporting this type of expressions.

Thus, the Uruguayan record industry enjoyed a great growth⁷, with records as the best Vehicle for music and culture. This success was due to a middle-class, cultured, culturally-restless

3 The 'buffering' society is a concept coined by Carlos Real de Azúa as a metaphor for the country and its people: in Uruguay social and political changes do not reach a head, but all tension is eventually "ironed out", a compromise is reached. In: Real de Azúa, C. 1984. Uruguay, a Buffer Society. Montevideo: CIESU-EBD.

4 The hyper-integrated society, an agreed-upon concept in Uruguayan historiography, is based on the fact that Uruguay does not have a significant autochthonous population and that, in few countries in the world has the immigration process had such a crucial transcendence in the early configuration of the local society as in Uruguay, with an insertion of very qualified foreigners in economic activity and the social structure.

5 Alfredo Zitarrosa, los Olimareños, Daniel Viglietti, Eduardo Mатеo, among others.

6 Between December 1956 and 1963, Montevideo's four open air TV channels were started.

7 Confirming the musical boom, the figure of 30,000 copies reached by some editions in this period shows a level not to be topped for a long time to come, which had both national and international transcendence. (CASTILLO, R; MUÑOZ, C.A. 1983)

country. The public expressed itself as an active, enthusiastic, committed audience. These features were at the basis of the acceptance of the graphic proposal by Grupo As.

The As printing press, founded by Jorge de Arteaga in the 1950's, was unwittingly an ambitious project of Uruguayan graphic design. Made up of well-known local graphic Designers who straddled two generations, the '45ers or critical generation, and the rupturist '60ers, with their vision of the possibilities of a historic leap into the future, with its signs of violence. They made incursions into multiple areas, one of their most significant contributions being in the area of poster design and work for the record industry.

None of them was a design graduate; As was neither an advertising agency nor did it have links to marketing. It was a printing press which started with the purchase of an offset machine, which is why it was linked from its inception with the productive aspect of graphic design. This machine, which made it possible to draw directly on plates and masters, conferred a swift, spontaneous way of working. It is not by chance that the first to use it were the members of the very press workshop, Torres García, Gurvich, Pezzino, among others, which provided an unmistakable link with Uruguayan artistic avant-garde.

In a local medium very much tied to typographical conventions, As offered a design of great liberty, with ample room for experimentation, to accomplish quality works regardless of cost, which appropriated Bauhaus elements, Torres García's, from Concrete Art, from Pop, from Latin American popular graphic industry, articulating them into design pieces with a strong local stamp which constituted a recognizable identity mark. As a result, they professionalized the Graphics design field in Uruguay. Hermenegildo Sábat stated: 'The professional, almost non-commercial, nature of the press transcended Montevideo [ε] Good design was always favoured, good drawings, the best compositions. A treat for any society' [SCLAVO 2007].

As's "cultural capital" [Julier 2010] lay in teamwork, in the importance assigned to innovation and creativity, in their capacity as a group to offer differentiation. These traits were in keeping with the Uruguayan popular music movement, which created their own repertoire to be sung in Spanish, strengthening a sense of identity but also engaging in an exchange with the Latin American movement. Identity and dialogue manifested themselves also in the cover art of records and the posters that the AS printing press developed and which the record industry benefited from.

The use of visual devices came to be utterly appropriate for a music which, in spite styling itself popular, it was an intellectually-based movement aimed at an elite who shared and understood its meaning. However, popular music was also appropriated by young people, who also identified themselves with a colourful, spontaneous, dynamic graphic style.

It may be said that true network was formed, with design took centre stage, unheard-of to that day in the local environment for the products of popular music integrated by many agents –authors, Designers, producers, intermediaries and consumers–, and which tallied with the search for alternative projects with an economic, social and cultural dimension, a search for projects that could be "a way out" of the crisis, which were a distinguishing feature of the 1960's in Uruguay.

This unprecedented relationship for Uruguay between design, the cultural field, politics, production, the market and consumption constitutes an episode which, according to 'De Fusco'⁸, gives rise to a veritable design event in the pre-dictatorial Uruguay.

4. The 'Uruguay Natural' Brand

The creation of the Tourism National Commission on May 25, 1933 evinced State intervention in the redefinition of the Uruguayan territory by installing the East districts of the Uruguayan seaboard, such as seaside resorts, modelling the imaginaries that would represent what we may call modern leisure. A not always pragmatic set of guidebooks, maps, brochures, posters and other typologies made up a repertoire which set about focusing on certain spots in the country, which came to be considered worthy of a visit.

The development of the Uruguay Natural country brand, with the State as principal⁹ again redefined the territory intending to widen the choice of tourist offers aimed at a national and international public. Inasmuch as it articulated an identity whose objective was to capitalize on tangible and intangible assets of the territory under the State's initiative represented a change in the policy of intervention of design in the public agenda, which sought to align itself with strategic design trends globally.

The celebration of independence bicentennials in many Latin American countries, Uruguay among them, seemed like fertile soil too. It made possible and stimulated revision, reinterpretation and value enhancement of patrimony and traditions with a view to designing new experiences which may involve the citizens, their plural organizations, so organizations and institutions which are not based nor belong to the country can adhere. [Puig 2009]

Among the actions evidencing a programme intention to commit different agents with a capacity to have an impact on local development, we can quote the Joint Programme 2007-2010 'Building Capacities for Development' between the Uruguayan

8 To De Fusco, an event in the history of design, unlike those of art and architecture, where the protagonists are the makers and their Works, is not only based on the project makers as, at least, a like weight is enjoyed by producers and salespeople, and the public. Nor can it be based on products alone, since often technical innovations, institutions, contributed ideas, above all the production-consumption logic, have contributed immensely to design culture.

9 The initial project was presented in 2002 by I+D, Gonzalo Silva and Nicolás Branca [Ortiz de Taranco 2008].

Government and the System of the United Nations in Uruguay-ONU. The 'construction of the country image' is one of the main government issues, on a par with the energy policy, the attraction of direct foreign investment and copyright law.

The determination of renovated ethical-cultural platforms from which to create richer, local concepts and more lasting, concrete qualitative commitments (Morace 1993) seems to be at the origin of this project. It is particularly interesting for this research the fact that Uruguay is the only middle-income country globally which has been selected to participate in the UN project in order to make some final reflections which do not mean to be conclusive. Juan Rial has pointed to the myth of a necessary average Uruguay to achieve a happy Uruguay. Together with that, they mention three other founding myths: that of differentiation-identity, that of consensus and that of the culture of the mass of Uruguayan citizens (Caetano 2008: 228-229). The selection of these three episodes amid the vast, diverse total in the research framing this paper¹⁰ aimed at identifying the long-lasting lines in which, in a variety of ways, design as a catalyst realized, brought together and de-territorialized the inertias and continuities of those myths.

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¹⁰ Some of the episodes identified: the Tourism National Commission; the Torres García print workshop; Uruguay at the Universal Exhibitions; the Design Institute; Concrete Art in Uruguay; Maldonado in Montevideo; the Book and Print Fair; the Print Club; the CIDI; design training starting with the CDI.

Sertanejo Art Deco: an inspiration for a Brazilian design?

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Brazilian Northeast / Popular Art Deco / Brazilian style / Academic experiences

This article lists design projects and researches concerning popular modernist constructions from the Brazilian northeast, entitled Sertanejo Art Deco. It introduces the style and shows how this subject has been historically unappreciated by Brazilian architects and academicians. An analytical method to classify geometric composition of the popular façades is illustrated, as well as arguments in favor of adopting Sertanejo's geometric features as an inspiration source for designers and researchers.

1. The discovery

This research started when the authors came across regional housing in 1972 and were fascinated by the villages along the highways of the Brazilian Northeast region (fig. 1). As designers from the Southeast region of Brazil, embedded with functionalist principles, they were taken by surprise when observing these “delightful” façades, which geometric compositions were in conflict with academic rules about the so called “good design”¹. Amazingly, that regional anonymous creativity that was expressed only by rustic rulers and compasses in a particular Art Deco style had neither been mentioned at all in the literature, nor expressed in the Brazilian architects’ and designers’ work and minds. This style can be referred to as the Northeast Art Deco Style or Sertanejo Art Deco, as explained further in this paper.



Figure 1. Two façades of Campina Grande's neighborhood in the 1980's. (photo by the authors)

The “invisibility” of this regional façades/buildings could be understandable if one refers to the 1970's weak or even non-existent communication between Brazilian Northeast and Southeast's trend setters. As quoted by Lemos (1981: 42), in general terms museums and architecture organizations seem to agree in keeping preserved rich “works of exception”, putting aside the “popular and ordinary goods” (Lemos 1987: 22). Besides that, Art Deco

style has been rejected and undervalued by some Brazilian academicians and architects even nowadays. For example, according to Weimer (2011: 7), “from whence the conclusion was reached that it would be absurd to speak of ‘Art Deco’ architecture or an Art Deco ‘style’”.

On the other hand, the authors have been engaged in the preservation of that regional popular modernism through a long run of talks, presentations, exhibitions, media campaigns etc. (ROSSI 1984; 1994). It is rewarding to know that since its first public presentation in 1982, Sertanejo Art Deco has served as an inspiration for other designers and researchers whose projects and products will be illustrated here.

2. Why Sertanejo?

The term “sertão” (hinterland) refers to a Brazilian northeastern geographic region. It comes from the colonial Portuguese word “desertão” (big desert), meaning a place distant from urban centers, a country remote backwoods. Poetically speaking, it is a piece of land of fond memory, “my sertão” (Rossi 2011: 42). Therefore, due to the absence of a distinct name to refer to the newly found regional style, the adjective “Sertanejo” was coined to baptize this type of popular expression of modernism not recognized by the academicians.

As usual in peripheral cultures - with few exceptions - international trends have been leading the aesthetics of architecture and product design. This directed design researchers to study mainly foreign avant-garde modernist topics rather than their own backyards’ “exotic” expressions. Fortunately, a new generation of researchers has a different approach to the subject. For example, Campina Grande (PB), the city where this research started in the 1980's, is referred by Queiroz (2010: 37) as having “a great and significant Art Deco inheritance”.

3. Official and popular Art Deco

Putting aside any conceptual debate about Art Deco, this style can be characterized as a geometric mixture of “Historicism and Modernism” (Frampton 1994: 220). Furthermore, Art Deco is also linked to dazzling shines reflected by luxurious surfaces, with fancy couples dancing Charleston in frenzy during the decades between the wars. Segawa (1995: 73) adds that Art Deco represents “an affluent American society which borrowed and multiplied the decorative artifices from a rich European culture.

¹ As we were taught at the Design Industrial Course in Rio de Janeiro, strongly inspired by HfG/Ulm, Germany.

However, in strong contrast to the American and European Art Deco, there is no shine in Sertanejo Art Deco's façades. Its luxury lies only on its anonymous builders' prolific creativity over plain masonry. The "modern" façades hiding old roofs are the core of our research interest (fig. 2), but what do those "one-door-one-window" modest houses have in common with Scott Fitzgerald's Jazz era?



Figure 2. Chã dos Pereira, Paraíba. Old roofs and new fronts, 2012. (Photo by the authors)

The answer may lie on the assumption that this Brazilian regional variation and its façades' geometry relate to the basic features of international Art Deco style, for example: stepped ziggurats, Egyptian reliefs, Mesoamerican temples, Greco-roman classicism, Streamline curves, and other elements taken from Abstractionism (fig. 3). In this respect, we would argue that the Sertanejo Art Deco is a type of "architectural dialect" that re-organizes the geometry of Modernism in a particular way. As an extension of Brito's (1983) concept of "interaction between the opposites", it is believed that there is a merging of all the "isms" into Sertanejo Art Deco's employment of meta-symbols (fig. 4).

In this regard, geometric shapes would also symbolize Modernism, but it was also in interaction with Historicism. Thus, the façades would be combined with elements of Classicism, Cubism, Eclecticism and Futurism, just to mention some. The past of art and architecture is then translated into straight and curved signals, at the limit (or within) of geometric abstraction that was expressed in icons of lime and cement, color and light in the Northeast. This is in accordance to Queiroz (2008: 234) when asserting that occupants of Sertanejo houses had "the desire of reflecting new times and rhythms, even though only through the façades".

4. Sertanejo Art Deco's geometrism: framework for classification

Due to the lack of literature on systematic analysis of mainstream Art Deco buildings, and particularly on Sertanejo Art Deco, an analytical framework is proposed by the authors. Compositional and decorative elements of approximately 2000 façades from around 60 north-eastern towns were analysed and compared against examples of international and Brazilian buildings officially recognised as Art Deco. The classification comprises 14 categories distributed into lines, polygons and polyhedrons¹, as showed next (fig. 5).

1 A detailed explanation of how this criteria was used will be subject of future articles and the book "Sertanejo Art Deco and its geometrism" (in preparation).



Figure 3. Classicism inspired façade in Pesqueira, PE, and Neoplasticism design in Bodocongó, PB, 1990 (photo by the authors)



Figure 4. Plain geometry simbology in Delmiro Gouveia, AL, 2000 (photo by Lia Monica Rossi)

This classification is presented first hand here, therefore was not yet used by the authors on projects that will be listed in the next section. Nevertheless, it can be perceived as a strong geometric similarity between the work of anonymous authors of Sertanejo Art Deco façades and other artisans, artists and designers from the same Brazilian region.

1. Stepped rectangular glazier	2. Broken lines				
	straight parallel chevrons	straight angles	Mixtures	stepped	
3. Parallel lines	4. radial lines	5. triangles	6. diamonds	7. squares and rectangles	
8. Other polygons				9. Overlapping polygons (neo-plasticism)	
Trapezoid-concave	Trapezoid-concave	Interwined	Miscellaneous		
10. circular	11. Complex composition	12. Triangular prism	13. Other solids	14. Tangent planes and secant (streamline)	

Figure 5. General framework for classification into geometric categories (Table by the authors).

5. Inspired projects

Examples of design and architecture constructions that have explored the Art Deco theme are briefly described and classified in two groups: (1) Products with the geometric shapes of Sertanejo Art Deco; (2) Products reportedly inspired by Sertanejo Art Deco. Though there are other initiatives engaged in the promotion and preservation of Art Deco and other forms of regional architectural expression (e.g., publications, documentaries, preservation projects etc.), these are not included here due to space constraints.

5.1 Products with the geometric shapes of Sertanejo Art Deco

Clay craft

Anonymous, C. Grande, Paraíba, undated, acquisitions from 1980 to 1990 (fig. 6)

These miniatures made by anonymous Northeast artisans were sold at the Central Fair of Campina Grande. They reproduce parts of buildings façades popular in the Northeast and measure between 15 and 30 cm tall.

Recycled glass craft

Anonymous, Juazeiro do Norte, Ceará, undated, acquisitions in 2000 (fig. 7)

These Deco-inspired miniatures are sold at the Center for Popular Culture Master Noza. The artisans reproduce and/or invent objects using scrap glass and mirrors pieces collected in glass workshops. Measure 10-20 cm high.

Truck mud flaps

Master Samuel and others, Campina Grande, PB, undated, acquisition from 1980 (fig. 8)

Mud flaps are used in the wheels of truck and are of unique geometry, manufactured by painters of the region on wooden or rubber surfaces.

Fictitious Clothes Project

Geová Amorim, Campina Grande, PB, 1984 (fig. 9)

In the 1980s the local artist Geová Amorim created a series of "fictitious clothes" based on geometric shapes, Erte's costume designs (Barthes 1976) and Sertanejo Art Deco compositions.

5.2 Products reportedly inspired by Sertanejo Art Deco

Fashion design and northeast cultura

Final work for Industrial Design BA Course, Federal University of Paraíba, 1990 (fig. 10)

Jose Marconi B. de Souza, supervised by João B. Guedes



Figure 6: Examples of miniature made of clay representing Sertanejo Art Deco façades. Collection of the authors. (Photo by the authors)



Figure 7: Miniature of drawer made with glass and mirror pieces. Collection of the authors (photo by the authors).



Figure 8: Truck mud flaps on rubber (40 x 50 cm). Collection of the authors (photo by the authors)

Sertanejo Art Deco: an inspiration for a Brazilian design?

This academic work contains a collection of menswear inspired by the popular aesthetic of the Northeast (i.e., houses façades and truck's mud flaps designs described before). The popular compositions were systematically analyzed, so their principles could be applied to clothes trimmings, ornaments and structure.

Campina ´s Furniture Project

Research and furniture design by Gustavo Bomfim & Jose Marconi B. de Souza

Industrial Design BA Course, Federal University of Paraíba, 1990

The proposal was to investigate elements of popular furniture produced and sold at the Central Fair of Campina Grande in order to develop a line of furniture to appeal to new consumers. The project was funded by the "International Design Forum Ulm – Conference 1989".

"Sertanejo Art Deco Building Blocks" Project

Final work for Industrial Design BA Course, Federal University of Paraíba, 1995 (fig. 12)

Rejane Catão, supervised by G. Bomfim, Jose M. B. de Souza & Lia M. Rossi

The objective was to design products that could be made of leftover materials collected from local furniture joinery industry (e.g. small pieces of wood and laminates usually discarded as firewood). When building blocks are assembled they create a variety of Sertanejo Art Deco façades' "modanatura" (i.e., arrangement of architectonic elements in accordance with certain composition rules).

Project deconstruction and construction of the Sertanejo Art Deco geometry

Jose Marconi B. de Souza, 2010

The objective is to provide step-by-step method of deconstruction and construction of a geometric composition inspired by truck mud flaps (fig. 13). The method employs digital vector software tools such as Bezier (available on standard desktop graphic applications).

Campina Déco Project

Consultancy by Lia Monica Rossi, Jose Marconi B. de Souza, Dra. Cristina Mello e outros, PMCG/ SEPLAN, Prefeitura Municipal de Campina Grande, PB, 1999-2002

Between 1935 and 1945 Campina Grande ´s downtown houses in an eclectic style were almost totally demolished. This destruction was based on a series of decrees that promoted the

replacement of old buildings by modern Art Deco terraces ¹ (fig. 14). Sixty years later, in 1999, the City Hall started procedures for downtown revitalization of the so called Campina Deco Project².

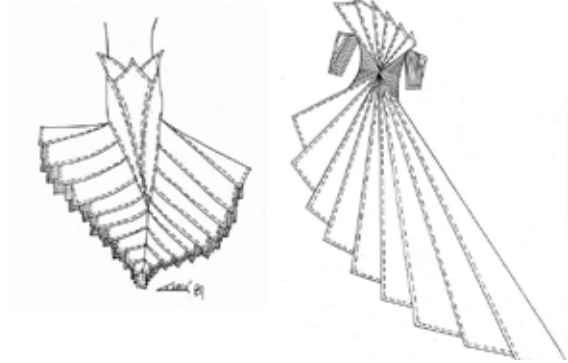


Figure 9: Two design for feminine clothes. Collection of the authors (photo by the authors)



Figure 10: T-shirts and shirts inspired by Sertanejo Art Deco geometry. Collection of the authors (photo by the authors)



Figure 12: Demonstration of the assembly process of a sequence of façades. Collection of the authors. (Photo by the authors)

1 "Builders and architects from the region or graduated at the National School of Fine Arts in Rio de Janeiro set up their offices to meet the large number of customers of that compulsory "modernization by decree." (Veras 1988)

2 Mayor Cassio Cunha Lima Administration. Law # 3721, Aug.06.1999, SEGOV/ PMCG, creating Special Area of Conservation I.

Besides preserving the building's stylistic features, this project included works on infrastructure networks, new paving, removal and standardization of advertising in the façades, re-allocation of street vendors, street furniture etc.

Local Commercial Associations supported the Façades Restoration Project, and a special tax exemption laws for owners of properties involved were applied (Fig. 15). This project consisted of: Research on architectural specification files (discovered in 1994), digitization of the façades, classification of buildings by area (Preservation, Guardianship and Tipping), the design of colour guide based on original specifications, detailed actions for each building, standards for shop signs and lighting (fig. 16).

The complete project was supposed to cover 150 properties in 10 blocks occupying 17 hectares of Campina's city center. But actually, only one street was completely revitalised. Given the popularity and media support, the spreading of the historical importance of popular architectural modernism worked as an example for other governments. The authors consider this a case of rare success in Brazil, which later on motivated the creation of a larger preservation movement in the city.

Pavement design

Architect Anselmo M. Dantas & Maria Veronica R. do Vale, drawing by Gilvan J. de Lima, PMCG/SEPLAM, PB, 1998.

Within the Campina Deco Project the remodelling of sidewalks paving was envisaged. Even though not implemented, this design is clearly inspired by the Art Deco geometrism and should be made using granite material.

St. John Feast scenery

Architect Anselmo M. Dantas and team, PMCG/SEPLAM, Campina Grande, PB, 1998

Free interpretation of the popular Art Deco façades used as decorative theme of St. John Feast at People's Park.

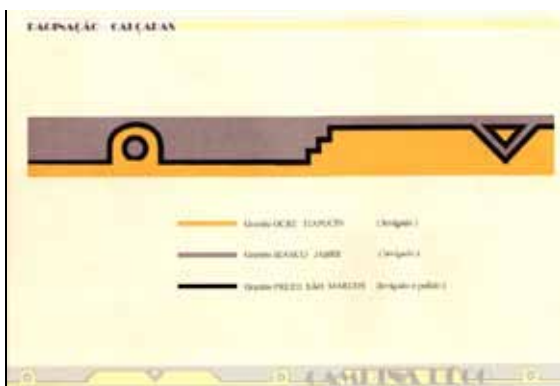


Figure 17. Art Deco inspired sidewalk design. 1998 (photo by the authors)



Figure 13: Illustration of the deconstruction and construction of truck's mud flap geometry (photo by the authors).



Figure 14: Art Deco uniformity of the 1940's downtown Campina Grande, 2005. (Photo by the authors)



Figure 15. 112, Maciel Pinheiro Street original project of Josué Barbosa in 1946. Still covered in 1999 and restored in 2000. (Photo by the authors)



Figure 16: Digitized façades of Maciel Pinheiro Street, 1st block, odd side. Design by Jose Marconi B.de Souza and Apoena R. Barreira, 1999. (Photo by the authors)



Figure 18. Stalls sequence scenario based on the Sertanejo Art Deco façades, 1998 (photo by the authors).

6. Final considerations

We can summarize this article with assumption that there are at least two approaches to the Art Deco subject: the first, whose authors deny its existence as style, and the second, whose authors defend its preservation. This work chooses the affirmative side of the discussion, supporting both the “official” features of the style and its anonymous expressions like the Sertanejo.

As usually happens in “peripheral cultures”, international trends are the “mainstream” of aesthetics whether in architecture, design, film programming or music, just to mention some.

However, as a reaction to this viewpoint, the authors remain engaged in the study, dissemination and preservation of Northeast popular Modernism, now more stimulated by the growing number of “followers”. Northeast culture as an inspiration to art often emerges in Brazil, whether as a theme in soap operas, movies, TV shows and carnival parades, confirming its potential as a creative source.

To illustrate the great possibilities of art expression of the Northeast culture, the authors presented some works in which formal characteristics of Sertanejo Art Deco were deliberately used by architects and designers. They also show how Sertanejo Art Deco's geometric shapes permeate crafts.

But, with exceptions of those few examples, it is pertinent to state that the Sertanejo Art Deco and other variants of Brazilian hinterlands culture remains an unknown field, an uncharted territory in the academy as well as for architects and designers.

Besides, it is worth mentioning that the process of preservation demands updating. In this sense there seems to be an agreement among theoreticians, as stated by Bardi (Grinover & Rubino 2009) and Reis (1970):

What is needed is to consider the past as historic present. (Bardi, in Grinover and Rubino, 2009: 165).

The cultural heritage of each Brazilian region should be mobilized

as a starting point for the creation of the present. This heritage is essential to incorporate intellectual and sensitive creative activities in today's life. (Reis 1970: 191)

Finally, the words of Mario de Andrade, a Modernist Brazilian writer and art critic, come to epitomise this topic. He advocated a “national art produced by native craftsmen” as a replacement to the foreign expertise of immigrants in craftsmanship at the beginning of 20th c. Brazil. In this perspective, one may wonder if the Sertanejo Art Deco craftsmen could be part of the necessary “artistic ballast” for Mario de Andrade’s “new Brazilian aesthetics conception” (Abbud, 1979: unpagged). We deeply believe they could.

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Architectural lettering: from information to identity: a study on Gregori Warchavchik's *Condomínio Cícero Prado*

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Architectural lettering / Gregori Warchavchik / São Paulo architecture / 1950 architecture / Typography

This article sets out to do a case study of the *Condomínio Cícero Prado*, a complex of buildings by architect Gregori Warchavchik, built in 1954 in São Paulo, and has the final goal of performing an analysis of its lettering, as a formal element of information and identity in the built architecture.

1. Introduction

In Western civilization, the Romans were the first to use lettering in a truly architectural way (Bartram 1976: 7), through inscriptions on buildings such as monuments, where the feats and achievements of leaders were recorded.

According to Bartram, after the Baroque period, no major breakthroughs occurred in the use of lettering as an architectural element, with some exceptions, during the Fascist period in Italy, where italians tried to revive the grandeur of ancient Rome, and also in several attempts in Russia, Germany and Holland during the beginning of the twentieth century, which were mostly restricted only to proposals. 'Even this early modern interest - and it was an important part of the general philosophy of the New Design to consider the relationship of all visual elements - seems to have died out.' (Bartram 1976: 8).

This paper's aim is to reflect about that, from the study of a particular case, the *Condomínio Cícero Prado*, designed by Gregori Warchavchik, located in downtown São Paulo. Warchavchik was born in Ukraine and introduced Modern architecture in Brazil during the 1920s.

This building, although considered of little representation in the whole work of the architect, acquires a relationship at least interesting from the perspective of architectural lettering, by arousing the interweaving of themes such as modernism and ornamentation. It's through this work that we intend here to analyse the relationship between lettering and architecture over a period of great architectural production and consolidation of the city's verticalization.

The objective of this work is not to value architectural or artistic movements, but rather to propose a brief analysis of how certain architectural styles took advantage of the use of lettering, creating aesthetically rich results, and providing a better relationship between architecture, the city and its inhabitants.

Definitions

The term typography, should be understood, in this article, in a broader sense referring to the set of practices and processes involved in the creation and use of visible symbols, related to orthographical characters (letters), and paraorthographical (numbers, punctuation, etc.) for reproduction purposes (Farias 2004), and also the characters obtained through processes classified as lettering (painting, writing, casting, etc.), and not just those obtained by automated or mechanical processes (Gouveia 2007: 2).

Architectural lettering should be understood generally as typographic manifestations designed together with the building, and made to last as long. Neither the building nor the typography should seem complete without the presence of one another (Baines & Dixon 2008: 118).

We are specifically interested in one of the subdivisions of architectural lettering, which is the nominative typography, or the permanent writing whose primary function is to identify a building (Gouveia 2007:3).

2. The *Condomínio Cícero Prado* lettering

Done by architect Gregori Warchavchik, it's located at Av. Rio Branco, 1661, having been built in 1954 by Construtora Warchavchik-Neumann Ltda., on request by the Cia. Agrícola Industrial Cícero Prado.

The complex, whose name actually is *Condomínio Edifícios Albertina, Cícero Prado e Cecília* (Fig. 1), home to nearly 150 apartments, is distributed in three large vertical blocks, implanted in U-shape, over a horizontal block that occupies the entire lot, designed to house a movie theater.

The extreme orthogonal rigidity of the three vertical blocks is broken by a series of concrete balconies, which are projected on diagonal lines, finishing with rounded ends. In the central block, the balconies are located in the center, while in the side blocks they are located at the ends near Av. Rio Branco. The balconies are also adorned by moldings and planters in the side blocks, and the central block by hollow elements in the railings.

On the roof of the horizontal block, there is a garden, which can be seen by the apartments in the three residential blocks, and in the centralized alignment with the street, the name Co. Cícero Prado can be seen in large size concrete letters.

The lettering CO. CICERO PRADO, was cast in concrete, in sans-serif, geometric, light typeface and is in centered alignment relative to the building. The entirety is approximately 20m. wide. The characters C and O, the abbreviation for the word *condomínio*, is 50cm in height, and the remaining characters are 1.20 m. in height (Fig. 2).



Figure 1. Albertina, Cicero Prado and Cecilia condominium (photo by J.R. D'Elboux).



