

## ***Graphic Design: A Consolidation Of A Discipline***

### abstract

This article shows that graphic design's power lies in the formal dimension of its productions. It is right there where cognitive structures are generated, and therefore semiotic and cultural possibilities. By reviewing some of the theoretical traditions in graphic design education, such as the ones provided by the early twentieth century avant-garde artists, some theories from the psychology of perception, and some from the cognitive science field such as the Conceptual Integration; we will be able to understand that the graphic design production is a communicational one. In this way, identifying both a sensory and a cognitive dimension of them, we may understand graphic design as a particular way of knowledge. Hence, graphic design education rather than focus in craft and technology, may understand by a critical and theoretical support that it is just there, in its production, where its communicational strength is. Also, getting support in other theoretical fields such as linguistics, literature, semiotics, or cognitive science, we could think on a consolidation of a discipline that transcends the visualization for communication, rather than one of communication.

### Introduction

Behind formal determinations of graphic productions are sets of intellectual decisions, which permanently are creating meaning, and therefore culture. In this sense, the conscious efforts done by designers, as well as observers, are not just perceptual but also cognitive. Nevertheless, design practice seems to focus mainly on its formal dimension, where "automatized design formats has been widely adopted as a standard, determined more by production software than intentions" (Emigre N.66, 2004). Moreover, education itself retorts this tendency by concentrating on the "notion that design is an on-the-job learning experience." (*Ibidem*)

Given that graphic design (GD) education has traditionally relied on crafts and technology, the critical and theoretical aspects seem to be secondary in designers' performance. Far from pointing out shortcomings of current design education, this paper reflects in the GD production as a powerful tool of visualization, and a semiotic and cognitive tribune that performs culture and society in paramount ways. Thinking GD as a producer of communication, rather than at its service, may help us to think about it as a discipline that operates beyond mere commercial logics.

Firstly, we will review succinctly some of the theoretical attempts of artists from the twentieth century's avant gardes, part of the design education tradition. This overhaul may help to restore concepts such as "form", "rhythm" or "composition" as parts of a simultaneous expression/communication dimension, in order to understand the validation

of the form as a vehicle through which emotions and ideas are expressed, and as a fundamental part of statements themselves.

Also, supported on Perception Theory, we may realize that the disposition of a visual message, whatever its appearance, is foremost, a communicational datum. These perceptual processes contribute to build pathways of meaning, which in Arnheim's words would define the course of thoughts because "forms are concepts." Identify, select and generalize, as properties of perception are essential instances in the cognitive process of concept formation (Arnheim, 1968).

Thus, visual communication as a field of GD is a complex scenario given that it is the quintessential spot to activate and propose certain mental functions, which enable new ways of understanding and not just for representation. Moreover, relying on a cognitive science theory such as the Integration Theory, we could understand some design productions in their communicational dimension, above the craft or technological one, in order to recognize GD productions as a genuine way of thinking while cognitive processes are happening.

Consequently, we could be able to think of possible ways to enrich GD education with a critical and theoretical basis, rather than to offer specific solutions. The idea of this approach is not to neglect the formal dimension, or consider it as subsidiary of the conceptual one, but to understand it as part itself of the significance process. These critical and theoretical complementary dimensions in design practice, as Cabianca says, work as a particular way to see the world in order to foster a sense of curiosity (Emigre N.66, 2004).

### Tradition That Allows A Transition

GD as a structuring process discipline has nourished from theories of the avant-gardes of the early twentieth century and also from Perception Theory. These approaches have been of great importance for the theoretical foundation of design education, especially for concepts such as *form*, *structure*, *rhythm*, *intuition* and *context*.