Figure 2. Nominative architectural lettering of the Condominium in characters molded in concrete (photo by J.R. D'Elboux).

The lettering design closely resembles Futura typeface, designed by Paul Renner in 1927, one of the most characteristic typefaces of modernist design. The lettering has some modifications with respect to the Futura, especially in its proportions: for example the much narrower width of characters such as A and E, further contrasting with wide characters such as O and C, drawn from exact circles. Another difference is the ending vertex of the letter A, a straight cut, unlike Futura, ending at an angle.

These characters, most likely, were not designed by someone intimate with typeface design, since they use unusual solutions to the design of types, making clear the choice for applying geometric principles, rather than optical procedures used by typographers more concerned with factors such as readability. Figure 3 shows the alphabet Futura superimposed over the characters in the original design of *Condomínio* Cicero Prado, where the main differences between them can be observed.

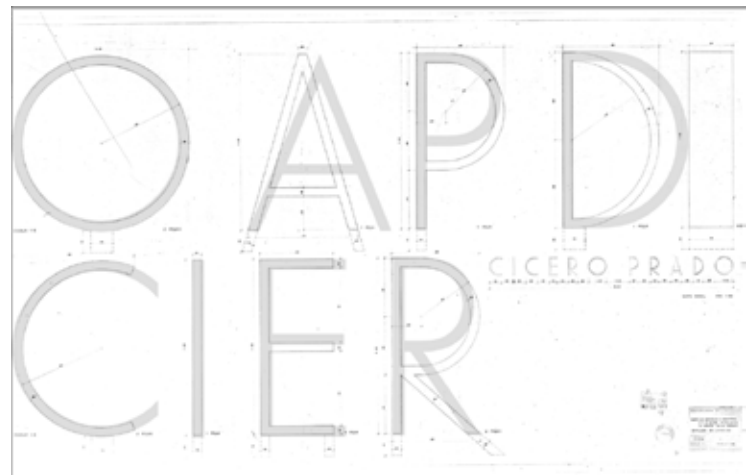


Figure 3. Overlap of typeface Futura Light (gray) over the original project design by Warchavchik, dated 01/06/55 (FAUUSP).

Examining the original blueprints for Cicero Prado condominium, some interesting facts emerge. The first is about the existence of a movie theater in the original project, which although mentioned in the literature referring this work, seems to have never got off the ground. In a registry blueprint entitled *Project for the construction of three apartment buildings and a movie theater*, though undated, there's a handwritten note that reads: *May/22/53 no effect*.

Some studies for facade and interior of Banco Cicero Prado headquarters were also found, dated 1952. In one of them we clearly see its location at the corner of Av. Rio Branco and Alameda Eduardo Prado (Fig. 4). At this place today there's a small building, with very similar characteristics as to these studies.



Figure 4. Study of front façade for the Cicero Prado Bank, located on the corner of Av. Rio Branco and Al. Eduardo Prado, dated 08/01/52 (FAUUSP).

There are also detailing drawings for the bank headquarters, at that time located in the area originally intended for the movie theater, at the front block of Cicero Prado condominium, dated 1955.

It follows then that the place where the movie theater would originally be built, went through design changes, and eventually housed the bank headquarters, which was originally planned to occupy the building at the corner of Av. Rio Branco and Al. Eduardo Prado.

Another interesting fact concerns the lettering. As seen in Figure 5, detailed in the project, the full lettering would be BCO. CICERO PRADO S. A., and was designed to be the lettering for the bank, and not the condominium, as we might be led to imagine by observing only the record of the place's current situation. This fact explains why the use of a lettering size as large as this to identify a set of apartments, as indeed it was originally for a commercial nature, despite the perennial feature of material and technique used in its making.

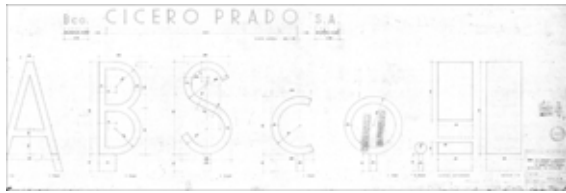


Figure 5. Reproduction of the original blueprint, where the lettering BCO. CICERO PRADO S. A. appears complete, dated 08/04/55 (FAUUSP).

Upon the closing of the bank, the condominium probably decided to keep this lettering, carrying out some adjustments, such as the withdrawal of letters B, S and A. In Figure 6, we note that there are still the two dots that accompanied the abbreviation of S.A. .



Figure 6. Detail showing the presence of the two dots from abbreviation S. A. (Photo by J. R. D'Elboux).

One question remains: why the two lettering detailing drawings have a two month interval from one another? As the project detailing the name CICERO PRADO, is dated June/1/55 and the one detailing the letters B, C, O, S and A, is dated Aug/4/55.

One hypothesis would be that, initially only the name CICERO PRADO was made, and later the full corporate name of the bank was included. Also, the unusual choice to abbreviate the word BANCO by BCO, was made so that the composition of the lettering as a whole remained centered on the facade, because if the lettering CICERO PRADO had already been done, completely including the word BANCO, would lead the composition to be much closer to the left edge, resulting in an unbalanced composition.

Why do the owners of Cícero Prado condominium decided to keep the lettering for Cícero Prado bank, once it had no more use

identifying a commercial banking house? It's not really possible to completely answer this question, but it is possible to indicate a possible interpretation of the facts.

Probably this lettering became part of the architectural ensemble as a whole. So that if it were to be removed, it would have disfigured this set. According to Baines & Dixon 'as a general rule, architectural lettering is conceived with, and is designed to last as long as the building. Neither the building nor the lettering should look quite right without the other' (Baines & Dixon 2008: 118).

As we have seen earlier, this lettering comes at a time subsequent to the design of the building as a whole, and probably after its completion. But the architect had the sensitivity to see the possibility of inserting an element that worked as a crowning of this facade, though still playing a functional and commercial role: the lettering, articulated in a dialogue of contrast between the lightness of the letter design in concrete, and the large horizontal block where the apartment blocks are supported.

It is thus quite likely that when designing a more commercial set, Warchavchik used common elements to the *Art Déco* language, to manage to join in an eminently commercial architectural character, something from the Modernism he helped introduce into the city, as Modernism and *Art Déco* originated from the same sources, the vanguards of the early twentieth century, and whose influence can be confirmed in the work done by Warchavchik in the production of additional elements for his projects such as furniture and metalwork. (Campos 1996: 65)(Fig. 7).



Figure 7. Interior of Warchavchik's modernist house on Rua Itápolis, 1930

In a recent study about Warchavchik, the Cícero Prado is described as an iconic achievement, in an attempt to compromise between real estate and plastic values (Lira 2011: 474). The author gets to describe details of the building, '...in it, the mass effects are counterbalanced by the aerodynamic line of concrete balconies, with its ornate sills and suspended planters...' (Lira 2011: 474). The use of the term aerodynamic is curious, coincidentally often used to characterize some aspects of *Art Déco*, but it's also important to note that another important feature in the formation of a São Paulo's *Art Déco* style, is exactly in such a

compromise between economic and formal interests (Pinheiro 2008: 117).

The relative formal cleanliness of Cícero Prado's architectural lines, as well as stylish moldings in ornaments and hollow elements on the balconies, provided an appeal of modernity while contributing to cheapening construction costs. In this sense, the lettering works as an additional ornamental element, able to communicate modernity in its characters of clean lines inspired by the Futura typeface.

Upon approaching the condominium one sees the large lettering, which henceforth occupies the role of main reference for the observer since the architectural set itself takes very large proportions, with some effort to be observed.

Due to its situation in the alignment with the street, and with a large empty area behind, the lettering creates a kind of filter for the eyes of those who walk by, stopping first in the design of its characters, then to reach the volumes of the balconies in the apartments.

According to Gordon Cullen, we build a progressive memory as we move through the urban environment, absorbing a set of visual information and spatial sensations (Cullen 1974). Following this principle, this lettering may represent more than a simple piece of information, and may establish an identity relationship with the environment itself where it's inserted, producing a sense of belonging by those living with this reference.

3. Architecture and lettering

The relationship between architecture and lettering can produce, at certain moments, quite interesting results, since both share a common trait.

Unlike most arts, both architecture and lettering have a primarily utilitarian function. Theoretically the intention of the builder or the letterer might be purely utilitarian without any artistic element, working only towards a purely efficient building or legible notice. But in practice is natural for the maker of something which is unavoidably visual and formal to wish to make it pleasing, as well as useful. (Gray 1960: 59)

This dual role found in architecture and lettering, was somehow perceived and used in the first moments of the Modern Movement, giving continuity to a process of integration between typography and architecture, promoted from *Art Nouveau* and the Viennese Secession.

Lettering can be considered the only decorative element in the famous AEG turbine factory from 1907, designed by architect Peter Behrens, responsible for the design of buildings, products and advertising material from the German company, having him also devoted himself to typeface design.

Architectural lettering becomes a point of strong interest in avant-garde movements that emerged in Germany, Holland and

Russia, following the typographical experiments of Futurists, and the New Typography, but at the same time, 'the formal interest suffered a final setback. The typographic freedom of the beginning of the century was rejected mainly due to its ornamental tendency' (Gray 1960: 92).

In the Paris Decorative Arts Exhibition in 1925, some pavilions drew attention by clashing with the whole show. Although based on the postulates of functionality and rationalization of Modern Movement they used the architectural lettering as one feature. They were the *Esprit Nouveau* Pavilion, by Le Corbusier and the Soviet Union Pavilion by Kosntatin Melnikov.

It's curious how this feature of the architectural lettering was abandoned by the Modern Movement architects later, but continued to be used in *Art Déco* style buildings represented in most of the fair pavilions, especially in the Robert Mallet-Stevens' Tourism pavilion.

4. Concluding remarks

Seeking to analyze *Condomínio Cícero Prado* from a somewhat uncommon perspective, having architectural lettering as a focus, we tried to understand a little better the process and consequences of the inclusion in a building of an element that is neglected in most cases by modern architects, the lettering.

The permanence of Cícero Prado's lettering after the closing of the bank for which it served as identification, shows that it became part of the visual identity of the condominium and its architecture, and is the likely transformation in visual reference in the city landscape.

As a project with commercial characteristics, the *Condominium Cícero Prado*, allowed Warchavchik to eventually use a feature, in this case the architectural lettering, that despite its historical importance, had been pushed aside by the more radical proposals of Modern architecture, that saw in it an ornamental role rather than an information and identity tool.

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A dialogue between art and city through artistic interventions on streets, façades and walls in São Paulo city

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São Paulo City / Artistic urban interventions / Visual surfaces

The city integrates current communication technologies in complex informational layers. Artistic urban interventions in the city of São Paulo, that make use of graffiti, lighting displays, projections and videomapping techniques- act as part of the urban landscape as visual surfaces able to heighten the perception of the city as a space for cultural exchange in the public sphere.

Even before the digital age, announcements in the form of posters, panels, billboards and lighting displays, represented layers of 'images of the city'. With today's communication technologies, the city is constantly being updated, leading to new imaginative creations and social configurations. In this new scenario, 'material' and 'immaterial' cannot be distinguished or thought as separated categories. This article examines some of the possible forms of artistic interventions in the city, including analog and digital techniques. These manifestations are understood to have an amplifying effect on the city's and its inhabitants' powers of communication.

Today, the city presents itself as surface of communication. Shop windows, lighting displays, and billboards, legacies of industrial cities, coexist with dynamic electronic-digital interfaces, artifacts of the contemporary world. Information technology and communication networks can be found encrusted in public and private urban spaces altering physical structures. Artistic manifestations that intervene in the architecture and in specific sites in the form of graffiti, panels, lighting displays and projections create new forms of significance that coexist with the previous ones in layers of information that stimulate the perception and cognition of the observer. Ambiguities result from the insertion of media in the midst of other forms already present in the city. However, these artistic interventions amplify the concept of the city making these spaces platforms for cultural intermediation and the sharing of activity. One characteristic of these interventions is that they increase the communication potentials of the city as visual surfaces, reducing the difference between public and private space through processes that promote reflection about the city itself.

In this context, the city can be treated as a communication system to be perceived and interpreted. According to Leite:

The problem in interpreting the contemporary city is due to the increase in the rapidity of construction and symbolic exchanges, where it appears that everything can be communicated, or is a communication, translation or representation of reality. At a time when we find a 'hyperinflation of signs and a multiplication of communicative subjects' (Canevacci), it becomes necessary to choose certain indicators or, as Ferrara suggests, use a single

dominant indicator to make our interpretations. (Leite 2005)

In the middle of images and visual stimuli focused on consumption, artistic urban interventions act as a counterpoint. They become part of the complex urban landscape as ephemeral actions capable of proposing new meanings, representations and narratives, of taking the individual away from his or her daily actions, stimulating his or her awareness.

Cities are permeated by visual manifestations. Since the dawn of antiquity, architectural surfaces have served as backdrops for adornment, images and texts, a medium that summons a variety of feelings and meanings. In the industrial age, posters, lighting displays and billboards, used in the most part for advertising, were fixed to architectural surfaces as visual manifestations. In the present day, the scope of activity has broadened to include electronic-digital alternatives along with analog manifestations such as graffiti, stencils, and stickers, among other things.

As Ferrara (2008) points out, the city is a medium that has media, and also provides a form of intermediation, given that its materiality provides the support necessary for the most diverse forms of media, which are capable of establishing communicative processes that can be interpreted by its users through its intermediation. In this sense, the city is dynamic and changeable, since as a medium, the city's surfaces behave like a skin that it dresses up in a manner that reflects the times that it exists in and as well as its culture. In terms of media, the city propagates itself through images, which supported by the city in its role as a medium, enable it to reinvent itself, establishing new forms of language, new meanings and as well as new and constant interpretations of it through its own intermediation.

Between superimpositions, juxtapositions, and substitutions, the surfaces of the city are configured as places for intermediation through communication on a local scale as well as on a global scale, given that artistic spaces are reproduced and disseminated throughout the world through the exchange of images, videos and mapping offered by digital equipment, mobile applications and the internet. The artist's discourse is permeated by a series of choices between the public and the ephemeral, and deals with shared spaces that articulate themselves through conceptions that are not only aesthetic and social, but also commercial and political.

If, in the beginning, urban graffiti was associated with marginal rather than institutional content, by the 1980s it already was causing repercussions on the artistic circuit of galleries and biennials. According to Moreira:

Graffiti began to appear in Brazil during the military dictatorship. In reaction to manifestations of order, short phrases appeared. Expressions such as “Down with the dictatorship”, “Hendrix Mandrake Mandrix” (by Walter Silveira) and “Cão Fila km22” marked the walls of the city during the 1970s. By the end of that decade and in the beginning of the 1980s, some names that today are famous began to attract attention in São Paulo. Alex Vallauri, whose classic adopted symbol was a woman’s boot, used this simple stamp as a strategy to make his work easily recognizable. (Moreira 2010: 50)

The artist Alexandre Orion has used the city of São Paulo as communicative visual surfaces, sometimes inserting new attributes and meanings, and at other times making new images appear by removing the excess of information present. An example of this is the “Ossario Project”, 2006, in which the artist, in selecting soot covered areas to be cleaned, created the image of a sequence of skulls, which also served as the visual pattern for the Max Feffer tunnel, offering a metalanguage in which his art criticizes the pollution being caused by the cars that pass through it.

Another work by the same artist is entitled “Metabiótica”, 2002, and envisions a ‘duel between photography and art’, since urban surfaces were chosen as ‘intermediary’ materials between the expression resulting from the dialogue proposed between paintings and façades, and later by the photographs extracted from these contexts and exhibited in exhibition spaces, which establish an extension of the same meaning that was proposed in their place of origin.

In this example, the visual condition of the surface manifested by the intermediary supports and façades of buildings accentuates the communicational multiplicity of the city as a medium and as a message fulfilling its potential as a mediator between visual images that are hybridized in urban materiality through images and the collective imagination.

The duo 6EMEIA seeks to construct a new look of the city by painting graffiti on manhole covers, sidewalks, and fuse boxes. One of its hallmarks is humor, produced, for example, by the “dislocation” of everyday objects on surfaces or objects that are similar in appearance, as “Relógio/Watch”, 2011, a graffiti of a watch on a manhole cover; “Armário/Closet”, 2011, a graffiti of a closet on a fuse box, or “Biscoito Oreó/Oreó Cookie”, 2011, graffiti of a cookie on a manhole cover.

The superimposition of layers of communication has constantly reconfigured the city of São Paulo. The city, like other megalopolises, reflects intensely the social and economic consequences of globalization. Ferrara [2002: 21] reflects that ‘the constitution of the place depends on a reaction. A response to the global plan of urban characterization.’ Artistic interventions in the city reconfigure “places” and their meanings. They conjure up imaginative images that reflect the waves of reorganization of urban space.

“Hotel”, by Carmela Gross, a lighting display that was installed on the side of the Biennial Building of São Paulo during the 2002 exhibition, becomes part of the urban landscape as an advertisement that appears on the façade on a scale that can be viewed close up or from a distance. The word, understood in every language, stimulates thoughts of an imaginary place, a temporary shelter, a space that one passes through. This work creates a fissure in the original meaning of the exhibition of which it is a part, and conducts a critical dialogue with this exhibition. Through it, the exhibition and its works are dislocated from their original context and instead appear to be located in a transitory, impersonal place.

“Arte/Cidade”, an urban intervention project carried out between 1994 and 2002, sought out abandoned urban spaces or paths of demolition done to make way for new directions and alternatives for the city. In its fourth edition, “Arte/Cidade Zona Leste” in 2002, Carmela Gross presented the installation “EU SOU (I AM) DOLORES”. A metallic structure, 2.1 meters high and 24.95 meters long, displaying fluorescent lamps, formed this phrase, cutting the interior and exterior of one floor of the SESC Belenzinho exhibition hall where it was on display. The word “EU(I)” was exhibited on the external wall as if it were an advertisement opening up to be read at a distance. This is a feminine phrase, a personal phrase. Pregnant with meaning it is thrust out on the city on a large scale, provoking an extension of the private sphere into the public sphere. In an urban context, the cut in the wall dialogues with the tearing of the urban fabric that has occurred due to the restructuring of this part of the city, giving it a particular and intimate identity.

“Tramazul”, 2011, by Regina Silveira, an intervention project for the four façades of the Museum of Art of São Paulo, is applied with vinyl adhesive over the windows of the façades. The image of a blue sky with clouds, virtually “stitched” in needle-point, forms a blue weaving that dialogues with the sky itself in terms of continuity, reflections and glare. At a distance, one sees something that doesn’t jibe with what someone sees when he or she gets close. This and other ambiguities give it a rigid ephemeral aspect, suggesting the possibilities of dialogues with the architecture, the place, and the people seeing the work displayed. It induces a rupture with customary passing looks and proposes perceptive challenges. These, in turn are related to the individual, the place and the city.

Integrated into the urban landscape as non advertising and site specific visual surfaces, these interventions activate senses and perceptions related to the local and urban context, but also to meanings a place can obtain, contain and disclose. Other possibilities open up through technological interventions created directly on building façades in a dialogue with the building’s architecture and its history. These initiatives have begun to appear giving a new perspective that adds further layers of technology to the infrastructure of the city in order to make possible new forms of interpretation and representation.

An example is the videomapping intervention coordinated by Visualfarm, of Alexis Anastasiou, on Augusta Street: the "Video Guerrilla project", 2010. It aims to redesign a multiple and dynamic place in the city, changing its landscape, proposing several simultaneous interventions, including the possibility of open participation to anyone. In this project, the contemporary art opens for inclusion in the urban scale, since it allows the re-configuration of this part of the city by a citizen who can be both an observer and an actor in this transformation. These initiatives demonstrate that the contemporary art role has in the city its most important commitment, as it allows the critical and participatory construction of an open and communicative city mediated by artistic interventions on its surfaces in order to bring new possibilities of interpretation and representation.

Urban interventions more than media insertions establish mediating situations between a city and its inhabitants, between its formal plan and its derivative appropriations that with a combination of freedom of expression and creativity propel the driving force of its constant process of reinvention. In this way, art plays its role as a message that conveys new visions and virtualities created by the city's skin.

[...] as far as intermediation is concerned, the city is not marked by the images that symbolize it, but rather by itself through its actions and behaviors, that pragmatically characterize it and through its intermediation reveal the city's nature in the great collective experience that is given to man to discover and live. (Ferrara 2008: 52)

The current article has presented artistic urban interventions understanding them as visual surfaces able to change the 'images of the city', the perception of its inhabitants and to stimulate new uses and meanings for contemporary city spaces through their streets, walls and façades.

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Vernacular design: a discussion on its concept

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Vernacular Design / Popular Design / Formal Design

This article presents a review of the literature that covers the specific area of design denominated 'vernacular design', and proposes a discussion and comparison of the different viewpoints regarding this theme, from the twentieth century until today. It also presents a discussion on the forms in which formal design has appropriated vernacular design, together with its positive and negative aspects.

1. Introduction

By observing the artifacts of design, which make part of our daily lives, it is possible to identify several spontaneous manifestations that go hand in hand with official design, and that sometimes become lost in their transience because they have not been registered or recognized by the academy or the market. The value of these artifacts is attributed, not through major design awards, or articles in specialized magazine or as successful items on the business market, but by the recognition of being built by tradition, a tradition that has been consecrated by the daily use of these artifacts in a particular place or region.

For those with an eye more attentive to their surroundings, these elements, which often go unnoticed in the constant dynamic rhythms of large urban centers, may reveal certain peculiarities of the habits and customs of a people, their desires, their needs, their ideas, and still express something from the periphery and its counterculture.

In this manner, Dona Nice, seamstress from the Lemos Torres community, with an urgent need to promote her dressmaking business, also finds herself taking on the role of signwriter, capable of making her own advertising signs. Those who sell mangos on the beach at Tamandaré need to pack their products in order to distribute them to their customers, and so they make bags from coconut palms. The gardener at a small shopping arcade in the district of Parnamirim discovers that a perforated plastic bottle attached to a hose is able to distribute the water more evenly on the grass and thus creates a new gadget. In most cases, it is the law of necessity that leads to the construction of these devices, often simple in shape, naive, and made from materials easily at hand (Figure 1).



Figure 1. Vernacular artifacts: sign, basket and sprinkler (Recife and Tamandaré, Brazil)

After the first schools of Industrial Design – or Design – opened, and the profession had been formalized, especially in those countries where industrialization represented a break with the old artisanal methods of production, and not the result of a natural development, many craftsmen were either forced to the margins of the professional market or went on to work in an informal manner. Since then, there has been a constant dialogue within the market between the production of Formal Design, originating from those professionals who have generally been through some kind of specialized training or academic graduation within the area, and the production of what we call Vernacular Design, i.e. spontaneous design produced on the edge of mainstream design. In this category it is also possible to include inventions of popular origin, such as utilitarian objects, packaging, signs for itinerant market and homes, as well as artifacts for popular communication - banners, signs, murals, amongst others

Since the 1990s, however, these artifacts have been through a continuous process of reevaluation and reinterpretation, boosted by post-modernism and by new digital technologies. Once the new work tools had been mastered, 'handmade' design, handicrafts, gadgets, popular, also became an object of projectual interest and have also become incorporated, simulated and mixed into elements produced through digital means.

In parallel to the arrival of postmodernism and its questions regarding modernist precepts in arts and society as a whole, the phenomenon of market globalization as well as the globalization of communications through the internet, has also stimulated con-

tact between different cultures, habits and behavior, providing an environment which is constantly exchanging experiences.

Thus, to a certain extent, the process of globalization has potentialized the hybridization of cultures, as well as the hybridization between different styles, from both analog and digital graphic language, thus allowing elements distanced by time and space to engage in a single artifact.

This movement of intense cultural circularity between the popular and formal design, particularly in the field of design, has sparked new debates and has slowly begun to consolidate vernacular design as a new area of study and research. Since it is a relatively new subject of study, it can be observed that the area is still undergoing a process of constructing concepts and definitions, as well as an exact definition of its object of study.

With the aim of defining and consolidating this field of research, this article presents a discussion and comparison of the different viewpoints regarding this theme from the twentieth century until today. It also presents a discussion on the forms in which formal design appropriates vernacular design, its negative and positive aspects.

2. Defining 'Vernacular Design'

Although this area is academically recognized, the concepts that define it remain inconsistent. If the recent history of the Latin America is compared to the long traditions of European countries, several disparities become more perceptible.

First, it is important to understand that our vision concerning the term 'design' is in accordance with that adopted by BORGES (2011) from the ICSID, where the concept is used in a broader manner, without exclusively specifying the mode of industrial production, including other forms of production such as artisanal or artistic.

Design is a creative activity whose aim is to establish the multi-faceted qualities of objects, processes, services and their systems in complete life cycles. Therefore, design is a central factor of the innovative humanization of technologies and a crucial factor of cultural and economic exchange. (ICSID, 2012)

Thus, those products that are developed by artisanal techniques in small quantities could also be considered design objects, like those originating from the informal production of design vernacular.

Initially it is fundamental to recover the original meaning of the term 'vernacular'. Derived from the Latin expression *verna* or *vernaculus*, according to the Aurélio Dictionary, this term could be defined with three different meanings: "1. Particular from the region in which it exists. 2. Pure language, without foreignness [...]. 3. The idiom of a country." In this way, the term 'vernacular' is originally related to the native language of a particular country, region or locality.

According to the design historian Darron Dean (apud Farias et al, 2010:303), "the term 'vernacular' was first applied to design by George Gilbert Scott in *Domestic and Secular Architecture*, published in London in 1857". Farias (2011) observes that it was in the field of architecture where the first studies on vernacular design were developed. In this area, the expression 'vernacular' could be defined like a "synonym of popular, folkloric, or an antonym of high style design" (Rapoport, apud Farias, 2011:167).

In Brazil, in the perspective of communication and design studies, the term 'popular' as an antonym of 'erudite' or 'classic', is frequently used to describe what we call 'vernacular' (FARIAS et al, 2010:303).

Cardoso (2005:7-8) emphasizes the binomial popular-erudite and presents an approach to vernacular structured on the point of view of the social dichotomy between dominant-dominated, where the "called graphic vernacular design, is related to the production of popular culture, and the other, erudite graphic design is related to the production that comes from erudite culture".

Lupton (1996), however, draws attention to the necessity of looking without preconceptions at these expressions from popular culture, observing that vernacular design should not be identified as something 'small', marginal or non-professional, but a vast territory whose inhabitants speak a kind of local dialect. There is not only a unique form of vernacular, but an infinity of visual languages resulting in different groups of idioms (LUP- TON, 1996:111).

Dones (2004:1) adapts the term vernacular for the specific area of communication and graphic design, asserting that "The term vernacular suggests the existence of local visual languages and idioms that refer to different cultures. In graphic communication corresponds to the graphic solutions, publications and signaling that make reference to the local customs produced outside the official discourse".

Farias (2011:167) expands the traditional concept of vernacular and apart from the informal expressions of design also includes those that come before the institution of design courses, she asserts that: "In Graphic Design and Typography, we can define vernacular artifacts as product of design practices developed before, or despite the institution of modernist design courses, mostly by anonymous artists and in the commerce context".

It is important to highlight that the definition by Farias (2011) refers to a specific meaning particularly common in the Occidental Europe. In England, for example, the term 'vernacular typography' is frequently used to denominate digital fonts that refer to wooden display types that were used during the boom of commercial typography in the mid-twentieth century.

In some Latin countries the term 'vernacular' is frequently used as a synonym for 'popular', while in some European countries it is more associated with pre-industrial production. This approach

that associates the vernacular with a production with nostalgic characteristics is not very common in Latin America, which makes us wonder whether in fact there would be no different nuances to the vernacular design that could vary from culture to culture, or country to country.

Another important observation concerns the inappropriate use of the term vernacular to identify some artifacts that belong to formal design, which are inspired and appropriated from elements of informal design. In these cases it is more suited to describe these artifacts as products of formal design that *make reference* to the vernacular design.

Today, there are many adjectives that characterize the word 'vernacular', but very often they lack specificity: informal, spontaneous, ingenuous, authentic, genuine, popular, rustic, artisanal, non-academic, non-official, anonymous, local, among others. Therefore, considering the main characteristics that define vernacular design nowadays among design studies in Brazil and in other countries, we could construct a 'cloud' of key words related to the term [Figure 2]:

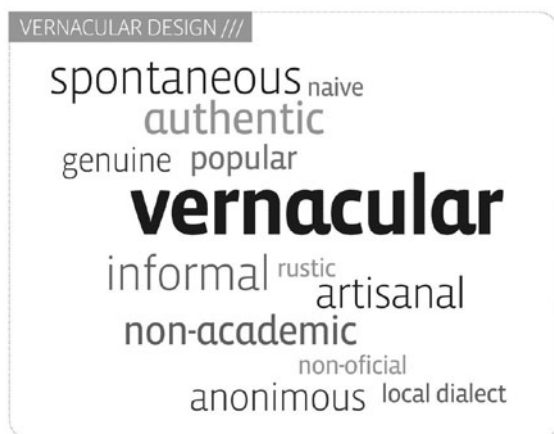


Figure 2. 'Cloud' of keywords related to the term 'vernacular design'

3. The Vernacular Artifact

In order to consolidate the ways that contribute to building a more precise definition for vernacular design, our starting point has been to observe this known artifact in order to analyze some of its characteristics.

Thus, we have proposed six analytical criteria for artifacts, considering the processes of conceiving, producing and commercializing the product, adapted to the initial proposal by Finizola (1996): 1) origin; 2) authorship; 3) planning process; 4) productive process; 5) final user; and, 6) the language of aesthetics.

The 'origin' concerns the source of reference that helped to build the repertoire of each author – whether academic or non academic, born of cultural traditions handed down from generation to generation. The criterion 'authorship' identifies and character-

izes the authorship of the product - whether specialist or non-specialist, designer or craftsman, etc. The criterion 'planning process' analyzes the design of the artifact – if it is spontaneous, improvised or guided by specific design methodologies. The 'productive process' observes whether the artifact has been developed according to a process of artisanal production, manufacturing or industrial, as well as observing the raw materials used in this process. The 'final user' refers to the public at which the project is aimed, according to gender, age, social class, among others and analyses the proximity between the author and the user, which in some cases may be the same individual. And finally, 'the language of aesthetics' concerns the language used as a formal reference for the conception of the artifact – for example, if it refers to a high style design or to a local, regional style, etc.

Finally, applying these criteria to the specific analysis of vernacular design, considering the current acceptance of the term here in Brazil, it is possible to mount the following schemata (Figure 3):

Criteria	Form of Expression in Vernacular Design
1. Conceptual Reference	Nonacademic / Informal.
2. Author	Nonspecialist / In some cases anonymous.
3. Planning Process	Intuitive, mental or schematic planning.
4. Productive Process	Artisanal or manufactured. Commonly uses local or recycled raw materials.
5. Final User	Local, in general from the community to which the author belongs; mostly from popular social classes. In some situations final users could also belong to other groups, other than those from which they originated.
6. Language of Aesthetics	In general refers to the visual culture of the suburbs and from the classes with lower purchasing power. Reveals the working tools and the raw materials used by the artisan. Utilizes chromatic and pictorial codes familiar to the popular universe.

Figure 3. Characterizing the vernacular artifact

4. The process of appropriation of Vernacular

The new paradigm of globalization and the digital era have stimulated the hybridization of diverse cultures and aesthetic tendencies in arts and design, including the appropriation of the vernacular by high-style forms. In this sense, an investigation is undertaken of the forms that this process of contact and appropriation have managed to attain, together with the possible positive and negative effects that could affect both sides.

However, if on one hand globalization has tended towards cultural homogenization, which comes from the continuous process of acculturation between distinct countries – whether imposed or not –, on the other, it provokes a sentiment of preserving habits and customs particular to each place, bringing about a movement of cultural resistance. In a third instance there appears what is termed 'hybrid cultures' constructed through the miscegenation of distinct cultural elements.

From within this new cultural paradigm, new challenges and

questions appear for the practice of design, where designers take on the role of mediator amongst various cultural groups, much like translators of the cultural elements into which they are inserted, able to reflect on the various visual rhythms in their region of production. In this sense, in an environment of cultural circularity, potentialized by the phenomenon of globalization, designers are capable of articulating elements that belong to other cultural contexts attributing new meanings and values to them.

The spontaneous languages encountered in the streets are used and reused, reconstructed by creative digital methods, going through a process of re-signification and thus are incorporated into formal design. This rich exchange of experiences permitting the erudite to become popular, and where the popular is assimilated by the official language, also becoming erudite (Figure 4).



Figure 4. Appropriations of the vernacular: Ronaldo Fraga's collection inspired by the Vale do São Francisco and special editions of Coca-Cola packaging referring to elements of Brazilian culture

The processes of hybridization and the appropriation of cultural elements from distinct groups may at times raise ethical questions regarding the form in which the process of intervention from one culture to another it is conducted. Gui Bonsiepe (2011:63-64) highlights the different approaches that may be adopted during the process of integration between culture, popular handicrafts and formal design that may also be applied to the field of vernacular design: “the conservative focus, the aesthetic focus, the productive focus, the culturalist or essentialist focus, the paternalist focus and the promoter of innovation focus”.

The intention of the conservative focus is to protect the artifacts from any design influence that comes from outside, treating artisanal artifacts as objects of study, which should have their legitimacy preserved; the aesthetic focus (also called *ethnode-sign*) elevates the work of popular artisans to the status of art and uses its formal aesthetic language as a reference for design production; the productive focus searches in the universe of popular artifacts for cheap, qualified labor for the production of objects developed and signed by artists and designers; the culturalist focus considers local projects developed by artisans as a starting point to build an identity of Latin American design; the paternalist focus gives incentive to programs that assist artisanal production as a mediator of the process, at times with high profit margins; finally, the promoter of innovation focus seeks to encourage artisans to be autonomous so as to improve their

living conditions. It is important to highlight that these postures may also appear in a hybrid form, with a combination of more than one of these attitudes cited by Bonsiepe (2011).

Rapoport (1982) also enumerates four attitudes which we could have in relation to the vernacular:

- 1) Vernacular design may be ignored;
- 2) Vernacular design may be recognized but its value may be minimized [ε];
- 3) Vernacular design may be romanticized and one then 'learns' from it by copying or imitating its superficial forms;
- 4) One can learn from vernacular design by analyzing it through the application of concepts, models, and theories [ε] and applying these lessons to design. (RAPOPORT, 1982).

By looking specifically at the production of Graphic Design that takes the vernacular universe as a reference, we may also perceive some indication of what brings about the process of appropriation and translation of the formal elements of popular imagery to formal design.

Finizola (2009) initially distinguishes three major groups: first, those that re-read or transpose visual elements present in vernacular or popular graphic language of a determined region and propose new applications and uses; second, those that register through images, colors, textures, forms and fragments of environments that make part of our surroundings; and finally, the projects that do not bring any direct visual connection to that which is popular, regional or vernacular, but that approaches the theme conceptually, with a graphic language that is strange to the original environment. (FINIZOLA, 2009:120).

Each of these project approaches or methodologies have their own specific merit, which impedes us from indicating any one way as being better or shorter. What unites these designers is the option to value, in one way or another, cultural elements of the region where they from, proposing a greater reflection and identification between those who will consume these products.

5. Concluding Remarks

The study of vernacular manifestations, including the analysis of its creative and productive processes, such as the formal and symbolic elements that characterize graphic vernacular, may bring important contributions to formal design, in that it becomes the starting point for a production more committed to the local culture and habits of its people and, at the same time, differentiated within a global market.

While the primary concept of 'vernacular' is understood as something, which is genuine and authentic, and from a specific place, there is considerable evidence to support the fact that the definition of vernacular could also have a number of variations and interpretations, depending on the place or context into which it is applied.

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Italian Radicals and Dutch conceptuials: the sensation of affect in two movements

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Experimental / Conceptual / Radical / Design / Affect

The Italian Radical movement of the 60s and 70s and Dutch conceptual design from the 90s and 2000s share in common the concern for experimental practices. However, their differences in organization and ethics are notable and inform the conceptualisation of their aesthetic experiments. This paper uses Deleuze and Guattari's theory of affect to investigate this process.

1. Introduction

Concern for various forms of experimental and conceptual thinking has long been important to product designers (Antonelli, 2011). In the second half of the 20th century, two of the more important movements engaged with such methodologies are the Italian Radicals from the 1960s and 70s, and Dutch conceptual designers from the 90s and 2000s. Despite being sometimes marginal in regards to actual penetration of the product landscape, both continue to have sustained influence on the field and in the design discourse. The vast majority of the critical writing on these movements is, perhaps quite rightly, concerned with topics such as social agenda and historical influence. Aesthetics are of course considered, however conventionally aesthetics are critiqued as resulting from stated or perceived conceptual, ethical or ideological positions. It is proposed that the relationship between concepts and aesthetics is actually inverted, and instead designers (and critics and market forces) develop a conceptualisation of the work subsequent to aesthetic experimentation. This paper explores how an understanding of Deleuze and Guattari's notion of the *affect* and *concept* can interrogate this proposition. In turn, these can notions can be used by designers wishing to work affectively to build stronger, robust or more flexible concepts.

2. Ratio and Mood

Italian Radicalism can be introduced through the work and experience of one its most notable practitioners Ettore Sottsass. Educated prior to WW2, Sottsass took advantage of the post-war boom and built up his practice with a number of important commissions from companies such as Olivetti, from whom he designed the famous Valentine typewriter (1969) (Fig. 1). However as early as the late 50s he became suspicious of the consumer society and began to work in a counter-propositional style that sought to invest meaning back into objects, whilst simultaneously working as a serious Modernist industrial designer. So Sottsass is both one of the earliest Radical designers

and part of the Modernist movement against which the Radicals were reacting. However, his Modernist work was not orthodox. His Valentine typewriter is clearly influenced from the Bauhaus, yet biographer Barbara Radice says that he never fully accepted Bauhaus ideals just as they were. Instead he sought to produce a "transplant operation" which re-arranged the ratios, distances and weights that he saw in the Bauhaus style into an "irony of dis-proportion" (Radice 1993: 142). Sottsass remarked upon his early career:

"When I began designing machines I also began to think that these objects could touch the nerves, the blood, the muscles, the eyes and the moods of people. Since then I have never designed a product in the same way as I would design a sculpture, and I have been utterly obsessed with the idea that I was setting off a chain reaction of which I understood very little." (Radice 1993: 109)



Figure 1. Valentine Typewriter by Ettore Sottsass (1969)

His work as a Radical did not replace this playful form of Modernism, but instead sought to create social and conceptual meanings through aesthetic experimentation. His quote above calls to mind the philosophers Gilles Deleuze and Felix Guattari's notion of *affect*; a non-reducible mediator that uses force and energy to transmit intensities of sensation. For Deleuze and Guattari, art is the composition of materials into tools for the experience of sensation. Affect is transmitted in waves, producing "compounds of sensation" (Deleuze and Guattari, 1994: 187). It is through affect that Sottsass is able to "touch the nerves" and "moods" of people. By re-arranging the visual qualities established by the Bauhaus, Sottsass alters the transmission of affect and creates

the unexpected. The quote suggests Sottsass is recalling a revelation or meta-awareness of his role as a designer, which may have influenced the creation of his subsequent Superboxes (fig. 2).

3. The Superboxes



Figure 2. various Superboxes by Ettore Sottsass (circa 1965 - 1968)

The Superarchitettura exhibition of 1966, introducing the work of Superstudio and Archizoom, has been marked as the beginning of the Italian Radical movement (Pettena: 2004) I propose that construction of the first Superboxes in 1965, as novel objects which broke the form the established design discourse, serve just as well. The Superboxes were large, colourful wardrobes covered in custom laminates in various blocky and striped patterns. Sottsass' use of laminates is more closely associated with his later Memphis work, but its interesting to note that the Superboxes predate Memphis by about 15 years. The objects are a confluence of many of Sottsass experiences, such as his exposure to American pop art, travel in India and as a kind of pumped up, super-saturated derivation of his early work on super-computer chassis design for Olivetti. Radice writes that their ultimate effect was to consume and dominate the room in which they were placed as if "dropped into the cosmos." This was an effect Sottsass learnt from his experiences in India, where he found a very different engagement with objects, compared to that produced by capitalist society in Europe. Sottsass said many years later, "they were such crazy things they were hard to imagine," though he did not shy away from conceptual explanation (Radice 1993: 148). For Sottsass, his Superboxes was an attempt to invest intensity and spirituality into domestic objects as a reaction to the status driven consumption of objects in post WW2 Western society. Sottsass saw the Superboxes as "tools to slow down the consumption of existence" (Radice 1993: 36).

4. A Chair on Fire

If I can argue that creation of the Superboxes began the Italian Radical movement, I would like to propose that it was likewise ended by the destruction of Alessandro Mendini's Lassú chair in 1975 (fig. 3). This chair was built a year earlier as a similar proposal to the Superboxes from a decade prior. Strong, archetypal and elevated upon a pyramid, the chair eschews functionalism for the elevation of the product as a human centred, spiritual conduit; a means to restore significance to life in the domestic society; a theme is reflected in the title of Mendini's drawings of the chair (Fig. 4) (Mendini: 48). A year later he set it alight and placed the photo of its burning sacrifice on the front cover of

Casabella magazine. It is variably interpreted that Mendini was being iconoclastic as a point of defeatism, a recognition of the pointlessness of the Radical struggle, or at least as a sign that the movement needed to progress to the next level, à la the rising phoenix metaphor (Kristal). Given that Mendini subsequently described work from that period as not "crystalized" (Cowell), can it be asked: did Mendini just burn the chair because it was a visually exciting thing to do?



Figure 3. Lassú chair burnt by Alessandro Mendini in 1975

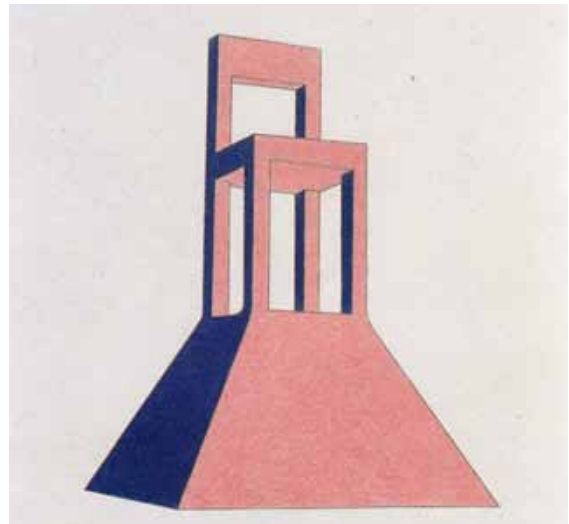


Figure 4. *Monumentino da casa* (Small Monument for the Home) [1975]

In Deleuze and Guattari's theory, affect activates the construction of concepts as it passes through the liminal threshold i.e thoughts are produced by sensation. Fire is especially capable of producing a potent compound of sensations that activates deep memories and feeling. Concepts such as fear and warmth are felt; these are common, persistent and also conflicting con-

cepts, so fire can be said to be both potent and alluringly non-specific. According to Deleuzian theorist Brian Massumi, affects can create deep and prolonged sensations from the vibration of feedback mechanisms within the senses, which are otherwise broken or interrupted by the construction of language, and hence concepts (Massumi, 2002: 23-25). Deleuze's own explanation of the vibratory nature of sensation, consisting of amplitudes and thresholds defining that point in which a sense is felt or no longer felt correlates well to this feedback mechanism (Deleuze, 2003: 45). So in the image of Mendini's burning chair there is an intensity, but signification is constructed subsequently. Affect does not connect in a straightforward way to conceptual content. It should also be considered that Mendini burnt his chair simply because of this, because of affect - he had a magazine cover to produce - and that its conceptual significance was constructed by Mendini and others later with historical perspective relative to the end of the Radical Movement.

5. Obscurity to Plurality

Of course, the end of the Italian Radicals has been marked by other events, such as the subsequent departure of Mendini and his editorial team from Casabella, or the dissolution of Global Tools. Global Tools (1973 - 1975) included many of the luminaries of the Radical scene coming together on the basis of their shared ideology and opposition to Modernism. However, its failure to coordinate a shared methodology has been seen as an indication of the failure of the movement as a whole (Moline 2012). The lack of a shared design language was previously recognised by Enzo Mari and used as an excuse for not contributing a project to the seminal exhibition *Italy the New Domestic Landscape* at MOMA. The essay he wrote instead decries the obscurity and value of the "personal" voice (Mari, in Ambasz 1972: 263-265).

Mari's position is interesting because it is personal voice, represented via a plurality of concepts, themes, and what could best be called micro-movements, which define the period of Dutch conceptual design starting from the creation of Droog in 1993. Co-founder Renny Ramakers describes Droog as experimental and flexible in content and style, but with one fundamental; the clarity of the concept (Ramakers 1998: 9). This does not exclude aesthetic consistencies, and many of the early products were dry and austere, but Paola Antonelli argues that Droog presented a new force of morality where ethics become as important as aesthetics (Antonelli in Ramakers 1998: 13). However, the movement is also compromised by lack of consistency. Droog designers, and Dutch conceptual designers in general, work from personally defined interests and agenda which can be, and often are, ethically driven, but as a group in potential opposition. Interestingly, this form of individualism and plurality was predicted to occur in the post-Radical period by the Italian theorist Andrea Branzi (Buchanan 1995).

Droog, however, has been noted to be absent of theory (de Rijk 2010). This can be assumed this generally also true for Dutch conceptual design of the same period. Their aesthetic experi-

mentations of the can be compared to that of the Italian Radicals, but in absence of theory do not conceptualise into a common ethical ideology. As such, their work is adaptable to various interests. Droog, an organisation engaged in marketing Dutch design, is one such interest. And a particular criticism of Droog is that the organisation is engaged in the production of concepts reducible to a sales pitch, as noted by Catherine Geel. Geel also proclaims this is a hijacking of the concept by marketing forces, pre-emptively identified and lamented by the Deleuze and Guattari (Deleuze & Guattari 1994: 10) at about the same time Droog was founded (Geel, 2010).



Figure 5. Maarten Baas: left, *Smoke* (2002) and right, *Where's There Smoke* (2004)

6. Smoking Wood

Maarten Baas' *Smoke* series (2002) is a good example of how experimental and affective practise can be co-opted in this manner. Baas, while still a student at the Design Academy Eindhoven, was interested in wear and tear as a signifier of value in products. He experimented with "crushing, melting and soaking", and even throwing chairs of a building (Fairs). When he had the idea of controlled burning he finally achieved the dramatic affect he was looking for, but at this point he had left his original concept of the value of wear and tear far behind. It was replaced by a process far more intense and ambiguous in meaning. The *Smoke* series was thus retrospectively conceptualised. Predictably iconoclastic interpretations persist; a protest against historical design perhaps, be it Baroque (fig. 4, left) or Modernist (fig. 4, right). Baas and others claim it is re-branding, though Baas is honest about his general lack of strategy. He claims, 'I just think: "Hey. This or that should be nice to make." Then I find a way to make it...' (Rawsthorn 2006)

His gallerist Murray Moss' interpretation of *Smoke* is interesting, for it touches upon the very nature of affect. Explaining how Baas manipulates the surface of the furniture with his blowtorch, Moss says:

"You take something and you actually caress it with your hands, with flame. You actually alter it chemically, like eating it, ingesting it". (Moss 2007)

This chemical and thus molecular based transformation he describes its not unlike the action of affect in mediating sensation.

Affects, as the product of the arts, are always on the outer surface of the senses, like a skin through which everything must pass (Bogue 2004: 2) As we ingest them we feel; mapping the affects into compounds, forming concepts and changing our thoughts. In this case, Baas, working affectively, produces a model or simulation of affect.

Moss continues to explain that this chemical alteration is re-branding. The flame of the blowtorch ingests the authorship and transfers/transforms it to Baas, marked onto the furniture. As Baas' gallerist, this is intelligently self-serving and in positive contrast to the alternative and conceivably self-wounding interpretation of burning design icons as an angry, iconoclastic act.

7. Destruction and Mockery

The use of destructive forces in design is, in a way, a kind of cheap shot because of the powerful sensations they cause. Perhaps especially so if the result is to conceptualise them into a marketing system. However, there are examples of destructive design from the Droog catalogue which communicate robust, sophisticated concepts which are not co-opted by marketing, and in fact are somewhat at odds with their sales pitch. The Do Hit Chair by Marijn van der Poll (2000) (fig. 6) is described by Droog as a chair you 'co-design' by smashing it, sledgehammer included. This is laughably unlikely to occur - surely considered knowing the dry sense of humour prevalent in the Netherlands. Instead the chair is offered for sale pre-smashed, which is of course of primary interest to museums: one such sale was to the Yerba Buena Center for the Arts in San Francisco. Smashing it yourself has no appeal, at least because it looks like a sweaty job, but not least because it lacks authenticity. Despite its framing as co-design, in no way is it a successor to the Whole Earth Catalogue, or DIY design, nor does it preempt open-source design. In fact, it mocks the seriousness of those movements.

However, the value of the design is not in the idea that you actually could or would smash out a chair yourself, but in the idea that you consider it virtually. The photo of the chair taken for the 2004 book *Droog 10+3* (despite the pretentiousness of the white garmented models, or perhaps because of it) suggests this quite well by presenting the chair in both its pristine and brutalised states. The physicality of the steel is not nuanced; it is crushed by aggressive force, the violence of the hammer upon the metal palpable in the jagged steel. Heavy metal becomes armature. When we interpret these sensations, we are led to the concept of a chair, a physical structure supporting the body. The body is an intuitive concept, so the sense of our own body in relationship to this chair is immediate; hard steel against soft skin. A secondary consideration - how is it moved? Can I move it around the house, or pick it up and put it in a truck? The Do Hit Chair invades the concept of mobility with the clanging of broken bone and torn ligaments. The hum of a forklift is a soothing sound - soothing as much as the guy who drives it is careful with your \$10,000 artwork. The object affects us, forming concepts which activate more affective sensations. They fly at us and

within us at speed. Affect is working in two movements, from without, producing concepts from sensation and from within, sensations from concepts. Van de Poll's intelligence with this design is that our conceptualisations are perfectly legitimised by his invitation to smash the chair ourselves. As a result, the concepts produced by the chair are open and mutable, freely changing shape and connecting through through affects to an extended set of concepts.



Figure 6. Marijn van der Poll: left, *Do Hit Chair* (2000) and right, from "*Droog 10+3*" (2004)

8. Conclusion

Its not true to say that the conceptual value of the Do Hit Chair is greater or less than that of the Smoke series or that together the individualistic plurality of Dutch conceptual design is more or less attractive than the shared ideology of the Italian Radicals. Such suppositions probably correspond to personal values. However, there is something to say about the the relative affective power of these works and the robustness of the concepts they produce which may be of interest to designers and researchers i.e. the intensity of their affects or their conceptual strength in the face of critical or marketing force. The Deleuzian perspective also gives insight into the processes of experimental design practise and order of conceptual and aesthetic production.

Acknowledgment

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Art criticism and the semantic construction of the concept of Design

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Art criticism / Design / Culture / Industrial modernization / Local history

Art critics contributed significantly to the development of a semantic understanding of the concept of design in the local history of industrial modernization during the 1950s and 1960s in the Socialist Federative republic of Yugoslavia. The needs of growing urban areas and rapid developing industrial production of material goods were seen as a principal social task. Along with public efforts by architects and artists, art critics were among the key promoters of the public need for industrial design. The contradiction of promoting mass consumption to the egalitarian ambition of the ruling party ideology was rarely seen as an issue in the focus of art criticism as applied to everyday objects.

1. Introduction

Public promotion of the idea of industrial design developed in socialist Yugoslavia during the 1950s and '60s as part of the newly formed urban culture. This occurred on four levels: through the critique of the concept of applied arts, through an extension of architectural projects, through social activism in housing and through art criticism as part of the lifelong learning of the working class (Vukic 2008:135-162.). The level paper presents here is art criticism of the late fifties in Zagreb (Croatia), which was the center of such efforts. The activities of the Workers' University of Zagreb, and articles published in the magazine 15 dana ("15 days") often covered the culture of industrial products. In the development of the discourse on the subject, the most important impact came from art historians. The magazine 15 dana was initially launched in order to simplify the operational activities of the Workers' University, the mission of which was to provide education to all, at least nominally to all participants in social projects identified as workers. However, the Workers University should have provided the basis for practical training to individuals in certain professions, and thus enable the social dynamics of knowledge, and as a consequence of social dynamics in general. Cultural activities were carried out within the Workers' University Cultural Center, which launched the magazine 15 dana in 1957. In the early years it was published as a bimonthly; then, in the mid-sixties, its issues came out less regularly. The magazine still exists today, even though its original publisher no longer formally exists.

2. Bringing Culture to the Working Class

From 1958, the header of the magazine listed its areas of focus as "theater, film, visual arts, literature, science", highlighting its cultural profile. The following year, music was added to the maga-

zine's list of interests. However, in 1961 15 dana reduced its field of interest by placing in the header the following description: "Magazine for Culture and the Arts", which indicated its intended function to popularize art as a form of culture for the broad range of consumers in a classless society. Thus, the magazine often reported on workers visiting art exhibitions or theatre shows, or on actors reciting poetry at the construction sites of a new housing development or it informed readers about a debate on literature in a factory, during a meeting of the workers council.

It is not easy to clarify what was a program (or even propaganda) and what referred to actual events in such a magazine. But a definite and clear editorial orientation towards raising the cultural level of society was evident, and in such an orientation a significant share of the articles in the magazine were on industrial culture and issues of product design. Most of the authors on these issues were art historians with experience in art criticism, and they made significant theoretical and critical contributions to the semantic construction of the concept of design throughout the pages of 15 dana.

In addition, it should be noted that authors of other professional profiles worked on the same topic, although within a slightly different framework. The architect Andrija Mutnjakovic has published a series of articles for the magazine in the late fifties and early sixties on the subject of housing culture, with a series of practical tips for the organization of housing (Mutnjakovic 1966:175-177). This type of discourse was present in the context of architecture as well, in the articles written by Zvonimir Marohnic for the magazine *Covjek i prostor* (Man and Space), which certainly made a significant contribution to the articulation of the culture of everyday life, but at the level of practical advice (Marohnic 1960). This can be largely understood today as a structural part of the context of social activism concentrated around the organization *Po-roдика i domacinstvo* (Family and Household) (Vukic 2011:5-6).

3. The Concept of Industrial Design as Culture

Theoretical discourse of art criticism in the magazine 15 dana, with regard to its social mission and its target group, is a set of critical concepts dealing with the culture of the industrial product. The initial significance in this regard is explained in Zlatko Kauzlaric's text "Terms and Concepts in the Field of Industrial Design", in which the title refers to the discipline, but the elaboration of the thesis starts from the protagonist. So the term "artist in industry" is described as 'industrial designer' (in English), and the profession as 'Industrial Design' (in English). Yet this is followed by a Croatian definition of the discipline as 'industrijsko

oblikovanje' (industrial formgiving) and the protagonist as 'industrijski umjetnik' (industrial artist) [Kauzlaric 1959:19-20.]. Kauzlaric will argue that the adjective "industrial" with the term artist is used instead of the less usual oblikovatelj (formgiver), which is more appropriate, however, in the Slovenian language, with the use of oblikovalec. The author clearly points out that the industrial arts should not be understood as part of applied art, since "... an industrial artist expresses - in the design of machines and products - with plastic values, while the details of the equipment and its colors are less important and belong more to the field of ornamentation "[Kauzlaric 1959:19]. If he specified the method, he did not forget the aesthetic grounds because "Industrial design is a practical activity based on the principles of industrial aesthetics," which would imply a certain set of attitudes or principles according to which the items are mass-produced. He referred to Herbert Read directly, explaining his views in two theses: the industrial product not only meets the individual's feelings and thoughts, but utilitarian purposes too, and the creation of industrial products should learn from nature [1].

Kauzlaric is referring to Read's discourse on the general character of art, the relation of form and ornament, "art" and "applied art", as well as his theory on "humanistic" and "abstract" art as a framework for the development of a separate industrial aesthetic (read 1934). Kauzlaric has apparently accepted a small part of this, appropriate to context of a popular magazine, which, however, had to write about culture in a way that readers could understand. The author shares Read's position on the evolutionary character of forms, from ornamented forms, typical of small scale manual production, to "plastic", non-decorated forms typical of mass machine production. This was through a discourse that dealt with concepts such as "traditional" and "modern", "backwards" and "advanced", which is exactly the conceptual apparatus that was founded in Read's book.