For Kandinsky, the *form*, and furthermore the composition (intuitive dimension where the parts are articulated by the rhythm) was a metaphor of the soul, which he calls the "content in itself" (Kandinsky, 1987). However, beyond his need for expression, and how could it been possible, we believe in the existence of a real communicational dimension<sup>1</sup> in these kinds of works. If we pay attention to the word "*composition*", and how the parts are articulated with a particular rhythm defined by *intuition*, we could see that as design productions, there are resulting situations from the relationships between elements in order to form "a whole". In this totalities converge the problems of form and of content by being just one transmitted and understood by intuition.

For Piet Mondrian the plastic expression is the same content of the work, and cannot be separated from its *context*. Like Kandinsky, he argued that "culture has not developed an awareness of *intuitive* ability [...] An intelligence that is not just the brain, that is not calculated, but feels and think; it is creative in art and in life" (Mondrian, 2007). It is precisely here where the form is not an end but a medium. For the avant-gardes

<sup>1</sup> Although 'communication' was not the concern of these artists, it was addressed to the effective expression of what was important for them. Consequently, we can easily match them with design purposes.

the work's expression becomes the subject. This, in the communicational perspective addressed here, shows the importance of validating the formal dimension as a constituent part of the message.

Additionally, Paul Klee, on the same path of abstract painters, relies on the idea of the abstraction of letters as pure forms. He realizes the semiotic dimension of the letter also as an image, a significance vehicle that is independent of the linguistic system. In his works, the encounter between the letter as figure, and as image, shares a determining factor that is *the structure* which enables a semantic relation that exist between different signs (Aickele: 2002). Likewise, GD production works with the same kind of encounters: under the temporal dimension associated with the letter, and the spatial one associated with the image.

These theoretical attempts —among others that follow the same route— enable a more intuitive possibility of retrieval, which usually has been limited by a western alphabetical culture which has accustomed us to limit our vision, restrict it to the individuality and successivity of objects, and to disregard perception of special compositions. In Design education, concepts such as syntax, grammar, vocabulary or language, etc., applied to the visual as categories, are still metaphors of a sequential and systematic thinking, as the alphabetical<sup>2</sup>. This suggests a kind of thinking that does not take into account neither intuition, nor the variable and complex conditions of the visual contexts. Also, this approach segregates categories of the visual and the linguistic as irreconcilable or analogous excluding more subtle and complex situations that exist within GD productions (Lupton & Miller: 2003).

Along with these proposals, and the International Style theories (Ruder: 1977) that conform the GD education foundation, studies of the Psychology of Perception were also fundamental at that time. The diffusion of this knowledge — from the late thirties to the fifties— was well received in the EE.UU., particularly in GD education, since it is then that GD was established as a profession (Lupton & Miller: 2003).

The concern of the Theory of Perception was the space and the relations within visual messages (Arnheim, 1968). These, as the ones proposed by modern artists, are often connections of heterogeneous units, which are context-dependent, and are modified by their internal relations (Dondis: 2010); similarly to GD productions where simultaneity —as a “system of forces”— is more important for its understanding than the linearity of text.

Likewise intuition<sup>3</sup> deals with more than one item at a time, and their interconnections in the space they share. The entire structure is apprehended simultaneously and ranks the elements within an overall hierarchy. So, the restructuring of visual situations is produced from the parts to the whole, with their relations and with its context, by an increasingly intuitive process that is involved<sup>4</sup>. Hence visual perception is visual thinking,

<sup>2</sup> Who makes this evident is Groupe µ (1992) reviewing some visual semiotic studies such as the ones of Roland Barthes (1964, 1967, 1970), Umberto Eco (1968, 1971), etc. Also see Dondis (1973), Llovet (1979) and Wong (1980).

<sup>3</sup> **Intuition** is that “ability to apprehend directly the effect of an interaction that takes place in a gestaltic field situation”. It is a property of perception, because operates exclusively in field processes. *Field processes* are those in which the location and function of each component of a whole is determined by a defined structure (ARNHEIM, 1968, p.28).