4. The Idea of Visual Culture

A series of articles from 1959 by Radovan Ivancevic has special significance in this discourse. In the series, he discusses the basic principles of industrial aesthetics. He specified the basic rules of industrial design as follows: the object should serve a purpose and meet certain aesthetic expectations; it should be of a harmonious shape, designed with a purpose and to communicate that purpose, so the shape of the object corresponds to the logical properties of the material from which it is made and, ultimately, that it represents value for money [Ivancevic 1959:13-15.]. Ivancevic, like Kauzlaric, promotes Read's thesis on industrial design, which follows the same functional laws by which nature builds. In addition, he points to the same evolutionary understanding of the development of an imaginary industrial aesthetic, from the original ornamented objects, "served by man", to the present case with the plastic qualities which "serve man". Ivancevic establishes his thesis in a critique of idealistic philosophy according to which "beauty is just that which serves no purpose," in order to support his criticism of manufacturers

who, despite the evolution of the means of production, machinery and form, still do not comply with at least one rule of industrial design. Before he noticed that "in social context, where there is social control of production, in which a manufacturer is also a consumer, this problem becomes particularly important, but has unexpectedly good opportunities for solution" [Ivancevic 1959: 13]. In order to found a basis for critical thinking methods to set up this aesthetic discourse, Ivancevic introduces the protagonist - "a new professional designation of artist" - the "disajner" (in Croatian), created by industrial production. He described this more specifically as a "designer to draft a model (prototype) of a product which will later be mass produced in a factory by machines" [Ivancevic 1959b :13-15]. This newly defined protagonist will serve the need for the extensive elaboration of the compliance of forms to purposes, and for the discussion about compliance with the material aspect of the product, since" the designer must have an honest relationship with the material" [Ivancevic 1959c: 12-14]. In the description of the relations of forms and purposes, the author uses the example of Le Corbusier's Chaise longue, while throughout the debate on materials he points out recommendations for the treatment of material, exactly along the lines of the concept of Herbert Read, using illustrations of industrial items that have no author. Stressing the beginnings of industrial aesthetics and comparing them with the current state of affairs (as Herbert Read widely quoted Walter Gropius), Ivancevic creates a critical apparatus following modernist discourse on the concept, which exactly Read had accurately formulated and Alfred J. Barr and Phillip Johnson had branded as "Machine Art" (Barr, Johnson 1934:132-135).

5. Art Criticism of Material Production

Given the social context, in particular with regard to the medium in which a series of articles were published, such theoretical positions were significantly amended in the discourse with references to the local situation. This was accompanied by visual presentations and verbal analyses of items collected in the stores, which mostly belonged to the domain of "irregular" industrial design, in order to point out bad examples of form and ornament relations. The elaboration of the concept of design as a signifier of the practical method of industrial aesthetics was a part of the overall efforts of the Workers' University and its magazine 15 dana to seek the purpose of educational activism, focusing on cultural awareness and a wide range of non-specialized readers. Hence the simplicity of language and the clear social basis of critical apparatus in the affirmation of a new understanding of the culture of industrial production. Such activism in the field of culture in industrial production continued after the nineteen-fifties, and most significant contribution came from art critic Radoslav Putar in his long series of articles in which he dealt with industrially produced objects and communications, gathered from the immediate trade environment.

His interest in the idea of the synthesis "of painting, plastic, and architectural creativity in one whole" [Kolesnik 1998:35] had already been elaborated in a critical review of the first exhibi-

tion of the EXAT 51 group (the seminal group for the foundation of experimental art and design in socialist Yugoslavia) in 1953. Later, in his review of Salon 1958, held in Rijeka, expressing his views of the need for “more complex treatment of contemporary visual culture in our country” because “the Salon, which is isolated within the limits of easel painting and sculpture in galleries which required pedestals only, certainly is in delay” (Putar 1959: 1). This “delay” could be interpreted not only in relation to accepted theoretical values from the manifesto of EXAT 51 group, but also in relation to the other, indeed synthetic, approaches to the presentation of art, such as Putar witnessed on the occasion of the Zagreb Triennial Exhibition in 1955 or in the broader context of the XI Triennale di Milano, on which he wrote a critical review (Putar 1957:49-55.).

At the time he had published a critical review of the Salon of 1958, the second Zagreb Triennial was just under preparation, where Putar had presented a lecture entitled “Art critique of material production”, and subsequently published it as a text. This was a systematic discourse on elements for a comprehensive foundation for the synthesis of ideas within the domain of industrial production (Putar 1959b :147-147). Putar emphasized at the outset how the visual culture of a certain context does not only consist of traditional artistic disciplines, but also of objects of everyday use which contain elements of artistic intervention. This expanded field of art he described as “the circulation of forms” which beats “at an accelerating pace in parallel with the industrialization of material production in our country.” After this, he argued his thesis statement that the final shape of products was directly related to the social and political structure of a society producing by industrial means. Therefore he asked, “could we be indifferent to the issues of industrial production?”. This argument deepened Putar’s concept of “synthesis” and above all, made strong reference to the problems of industrial production, comprehended as a segment of visual culture, and therefore, a legitimate interest of art critics.

6. International Relations

The basic postulate was the idea of the development and evolution of the shape, which according to Putar, can have positive and negative aspects – in relation both to heritage and to acceptance of the new or “modern”. So his classification extends from items of folklore, to the imitation of tradition and the modernizing masking of traditions, to “authentic contemporary forms.” Over such a range Putar had developed a critical attitude on material production being subject to social and economic development, so the forms evolve. One important element of his theoretical position includes industrial production in the sphere of visual culture, another is the development of a typology of the research model, and a third places such theoretical positions and models in a particular social environment.

The impact of foreign periodicals has contributed significantly to the formation of attitudes such as Putar’s, within a general tendency towards promoting the concept of “good design” or “good

form” or, in the French context, the concept of “l’Esthétique Industrielle”. Above all, the influence had come from the magazine of the same name that promoted the culture of industrial production, the arts, and industrial products (de Noblet 1993:21-26.). This magazine was launched in the early fifties by l’Institut Français d’Esthétique Industrielle, founded upon the initiative of Jacques Vienot, owner of one of the first French agencies for industrial design - Technes. Even slogans in advertisements that promote the agency through the magazine testify to its commitment describing the offer as a service “from the toothbrush to Autorail, from coffee pots to prefabricated house ... “(2). Through the pages of L’Esthétique Industrielle, articles were published (3) which might confirm the thesis of de Noblet that both the magazine and the Institute were “... a logical continuation of the modernist goals of the founders of UAM (Union des Artistes Modernes) from the nineteen-thirties” (de Noblet 1993:25). This parallel is interesting, even before the detailed analytical comparison of Putar’s attitudes with ideas from the French magazine, since one of the ideas proposed in L’Esthétique Industrielle is the relation between abstract art and industrial aesthetics, to a large extent similar to the theories of Herbert Read. This relation considers forms that, according to Read, are “plastic”, i.e., they have a stronger inherent form than representational art. Therefore, even Putar’s theory on cointemporary visual culture of material production, supported by the categorization of industrial products, builds its apparatus precisely upon this idea.

7. Conclusion

In the context of education of the working class organized by the Workers University in Zagreb and throughout the pages of the magazine 15 dana, the efforts of art criticism added significantly to the very idea of such an education. Furthermore, the art critics formed a theoretical position of discourse on industrial production and industrial items. In this discourse, the standard concept of oblikovanje (formgiving) was used, and sporadically (and for no particular theoretical reason) the term “design” (in English) is used, mainly to indicate the origin of the term, or “designer”, when they wanted to point out the carrier of the process. In this way, the concept of formgiving was established in the local context of a state-governed economy, giving way to later semantic construction of the concept of design.

The construction started in the nineteen-fifties and with a discourse fairly similar to criticism of the concept of applied arts. Even the protagonists of this discourse were shared between the two contexts of theoretical construction, with Putar being the foremost example. The particularity of the theoretical elaboration of the concept of formgiving within the context of educational activism is the general usage of discourse appropriate for a non-specialized audience. But from the beginning of the nineteen-sixties, with the introduction of economic reforms in the context of self-managed socialism, this level changed in this context in Croatia and the former Yugoslavia, with the full introduction of the term and concept of dizajn (design).

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Notes

- 1.All texts referenced in this paper were published later in Vukic, Fedja (ed.), *Od oblikovanja do dizajna/From Formgiving to Design*, 2003
2. L'Esthétique industrielle 6, Paris 1952, advertisement on last page.
3. Some of the articles that deal with the relationship of avant-garde modernism / abstract art and the creation of industrial products: Ozenfant, Amedee, Deux artistes, deux autos, L'Esthétique Industrielle 26, Paris 1957, pp.6-9; Florence, Pascal, La participation de l'Institut d'esthétique industrielle a la Foire de Paris, L'Esthétique Industrielle 28, Paris 1957, no pagination; Gueguen, Pierre, Art abstrait et esthetique industrielle, L'Esthétique industrielle 33, Paris 1958, pp.10-13.

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Interieur Kortrijk, an edu-commercial Biennial as mediation junction between several actors

DE VOS, Els / Dr / Artesis - University of Antwerp / Belgium

Design education / Mediation junction / Belgium / Interior architecture / Furniture fair

In 1967 the non-profit organization Interieur vzw was established. This organization has set up an international biennale where good interior design/architecture was displayed, and where so called 'wooncreativiteit' ['creative living'], was encouraged. This paper will investigate the biennale through the concept of the mediation junction, a frame developed in the history of technology to understand the connection of technologies and consumer identities in the twentieth century.

1. Introduction

I have always considered the *Interieur Biennale* as one of the places where one understands what design means to Europe. This exclusive little fair at the centre of the Old Continent performs a commercial function for contemporary residential furniture, but it has always attached a deeper meaning to the words 'design' and 'commerce'. It considers the fair as an activity where the exchange of goods is also an opportunity for an exchange of culture, ideas and sophisticated information. I never thought *Interieur* as a specialised fair, for me it is a witness to the great tradition of European nations, which over the past centuries have conveyed their ideas, art, philosophy and religion to the world through their products. (Branzi 2010: 17)

As this quote from architect and designer Andrea Branzi, who was 'Guest of Honor' in 1988 and strategic consultant of the Interior Foundation between 1989 and 1994, makes clear the *Interieur Biennale* was much more than just a local commercial event. Organized for the first time in 1968, it acted as a place of exchange between several (European) countries. According to Branzi, it reflected through the products the ideas, art, philosophy and religion of European nations. And as distributor of "sophisticated information", it had an informative, perhaps educational, mission as well. As it was a kind of intermediary between several actors, it is interesting to investigate if the concept of the mediation junction is useful to study the biennale *Interieur Kortrijk*. But first, I will shed some light on the development of the biennale based on its catalogues, an overview book and retrospective interviews with three key-informants.

2. The foundation of *Interieur Kortrijk*

From the 1920s until the end of the 1970s home culture education in Belgium was predominantly organized by a number of socio-cultural organizations of either Christian or socialist persuasion (De Caigny 2010, Floré 2010, De Vos 2012). These organizations educated their members (socialist women, Christian worker's women, farming women or bourgeois women) on

'good living' and domestic matters. In the 1960s, more commercial initiatives emerged. *Batibouw*, a big professional annual fair of construction and renovation in Brussels, was founded in 1960 and three years later the fair *Bouwen Wonen Nu* (*Building Living Now*). In 1968 the first edition of the biennale *Interieur* was set up.

The origins of the biennale are intertwined with the construction of a big hall on the outskirts of Kortrijk, financed from the then still available war damage reparation fund. Jozef De Jaegere, Kortrijk's alderman for finance (and its mayor between 1983-87) decided to organize a competition for an exhibition hall. The design of the architects Guy and Francis Van Oost with a series of massive umbrella-shaped wooden arches manufactured with glued laminated timber (Glulam) from the company De Coene, had won the competition because of its easy extensibility (De Laere, 2011). Company De Coene, since 1888 an important furniture manufacturer in Kortrijk who employed about 2200 people in the 1960s, had reoriented itself in the postwar period in a reaction on the furniture crisis in Belgium. Pol Provost, the director of De Coene, started with Glulam, based on an American technology, and in 1954, he also received the license to produce and sell furniture for the American furniture giant Knoll in the Benelux (Floré, 2002: 12). As the new hall was initially only occasionally used, it is said that the hall became soon the personal depository for the Knoll furniture of De Coene.

The director of the hall, industrialist Yvon Van den Abeele, had appointed Hubert Sap as vice-president of *S.V. De Hallen*, the official name of the complex, to organize events. Sap was also the secretary of the commercial Court, of which Provost was the president. As such, the idea to organize a fair about the interior was quite obvious. The initiative enjoyed large media attention. Knoll furniture had an international prestige and the De Coene Company had not only commercial expertise, but also a big network - Provost founded for example in 1956 the Belgian Institute for Industrial Design in Brussels, a think tank for design research, and he was one of the initiators of the Belgian Design Centre in 1964.

However, before they jumped in at the deep end, Sap and De Jaegere consulted some experts: Emiel Veranneman, a Kortrijk-born famed furniture designer and already a prominent gallerist, Geert Bekaert, Kortrijk-born as well, and the most important architectural critic during the 1950s-1970s in Flanders and the Netherlands and Jul De Roover, an interior architect, a much sought-after lecturer and founder of the first interior architecture education in Flanders (Veranneman 2003, Van Gerreway 2011,

Spitaels 1996). Veranneman immediately supported their idea to organize a two-yearly international fair to promote contemporary interior architecture/design to the broad public. Bekaert and De Roover were rather skeptic because modern design had fallen into discredit. It had lost its social mission and was seen as too elitist (only for higher middle class people). Secondly, moral education initiatives were in decline (Bekaert 2010: 37). Nevertheless, the *Interieur* vzw (Interior Foundation) was established on October 26th 1967 with the following mission statement:

the stimulation and promotion of creativity in the field of interior architecture, the announcement and propagation by all useful means and in all forms of the latest ideas, designs, formulae, products and realizations in the field of the interior, by the organization of large exhibitions and beginning with a great biennial international exhibition which at the same time gives a review of the latest ideas and the most successful realisations in interior architecture (*Interieur*, catalogues 1976 –'78).

In accordance with the Dutch, French and German version I use the term 'interior architecture' instead of 'interior decoration' as translation of *binnenhuisarchitectuur*, *architecture d'intérieur* and *Innenarchitektur*. The term was judiciously selected as Jul De Roover pleaded for the full recognition of the discipline interior architecture, that went beyond decoration. The term 'design' was not mentioned in the first edition, but so called "wooncreativiteit", which literally translates as 'creative living', was the point at issue.

The biennale differed substantially from neighbouring initiatives such as the yearly Salone Internazionale del Mobile in Milan (first edition in 1961), or the Imm Cologne, which started as early as 1949. The fair in Kortrijk was much smaller, much more selective

and had a certain educational assignment. Firstly, candidates had to submit an application, which was reviewed by a committee and then either accepted or rejected. The most important selection criteria were the quality of the company's products – only high quality, contemporary design was admitted – and the design of their exhibition-stand. Secondly, the organizing committee invited a Guest of Honour who was often an important 20th century architect, designer, producer or theorist of the 20th century, such as Raymond Loewy, Gio Ponti, Verner Panton, Jean Prouvé, Alessandro Mendini, Maarten Fieldboom, Jean Nouvel, etcetera. His mayor task was to give an opening lecture. Thirdly, the Interior Foundation set up a lot of additional workshops and conferences for (interior) architects and students, decorators, color specialists, etc. Fourthly, since 1970 onwards, a successful design competition, entitled *Internationale Prijsvraag*, was launched with the aim 'to create an international confrontation of creativity in interior architecture and design' and to bring designers, visitors and producers into contact with each' other (Berkas, 2012: 92). Important personalities sat on the judging panel, such as the Guests of Honor, Pieter De Bruyne (an important Belgian designer), Josine des Cressonnières (director of the Belgian Design Center) and Ingo Maurer [a famous German industrial designer]. From the 1980s onwards, several laureates received a prize, awarded by the province of West-Flanders, the Minister of Dutch culture, the city of Kortrijk, etcetera. The competition became more prestigious in 1986 with the *Ikea Award* and the *Press Award*, and in 1988 with the *Abet Award* for young designers and students in the field of (interior) architecture and design. Since the Biennale of 1982, a national competition called 'meeting point' is launched in which could participate all Belgian schools of (interior)architecture and

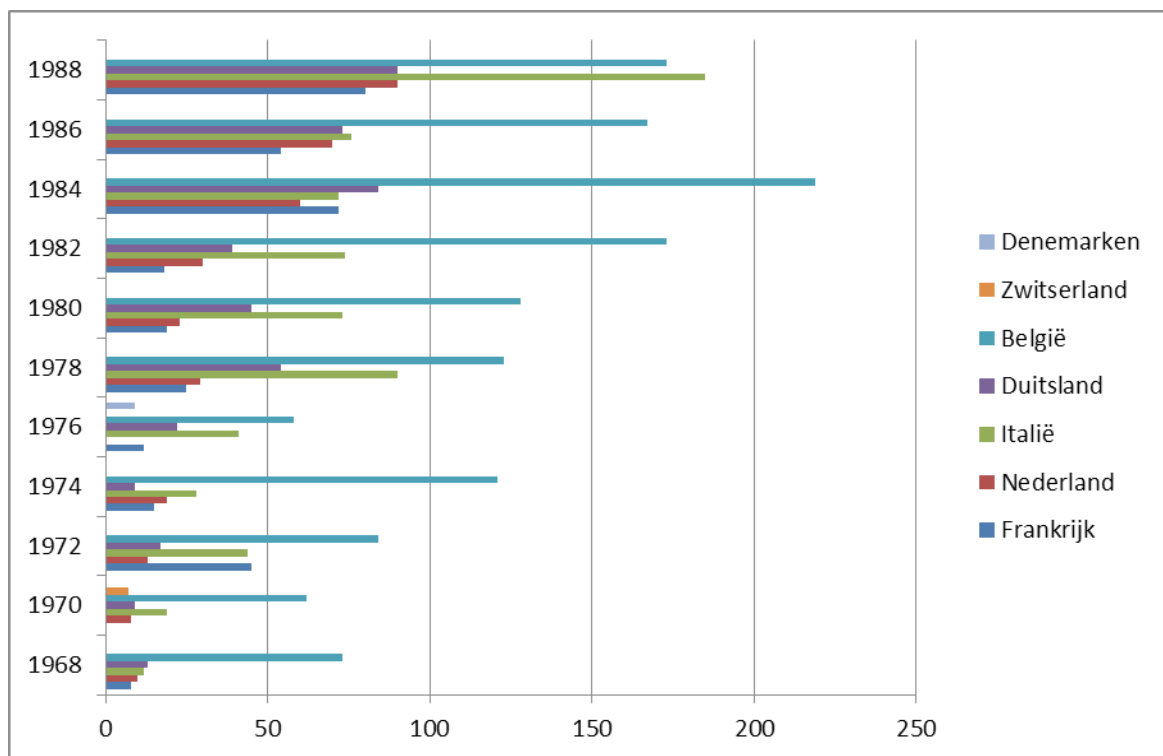


Figure 1. The participation of the most important countries at the Biennale [Courtesy of Fatma Berkas, 2011: 67]



Figure 2. The evolution of the visitor numbers according to the official website of *Interieur Kortrijk* (Courtesy of Fatma Berktaş, 2011: 70)

industrial design. They had to set up an exhibition space of 144 square meters as a communication and information center that reflected the latest interior design tendencies (Berktaş 2012: 95). Finally some ‘international days’ were organized, such as the French Day in 1968 and 1970, the French-German-Belgian-Swiss Day in 1978 or the British Day in 1980. They were often organized by the Belgian Department of Foreign Commerce, but also by confederations of the industry of those countries. The embassy, designers and tradesmen from those countries were invited on those days (catalogues 1968 -1988, s.p.). Business transactions were fundamental, but also the field of culture of the guest country was highlighted.

The Biennale proved very popular among exporters, producers, designers and its customers. The number of participants of the first edition far exceeded all forecasts, and the Biennale grew steadily. The amount of halls had already expanded to five in 1988. Eventually, the City of Kortrijk became well known within the international design world and received in 1994 the prestigious European Community Design Prize. Particularly, the pioneering Italian designers found their way to the exhibition - the fair acted as a bridge to the Northern European countries - and as such contributed to the success of *Interieur* (fig.1). In Kortrijk, it was possible to see all ‘most successful achievements in the field of interior design’ of Europe in one day (*Interieur*, catalogue 1998).

3. *Interieur Kortrijk* as a mediation junction

Between 2003 and 2005 Dutch historians of technology introduced the term ‘mediation junction’ to gain an insight into the connection of technologies and consumer identities in the twentieth century (Schot, de la Bruhèze 2003; Oldenziel, et al. 2005: 1, 111; Oldenziel, de la Bruhèze 2009). Inspired by Ruth

Schwartz Cowan’s famous concept of the consumption junction, defined as ‘the place and time at which the consumer makes choices between competing technologies’ (Cowan 1987: 263), they developed the mediation junction as a conceptual frame in the history of technology to study mediation processes about new technological developments between the state, the market and the civil society. Whereas Cowan only focused on the interaction between individual consumers and producers, Oldenziel, de la Bruhèze and Schot added the state and the civil society (with its organizations) as important actors in that process. Especially in Europe, the state had often an important role in the mediation process between production and consumption (Oldenziel et al. 2005). In the *Interieur biennale* case, the city of Kortrijk was the initiator in commissioning the construction of an event hall and De Jaegere remained the president of the Interior Foundation until his death in 1995.

Albert De la Bruhèze and Johan Schot defined mediation junction as follows:

For mediation purposes, often a specific institutional locus – an agency or a platform for example, will be created. We call such a locus a mediation junction. (€) The mediation junction, is, thus, the place at which consumers, mediators, and producers meet to negotiate, articulate, and align specific technical choices and user needs. It is an arena where agenda building and technology development become connected. (Schot, de la Bruhèze: 2003, 234).

Obviously, *Interieur Kortrijk* acted as a mediation junction between the state, producers, designers and consumers. It was a place where on the one hand, the public could see and touch high profiled design from several countries and could start to dream of it, and on the other, where producers, as well as art and architecture bookshops and lifestyle magazines, met like-minded producers from other countries.

However, the concept of mediation junction is called into existence in order to include the power and agency of the users in the mediation process between production (supply) and consumption (demand). De la Bruheze and Schot (2003: 235) distinguish different kind of users: real users (of flesh and blood), represented users (by intermediary organizations for instance) and projected users. Inspired by the concept of the script explored by Madeleine Akrich, the impact of the 'projected users' in the mediation process is the way that users with their skills, motives, specific tastes, competences, aspirations, political prejudices, and the rest, are 'inscribed' by the designers in their new objects.

De la Bruheze and Schot also distinguish several places where the mediation junction takes place: it can be located within a firm (where users are for example represented by marketing studies) or outside the firm. The kind of mediation junction can be determinant for a successful mediation.

The influence of the real users on the fair can hardly be deduced by this research. Therefore additional oral history (interviews with visitors) would be necessary. Generally speaking, the influence of the visitors was rather weak and the mediation junction happened within the organization. Statistics about the visitor numbers were kept (fig. 2) and the organizers also carried out surveys. They discovered for example that mainly women visited the fair during the week and returned with their husband in the weekend to decide and buy (Bucquoye 2011). But real individual users were not invited to participate in the organization of the Biennale or the selection of the goods.

The biennale offered an arena for represented users, by offering the possibility to several organizations (including socio-cultural women organizations such as the Association of Farming Women in 1968) to organize their own workshop or to bring a guided visit at the fair. However, mainly well-to-do women organization remained visiting the fair, like the women of the ambassador or the women of a service club (like the Rotary or Lions). Also the 'projected user' in most of the designs in the catalogues is clearly someone who is looking for added value and who belongs to the (higher) middle class, notwithstanding the fact that the organizers opened the fair to a broad public (Ballegeer 1976: s.p.). The Biennale also acted as an intermediary as Bekaert explained in his essay for the first catalogue "the designed man" (Bekaert 1968, s.p.; Van Gerreway 2010). On the one hand, the organizers did not command the visitors how to live and how to furnish their home - they only stimulated them to discover what they like - but on the other hand, the organizers selected the participating firms and their displayed design beforehand because they wanted to monitor the quality. As such, they filtered already the information for their visitors, and treated them as projected users.

However, in the period around May '68 the identity of the (projected) users came on for discussion. The subject of a panel discussion organized at the opening of *Interieur '70* was for example 'The interior, for whom?' (*Interieur '70*, s.p.). Four years later, Verner Panton questioned in his opening speech the desires of

the visitors: "Is the customer after status symbols, or standard interiors like his neighbor? What kind of interior do we want? Conservative, progressive, conventional, arty, pop, snob, status, hippie, cheap, value-for-money, fashionable, rustic, kitsch, avant-garde, nostalgic?" (Panton, 1974, s.p.) Engineer Georges Patfoort (1982, s.p.) went a step further and openly criticized in 1982 the organizers with his opening lecture entitled 'The intellectual Mortgage on Furniture: Or How to Shoot Arrows at Those Who Think They Know Better'. According to him, design was suffocated by those specialists who decided what good design was.

The biennale also offered a platform for designers and producers. Particularly, the design competition for (young) designers was an interesting vehicle. There could be no finer vindication of this than what happened to Belgian designer Maarten Van Severen (De Laere 2011). In 1992, he successfully participated in the design competition of *Interieur*. At the following biennale, Maarten Fieldboom, the director of the German furniture producer Vitra, became a jury member of the competition and the two got acquainted. It resulted in an interesting and happy marriage, for the work of Van Severen, which was based on handcraftsmanship, could be adapted to industrial production methods (Windlin, Fehlbaum 2008: 231; Bucquoye 2001: 62).

Not only did the fair offer opportunities for real designers (and design students) to participate, the designer was also 'projected' in the graphic design of the fair as the catalogue, the lay-out and the sing-posting, was done by a professional graphic designer, Boudewijn De Laere, who opted for clean, pure and minimalist printed matter, imported from Switzerland (De Laere 2011). As such, he created many expectations for the public, the producers and especially the designers and architectural students.

In sum, the mediation junction together with the three approaches of the user/customer, offer an interesting framework to investigate the influence of the visitors in a systematical as well as sophisticated manner. Even if real users had limited impact, as 'projected' and 'represented' users they were more present. Furthermore, their role was subject of discussion from 1968 onwards. The concept can also be applied to the designers, architects or students, as they are also present as real, projected and represented person. It allows to approach the user/designer/students from bottom-up. The mediation junction also offers the possibility to include the contribution of the authorities (state, city, legislation, Chamber of Commerce, etcetera). However, the framework did not offer a tool to grasp how the European identity was mediated among several actors, apart from the fact that every country presented its own outstanding design.

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The story of convertible Sofa-Bed: reading the social change in Turkey through the design of an industrial product

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Convertible Sofa-Bed / Social change / Housing / Tradition / Urbanization

This paper examines convertible sofa-bed with all its functional, socio-economic and socio-cultural dimensions since it is a signifier of the housing problem originating from the in-migration wave from 1950s to 1980s, and gives reference to traditional habits of sitting and hospitality culture in Turkey. Therefore an analysis on the evolution of convertible sofa-bed provides an insight for the social change in Turkey's history.

1. Introduction

A convertible sofa-bed is basically a sofa which folds up as a sofa and folds out to double up as a bed. It is widely used in Turkey since it suits well to the Turkish culture and everyday life. Despite the changes in the product's name and physical configuration, convertible sofa-bed's basic functions are both to be a part of the 'sofa set' that is being used in the living room and to increase the number of existing beds in the house, if needed. Thus, a living room in daytime can be converted into a bedroom at night, when the sofa is converted into a bed: The rooms of the house become flexible and provide multiple uses due to unexpected situations.

An ethnographic inquiry was conducted to find out why people preferred using convertible sofa-bed and how they used it in their houses. The research also helps to understand the way it was used in the past and the change it has been through, in terms of its former physical configuration and location in the house. The change of the design of the convertible sofa-bed is parallel to the change of the traditional Turkish house: It is a partial solution in the inner space because the household population increases while the dwelling becomes less affordable.

To summarize its symbolic and functional value in Turkey; on one side, convertible sofa-bed represents in-migration to metropolitan areas, unplanned urbanization and housing problem; on the other side, it represents hospitality culture despite the lack of space, traditional housing and sitting habits. The analysis of the product shows how these aspects are combined together and what kind of a solution the convertible sofa-bed proposes for this situation.

2. Towards the social connotation of furniture

Considering their relationship with the society, products are conveyers of cultural values and lifestyles: They are objects of psychic and physical investments; elements of life decoration where cultures are reflected and documented. Thus, they are messages from the society that produces them and they are signifiers of their users' identities [Bilgin 1986]. Like all kinds of signs and messages, products also consist of two main structures of meaning: Denotative meaning of commodity is related to "what for" it is produced. Connotative meaning of the commodity is, on the other hand, related to aesthetic, moral and subjective reflections on each individual's mind [Barthes 1957].

Considering 'furniture' as the subject of analysis, it is possible to build connections towards various socio-cultural movements and changes. Thus, furniture becomes a substantial signifier of the socio-cultural and socio-economic characteristics of those societies or individuals who are involved with them. In this context, symbolic properties are important so that furniture becomes a 'documentary product' identifying such a broad field of everyday life. Furniture gains its identity through social values and becomes a language [Carkaci 1994].

An example for the relationship between furniture and society is given by Cranz [1998] where he claims that the 'cross-legged sitting' or sometimes known as 'tailor sitting' posture is actually 'Turkish sitting posture', and identifies this socio-cultural posture with a specific furniture, the traditional divan:

A particularly common alternative posture is sitting Turkish-style, what Westerners call cross-legged, or sometimes tailor-fashion. In Turkish homes, traditional "divans", from which we get one of our terms for couches, are deep, wide and firm enough to permit sitting in this way. The divans are low wooden platforms with pads and bolsters, built into a room called a "sofa" for receiving visitors and enjoying oneself with family. From this we have derived another of our terms for couches. [Cranz 1998: 27]

These distinctive sitting postures refer to distinctive cultural codes and systems [Andrews 2003]. In the case of Turkey, for instance, the socio-cultural movement during and after 1970s evoked different dimensions in the variation of furniture and other inner housing equipment. In addition transitions between segments of society supported not only the increase in variation and

number of furniture types, but has also created different systems of taste in housing equipment (Carkaci 1994).

3. The case of in-migration and the evolving Turkish house

The very first examples of Turkish dwellings were built on soil ground, with various isolation material, and they used to consist of a single huge room, and different activities, such as, eating, sleeping, sitting and storing were happening in this same room (Goker 2009). Since rooms in traditional Turkish house are designed as volumes having many functions, objects used in these rooms became also portable and multifunctional. A characteristic of traditional Turkish house is the *sofa*, the center area of the house to which all other rooms have direct connections. *Sofa* is the place where all members of the family can spend time together and also, guests are hosted.

Within new housing designs that are constructed in urban areas *sofa* is losing its power and importance in gathering people together. As a result, *sofa* disappears physically in urbanized areas' dwellings (Eric 1986). The transition from traditional Turkish house to the apartment started with the industrialization process of Turkey and the resulting in-migration from rural areas to urbanized areas. This process started from 1950s on and was the result of the modernization of agriculture that has started with the Marshall Aid (Tekeli 1996). The reason behind this in-migration is rather the otiose labor-force in agriculture than the beginning of the industrialization process.

From 1960s on, squatter housing became a current issue in Turkey. Istanbul, thereby, became the core of the squatter housing process in Turkey. Through legislations and several releases in 1970s and 1980s, squatter houses are replaced by 'squatter apartments' (Turkdogan 2002). It is not a coincidence that convertible sofa-bed production increased in 1980s when the rate of in-migration is examined.

For the structure of Turkish house from 1960s to late 1990s, it is possible to claim that the house consists of two main parts: The inner house, where the family lives, and the *salon*, where guests are hosted. Conceptually, the inner house means sincerity, nearness, warmth, comfort, directness, density and familiarity, while *salon* is the world of relationships with 'disturbing' strangers (Ayata 1988). Due to this sharp distinction of spaces in the same house, the family living in there has two distinct worlds, socially and psychologically. With respect to this situation, it is possible to claim that the room, where convertible sofa-bed is placed, serves like a transition room between living room and bedroom. The concept of the living room in Turkish house and convertible sofa-bed speak the same language.

4. The story behind convertible sofa-bed: Transformation of society, transformation of products

It is explained that the socio-cultural attitude in Turkey is to prefer products that have multiple functions. Considering furniture, these have been *sedir*, *divan*, *kutuphaneli divan* and convertible sofa-bed, which are examined in the following sections in terms of their use.

Sedir and yukluk

In traditional Turkish house, furniture was built together with the house. Thus size, location and place of furniture are limited. In rooms there are *sedirs* that continue along walls, as in Figure 1. The household generally uses these *sedirs* for sitting and laying (Goker 2009). *Sedir* has a low height from the ground but it is wide on its sitting area. Considering the fact that people in villages work all day on the farm and they mostly process their product on the ground *sedir* allows these people to rest accordingly because its nearness to ground corresponds with the tendency of working, sitting and resting close to the ground.



Figure 1. *Sedir* in traditional Turkish house (Kucukerman 1998).

Another example for this tendency is the floor-bed: It consists of a piece of mattress and placed on the ground where it is used as bed. Floor-bed can instantly convert a living room into a bedroom and it can be rolled up quickly. Due to storage need of the 'rolled up floorbed' and related equipments such as bed linen, another unit has been required which is called *yukluk*. So, *yukluk*, meaning 'the place to load', started to serve for storage. Accordingly, *yukluk* became one of the most important elements in the house so that it is also used with *divan* and *kutuphaneli divan*.

Divan

During the transition from village life to urban life, sitting, laying and storing habits and related products had to be re-defined. Change of social life and change of neighborhood required new solutions for sitting, laying and storing. After in-migration from rural areas to urban areas and within the first encounter with urban culture, generally, divan has been the new solution for sitting and laying. Divan serves for the obligation to fit into limited spaces and also for the effort to host relatives who come and stay for a certain period (Eric 1986). Thus divan is used in the living room during the whole day as a sitting unit and at night it gains another function where it is used as bed. Considering physical characteristics of divan, a noticeable one is that it is higher than a usual sitting unit where under it a certain free space occurs. This free space is usually used as a storing unit where it is covered with the furnishings of the divan (fig. 2).



Figure 2. Turkish divan with its furnishings (photo by Engin Merzali).

Since the area for sitting is larger than a usual sitting unit the person who sits on a divan generally sits cross-legged or lays his/her legs straight.

Expressions related to divan usage are mentioned as following:

I have been using divan before I married, in 1968-1969. It was located in the house where we used to sleep. Cloths and cushions were sewn for divan, and it was covered with these cloths during the daytime. It was very high from the ground, so our feet could not reach the ground. Thus, we used to tuck up our legs while sitting on it, and it was very comfortable. When we wanted to sleep, we used to cover it with bed linens, which were tidied up in the following morning (Celikoglu 2011).

Considering the fact that these statements belong to people with the age range 40-70, it is obvious that divan is widely used at least for 30 years long, which is between from 1950s to 1980s.

Kutuphaneli divan

Traditional divan is followed by another type of furniture called 'kutuphaneli divan', meaning divan with a library. Kutuphaneli divan (fig. 3) enables to sustain conventional sitting and laying habits by its physical structure where it additionally has some kind of cabinet consisting of shelves and closed spaces.

From late 1970's on, kutuphaneli divan got widely used in Turkish houses since it was considered to be more elegant and modern than the traditional divan. Like divan, kutuphaneli divan also served as a sitting unit throughout the day while it became a bed at night. Eric (1986) claims that the relationship with the new social environment in the metropolitan area and the effort to create a 'high-cultural' effect required the need for exhibition and storage of books.



Figure 3. Kutuphaneli divan in its environment (photo by Koray Gelmez).

Today, kutuphaneli divan is still considered as a part of Turkish material culture. Encyclopedias next to religious books, vases and alarm clocks are displayed on its shelves that are covered with laces, and this situation made kutuphaneli divan a stereotypical product for Turkish society. As Eric (1986) states, kutuphaneli divan used to be a status symbol during 1970's, and it became less and less popular with time.

Experiences of interviewees show that kutuphaneli divan was perceived as a "modern and chic" furniture compared to divan and became a status symbol:

My grandfather had a kutuphaneli divan, probably left from 1970s. On its shelves there were old photographs, photograph albums and books. In its closet part, there were things like cologne, eyeglasses, and etc.

Kutuphaneli divan was expensive for us, it was luxury. We preferred divan (Celikoglu 2011).

Convertible sofa-bed

Considering traditional sitting, laying and storing habits, convertible sofa-bed (fig. 4) is totally in accordance with the habit of using the same unit for sitting and laying since it can be used as a sofa during the day and as a bed at night. Moreover, it allows a closed volume under its sitting unit where many goods can be stored. Thus, it allows a way to adapt the traditional lifestyle in villages to metropolitan lifestyle replacing *yukluk*.

Issues of informal housing and insufficient living areas, as well as cultural characteristics of traditional Turkish family life and hospitality had an important role in the situation that the convertible

sofa-bed became widespread in Turkey. Here, characteristics of people or families sharing the same dwelling become the most decisive factor. Due to the structure of the family and the change in the number of family members such as care taking of children and elders that are not considered while buying or hiring the house, the inner organization and requirements of the house changes continuously. Thus, a house that does not seem insufficient at first is expected to be 'flexible' with time.



Figure 4. Convertible sofa-bed in the 'inner house' (photo by Ozge Merzali Celikoglu).

The position of convertible sofa-bed in the house has changed during years. When it first entered the house, it was perceived as luxury furniture alternating to divan and kutuphaneli divan, and it was placed in *salons*. After a while, within the effect of decreasing price, convertible sofa-bed is transported to back rooms, such as living rooms and children's rooms. It did not really serve to conspicuous consumption but it is rather defined with its use and functionality.

Today, convertible sofa-bed is still a part of Turkish everyday life. It exists with various models in different rooms of houses, in the background of old family photographs, in movies that reflect middle- or lower-class lifestyles and in humour magazines with caricatured expressions.

5. Conclusion

The widespread use of convertible sofa-bed in Turkey has two main reasons: The multi-functionality of the product and its correspondence with the socio-cultural background. Considering the multi-functionality of convertible sofa-bed, it serves as a unit that provides an extra bed but does not turn the room into a 'bedroom' providing a certain 'flexibility' for the house. In addition, it replaces *yukluk* by allowing storage in its own volume and draws a line between the rural and urbanized lifestyle. This multi-functional characteristic proposes a solution for the urbanization and housing problem in Turkey that has started with the in-migration wave from 1950s and reached its peak in 1980s.

Within the socio-cultural background, the traditional habit of sitting and the hospitality culture are to be mentioned, which strongly re-

late to rural lifestyle, but survived through the transition process to urbanized lifestyle. Convertible sofa-bed follows the traditional way of sitting as *sedir*, *yukluk*, *divan* and *kutuphaneli divan* did. It serves as an extra bed for guests in a small house because according to Turkish hospitality culture, a place for guests should always be provided no matter how insufficient the house is.

To conclude, convertible sofa-bed is a product that proposes a solution for the problems in inner space caused by urbanization and in addition, it can respond to traditional sitting, laying and storing habits very well. Convertible sofa-bed with all its characteristics refers to those years of industrialization, in-migration and urbanization process of Turkey. Thus, it carries the traces of a society's history with its physical configuration and multi-functionality, which signify the need to flexibility for the product itself and the need to flexibility for a society through a transition process.

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Vapourware and the agency of ideas

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Vapourware / Computer history / Product Design / Product concepts

'Vapourware'—computer hardware which is promoted as forthcoming but which is never manufactured—has received little attention in Design History, although it is important. Vapourware often has a direct influence on the future development of computing technology—causing competitors to reconsider, alter or even stop their planned activities. This paper shows that often, product concepts themselves influence market expectations or desires for future technological developments. Proof, in fact, of the agency of ideas.

1. Introduction

This paper discusses the phenomenon of 'vapourware'—prototype designs for computers which reach the final stages of development and are promoted as forthcoming products, but which then fall at the final hurdle before being offered for sale. They are often product concepts that stretch the very boundaries of proven technology or market territories, but which fall from view without trace.

Writers of Design History and the History of Technology have previously discussed different aspects of product failures, by turn taking the perspectives of Technological Determinism or the Social Construction of Technology (Bijker, Hughes, & Pinch 1987) as analytical approaches to discuss the various explanations for the demise of different computer products. The reasons cited are legion, including the lack of a suitable market for a new product; the failure of a product to perform as expected or to 'fit' the needs of its target user group; the lack of a robust infrastructure of peripheral hardware or software; or 'path dependency'—the stranglehold of established products proving too difficult to overthrow.

Vapourware products, by contrast, are not subject to these particular forces, as they are never actually exposed to the acid test of market success. Vapourware 'fails' (if indeed it can be said to fail at all) for different reasons—often, but not always, the inability to make a new technology reliably functional; the lack of available funding required to fully develop or productionize prototypes; or the missing of a particularly narrow window of opportunity for a new product in a rapidly and ever-changing technological market.

The fact that vapourware doesn't get to market, though, does not mean that it is of no importance. The fact these products are announced if not sold is a key aspect, as it means the function and form of an intended product are known to an audience, even if the actual product does not appear. Through numerous case studies, this research has shown that such announcements often have

a direct, causal influence on the future development of computing technology—causing competing companies to either rush to market, change direction, or drop their own lines of product development completely. The promotion of non-existent products has even been key in competitors creating completely new markets for products that perhaps otherwise would never have appeared.

2. Early Vapourware

The computing industry has a longer history than many imagine, especially if one traces the origins of calculating devices back to the abacus. Even discounting such simple devices to concentrate only those enabling automatic programmable calculation, the history goes back almost 200 years. Interestingly, so too does the history of vapourware. In fact, wherever there has been a computer of any description successfully marketed, there have been associated examples of machines that did not go into production at all.

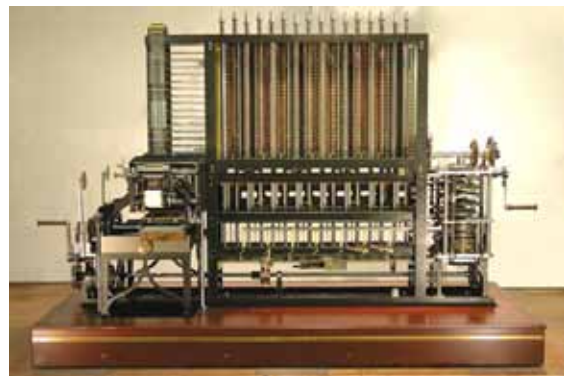


Figure 1. Reconstruction of Babbage's Difference Engine, 1991. The first piece of vapourware? (photo by Doron Swade).

One of the people most commonly labelled by historians of computing as the 'father' of the computer, Charles Babbage, has been described as being 'equally famous for two things: for inventing vast computers, and for failing to build them' (Swade 2004). Starting in 1821, Babbage spent the last 50 years of his life trying to perfect his Difference Engine and his Analytical Engine—huge mechanical contraptions that would produce error-free mathematical calculations. Babbage's ongoing efforts were widely celebrated in late Georgian and Victorian England. His highly ambitious design for the Difference Engine (fig. 1) called for the accurate assembly of 25,000 precision-engineered parts, but after a decade of development and the spending of the then enormous sum of over £17,000 of public money, all he achieved was a prototype mechanism—a small part of one section of the machine. His work, though, inspired many who followed in his footsteps, in-

cluding the Swedish inventor Pehr Georg Scheutz, to create working difference engines such as the Scheutzian Calculation Engine of 1837, albeit of lesser capability than Babbage's proposal. The government finally withdrew from funding Babbage in 1842, at which point, his prototype section was consigned to a museum. Yet it is a testament to how advanced and influential this design was that, forty years after its conception, it was displayed in London alongside other commercially available calculators at the International Exhibition of 1862. The exhibition showcased the latest advances in technology, and the jurors of the Exhibition stated that Babbage's machine was still of 'a higher order' than those available. [Purbrick 1993]. Babbage's inability to complete the machine was thought for many years to have been due to the limitations of Victorian manufacturing technology. However, in order to celebrate 200 years of Babbage's birth, the Science Museum in London recreated his Difference Engine in 1991 using manufacturing processes and tolerances achievable in his time, and it worked perfectly.

3. Personal Vapourware

At every stage of the computer's development into the machines we know today, there have been examples of vapourware that have had influence on the wider computer industry. As computers began to be manufactured by more companies, the opportunities for machines to be developed but not released increased accordingly. Often, this was because smaller companies set up to manufacture computers with little experience and few resources, but occasionally such drawbacks occurred in the largest, most experienced and best resourced companies.

IBM was one such company. The world leaders in business computing had, by the mid 1950s, built 70% of all the computers in the world. Consequently, when one of their own directors, Bill Lowe, told them in the early 1970s that business computers would be replaced by personal computers, the Executive Board would not listen. In the mid 1970s, Lowe had in-house Industrial Designer, Tom Hardy, produce working prototypes of home computers—small, powerful, brightly coloured machines that used a domestic television as a display (a low-cost route eventually adopted by most manufacturers). Despite these being radical proposals that would have established IBM as clear leaders in a new market, the executives were not convinced of the potential for personal computers. In 1977, three competitors launched successful home computers that together, kick started a whole industry. By 1978, the Commodore PET 2001, the Apple II and the Tandy TRS-80 had sold in their thousands, and IBM executives started to take notice. When the spreadsheet package VisiCalc for the Apple II was launched in 1979, Apple became a threat to the office computer market, and they really started to worry. Finally, the Executive Board asked Lowe to produce a personal computer.

It was no secret that IBM was not the fastest in producing new products. In fact, the internal processes were so convoluted that it took three years to go from concept to production. Lowe knew



Figure 2. The IBM PC, 1981. The direct result of a vapourware proposal (courtesy of IBM Archives).

that this was far too long for an industry that was moving more quickly than ever before. The only chance of getting a product to market quickly enough was to bypass the usual processes, but he knew he would never be given permission to do so. To force the issue, Lowe met with a smaller company that had recently launched a home computer used mainly for playing games. Unbeknown to management, he had one of these products upgraded, redesigned by Hardy into a package that followed IBM's design language, and badged it as an IBM product. He then presented it to the board, saying that the only way they could get into the market fast enough was to buy this smaller company and rebadge their products. The board was not amused. The very idea that the largest computer company in the world would be reduced to buying a 'toy' was complete anathema. Lowe then told them that the only alternative was to give him complete freedom to disregard IBM's internal processes to get a product to market within a year. Stunned, the board agreed and Lowe went outside of IBM to use many off-the-shelf components to build the IBM PC [fig. 2]. It proved to be one of the most successful computer designs of all time, and became the industry standard. But this was partly due to the fact that, because of its construction from existing parts, others could so easily copy it, which proved to be the thin end of the wedge in the decline of IBM's fortunes.

4. Portable Vapourware

Xerox, the world's largest manufacturers of photocopiers, was another well resourced but risk averse company. Aware that their patents on photocopiers were about to expire, releasing their stranglehold on the industry, Xerox assembled a team of the best computer researchers in their Palo Alto Research Center (PARC) and set them to invent new products. PARC were exceptionally good at this, although almost nothing they created made it successfully to market. One example was the Xerox Notetaker. As soon as he arrived at PARC in 1970, its designer, Alan Kay, inspired many people to try and develop a truly portable computer through his vision of the 'Dynabook'—a computer that looked like a large notepad, that could be drawn on with a pen, and was so simple to operate that even a child could use it [Atkinson 2008].



Figure 3. The Osborne 1, 1981. Closely based on a piece of vapourware (courtesy of oldcomputers.net).

The Dynabook was technologically out of reach at the time, although Kay was convinced he could make it happen if he were given the necessary backing. Xerox management were not supportive, and so in 1975, Kay started building a computer that was a ‘stepping stone’ towards his grander vision. The result, the Xerox Notetaker (fig. 3), had much of the capability of a larger computer system being developed at PARC, the Alto, which was the first with a Graphical User Interface (GUI) operated by a mouse. When the technology of the Alto was crammed into the Notetaker, it was the size of a small suitcase and had a small touch-sensitive screen, a floppy disk drive, a GUI operating system, 128k of memory (powerful for the time) and network capability. It also boasted a microphone, stereo speakers, and a rechargeable battery. The components alone were worth around ten thousands dollars (Hiltzik 2000). The downside was the weight—over 20kg (45 lbs), meaning there was no way it could be carried by children, and not easily by adults. By June 1978, Kay’s team had produced ten fully working prototypes to show Xerox management that it was indeed possible to produce a high-performance portable computer. It was tested in the field, and even used successfully during airplane flights. The team spent the best part of a year presenting the Notetaker to Xerox executives across the country, but despite numerous promises, nothing happened. In despair, Kay left and never returned to PARC. The Notetaker was never put into production, but Adam Osborne, who was well aware of Kay’s design, built an almost identical, much cheaper, less capable but just as heavy computer, the Osborne 1. This is often stated as being the first successful mass-produced portable computer and despite its drawbacks was massively influential, spawning numerous clones from competitors and defining the accepted form of portable computing for a number of years until the appearance of cheaper laptops.

5. Pen-based Vapourware

One of the best-documented cases of vapourware was part of a development in the computer industry that promised a whole new world of computing products. Pen Computing, a method of interacting with computers by writing commands onto the screen rather than typing instructions, was hailed as the future for computers with complete certainty by those involved. At one point in the early 1990s, almost every computer manufacturer was developing a pen-

based machine (Atkinson 2008). The GO Computer was the product everyone was talking about, and its writing-based operating system, PenPoint, was seen as a more natural, intuitive way to interact with computers (Kaplan, 1994). Computers that were operated with pens had been produced a few years before, but these were half-way houses—machines that used existing mouse and keyboard-operated interfaces and merely replaced the mouse with a pen and the keyboard with an onscreen version. True Pen Computing offered much more—full handwriting recognition and whole commands that could be replaced with gestures made by single strokes of the pen in electronic ink. The computer industry

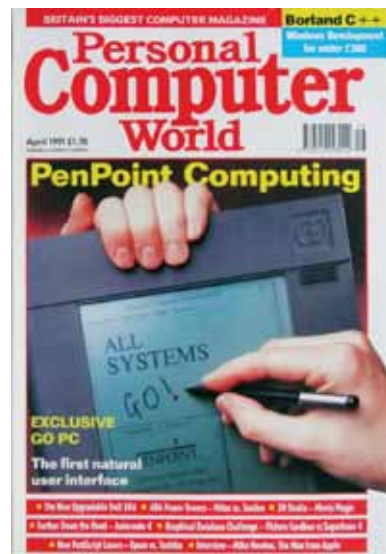


Figure 4. The non-existent GO Computer was even reviewed in magazines (photo of cover by author).

From the word go, GO made no secret about its intentions, and had announced its forthcoming product as soon as it had a working prototype (fig. 4). The problem was that the prototype was nowhere near production quality, and a whole series of technical problems kept emerging, sending the development team back to the drawing board. It proved impossible to write on the LCD screens without damage, the addition of a sheet of glass made the pen appear to ‘float’ above the ‘ink’ on screen, the components that tracked the position of the pen wouldn’t work properly, and assembled prototypes burst into flames for no apparent reason. The expensive product development process meant that the directors had to constantly search for more financial backing and sign parts of the company over to strategic partners in recompense. The lengthy delays also gave the competition, namely Microsoft, the time to announce their own version of essentially the same device and give mocked-up video presentations of their designs in use, giving the impression they had a finished product almost ready to launch (which they didn’t). As a result, all the developers that were writing third-party software for GO switched to work with Microsoft. In the end, GO created a spin-off company, EO, to manufacture the hardware and changed direction to become purely a software company. By this time, the industry was starting to become very disillusioned with the whole Pen Computing

project, and the bottom fell out of the market before it had even got going. Manufacturers continued to try and develop and launch products, but with little success. Pen Computing took a different route, and emerged in far more successful but less capable products in the form of hand-held Personal Digital Assistants (PDA's).

6. Conclusions

There are obviously far more cases of vapourware than there is room to discuss here, but even these few examples demonstrate the different and significant impacts that immaterial products can have. Babbage's Difference Engine and the Xerox Notetaker both inspired others to make significant advances and successfully produce real products that had a tangible effect on the direction of computing, even if the machines they produced did not reach the technical heights of the original concepts. The dream of Pen Computing embodied in the GO Computer drove the whole industry to explore a possible alternate path for computers and the creation of myriad products that pushed the boundaries of computer technology, even if those products went on to fail in the marketplace. The widespread public dissemination of the concept raised awareness among potential users and made them consider what computers could be like, arguably clearing the way for the ready acceptance of smaller, simpler pen operated devices in the form of PDAs. The personal computer prototypes produced within IBM had a very specific and localised impact, but nevertheless were directly responsible for the creation of a product that completely altered the course of computer history and opened up the computer industry to a much wider range of manufacturers. Indirectly, this led to the widespread mass production of compatible machines, huge reductions in the cost of computers and supported a change of the perception of the computer from a high-end specialist piece of equipment to a quotidian, status-free product.

These are not the only effects of vapourware, but they at least prove a significant point. While the focus of much of design history focuses on the consumption of mass produced products, and great play is rightly made of the powerful forces of social construction, there remains an area of study of products which

never made it into manufacture, never appeared in the retail market, were never subjected to the capricious test of public opinion and yet which still had significant effects of the development of computer history. The mere concepts themselves were enough. These pieces of vapourware are indeed proof, if any was ever needed, of the agency of ideas.

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Pre-Columbian Asceticism: the Tuza-Piartal morphological expectation from its ocarina CRIA-269

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Pre-Columbian Design / Tuza-Piartal Ocarinas / Pre-Columbian music

If the production of aerophones by the Tuza-Piartal, inhabitants of Colombia's southwestern plateau, -1250 and 1500 AD-, is found within the morphological expectations of this ocarina, it could be stated that the formal experimentation of its craftsmen met a musical exploration. Morpho-Acoustics, rather than a strictly plastic aesthetic experience, –as in Tumaco-La Tolita- (Buitrago, 2010), is intended.

1. Morphologic expectation in Ocarina 269

Iconic consideration exposes several representation levels in human creation (Villafañe, 2006). These levels are present in a context of extreme figurativism (mimesis), in which human beings created images reproducing immediate reality or, conversely, radical abstraction (arbitrary abstraction). Where, if there were a reference, this one had been overcome for the intellectual game of the craftsmen¹. We found that in this opposition, it could be explained the relations that human has established with images, in a practice of transformation and establishment on their territory².

If Gombrich (2007) and Huyghe (1977) are right, we may say that the aesthetic functions of these artefacts has been gradually reached, almost on the same pace in which pre-historic human settle-down on a territory. Although this kind of relationship with these artefacts was present before, it is the awareness of this concept, what we just recently called *aesthetics*, that aroused with the gradual transformation human in a sedentary beings.

Music archaeology is a research field looking for answer questions about mankind's intentionally produced music, on the basis of archaeological finds. Is the design of a sonorous object suggesting its potential function? Does the form of a piece follow an specific organization related to its use as a tool or as an "operation object"³? Does the form of a piece reveal specific

1 This idea suggests that the craftsman belongs to the historic moment that conquered conceptual thoughts.

2 The different ways to approach these transformations and establishment of concept processes have varied in time, and they have been studied by several scholars as René Huyghe (1977), Ernst Gombrich (2007) and Erwin Panofsky (2000).

3 Though it is difficult to establish a difference, we attempt to say that a practical object respond to basic material human necessities, while an "operative object" responds to operations in the magic or shamanic order.

functionalities that require certain improvement in the description of its form, to which its configuration responded? In spite of the enormous coincidences among the different types of human material production, the generalization of this precept it can be interpreted as conceptual abuse, taking it to the realm of the ethnocentricity. Perhaps this is the reason why Gombrich posited that the entire history of art it is not a history of progress and technical achievements, but a history of new ideas and demands (Gombrich, 2007, 44).

In several cases, the form of the objects elaborated by agriculturally-based communities– or their immediate antecessors, followed the cristalization of the natural references presented in the context in which they inhabited, probably, as scholars posit, with the goal to appropriate their metaphysics attributes by mean of the reproduction of their forms: from thrusters carved in bone with realistic reproductions of a bird through pottery trumpets elaborated by the Tuza-La Tolita II craftsmen, in detail manufacture resembling the shell of the *cassidae* snail, a frequent specie in the southwestern coast of the Pacific Ocean. In each one of these cases, the manufactured artefacts documented, recorded in their forms and structures, a social sense of taste, referring to Bourdieu (Bourdieu, 2010), and, in strict sense, are evidence of the thoughts and demands ruling societies every moment, everywhere. To understand the universe of images belonging to a society, means to visit their depth mind pillars, to contemplate the foundations from where their identity is built. (Gruzinsky, 2010).

In this general frame of conceptual strain is exposed, the social relationship between practical function of the artefacts designed by human, classifiable as prestige goods, tools or instruments, and the iconographic complexity to which they respond, as a copy of a surrounding reference in a collective or individual frame.

If the collection of aerophones in the Tuza-Piartal ceramic production responds to the morphological complexity by the ocarina CRIA-269⁴, it is possible to suggest that this indigenous community reached the concept of musical instrument, and, that the formal experimentation seems to answer specifically for the quest of quite precise acoustic records. Although in other indigenous ceramic collections, as Tumaco-La Tolita II- with an admirable pottery production-, there are reproductions of animals, veg-

4 The globular flute CRIA 269 belongs to the archaeological Tuza ceramic collection at the Archaeological Museum Julio Cesar Cubillos - Universidad del Valle. CRIA stands for Regional Center of Archaeological Investigation.

etables of human beings, even their respective formal fusions, the creation of “sound” when blowing by their mouthpiece, their design, individually or, as a collection, does not seem to seek for musical structure.

The contour of the ocarina CRIA-269 may suggest the abstraction of a snail-shape. It is a first lecture to the object that, after a glimpse to its external form, can not be denied. Nevertheless, after a more careful observation to its morphologic complexity presented in the quality of the outlines shaping the contour, its external dimensions, the graphic impressed on it, its axially, or even the develop of the resonance body, the first representative impression of natural mimesis vanishes.



Figure 1. CRIA 269 (graphic by Juan Camilo Buitrago)

2. Contour and symmetry

The general contour of the ocarina presents forty arcs delimitating its form. An main observation is that one of these arcs, that seems to be quite rational – like the one connecting to the right both substructures (cone and sphere) is described by four arcs relatively equivalents in radio (From top to bottom: 49,7; 32,9 y 37,5, fig. 2), as well as for six endogenous arcs⁵, which configure the inner curvature of the piece (seeming as a belly in the lower part of v1, fig. 4). These elements indicated that it does not exist a geometric precision that in detail describes them as western-related figures or volumes, besides what the

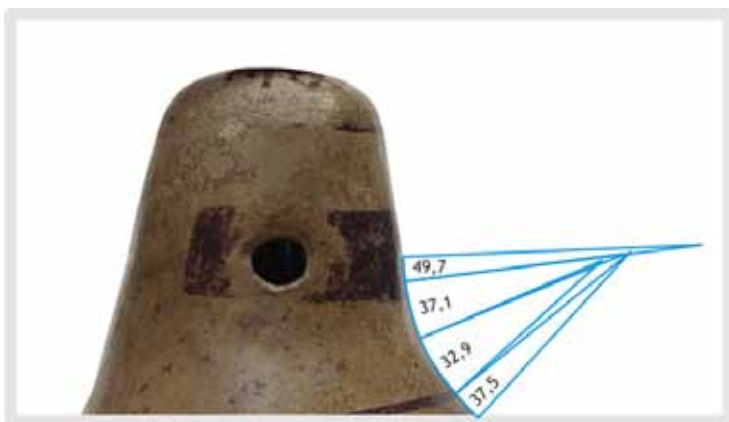


Figure 2. CRIA 269. Detail (graphic by Juan Camilo Buitrago)

⁵ Responding to different radial and cords.

object seems to pretend to be a regular formal register of a natural reference.

An important detail to highlight is the change in the direction of the arcs that configured the perimeter, and that are revealed to the craftsman, once he or she founds the necessity to build the mouthpiece of the ocarina⁶.

Nevertheless, given the form tendency to configurate itself through endogenous arcs, the change in this behaviour seems to look for the comfort of the performer with the instrument, and the efficiency to produce a desired sound register. This manifest an approachment to form that allows the creation of intentional sound production, as a knowledge consolidated during long periods of morpho-acoustics explorations.

If the aim of the craftsmen were to create a reproduction of a snail shape, the facture of the aerophone would have copied the infinite amount of formal variations of the natural referent, without any concern about delimiting the number of segments in the configuration of the contours. In this case, design intention leading to more straight lines suggests certain asceticism. Furthermore, this is the evidence of intentional sound production. If in any moment the initial idea was to reproduce a natural setting, it is clear that finally it becomes an abstract representation of the form with other functional goals (Buitrago et ál., 2009).

Furthermore, the exercises of symmetry applied on the perspective of a formal unit, reveal the presence of three-dimensional substructures within the ocarina morphology.

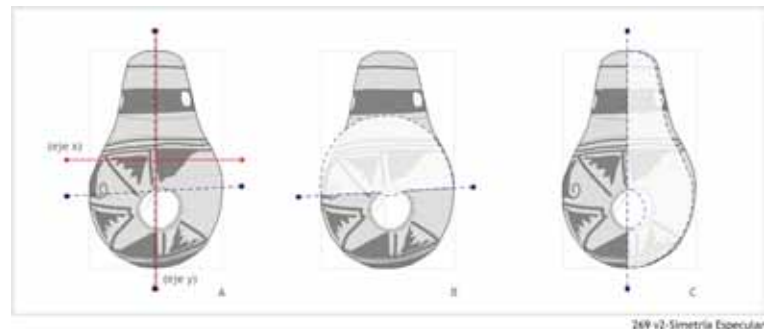


Figure 3. CRIA 269. Top view symmetry (graphic by Juan Camilo Buitrago)

In this sense, it is necessary to observe the three-dimensional domain suggested by the specular symmetry (fig. 3, B and C). This do not only reveals a symmetric precision in the form of the piece, but also a clear intentionality behind it. In addition to the evident difference related to the form of the mouth piece, due to relative “phase displacement”, related to the deformation the lateral-down of the shape in v1 (*silueta V1*, fig. 4), these two shapes do not result been the same. It is uncertain if this dif-

⁶ Reading, in a clock-wise lecture of the perimeter, for the more “straight” segments perceived from the half-part to the bottom in the left-side view (fig. 1), before the beginning of the lower curve of the piece.

ference is attributable or not to a mistake in the transformation process. What it is true is that the indicated deformation is found over the supporting side of the artefact, without necessarily been this one the pursued function [It is not easy to balanced position of the piece over a flat surface]?

This specimen presents specular symmetry as a whole but also from different angles, (fig. 3). If every substructure is studied independently (sphere and cone), each one would reflect its own axis, from every point of view. These are patterns from where the form of this globular flutes emerges.

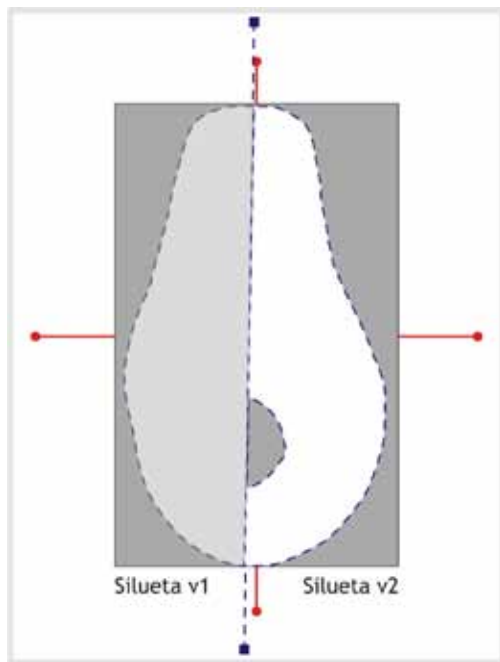


Figure 4. CRIA 269. Comparison of the symmetry top view (silueta v2) and side view (silueta v1) (graphic by Juan Camilo Buitrago)

3. Volumetric issues: axiality and aural proportion

The ocarina 269 characterizes by its morphological complexity and asceticism. The perimeter of the globular flute contains two main substructures. The top view (fig. 3, A) reveals two axis and the two volumes covered by them. On a reductionist view, the upper part resembles a cone, while the lower part approaches the form of the sphere. In resume, it is a co-axial structure.

In the general proportion of the perimeter it is observed that the contour of the front view (fig. 5) could be inscribed in a perfect

? Conversely, the finger-holes show that in the manufacture of an object of these characteristics were present certain decisions related with its form and function, previously visualized in the elaboration process (the lateral holes present a previous use as holder holes, reenanced by a color ornamenting the object). But in the same way, the vent hole, used to adjust the tone, reveals that once the object is finished, somehow, some experimentations or newer details can be added to the shape of the piece. The idea to remark here is that there are post-manufactured decisions, related with the sound box, that make possible to adjust the fundamental sound produced by the instrument. (Is there a mechanic-aesthetic experimentation process related to the production of sound?)

square, since the minor of its dimensions (height) multiplied by 1,12 is its width. Finally, when this last dimension (10_1/8x, fig. 6, A) is compared to the length of the contour (16_2/3x) the resultant pattern is its division by 1,613; a number approximated enough to the golden ratio (1,618).

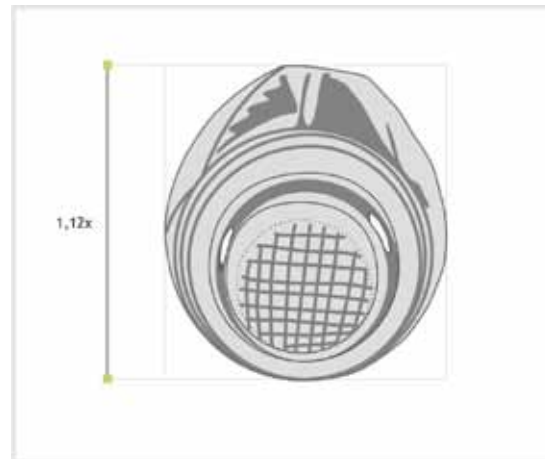


Figure 5. CRIA 269. Front view (graphic by Juan Camilo Buitrago)

This proportional relation is not only present there. Among several cases, in the left side view of the piece (fig. 5) it is manifested a 1,5 relation between what we could understand as the trajectory by the truncated cone (10_01. fig. 6), and the vertical distance of the half of the sphere (6_2/3x8).



Figure 6. CRIA 269. General proportions (graphic by Juan Camilo Buitrago)

When observing the horizontal distance of the point that we suspect begins the transformation of one substructure in another (square on C, fig. 6), it is observed that this one is found related to the width of the overall perimeter by means of proportion 3.3 (10 x divided by 3_1/3x). This quantity is not just the double of the proportional ratio between the width and the length of the object, but also the golden number (1,618E)

There are also proportional ratios in the design of the inner cavity of the object, which presents inside the two main substructures (sphere and cone), a sound box and a spiral with five revolutions.

The spiral segment has an ovoid shape and its trajectory turns

around a central axis. Because of this, it is perceived as a “column” passing by the center of the cone substructure in the ocarina. This is a spiral that draws in three-dimensions a structure similar to a truncated cone shape, since the base that intersects with the sound box (the spiral bottom) it is almost the double of the first revolution on the top. The spiral pattern of growth is regular [1,2 average], as the constant thickness of the body, which is almost 2 (fig. 7).

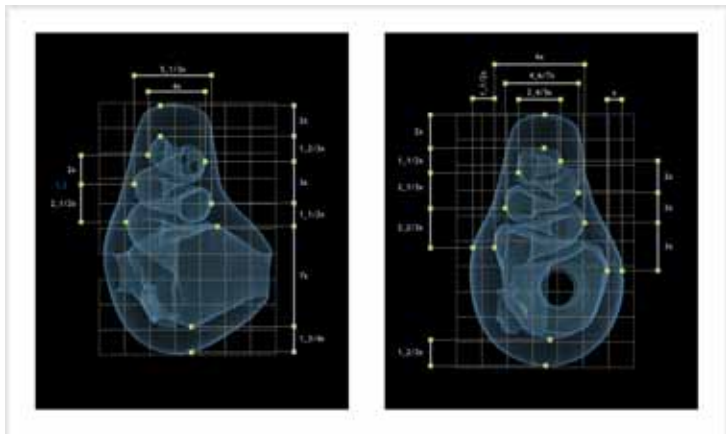


Figure 7. CRIA 269. Tomography and general proportions of the inner spiral (graphic by Juan Camilo Buitrago)

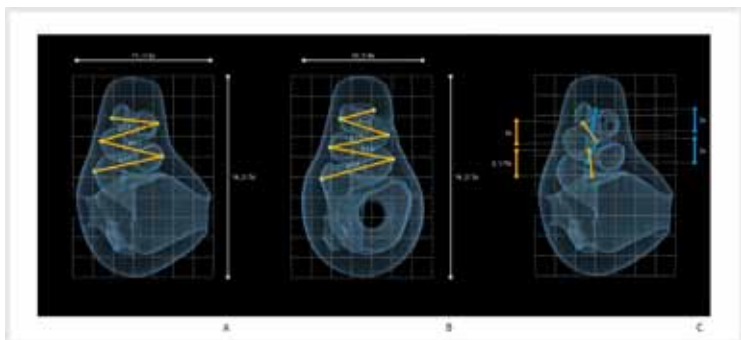


Figure 8. CRIA 269. Tomography and general proportions of the inner cavity

Conversely, the sphere is a transformation of the regular rhythm by the spiral, but also a modification of its spherical three-dimensional structure, since the inner design of the sphere is a hollow following a particular formal order, and that is difficult to understand it by means of an specific geometrical tendency.

A look to the cavity as a unit (spiral- spherical form, fig. 8) reveals how it is located [2x] (vertical distance) from the top edge of the piece. In the same way, the distance to the bottom edge [1_3/4x] left side and [1_2/3x] right side, fig. 8). In the same way, it is appreciated the location in width, [1_1/2x] from the left tangent of the cavity to the edge of the piece, and [1x] from the right tangent to the respective edge. These four measurements correspond to the horizontal and vertical dimensions of the inner cavity of the ocarina (Top view, fig. 8, right side). They indicated a relative intention for keep the position of the hollow cavity of the object in an equidistance position to external surface of the ocarina. In other words, the exterior form of the artefact

function as a case for the inner cavity, where it is succeeded the mechanical production of sound.

Given the complexity of this cavity (exposed in some part), and the tide relationship between the formal tendencies of the piece and the resulting sound compass, it is worthwhile to points out that the external shape of the piece respond to a necessity to afford an accurate space for this internal acoustic mechanism, instead of pretend a pure plastic expression.

4. Ascetism in CRIA 269: ¿Tuza Ascetism?

The ocarina CRIA 269 is a globular flute that produces four fundamental tones (Buitrago et ál., 2009b). This flute has in the quasi-spherical substructure two holes. There is one in the top side and it functions as a mouth hole. The other is located opposed to the former in the bottom of the piece. This is a finger hole. In the cone substructure of the piece, and connected to the inner spiral, there are two minor finger holes (fig. 1). There is also a vent hole located in the left side of the sphere. This is an auxiliary hole often provided in wind instruments to tune a note or adjust the bell note .

This organological characteristic is evidence of the formal complexity in the conception of the sound box and the skilled hands who made it. It also highlights the morphologic independence of this acoustic structure with the external surface of the piece: a constant principle present in several ocarinas of the Tuza ceramic production.

Upon inspection of several characteristics in the facture of these ocarinas and the connections between them, it is uncertain to talk about manufacture aleatory results. There is a quality in the contours of the form, great symmetric coincidences in the ratio of the volumes, a frequency in which the pattern of proportions repeated in the entire configuration of the object, and there is also the intended transformation of a three-dimensional structure by another one that is only rule by very precise symmetric parameters. Overall, these aspects addressed a complex proportional tendency in the whole piece.

It is certain that the golden relation were not a conscious hability of the craftsman to work the clay in a numeric intended disposition, but nevertheless, this sonorous object approaches its aureal proportions in its dimensions, in such a way that notions of formal balance and formal abstraction are already in the core of the aesthetics expectatives by the community of craftsmen that materialized this piece.

These observations on the globular flute, ocarina 269, suggest that formal experimentation in the Tuza craftsmen was probably directed towards the production of sound. They probably create this ocarina collection intending to explore morpho-acoustic experiences, beyond the formal imitation of the surrounding setting. They were actually creating musical instruments and

improving their concepts and techniques about these processes of creating sounds on clay.

Acknowledgments

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The collection of textbooks “Tapete Verde”: from the creation to the graphic production by Editora Globo (RS/Brazil), on the 1970s

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Tapete Verde / Textbook / Editora Globo / Design / Graphic production

This paper presents some data of the collection of textbooks “Tapete Verde” research, from its creation to the graphic production. It's written by Nelly Cunha and Teresa Lara Palmini Fabretti, and was edited by Editora Globo in Rio Grande do Sul's state, in the south of Brazil, in the 1970s. This research contributes to the investigation areas of Brazilian editorial and graphic design's history and of education's and textbook's history.

1. Introduction

This paper presents some data of the research about the collection of textbooks “Tapete Verde”, comprising the design stages from its creation until the graphic production. It's been developed by the author, on the Master's Degree in Education, of the *Programa de Pós-Graduação em Educação (PPGE)* in the *Faculdade de Educação (FaE)* at *Universidade Federal de Pelotas/RS (UFPEL/RS)*, in Brazil, and it's linked to the research group HISALES (*História da Alfabetização, Leitura, Escrita e dos Livros Escolares*), also connected to PPGE/FaE/UFPEL and coordinated by Prof. Dr. Eliane Peres. This group is active in research on the history of literacy, social practices of reading and writing and analysis of production, circulation and use of textbooks.

The “Tapete Verde” didactic collection is written by the teachers Nelly Cunha and Teresa Lara Palmini Fabretti and was edited in the 1970s in Rio Grande do Sul's state, in the south of Brazil, by Editora Globo. The choice for the analysis of this collection was due that stood out compared to other collections in the library of textbooks of HISALES, by graphic aspects, use of colors, quirky illustration, and differentiated visuality, in the graphic composition. In addition to that, the collection was published in a period that include factors that influenced the production, such as: traffic in graphical and technological developments; discussion of new concepts, activities and responsibilities among professionals involved in the graphic industry; interference of editorial and economic factors in the activities of Editora Globo; growth process of publishing educational publication; country's political, economic and educational changes.

The research base is the intersection of concepts from various theoretic disciplines: history of the book, textbook, graphic design, editorial design, information design and graphic production. The case study data (through the knowledge of the cycle that involves the creation, project, graphic design and graphic production in the publishing industry) contribute to the editorial and graphic

design's history and education's and textbook's history in Brazil, specially at RS, in the context of the 1970s.

2. The textbooks

Textbooks are used as teaching resource by teachers and as physical support for student learning, at school. Regardless of its content and its function, can be an important source of data about the context in which it was produced, which may reveal aspects of society and time by analyzing the market in which it was circulated, of editorial production and their educational goals.

Choppin (2004) indicates that textbooks, from the 1970s, aroused interest among researchers in the history of education, providing knowledge of educational processes of the past. Textbooks are important because they are teaching tools and support of knowledge of what should be taught, and this contributes to the understanding of aspects of school culture, knowledge of the country's history, culture, values and ideas of a certain period. Maciel and Frade (2003) affirm that textbook analysis allows investigation related to: its production processes, the printed media as a source and object, and to the recovery practices arising from its use.

Batista (1999) characterizes the textbook as a ephemeral book, that downgrades with speed. These publications are hard to be find because they are not valued academically and usually are discarded after use, being rarely reused and reread. The preservation of those textbooks that still exist is not always adequate and sometimes there are missing information which limit the search.

Choppin (2002) defines the textbook as a complex object, with multiple functions, and argues that they can also be investigated by factors such as: material evolution (paper, format, illustration, pagination, typography, etc.), printing techniques and semiology of the image.

Textbooks usually have large runs, renewal by the industrialization and development of graphic technology, wide distribution and presence in the school environment. Nevertheless, visuality and materiality of textbook and its effects on cultural and aesthetic training of student and teacher are still less researched topics on the fields of education and design. However, it's noticed a growing interest in this type of research in recent years, due to the recognition of its contribution to the history of education, to graphic memory and by the influence within schools and in the publishing, technological and graphic market.

The textbook has become the focus of attention by its visuality

in Brazil from the 1970s. While the school was expanding in the country, there was the emergence of publishers of books aimed at this market, and also a renewal of the graphic arts area. Before 1970s, the publishers didn't have specific attention to issues of visuals and graphics aspects on the production, because their professional weren't trained specifically on communication and design, without information and experience for that.

From this, the Brazilian graphic and editorial market started to incorporate trained professionals, such as graphic artists, illustrators and designers, to renew the visual language of teaching material, with new concepts, recourses and graphic techniques, aiming the communication of the content and the commercial success of the textbooks.

Design is an interdisciplinary field, with visual language and others elements in the development of a graphic design, and allied to education, it can interfere in the formation of knowledge by the child and its dynamic learning, can stimulate the student in their potential, initiative, creative thinking, aesthetic and critical sense, and develop the senses, sensibility, perception. It can reach the child playfully and provoke their curiosity, while that exploits visually the knowledge to be discovered, also interfering in the relationship between the reader and the book.

3. The *corpus* and the methodological procedures

The theoretical and conceptual references in the fields of education (book and textbook history) and design (graphic, editorial and information design, and graphic production) are essential for the research. Theories about books by authors such as Chartier (1990), Darnton (2010) and Hallewell (2005) are being studied, and also those about textbook, with Choppin (2002, 2004), Batista (1999), Frade e Maciel (2002), Peres (2008), and others. On design theories, some of the important authors are: Lupton and Phillips (2008), Pedrosa (2009), Hendel (2006), Tschichold (2007), Linden (2011), Lins (2002), Linden (2011), Villas-Boas (2008), Fontoura (2002), Coelho and Farbiarz (2008, 2010).

The “Tapete Verde” collection is composed of different volumes with Livro Integrado (Integrated Book), Caderno de Exercícios (Workbook) and Manual do Professor (Teacher's Guide), from 1st to 4th grade, separately. These volumes are the investigation *corpus*, and all copies of the HISALES archive are being analyzed, as well as those from personal collections.

The *corpus* is composed of 14 volumes of the collection (incomplete): 12 are from HISALES and 2 are from Teresa Fabretti. They are: a) 11 Livros Integrados - 1st grade (1976 - 1 copy), 2nd grade (1976 - 1 copy; 1978 - 1 copy; 1979 - 3 copies; 1982 - 1 copy), 3rd grade (1978 - 1 copy; 1979 - 2 copies) and 4th grade (1977 - 1 copy); b) 3 Cadernos de Atividades - 1st grade (1976 - 1 copy), 2nd grade (1976 - 1 copy) and 4th grade (1977 - 1 copy).

Furthermore, the interviews with professionals involved in the production of the collection and document analysis of specific materials are also part of the research methodology.

4. The “Tapete Verde” didactic collection

The “Tapete Verde” collection is written by Nelly Cunha and Teresa Lara Palmira Fabretti, both from Porto Alegre/RS and teachers followers of pedagogical trend of “Escola Nova” movement, which expanded in the world in the late nineteenth and early twentieth century and proclaimed the “end of traditional education”.

Nelly Cunha (1929-1990) is an educator recognized for her career in RS (teaching, *CPOE/RS - Centro de Pesquisas e Orientação Educacionais do RS*, *SEC/RS - Secretaria de Educação e Cultura do RS*, *COLTED - Comissão do Livro Técnico e do Livro Didático*, etc.) (PERES, 2008). Teresa Fabretti was born in 1934 and had a teaching career for many years, worked as educational coordinator in schools of the state of RS and nowadays is retired in POA/RS.

Originated from Livraria do Globo, founded in 1883 in Porto Alegre/RS, Editora Globo is one of the most important publishers in the history of publishing market in RS for its long history, also being recognized for its production of textbooks started in the 1930s, that contributed to its expansion.

In the 1970s, Editora Globo was facing serious financial crisis, and in 1975 the director José Otávio Bertaso proposed a new project of didactic collection in co-authorship for Nelly Cunha and Teresa Fabretti, what would be the “Tapete Verde”. In times of cost containment, the publisher was looking for alternatives to the editorial production by pedagogical and commercial appeal, reducing costs and with restrictions as the use of cheaper paper and just 2 colors (FABRETTI, 2011).

In 1976 the first edition of the collection was published. The books are integrated, they have two or more subjects in the same volume, with Language, Mathematics, Sciences and Social Studies contents. There are books from 1st to 4th grade, in different volumes, containing, separately: *Livro Integrado*, *Caderno de Atividades* and *Manual do Professor*.

Among the professionals of the art sector of the publisher, who worked in the collection's production, with specific functions in graphic project, there are: Leonardo Menna Barreto Gomes - creator of covers and illustrations of the volumes from 1st to 3rd grade, Renato Canini - creator of cover and illustrations of the volume of 4th grade, and Sônia Heinz - responsible for the graphic planning of all books. The editorial secretary Maria da Glória Bordini also worked in the production of books, advising the art sector with the editorial director José Otávio Bertaso.

Gomes (Interview, 2011) reports that much of the work of graphic and editorial project of the collection was prepared by manual processes of composition and assembly, according to steps and

standards for the layout, using the resources and tools available at that time.

The edition and photosetting of collection were made in the graphic workshops of Livraria do Globo in Porto Alegre. The printing was done in different graphics: São Paulo Editora S. A. (São Paulo/SP) in early editions, and Gráfica Editora Primor S. A. (Rio de Janeiro/RJ) in the latest edition located [1982]. This indicates that there was outsourcing of services of offset printing.

The book's size are 17 x 25cm, the bookbinding has square spine, cover on bond paper, with grammage superior than the pages in newsprint paper. The books can have between 90 and 230 pages, depending on the volume, changing the extent of the spines, ranging between 0,5 and 1,5cm.

According to Fabretti (Interview, 2011), the collection name was chosen by the authors and referred to one of the texts published in it, with the same title. They decided the 2 colors used on the volumes: green and black over the paper color, because of the title of the collection and also by the interest of working in schools with ecology, referring to fields and woods.

Covers and back covers are the ones that have 3 colors printing: overlay of cyan and yellow, resulting in an uniform and compact green, and black, used in contours and at some typographies (authors names, classification of book and editorial data).

The applied colors have variations of tone in printing of different editions. Some copies have pages with problems on print-to-process registers, others have misprints areas without uniformity, differences in color intensity, and there is one copy which has some empty pages, without the print content. It's important to consider that the physical and chemical properties of newsprint influences on the final print quality of the pages.

On covers there is one illustration that integrates with the back cover, by its continuity, through representation of scenes exploring features of motion and depth. There is also the application of a stylized typography as the brand of the collection, always in the same position, at the top right, with green color and it's used with the same graphic features in all covers of volumes. This typography was created by Leonardo Gomes specially for this collection, and it's presented in uppercase, irregular, with variation on structures of the characters, sans serif and simulating manual cropping. The characteristics of this typography refer to the influence of the graphic references of the Ziraldo's work, an artist whose talent was recognized nationally at the time (GOMES, Interview, 2011).

The books contain pages of text and illustrations that will vary in content and structure with the evolution of the grades. The typographies are applied according to the ability of understanding of the child in each grade, changing from sans serif to serif fonts. The illustrations show human and animal characters interacting in various scenes, but there is a disruption of the visual identity

among the illustrations of all books, because the volumes of the 4th grade were made by another illustrator.

Illustrations and HQ's present concepts linked to the themes of the texts and exercises, efficiently and innovative as regards the graphic and visual resources applied in this type of publication, in the context of the time, which until then had "clichés", widely found on pages.

The illustrations with their peculiar graphic characteristics feature visual appeal, attracting even more attention of the reader. The use of hollow and filled areas is quite explored, with the use of figure-background through negative and positive positions of the same color and contrasts with each other. The gray color sometimes is used, obtained by applying the black and halftone patterns, and found in pattern areas.

It's possible identify that these textbooks present editorial and graphic aspects added to their pedagogical functions, in its constitution as information support for the learning of children.

5. Conclusion

The textbook is more than a physical support of content, because it can allow communication in addition to information written through the visuality and material conformations, sensitizing students to the visual phenomenon and stimulating other specific capabilities.

The characteristic from graphic project to the graphic production may be responsible for setting guidelines, influence on the placement of content and cause different behaviors in the reader. The "Tapete Verde" collection stands out as proof that, despite the limitations imposed by Editora Globo, innovated and provided unique solutions in regard to the exploitation of graphics resources, comparing to those textbooks previously published. This proves that one should not evaluate the visual quality of a textbook only by the amount of color and type of paper used.

The function of transmitting the message and facilitate the proposed content is accomplished by the collection, through a structured graphic design, with interaction between illustrations and texts. Images and texts are equally responsible for the narrative and complement each other to compose the structure of pages, exploring visual communication with the hierarchy of information, movement, scales, depth and balance. The colors of ink, printing type, contrasts, color and type of paper, and plastic and perceptual effects, also influence the page's visuality, contributing to the formation of the printed surface of textbooks. One should appreciate these aspects as they may influence the way a child, in the school stage, sees, uses and reacts to the textbook, thus interfering in her learning and training.

The collection's analysis gathers knowledge to the textbook's history and the editorial publishing history, in Brazil, being reference to observation of different characteristics in this type

of publication, by graphical and materials aspects, considering facts that interfere on the development of content, project, design and graphic production.

Finally, one realizes the importance of effective research with the confluence of conceptual references from the fields of education and design, in search of contributions by historical and current perspectives, advancing on the integrated study of both areas.

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“Their pen draws everything, as if it were print”: letterforms on the title page of the *Catecismo de la lengua Guarani*

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Cruzeiro Novo Project: Design and technology for the first series of banknotes printed in Brazil

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Design / Technology / Aloisio Magalhães / Graphic industry

This paper focuses on the relationship between the design of the series of the Brazilian banknotes known as Cruzeiro Novo, and the acquisition of technology to implement their production.

Until 1970, all Brazilian paper currency was produced in foreign countries. The launch of this series designed by Aloisio Magalhães was a milestone in the process that enabled the Brazilian Mint for the production of money in Brazil.

1. Introduction

We intend to analyze the conditions and initiatives that led to the national autonomy in money making, highlighting the technical and visual solution developed by designer Aloisio Magalhães.

The Cruzeiro Novo paper currency series was launched in May 1970. Economic, political, institutional, and cultural factors were combined in several ways in this process. Among those we may highlight: the goal of avoiding wasteful spending on foreign currency used for the printing of money outside the country; the question of national sovereignty that involved in this issue; the nationalist ideology of economic growth characteristic of the military governments; movements of rationalization and modernization of the state machinery; the aspirations and initiatives of cultural modernization of the country involving the design as a profession; and the professional and institutional pride of the Brazilian Mint concerning the production of the money locally [Lessa, 2009].

Our gathering of data initially took place by means of interviews with some people who, directly or indirectly, accompanied the process of design of the new series of banknotes. At a second moment, there was a bibliographic research that worked as grounds for the analysis. It focused on the visual characteristics of the projects presented in the design competition, on visual solution proposed by Aloisio Magalhães and on the technical characteristics used in the implementation of the project.

2. The beginning of the production of banknotes in Brazil

The international company Thomas de La Rue proposed to set up a banknote plant in Brazil between 1936 and 1940, without success. In 1956, a new proposal was made to setup a mixed

corporation. In 1957, the company decided to open a joint-stock company in Brazil specialized in security printing. With the creation of the new currency in 1966, the company carried out the overprinting of the existing banknotes with the words 'cruzeiro novo' [Trigueiros, 1987: 226].

The Brazilian Mint had already printed banknotes. In 1854, for example, they were printed for the Bank of Brazil "while awaiting an order made abroad". [Trigueiros, 1987: 152]. Several years later, between 1907 and 1908, the Brazilian Mint printed five designs of lithographic matrices of the French company Georges Duval, already used in previous designs. Later, between 1920 and 1924, the Ministry of Finance made a new experience that resulted in printing of 17 designs in xylography.

Finally, in 1961, the Brazilian Mint began the production of the third design of five Cruzeiros banknote, known as *Cédula do Índio* (Indian Banknote) [fig. 1]. The design was developed in the Brazilian Mint and it greatly differed from the iconography and some graphical patterns used until now. According to Trigueiros [1987: 156], the production was interrupted not only because the productive resources of the Brazilian Mint were precarious, but also because the banknote had technical problems. On the other hand, we identified a positive appreciation of the experience on the part of the technical team of the Brazilian Mint. Vicente de Paulo, who headed the Department of Matrices, minimized the technical problems by saying that the production of the banknote was discontinued due to the lack of supply of paper bought abroad [Silva Junior, 2008: 115]. Anyway, the effective process of the equipping of the Brazilian Mint only takes place from 1965 on.



Figure 1. The Indian Banknote 5 Cruzeiros, 3rd design, 1961, chalcography plus offset. Design by Orlando Maia, Casa da Moeda [Brazilian Mint].

3. The new series of banknotes

In November 1965, a decree was issued authorizing the creation of a new currency, the Cruzeiro Novo. It was also determined that a new series of banknotes and coins, designed and printed in Brazil, would represent the launch of a “strong” Cruzeiro. To do so, it was necessary to initialize some institutional changes regarding the issue of values and the organization of the Brazilian Mint.

In 1950, the law established that one of the goals of the Brazilian Mint would be the printing of banknotes. Nevertheless, there was the idea of setting up a national plant for the production of paper currency that did not depend solely on the Brazilian Mint. That problem was solved in December 1964 when the military government determined the reorganization of the Mint, making it subject to the Ministry of Finance. Brazilian Mint would receive an increase in its productive capacity by means of the acquisition of equipment and training of staff abroad. Also, in December 1964, the National Monetary Council was created and the SUMOC [Superintendence of Currency and Credit and of Specialized Portfolios] was turned into the Central Bank of the Republic of Brazil [later called the Central Bank of Brazil, in 1967]. The project of the new series of bank notes would be chosen by means of a competition by invitation. F. dos Santos Trigueiros, a Central Bank official, was appointed to organize it. The printing matrices would be developed in the European headquarters of De La Rue Giori.

The competition jury consisted of Florisvaldo dos Santos Trigueiros [Central Bank], Vicente de Paulo Ferreira da Silva [Brazilian Mint], Wladimir do Amaral Murтинho [Ambassador and supporter of the project], Flavio de Aquino [Director of ESDI, School of Design] and Leopoldo de Souza Campos [engraver of the Mint and teacher of the EBA, School of Fine Arts]. The competition was confidential and limited to the invited guests. The Central Bank invited the following people: Alexandre Wollner, Aloísio Magalhães, Gustavo Goebel and Ludovico Martino, all of the design area. The Mint appointed its employees: Benedito Ribeiro [coin engraver], Petrarca Amenta [designer], Waldir Granado [designer] e Zélio Trindade [banknote engraver]. Each participant received an album with the basic characteristics of the banknotes and examples of banknotes from Brazil and from other countries. From the distribution of members of the jury, and invited participants, it is clear that there was a division between two professional categories, in fact, the two sides that organized the competition.

The technical staff of the Mint were the heirs of a tradition of more than 250 years of security printing and, according to Silva Junior [2008, 130], where “connected to the School of Fine Arts [EBA]”. According to Lessa [2009]:

The Mint interpreted the production of banknotes as applied art. Subject to the system of the School of Fine Arts. Since the Empire there was a transit between the Artistic Section of the Mint and the Imperial [and, since the Republic, National] School of Fine Arts.

The designers were representatives of the newly created Central Bank which, according to Silva Junior [2008: 125], “seek to

define its operation as a modernizing vector”, were holders of a potential for rupture that symbolize the vanguard, connected to the ESDI. As recent profession with contemporary characteristics, and the design professionals sought to show the differences of its practice in relation to the artistic tradition.

Each group presented works with particular characteristics [fig. 2]. While the technicians of the Brazilian Mint showed visual concepts connected, according to Silva Junior [2008: 127], to “a process of artistic creation unrelated to the serial production”, and to the security printing techniques, the designers sought to break with the classical iconographic tradition and bring designs connected to the standardization and industrial reproduction.



Figure 2. Layouts of six competition participants for the design of the series of the new currency. The rest was not found. To the left, the employees of the Mint, and to the right, the designers invited by the Central Bank.

The decision was announced on August 16, 1966. Four votes were given for the proposal offered by Aloísio Magalhães and one for the proposal of Benedito de Araújo Ribeiro. At the end of the competition, the design by Magalhães was chosen. According to Trigueiros [1984: 231], Aloísio Magalhães presented a design “that is not committed to a specialized graphic tradition that offered a new visual design making use of the banknote as an element of genuine mass communication of our culture”. Silva Junior says that:

Aloísio Magalhães won the competition, because the material he presented fascinated the jury and went well beyond the requirements and characteristics asked for. (...) It is a graphic proposal that conciliates visual innovation and appropriateness of the work to the specifics of the paper currency. [Silva Junior, 2008: 129]

On October 14, 1966, Magalhães presented the details, and on November 4, he and Trigueiros arrived in Milan to follow the production of the matrices at the Center of Instruction and En-

graving of De La Rue Giori. The work was developed in Vienna and London. The result achieved on February 14, 1967 did not correspond to the expectations of the designer. So, Magalhães returned to Brazil, but he and Trigueiros, who had stayed in Europe, continued to work in order to achieve the intended result. When Magalhães returned to Milan, in April, the solution was considered satisfactory. On May 11, both men returned to Brazil. On November 6, Magalhães presented to the Central Bank a mockup corresponding to the preparation of the matrices, thus concluding the stages of the project for production.

With the purpose of putting an end to the dependence on foreign suppliers in the manufacture of paper currency and of showing Brazil as a “country of the future”, the military government appointed the design that best presented the ideals of a modern and progressive country. Besides presenting the most innovative design, [fig. 3] the winning project also introduced a new safety factor, the Controlled Moiré, created from a guilloche.



Figure 3. Competition winning design.

Technical aspects

Technically, according to Frederico Porta, the Moiré effect occurs when there is a failure in the printing registration:

term that, in photogravure, indicates a defect that can sometimes be noticed in reticulated cliché, when the original is also an autotypical gravure [reticulated]. The overlapping of the two reticules, the original and the reproduction, may give the pattern flamed tones that may make the picture confusing. Porta [1958: 276] – emphasis added.

The matter of security, for obvious reasons, is vital. However, as Magalhães prints the Moiré pattern in a controlled manner, he proposes a means to increase the security of the banknotes, subverting conventional techniques of manufacture of banknote without losing the visual characteristics of the traditional money. According to João de Souza Leite [2003: 192], “an original design was achieved for the Brazilian currency”. Finally, Brazil reaches its autonomy for the production of its own currency.

By examining the winning layout, we can note: a) it features a geometric structure that suggests the superposing of plane; b) it incorporates guilloches, for example, bands and rosettes; c) it combines the traditional visibility of the guilloche with an unusual security background, a Moiré obtained from the superimposing of linear patterns.

The Moiré effect is caused by the superimposing of equal graphic patterns in different angles, generated by the regular repetition of lines or dots. It is characterized by the formation of optical interferences between the two standards. The proposal of Magalhães was to develop controlled Moiré backgrounds. From films of rosettes and geometric backgrounds he experimented by superimpose them, until he got to the intended result [fig. 4]. Jorge Manriques, of the Brazilian Mint, made an assessment of the association between the Moiré pattern and the guilloche concluded that “no one, until then, had dared, at that time, to place guilloche as he did” [apud Silva Junior, 2008: 142].



Figure 4. Moiré study developed by Magalhães; Press test run at Clicheries Reunidas Latt-Mayer SA, Rio de Janeiro [Mirabeau: 2010].

4. Final considerations

Aloisio Magalhães, repeatedly declared that money was one of the most comprehensive means of mass communication. Therefore, it was required that such communication be effective. Beyond that, the design of the banknotes was a quest for adequate, innovative and contemporary solutions, specific to the design field. It also became a factor of consolidation of a professional field. As we analyze the process, it can be said that:

1. the graphic categories consolidated by the tradition of banknote design were simplified without losing the visual characteristics that allow them to be identified as paper currency;
 2. the procedures for visual modernization and technical innovation reach their high point with the use of the Moiré pattern as security background:
 3. the ornament is elevated to a non-traditional technical level, providing a contemporary character to inventiveness;
- a) they characterize, what can conceptually be called, the “transfiguration of an error” by aesthetic value of visual effects and by the transformation of something graphically common into a sophisticated element.
- b) they respond to the demand for the use of elements of dif-

difficult reproduction and due to the emphasis of the Moiré effect in the layout, it emphasizes semantically the question of security.



Figure 5. The 5 Cruzeiros banknote with the portrait of D. Pedro I.

The design by Aloísio Magalhães presents the singularity of being modern and independent without leaving tradition behind. It breaks with the visual conventions established in Europe and in the United States since the 19th century. All of this confirms the importance of the series of banknotes Cruzeiro Novo, as a milestone in the development of Brazilian design, and as the reiterate of the sovereignty of the country.

Notes

1 In the gravure made with a burin, the visual effect of the crossed lines leads to the achievement optical shades of gray that may suggest volume in the drawing. It starts presenting patterns of regularity with the guilloché, "technique of production of geometric elements for security printing. Numismatic backgrounds, rosettes, bands and geometric backgrounds are traditionally produced by numismatic pantographs and by geometric lathes. Currently, specific programs of graphic computing restricted to the numismatic printing houses, replace the mechanical equipment." (Silva Junior, 2008: 309).

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Design for a sustainable culture

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Design / Art / Culture / Sustainability

The focus of this study is the production of meaning in the work of the Campana Brother and Vik Muniz, exploring through a critical reflection the notion of technology, communication and culture in the globalized society. It is intended, by the symbolic and media dimension from the work of these designers, to reflect on the theoretical universe of the art-design relation, epistemologically approaching design, art, and communication of the contemporary paradigm of complexity. It is considered that the formal and expressive aspects from the work of these designers, demonstrate the mediation of values and meanings that reflect an important trend of the contemporary society: the design of the author as an agent within a system for the sustainability capable of powering significant chains of singularities and differences. In the scenario of post-industrial society, are evident plurality and diversity of socio-cultural processes and the changes produced by them, including the saturation of the systems of symbolic representation, aesthetics and politics. In developments, installs a state of crisis of ethical values on consumption. The perception of these limits has created a new culture of design. The contemporary consumption and the large population increase, but also the lack of natural resources and energy to meet the demand of the current system of production and consumption, has forced a rethink their livelihood patterns of postmodern culture. In this paper, we propose to develop this theme by the strategic design, art and culture in its relationship with sustainable logic. The methodology adopted is of qualitative and exploratory nature, seeking to understand new concepts and contexts of design. The expected results will be the formulation of a paradigm for the sustainable design, of complex and transdisciplinary nature. The goal is to investigate the notion of design-author and to identify in the relationship design between art and design relevant questions about the foundations of innovation guided by culture.

1. Art re-meaning design

The focus of this article is the production of meaning of works that express the relationship between art and design. As an object of this first investigation it was chosen part of the work of the Campana Brothers. It is intended to explore the universe of these designers through aesthetics, culture and communication, updating problematic of the design in the context of a globalized society in crisis.

In this article, the media and symbolic dimension of the work of these designers will be explored, and so, through the critical interpretation, formulate a theoretical space for the relation-

ship between art-design in the perspective of the sustainability, searching for, in the horizon of this research, an approach of the design of the contemporary paradigm of complexity.

The perspective of this paradigm, as presented by Edgar Morin and Ilya Prigogine, is perceived as a non-cartesian theoretical and formal space, opened to random, chaos and uncertainty, where the definition of limits of the own rationality is present, opening up this way, to the most sensitive and subtle experiences, such as those caused by the colors, textures, organic shapes, and mathematical and infinite lines. First, the formal and expressive aspects of the work of these designers show the mediation of values and meanings that are reflected through the plastic and technological language a relevant trend of the contemporary society: the sustainability through the stimulus of affection from the body relationship with the matters, forming, from the art-design relationship, possible cultural innovations.

2. Cultural innovations

Cultural innovations are those that are mediated by cultural artifacts producing significant changes in the socio-cultural context. As a result, a cultural innovation tends to modify the levels of perception of world, behaviors and values in a given context. It is believed that through design it is possible to stimulate the

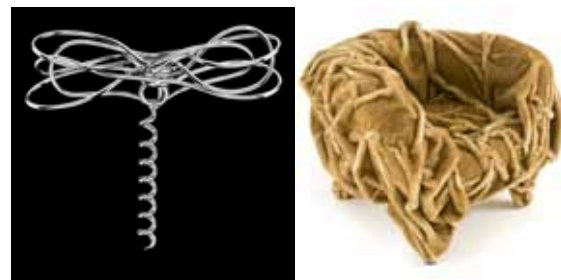


Figure 1. Tramontina Corkscrew

Figure 2. Grinza Couch



Figure 3. Alligator Couch

Figure 4. Panda Chair



Figure 5. Milan Couch

construction of new ethical, aesthetic and political values that may be more favorable to the relationship between man and nature, without losing sight, however, of the technological and machinic horizon of the human development.

It is probable that the design that fits in this modality can act as an operator of new meanings within a complex system that seeks the social, environmental, and economical sustainability. Would the design of the author be sufficiently understood by the applied social science field within their capabilities to respond to emergencies of the contemporary society? Author design is primarily a producer of singularities and differences and therefore it faces the problematic of the accelerated entropy of values and assets in the current consumption culture.

3. Humberto and Fernando Campana

They are Brazilian designers who were born in Sao Paulo. Humberto was born in 1953 and Fernando in 1961. Humberto studied law at the university and Fernando studied Architecture at Fine Arts. They became designers experimenting: in 1983, Humberto helped his brother who had launched himself in making metal furniture. Since then, they've been working together.

It is understood that the production through art-design, or design of the author, as media, conveys messages, building affection fields, changing the process of construction of the meanings and the perception of the world, constituting new possibilities for the relationship between subject-object. The problematic raised by the work of the Campana Brothers suggests an ontology of the object



Figure 6. Capanas Brothers



Figure 7. Cascavel Snake

Figure 8. Boa Couch

and the aesthetic-communicative experience. What are the potentialities of the production of differences, of openings to new subjectivities that the design of these Brazilians point? Considering the design as a communication device it is properly to frame it within a logic of construction of meaning where all the communication chain is evident, from the sender to the receiver, being the artifact the media itself.

From the standpoint of design and communication, the works of the Campanas indicate a path of cultural innovation that approximates subject and object in an aesthetic experience modulated by a more open and casual logic, that is, more baroque, more ludicrous. A framework of new meanings and aesthetics points to new standards of society and culture to be described. What are these new meanings drawn from the author's design?

The concept of the Slum chair (1991) presupposes the reuse of pieces of recovered wood. Its meaning suggests the inclusion in the project of simple materials and its organization and upgrading into more complex forms. These objects originally perceived as surplus, residue, excrescence, have the vocation to expand the intensity in the sensible relationship between subject and object.



Figure 9. Slum

Figure 10. Slum Chair

Overall, this arrangement raises the opening of the senses in a perspective of shifting emotions - a new one can emerge: perhaps in the plasticity of a less dominating relationship of the complexity of the object. The analogy of the object as figure-world becomes relevant here.

Design, by its applicative nature, is properly a reductor: reductor to the forms, materials, concepts, experiences. In fact, the design that seeks references and it is potentiated along with the field of arts, tends to play with the boundaries between significant producers of ruptures and continuity, thus generating a strangeness that tends to intensify the sensation of the

body, approximating it closer to the matter of the object and, by analogy, the body of its density and sensations.

4. Design and singularity

Design of author is, above all, the result of the embedded creative process of methodologies of arts, being able to trace a logical path of singularity in the language of design, singularity in the sense of production of differences. The production of differences in a creative process can occur in two different perspectives: in an immanent or transcendent way.

In the immanent perspective, the difference occurs in contrast to the representation [from inside out]. In the transcendent perspective, the production of differences occurs by coupling to the codes recognized and established by the group [from outside to inside].

This order of difference [transcendent] is the reproduction of a collective significant, determined socially.

According to Baudrillard, “we always manipulate objects [in a broad sense] as signs that distinguish us, either in affiliating with our own group taken as an ideal reference, or demarcating ourselves from our group by reference to a group of higher status” (Baudrillard, 1970: 79)



Figure 11. Sushi Chair, 2003
Figure 12. Tribal form

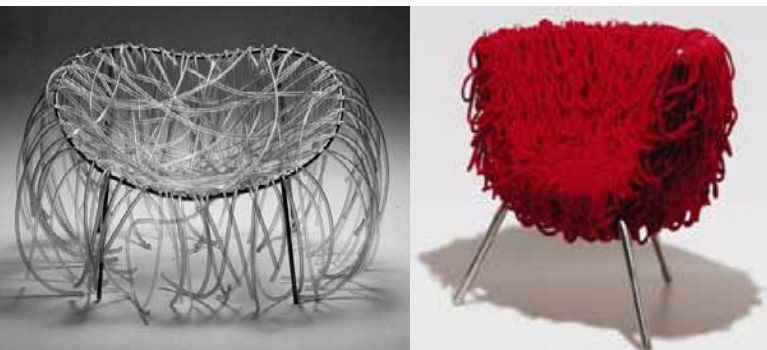


Figure 13. Anemone Couch
Figure 14. Red Chair

5. Organic, hybrid, multiple forms

Espinoza’s logic of affection, “affecting and being affected” is the key point which is possible to understand the place where we put the work of the Campana Brothers. They are works that produce affections, by visual, by touch, by formal estrangement, by the analogies that are translated into cultural values. These works take us to the experience of the *other* in us (the being in the world in relation), by its intensity, density and presence, producing folds of meanings which individuals move from their comfort zone, are affected, and are launched in an eternal come to be, in a rhizome dynamic that preserves the expression of becoming.

Maybe we can identify the sustainability dimension associated with the art from some formal and symbolic aspects present in the work of the Campana Brothers. The order of temporality that is established in the subject-object relationship in the experience of art allows us to reposition the very logic of consumption when the design breaks the borders with the art. A temporality that entices us the effect of duration and memory, as observed by Bergson in Matter and Memory.

6. Forms of expressions in scrap material

The space of the cultural experience is only produced by significant operations that lead individuals to assign meaning to everything around them. Such meanings, however, do not lie only on the level of manifestation, and it is in subliminal subjacent spaces that lies the heart of the symbolic operations. Differentiated by the matter in which form and substance work, they are subject to a discrete analysis, but are really interested by the content offered to fruition, the different significant matter that differentiate each one of the various languages, are, in turn, of metalinguistic interest, for the analysis of its significant potential and operations that are inherent. As the first theory, there are no restrictions of any kind to the use of sensitive materials from the most diverse kinds, so that the configuration can depend on them to inaugurate a new language. In turn, the syncretism is the reducer process that subsumes the significant operators and the semantic inputs that are presented to the reading actions of the interpreting subjects. Suddenly, this is an attribute that it is suggested by the work of Vick Muniz (V. Muniz), specifically in the figures mentioned here. New forms of constitution of the significant materials, and the asyncretic construction to reframing them, and thus, to inaugurate new ways, make the screens a true event. The event is understood as autonomous and inaugural reality to compose the scenario of reality, also the space of possible virtual meanings.

The comprehension of areas of the cultural experience involves the perception of the urban realities, more specifically how the cultural possessions are produced and how the symbolic components articulate. The work of V. Muniz speaks directly about these events, being their own events. It is a productive complexity. It speaks about the society in a subliminal critical way by the narrative that the reader can compose, or so expressed, for example,

the own recovery of matters or residues which themselves bring to the screen, in double sense, the events (social facts). In general, there is an update in the symbolic chain to mean the perishable and transient, the appearance and the trivial, the included and excluded, the usable and disposable, under the aegis of consumption, increased expression of the society of abundance and the excess. Not paradoxically, they are experiences that generate healthy tensions for the development of the society, therefore, not ignoring the so-called modern times, they are included as relevant in the processing of transformation or the cultural innovation.

The expression of these doings updates the representative manifestations of the factual or discursive innovative processes, the own facts are discursive of the symbolic nature, i.e., connotative differences when mediated by the technologies. In this sense, it also operates V. Muniz, in varying the significant materials, in overlaying plastic techniques and in working with the technology for the production of his screens. In his work, the strategies of composition are indicted, as it happens in the fragments of juxtaposed residues, in the design of data of the human figure in composition, technologically immobilized.

The fruition of some of the screens by V. Muniz speaks directly of the symbolic representations, of the sustainable materials, of social inclusion thesis, of experimentation and of technologies and innovations. By way of information, which is available to everyone, in the public domain: it is about a Brazilian artist who has works in major museums of contemporary art in the world. In his creations, he uses unusual materials such as sugar, cotton, chocolate, junk and dust. He investigates themes related to memories, perceptions, representations of the images of the world of arts and media. The use of unique materials impress by the creativity, by bringing together drawings, paintings, photographs and techniques, this artist, besides addressing different issues, reveals that great things can arise from simple elements, even perishable, using everyday life. They are expressions of the contemporary makings and feelings permeated by simplicity and emotion, by reason and feelings.

It is for these reasons that the fruition (the pleasure of the text) of V. Muniz takes the overflow of the limits of the screens (of the symbolic representations and the technological mediations), to read, to hear or to feel the readers (the interpreting communities) in effects of the senses produced by them... It is alive in the surroundings, the discussion of the residue recovery, reprocessing of materials, social consciousness and innovative attitude as the conditions of preservation of the environment, the rescue of inclusive citizenship, the generation of wealth and the innovative production. They are some of the socio-cultural frames that unfold on screen, those duplicated in external physical frames in themselves, or internal to the text stated, for example, the frame of the residues and the human body represented. It's as if this dialogue takes place around the facts, like the picture that opened the soap opera from Globo TV "Passione" (Figure 15), or the surroundings of the theme of the documentary film whose protagonists are the garbage collectors from the landfill in Gramacho in Rio

de Janeiro. For Floch [1990], significant practices are essentially social practices and for Fontanille [2005], the levels of pertinency of the textual cuts obey the criteria of relevance. These are two fundamentals of cuts made here.

At this point of reflection, the questions are imposed: In what space does the reflection on the meanings lie, those meanings that we'll later call floating? On what basis, also floating, do the flows and becomings happen? Touraine [1994] helps us to reflect on these issues. Certainly, it would not be on fixed space, streamlined, with historical references, and unique culture or identity, because that's not the physiognomy that shows us the so called current modernity, fragmented and liquid; transience, diversity, dissociation, hatching, but also decomposition and irreversible rearrangement in constant interaction, this is the contemporary scenario.

One of the different ways to understand the contemporary space is to treat it by the look of morality, because the greatest estrangement occurs in the mean current forms of ethics. Just like the other concepts worked here, morality is not a homogeneous tissue, without dispute or contradiction. Like the "semiotic set of figures," there is a set of socio-cultural constructs to structure the context and the situation. This is what Lyotard [1996] calls "maximum murmur, the complaining laughter" in the movement "so life goes on." Continuing, he recognizes that life goes by fast at the movement in which the morals volatilize by the effect of diversity so appreciated, by the course of life in all directions, and by the construction of the futility and the deception.



Figure 15: Passione

de Janeiro. It is from Maffesoli [1996] the theme of hedonism, of appearance and frivolity. There is an irrepressible everyday hedonism and powerful that underlies and sustains all life in society. It is a reality at the same time very much alive and growing. The pictures of all the speeches of the social and of all the languages organize in the dynamic transformation to the idea of continuity, which echoes the propositions in terms of semiotic textual space. Moreover, the postmodern, for the author, appears "as an organic mixture of archaic elements and others in little contemporary" (p.14), inaugurating "the newest form of solidarity, the social, then defined, not by contracts, but by "a complex process made up of attractions, repulsions, emotions and passions" (p. 15). "As a patchwork blanket, the post-modernity is

made of an entirely different set of elements that establish ongoing interactions with each other made of aggression or kindness, love or hatred" (p.16), in solidarity relation.

It seems productive for the determination of cultural differentiation marks, the idea of replacing the logic of identity by the logic of identification. For Maffesoli (1996), the logic of identity "rested on the existence of autonomous individuals and masters of their actions, the logic of identification brings into play" people "of variable masks, which are tributaries of the emblematic systems that identify" (p.18). It is seen in V. Muniz's, the production marked by the logic of identity which comes from the membership of the magical atmosphere, between lustful and playful, talking about the contemporary readings of the latent Brazilian-ness. There is viscosity in the air, the good viscosity not of the opacity, but the transparency that lets you see how the identification data are permanently on the boil, image so proper to say of the Brazilian culture. From the realm of appearance to the logic of identification, Maffesoli's thesis can install a new paradigm of understanding that would mean more and different from the Brazilians. The formation in allegories would allow the explanation of a remarkable process of national culture, that is, the carnivalization. The texts of V. Muniz are allegorical constructions in which the various modulations build a formal and allegorical appearance of simulacrum and replica, talking about the society at any given time. They are synchronized records that function as a source of historical interpretation, and assume the character of the document, the "testimony" (LYOTARD, 96). It is a way to put it on screen (in its two senses) responsible content for re-enchantment of the world in operation that does not disdain the available technicality.

Certain images, then removed by science and technique, return with strength, spread into the whole social body with the help of the technological development. The body generates communication because it is present, it occupies space, it is seen, it favors the touch."It is, therefore, the horizon of communication that serves as a backdrop to the exacerbation of the appearance" (MAFFESOLI, 96) the reinstatement of the body (GIL, 97). In V. Muniz, for example, the body is the articulator of the visual and textual spaces and the organizer of the residue materi-



Figure 16: Lixão do Gramacho

als into new sensitive tissues, significant matter of the substance and the form of the social contents. It is a peculiar way of building the post-modern identity, the paradox of wealth and waste, in the paradoxal scenario of poverty and exclusion, in the context of wealth as well as market and not as a social good.

Aiming at the pleasure of the eyes (tactility and visibility), his writings take the thought to flow, but also to know, to express the various truths of the things. It acquires, then, the value of testimony, so registered in history, as noted previously. In a way, it replicates the four essential pivots that Maffesoli (1996: 145) proposes to structure the social aesthetics, "the prevalence of the sensitive, the importance of the environment or space, in search of style and appreciation of tribal feeling." The character of the document of the epoch is proposed by the work of V. Muniz, in the process of identifying expression of Brazilian culture.

By thematizing the passion (Figure 15), V. Muniz surrounds in pieces of objects simply joined to internal configuration of the frame that metaphors the passion by the kiss, another metonymic expression to score heavily on the screens of the author. The joke here is on the textual context; lust gives way to the ascetic purity of the physiognomy features of the narrative. It reappears, very clear, in figure 16, in the macunaimic form that represents the common man in society around poverty and scrap, as sovereign in their distinctive national identification process, in one of its many segments. In the mosaic of culture, it settles the mosaic of plastic forms technicized. It is noteworthy, in this particular case, the recognition of the culture of poverty in an abundant and disposal society, and the resumption of the chain in the counterpoint of extreme poverty. Strategies are created for re-materialization and recycling, raised to the status of agent of transformation to promote new lifestyles. The dialectic consumption-discard-scavenging recycling is coated of great significance by introducing an aspect of otherness kitsch, dominant in the urban public space, as the pleasure of the senses and forms of the game.

Conclusion

It is considered that from the sensitive experience proposed by these works, not only the perception of time and space change, but also the affective value which is constituted in an immanent way between subject-object in the consumption generates a quantum of affection, of construction of the meaning and memory. However, as noted by Adorno, the cultural industry, and within the design itself, produces effects of standardization, which in the current era, the globalization tends to replicate. The resistances to this system have gradually been giving way to a new order. Some designers express this conflict, trying to bring out beauty, order, luxury. Would this be the case of Campana Brothers? .

It is considered that the work of the Campana Brothers is potentially anti-mass, and therefore reflects the luxury despite extracting its significant materials of the poorest and simplest means of the society, thus creating continuity between the different social spheres. Its result, in the perspective of a Campanian object, is an amalgam among forces that opposed each other, but

also they complement each other: an effect of representation of carnival order. It is considered also that the work of Vic Muniz, in the mosaic of culture, it settles the mosaic of plastic forms technicized. It is noteworthy, in this particular case, the recognition of the culture of poverty in an abundant and disposal society, and the resumption of the chain in the counterpoint of extreme poverty. Strategies are created for re-materialization and recycling, raised to the status of agent of transformation to promote new lifestyles.

The understanding of the design of the author as a process requires an anthropological view of itself, in the sense that it is necessary to rescue, from its whole, whatever gives it a systemic shape and what it is its singular use: the expression of an intrinsic humanity in the creative process and in the expression of the materials.

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Design and biodiversity: the production of knowledge in the development sustainable products

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Biodiversity / Sustainability / Product Design

This paper aims to discuss about how the raw material found in the amazon rainforest can be used in the product planning within the use of design, basing its studies on the concepts of sustainability and life cycle design focusing on the actions of the product development with amazonian material group from the University of Pará, responsible for research the nature and application of those resources.

1. Introduction

According to Manzini (2008), the transition to sustainability will be a process of social learning in which the human beings will learn gradually, by mistakes and contradictions – like in any other process of learning - to live better consuming (much) less and regenerating the environment quality, helping the global ecosystem and the local contexts where they live.

Is from that analysis about the sustainable development that designers, as being responsible for the development of consumer goods and its production in large scale, shall think in its function having as a base those new global demands worrying in apply them into the context where they are.

This application can be made thinking in the reduction of use of materials, discussed by Manzini and Vezzoli (2005) or by the research of new types of raw materials for the product design. As made by the product development with amazonian materials (DEPROMA), from the design program of the University of Pará (UEPA).

Focusing on the research and experiments made with natural resources found in the amazon rainforest, combined with the studies about sustainability and life cycle design, the group researches how the raw material found in the amazonian biodiversity could be an alternative to the materials used nowadays. Basing their studies in new models of Project methodology which condireates the last contemporaries demands.

This work, so, discuss about the context in which the amazonian biodiversity represented by the main vegetal species used by local communities in the production of crafts, can be turned on design objects. The interdisciplinary research in the design course of UEPA shows the importance of think about the use of vegetal raw material in the socio-environmental context.

2. Amazonian biodiversity and local development

The concept of biodiversity proposed by Sachs (2008, P. 31) covers not only the species of beings and genes on Earth, but involves too the ecosystems and landscapes, and further the writer says that “biodiversity and cultural diversity are related in historical process of co-evolution”.

At the amazonic region, the scenario of many natural resources contrasts with the poverty of many communities, specially those who practice as source of livelihood the extractive activity. However, the interest of using the biodiversity from the region for different branches of production is increasing.

The recognition of the potential of vegetal raw materials, specially fibers, for the use in the industry contributes to the economic development of the state, even in those communities whose have the possibility of generate income with the commercialization of the cultivated and extracted materials from the environment.

The palms of the amazonian biodiversity are the main species to supply of these fibers and also other types of bushes and bromeliads. The interest in using these materials in products is justified by the advantage of being obtained from renewable sources, biodegradable and of relative low cost, easily found and collected in the forest, such as the miriti fiber (buriti palm) and tururi fiber (ubuçu palm), or cultivate such as the juta fiber and curauá (*Ananas erectifolius*).

At Pará, the graduation in product design offered by the University of Pará (UEPA) was created in 1999 with the objective of aggregate value to the raw materials (iron, aluminum, Wood, fibers) extracted in our territory, turning them into products/ objects promoting the development of the industry in the state.

The first researches in the design course were focused in the use of vegetal fibers into the local industry of furniture and wood artifacts. Besides Wood, the most used material in the furniture industry, the vegetal fibers used in the handicraft produced by amazonian populations are presented as a differential in the project of furnitures and artifacts.

The continuity of the projects in the course gave origin to the research group *Products Development with Amazonian Materials – DEPROMA*, aggregating many researches from the graduation with the objective of search knowledge about the region's natu-

ral resources and ways of how these can be transformed in new products using design tools.

The work of the researches in developing of these projects bring as a result the strengthening of the Materials and Processes as a official discipline in the design course's curriculum, rescuing its technological identity. Also, the scientific production made by DEPROMA is contextualized through the teaching and extension activities and with workshops, creation of new disciplines and through the experiences in the design laboratories.

3. Design and sustainability

The new paradigm of sustainable development points to a position more committed to the needs of environmental conservation and social issues over economic interests.

In this regard, Zanin and Mancini (2004, p.16) state:

"The new concept for planetary sustainability demands different behaviors of the public sector, production and consumption in relation to waste and Nature.[...] This implies changes in the forms management, with new priorities, which are unidirectional and mechanistic model for a holistic and ecological system that guarantees long-term stabilization of demand for natural resources and the final volume of waste be willing, minimizing environmental degradation" (Zanin and Mancini, 2004, p. 16).

The authors, following this conception, to say that product development should be prioritized durability, ease of repair and maintenance and use of materials that can be reused or recycled.

In this context, there arises the idea of a production guided by the principles of sustainability and so emerges the term Ecodesign, which Victor Papanek (2005, p. 36) also called "ecoconception" treating it as "an approach that consists in reducing the impacts of a product, while preserving its quality of use to improve quality of life for users of today and tomorrow".

Regarding the role of design in the production system, Papanek (2005, p. 31) states that "an activity that is profound and direct influence on the ecology and must have a positive and unifying role in connecting human needs, the culture and ecology".

Continuing, the author warns of the growing need for designers specializing in green design noting that in his opinion, "all education in design should be based on ecological methods and ideas" (Papanek, 2005, p. 52).

In this approach the ecological design, the use of Life Cycle Analysis (LCA) of the product becomes essential at the moment of conception of a project. According to Mancini and Zanin (2004), LCA is an environmental management methodology used to evaluate the effects of a product, process or service on the environment, through all the steps involved. Comparing the product as an organism that has a life cycle, all the activities necessary to produce, distribute, use and discard is considered as part of a unit.

The goal of Life Cycle Design (LCD) or Life Cycle Analysis (LCA) is to reduce the environmental impacts associated with the entire life cycle of the product, thus: "The intention is to create a systemic view of product, in which the inputs of materials and energy as well as the impact of all emissions and waste are reduced to a minimum." (Manzini and Vezzoli, 2008, p. 100).

Using this methodology allows the environmental optimization of each stage of the life cycle of a product and the feedback cycle itself by re-using and / or recycling of product components favoring the reduction of search for raw materials and energy at the source.

It is from these new paradigms and methodologies in the design that becomes necessary not only to reduce the use of raw materials, but also to search for new materials and renewable energy sources that can replace existing ones, reducing impacts to the environment and can be applied in designing new products.

Manzini and Vezzoli (2008), argue that the least possible use of materials reduces the environmental impact. In addition to seeking to minimize the maximum content materico products, it is important to choose materials based on their environmental impact.

In this context, the variety of natural resources in the Amazon rainforest, combined with research done on these, are of great importance to the designer during the process of developing their projects. According to Homma (2005) potential of biodiversity needs to be transformed by means of adding value by identifying and selecting productive varieties of interest for planning planting and / or industrialization.

4. Interdisciplinary research in Design

The interdisciplinary approach allows the dialogue between the various areas of knowledge, which according to Piaget (cited Fontoura, 2011) correspond to the reciprocal exchange between the parties, able to generate mutual enrichment.

To Fontoura (2011) interdisciplinary pedagogy aims at articulating knowledge, knowledge and experiences with the community and the environment, which may contribute to the education of the citizen.

For the development of interdisciplinary work, the author presents the methodology proposed by Piaget (cited Fontoura, 2011):

- 'The integration of content;
- The passage of a fragmentary view to a unitary conception of knowledge;
- Overcome the dichotomy between teaching and research, considering the study and research, from the contribution of various sciences;

- The promotion of teaching-learning process focused on a vision of what is learned throughout the life' (PIAGET cited FONTOURA, 2011, p. 93).

The concept of the authors, is an interdisciplinary interaction between knowledge, fragmented knowledge for the construction of new knowledge. From these concepts, it can discuss the interdisciplinary nature of design, it is an area that needs the knowledge of several other areas to develop their activities. According Fontoura (2011):

"The interdisciplinary meets the requirements of this activity, because the design, as well as taking into account many technical constraints, the designer also considers the universe of users' needs. This implies a body of knowledge from different areas, including: anthropology, psychology, sociology, art, ergonomics, semiotics, technology, science materials, techniques of representation, economy, administration, marketing, proxemics, the computer science, applied simultaneously with the establishment and development projects" (Fontoura, 2011, p. 92).

As it can be seen, the construction of knowledge and the work in Design goes through a quest for knowledge in several areas, which for Regis (2004) "allows a greater autonomy in the projects, the ability to check the technical characteristics of the materials and processes and discuss them with their professional, approaching the design of engineering".

In addition to various branches of Engineering (Materials, Mechanics, Forestry, Manufacturing, etc.), The Design approaches in areas such as Architecture, Communication and Arts for the construction of their theoretical and practical knowledge. Note from this that the formation of the Design Professional should be comprehensive so that may have expertise in project execution.

In the current scenario in which they discuss the contributions to the development of Design sustainable, all innovations in relation to ecological materials, clean production methods and changes in the pattern of consumption are important in the formation of new paradigms in knowledge in the field. The concept of biodiversity proposed by Sachs (2008, P. 31) covers not only the species of beings and genes on Earth, but involves too the ecosystems and landscapes, and further the writer says that "biodiversity and cultural diversity are related in historical process co-evolution".

At the amazonic region, the scenario of many natural resources contrasts with the poverty of many communities, especially those who practice as source of livelihood the extractive activity. However, the interest of using the biodiversity from the region for different branches of production is increasing.

The recognition of the potential of vegetal raw materials, especially fibers, for the use in the industry contributes to the economic development of the state, even in those communities whose have the possibility of generate income with the commercialization of the cultivated and extracted materials from the environment.

5. Concluding remarks

In this paper was exposed some considerations about the use of natural resources of the Amazonian biodiversity as a factor for regional development through incentives local industry. The creation of the Product Design course at UEPA and then the research group DEPROMA contributed to this development and allowed the construction of knowledge about the biodiversity found over the region and its applications in products.

The work group is continuing in order to generate knowledge and disseminate it in activities education and extension. The diverse research group are always guided by concepts and principles of Ecodesign, considering tools such as life cycle analysis and ecological requirements for material selection and processes in product designs.

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Lightness and beauty in furniture design

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Design / Lightness / Furniture / History / Modern

When speaking of “lightness” in furniture design, how many layers are there behind our imaginary? This article seeks to uncover just one - the image of lightness constructed between the late nineteenth and early twentieth century. Two significant aspects of the home environment point to a lighter aesthetic design of domestic furniture: home as a space for expressing the character of the people who inhabit it, and the incorporation of hygienist ideas into the home environment.

1. Introduction – aesthetic of lightness in the modern home

The Thonet chair is an iconic example of a type of furniture that is valued for its lightness, efficiency and elegance. When speaking of “lightness” in design, how many layers are there behind our imagination? This article seeks to reveal just one - the image of lightness that was constructed during a fundamental period of modern society, between the late nineteenth and early twentieth century.

In order to address the idea of lightness incorporated into the design of contemporary home furnishing, we will use a historical approach to understand how lightness was characterized as an aspect of elegance, beauty and “good taste”, in the context of design in the domestic field, and in the ‘general framework for changes that characterize modern society’ (Williams, 1969), especially as of the industrial revolution.

The twentieth century witnessed profound changes in the ideas and feelings that defined the home. We therefore highlight this period based on the idea that ‘notions of what is proper, and therefore beautiful, in the home have shaped the design of articles for domestic use’ (Forty, 2005, p94). Alongside these changes came a new “lightness” in the aesthetics of furnishings in European and American households which was spread by designers and architects and consolidated by the middle classes in general.

We will address two significant changes in the concept of the home that were instrumental in the introduction of a lighter aesthetic design for furniture: home as a space for expressing the character of the people who inhabit it (Eco, 2004; Forty, 2005; Cardoso, 2000), and the incorporation of hygienist ideas to the home, which had an impact on the design of household furniture (Forty, 2005; Cardoso, 2000, Lupton and Miller, 1996).

2. The Beauty and the good in the ideal home

Home, intimacy and domesticity

In his book *Home – A Short History of an Idea*, architect and historian Witold Rybczynski recalls the modern Anglo-Saxon meaning of the word “home”: ‘“Home” meant the house, not also everything that was in it and around it, as well as the people, and the sense of satisfaction and contentment that all these conveyed.’ (Rybczynski 1987: 62).

This notion of the home as a private, intimate space took shape as a result of changes that began in the Middle Ages and were consolidated with the industrial revolution, when the home and the workplace were ultimately separated.

Rybczynski recognizes that many shop owners, merchants and craftsmen in seventeenth century Paris still worked and lived in the same place (which was common at the time). But for some of the bourgeoisie (lawyers, builders, public officials, etc.) the house was beginning to function just as a residence. As a result, it became a more private place that took on a sense of intimacy and an identification with the idea of family.

From the industrial revolution on, the separation between home and workplace became increasingly more clear. As such, when Adrian Forty introduces the idea of home design in relation to the household in *Objects of Desire*, he states, ‘It is obvious that factories are a result of the industrial revolution, but we rarely think of homes, as we know them today, as a creation of the same revolution.’ (Forty 2005: 99).

According to Forty, the factory and the office work not only physically separated from home, but their oppressive nature encouraged people to keep the two spaces mentally separate. If one represented oppression, then the other should have all the virtues capable of making it a haven where its inhabitants’ self-respect could be safeguarded and nurtured. The home, which was already gaining a sense of family intimacy, therefore started to represent a bolstering of self-esteem, becoming something of a fictional place which should be free of any bad feeling: an ideal place.

In this context of the ideal home designed as a place of refuge and domestic intimacy, the decoration of the house, its objects and furniture, started to be given more attention and became more important.

To speak of domesticity is to describe a set of felt emotions, not a single attribute. Domesticity has to do with family, intimacy, and a devotion to the home, as well as with a sense of the house as embodying – not only harboring – these sentiments. [...] Not only was the interior a setting for domestic activity – as it had always been – but the rooms, and the objects that they contained, now acquired a life of their own. (Rybczynski 1987: 75)

Beauty, weight and comfort

Commenting on this context, Forty describes the middle-class home in Victorian England, stating that to meet those illusions of an ideal home, the Victorians adopted various strategies. Among them, the development of special standards of taste and design for the home was particularly important. Since the antithesis of work did not provide in itself a model for domestic interiors, the Victorians looked for a reference that could function as an inspiration for how their homes should look.

The most readily available source of inspiration for the interior designer were the homes of the aristocracy, places that were totally unencumbered by any association with the idea of work, and which the bourgeoisie admired for their life of leisure and comfort. Therefore, until the 1860s, many homes of the bourgeoisie sought to imitate the taste of the aristocracy, which resulted in interiors that prized comfort and luxury and abounded with furniture, velvet, curtains, prints, decorations, wallpaper and carpets. In other words, they were filled with objects, fabrics and embellishments.

An aesthetic of interior design was being molded on the idea of opulence and comfort, represented by the weight of the material and an accumulation and overlapping of things, as is explicit in this commentary by historian Eric Hobsbawm:

The house was the quintessence of the bourgeois world, because in it, only in it, one could forget, or suppress artificially the problems and contradictions of society. Here and only here the bourgeois families, [...] could maintain an illusion of harmonious, hierarchical happiness, surrounded by manufactured goods which were the demonstration of that happiness and at the same time, made it possible. [...] The most immediate impression of a mid-century bourgeois interior is overcrowding and concealment: a number of objects, most often masked by cushions, draped fabrics, tapestries, and always, whatever the nature, elaborate. No painting without a golden, carved, inlaid, even striped velvet frame; no chair without upholstery; no fabric without a fringe. (Hobsbawm apud Eco, 2004)

Appearance and Identity

When it comes to the opulence of Victorian interiors, it is worth remembering what was happening at a time when issues of appearance and identity were gaining importance in a society marked by a growing middle class and changes in consumption and domestic habits. To borrow the words of historian Rafael Cardoso,

The emergence of the middle classes in Europe and the United States [...], brought a relative democratization of the concept of individuality, i.e. a new willingness to differentiate and express the identity of each group through their choices of reading, clothing,

decoration, and ultimately of consumption. According to Richard Sennet in his now classic *The Fall of Public Man*, the 19th century was marked by a profound transformation in social relations, in which goods and consumption habits were seen as veritable “social hieroglyphics”, symbolizing personalities and demarcating identities. (Cardoso 2000: 56)

Standards of taste based on the weight of opulence not only represented comfort, but were also a form of social differentiation. It is on the basis of this identification between the subject and its objects and the notion that the home expresses the nature of its inhabitants that, in the second half of the nineteenth century, the appearance of homes was transformed by architects and designers in reaction to the opulence of Victorian taste. In that sense, the standards of beauty in the design of home furnishings moved from an aesthetic of weight towards an image of lightness.

Beauty, lightness and morality

In *Culture and Society*, Raymond Williams discusses the ideas that exerted a strong influence in the early 1800s in Britain during the huge social upheavals brought about by the industrial revolution: clashes over political issues, democracy and the new industrial regime, and how to save cottage industries in face of the industrialization of manufacturing.

The intention here is not to focus on this socio-political context, but to use his idea that the tradition of critique of industrial society was at the root of the transformation that would establish the idea of a relationship between culture and society, art and the time when it was manifested. When one recognizes this transformation, it is easier to understand the shift in taste from weight to lightness.

As Williams argues, in the second half of the century, this new understanding of culture nurtured the ideals expressed by William Morris and J. Ruskin, reformers who founded the Arts and Crafts movement. The fact that, for the first time, architects and designers were designing furniture with the awareness that it was a reflection of its time, society and culture gave design a sense of morality, resulting in criticisms of existing production methods and ultimately the prevailing aesthetic.

As it is well known, the Arts and Crafts movement gave precedence to the values of honesty and simplicity in response to changes caused by industrialization and utilitarianism (Forty 2005, Cardoso 2000). This meant that the beauty of a piece of furniture was closely related to how it was made and the values it bore. As a result, a new aesthetic emerged that opposed the heavy appearance hitherto considered “good taste” by the Victorians.

As such,

The same abundance of cheap goods that was perceived by most as synonymous with comfort, luxury and progress was soon condemned by some as indicative of excess and a decline in the standards of good taste and even in moral standards. While the new industrial wealth opened up the potential for consumption to the masses, for some it kindled new concerns about the nature of what was being consumed. (Cardoso 2000: 69)

According to Forty (2005), the ideas of the Arts and Crafts movement were quickly incorporated by architects and designers who created the so-called “art furniture”. As the domestic environment start to be considered a sign of its inhabitants’ character, people began to put effort into producing a satisfactory image of themselves, based on values of honesty and simplicity. The idea was ‘to establish a whole form of beauty that roughly corresponded to the moral virtues that the reformers of aesthetics believed should be represented in the home.’ (Ibid: 153). Decoration manuals began to repudiate the “bad taste” of excess, and to appreciate simplicity in spaces and objects.

The principles of good taste in decoration thus started to embody a correlation between beauty and morality, which resulted in a particular taste for an aesthetic of lightness:

The general principles of “art furniture” were to reduce the amount of furniture and create more space in rooms. Heavily upholstered furniture was eschewed in favor of wooden-framed chairs and settees with loose cushions. (...) There seems to be more space in the room, an effect achieved by less furniture, fewer ornaments, and the white painted ceiling and wall-panelling. (Forty 2005: 111-112)

This quest for a morality of design resulted in a reformulation of what constituted “good taste”, which involved a return to simplicity that was expressed in the forms, materials and the finishing of home furnishings. In other words, rather than luxury and excess, a simplicity of shapes and materials was prized, which was characterized by a process of “elimination” – of fabrics, ornaments, imitation - which resulted in a lighter appearance. This constitutes one of the pillars of the idea that equated lightness with good taste. Essentially, the aesthetic of lightness in mid-nineteenth century furniture design is recognized as an expression of moral virtue and honesty in the context of domestic space, which became a place for intimacy, refuge, and the expression of the nature of its inhabitants, in response to the social and cultural upheavals experienced during industrialization.

3. Beauty and hygiene in the home

This “reduction” and “simplification” of furniture – initially related to cultural transformations in which household objects were associated with moral values – reached its peak in the twentieth century, when another aspect entered the home: the idea of hygiene.

In the early nineteenth century there were already concerns about bodily cleanliness, but these were still related to the morality preached by the church, or a growing number of doctors. The equivalence between cleanliness and hygiene began to be formulated in the mid-nineteenth century but only really took hold in the twentieth century, with new scientific discoveries that associated germs with diseases. (Lupton & Miller 1996, Forty 2005)

In the 1860s sanitation reforms were introduced across Europe. They were scientifically based on the discoveries of French biolo-

gist Louis Pasteur and British surgeon Joseph Lister about bacteria and asepsis, when ‘everything that might be described as dirt was now linked with the transmission of diseases’ (Forty 2005: 160). Thereafter, cleanliness ceased to be a problem of the State and began to be understood as something that depended on individual actions, and gained particular importance in the privacy of the home. Around 1920, a reform movement started that sought to spread the principles of hygiene to all classes (Forty 2005, Cardoso 2000, Lupton and Miller 1996).

Thus, as stated by Cardoso, ‘the well known virtues of the home – comfort, domesticity, well-being – were joined by new standards of cleanliness and efficiency.’ (Cardoso 2000: 63)

In *Bathroom, Kitchen and the Aesthetic of Waste: A Process of Elimination*, Lupton and Miller address the relationship between the issue of cleaning of homes and the simplification of modern American design aesthetics. In this sense, the authors stress that ‘various consumer goods, from packaging, appliances, and furniture to interior architecture, began to acquire a vigorous new physique: the plush fabrics, carved moldings, and intricate decorations of Victorian domestic objects were rejected as dangerous breeding grounds for germs and dust.’ (Lupton & Miller 1996: 2).

It is possible to draw some connections between certain aspects of this “overtone of hygiene” and an “overtone of lightness”. First of all, upholstery was rejected because it accumulates dust. That is, when withdrawing what covered the structure of the furniture, the weight – both physical and apparent – was also eliminated. Similarly, ornaments that were too intricate began to be considered unhygienic, and were therefore eliminated, again resulting in a lighter appearance.

‘The aesthetics of cleaning has become the norm in the home landscape,’ says Forty, and has been widely accepted by the general public, thus defining the criteria for beauty among architects and designers, while this standard has also reinforced the principles of hygiene in people’s lives and homes. For all aspects of life, there is an optimal hygiene solution – and this solution also corresponds to removing surplus elements from objects.

He also points out that although it seems logical that design can be used to convey ideas of cleanliness, ‘the belief that design, rather than, say, prayer, custom or morality, might contribute to health originated in the eighteenth century, with attempts to find ways of reducing mortality in prisons and hospitals.’ (Forty 2005: 170)

Experiments with more airy spaces that improved the health of patients were extended to housing, prisons and schools, whose design aimed to improve the circulation of air. Doctors wrote papers about how a hospital bed or a child’s desk should take into account its users’ health.

During the hospital reforms, it was deemed important to design spaces that had better air circulation and were easy to clean,

including their furniture, to prevent the spread of disease. The principles of ventilation and cleaning were then extended to housekeeping manuals in the late nineteenth century, with the discovery that microbes were the cause of disease only going to provide a scientific basis for these beliefs. The hospital standard for bathrooms, which were white and free of ornaments, also started to be applied to homes. [Lupton & Miller, 1996]

Thus, the attitude of sanitary reformers, doctors and hygienists contributed to a profound change in the standards by which furniture, artifacts, spaces and clothing were judged. According to Rybzcynski, 'after 1920, there was an indisputable change in popular taste, rooms became less dense, a trend that reached its peak with the minimalism of the 1970s'. But minimalism is another story...

4. Conclusion

The image of lightness projected to a chair conveys values inherited from a modern tradition strongly represented in the context of home. Home's new character, originally defined by the separation between work and home in industrial society, is the basis for the emergence of new standards of beauty maintained by architects, designers and decorators. These standards derive from notions about what a home should be and what it represents, and are embodied in the field of design as objects. The constitution of home as opposed to workplace, the affirmation of moral values in response to changes caused by industrialization, and the subsequent incorporation of principles of hygiene are a few of the social processes from which the field of design defined a notion of beauty that has been associated with an appreciation of simplification and fewer decorative objects, ultimately expressed in an aesthetic of lightness.

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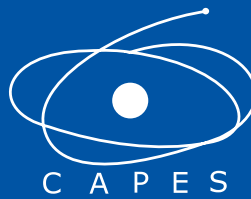
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