<sup>4</sup> Gestalt School is concerned in the perceptual process, (elements, relationships, and the group formed as more than a mere sum), rather than on the environment. Hereby is pointed by the School of Graz (especially Heider and Gibson) as an incomplete theory. Wagemans, Feldman, Gepstein, Kimchi, Pomerantz, Van Der Helm, Van Leeuwen, 2012: 21.

since it is the essential for a cognitive process (Arnheim, 1968).

From cognitive science, the simultaneous recognition of parts in order to produce meaning also operates in “field processes” by intuitive synthesis. However intuition as a pillar of cognition cannot work alone. Even if it determines the overall structure of a situation, it has to be standardized and compared to mental models through intellectual operations that allow knowledge. Thus, interaction situations have to be complemented by stable structures of cooperation between intuition and intellect. Therefore, design productions contain themselves suitable elements for cognition that came from sequential linearity of intellectual operations, and from intuitive situations for visual restructuring, in which everything exists above the mere juxtaposition of elements. Consequently, visual thinking is a fusion process.

Fauconnier and Turner's (2003) Conceptual Integration propose that analogy, metaphor — rehabilitated as engines in cognitive processes during the eighties<sup>5</sup>— and intuition, enable the appearance of “emergent structures”, in which more than one activity is involved, and they could come from completely different frameworks (visual/linguistic). They describe the cognitive operation of integrating heterogeneous information, through actions that go unnoticed such as the metaphorical and analogical thinking, excellent resources in GD.

Such conceptual integration generates meanings in a creative dimension in which imagination<sup>6</sup> is involved. Thus, disparate information is not a problem; actually, when two kinds of information are activated simultaneously, a new emerging structure is generated in a third new and with equally valid information. Hence the blend is a process in which a projection of certain information participates, and with the import information from another reality, creates new information sets (Fauconnier & Turner, 2003).

Graphic productions, in order to establish themselves as visual thinking, require: For the retrieve a perceptual process in which possible associations to cultural memory become the engine of a recognition act, which make possible the interpretation process. These dimensions: visual/perceptual, mental/cognitive and semiotic/cultural define integral aspects of communicational productions, according to formal operations. Therefore, the form is associated with both perceptual and cognitive levels, creates semiotic and cultural possibilities.

As a consequence, the emergence of a culture of relationships seems evident in design education, because the fact that morphological decisions in GD productions are themselves communicational keys is usually invisible. The reason is that these decisions are internalized habits for both the producer and the receiver. In this sense, highlighting concepts that may seem old-fashioned (form, composition, intuition, context, etc.), operations of perceptual and cognitive fields, and also by clarifying the intentions of “design doing” within a socio cultural context, we could see a possibility of a transition that allows recognition of the design doing, its productions, and its producers as an important actor of sociocultural, and political changes.

<sup>5</sup> Since the Parallel distributed processing PDP, which demonstrates the ability to find similarities with analogy. And from metaphor studies that shows it as a real resource of knowledge, and not only as a poetic device. Metaphors we live by. Johnson and Lakoff. 1980.

<sup>6</sup> This concept for Lakoff (1980) and for Ricoeur (1978) is understood as a capacity near the intuition used in the processes of meaning.

## A Critical Graphic Design

Understanding the abovementioned concepts in design education, make us recognize the GD production as a powerful tool *of* communication, rather than *for* communication.

Nevertheless, while market needs are changing everyday, design education is not advancing at the same pace. Maybe because since the instauration of GD as a profession, its education has been based on current crafts and the technologies, on the theories abovementioned, on the International Style, on some contributions made by design authors such as Dondis or Wong, and some from the aesthetics fields. Therefore GD is often limited to this knowledge as a tradition that “designers must know”, but that then are not able to put into social and cultural perspective. I could affirm this as a design teacher, and supported on the *Default Design System*, (EmigreN. 66 2004), as a tendency since the nineties, characterized as the use of a “quasi-simplistic rule-set, often cribbing elements from the International Style in a kind of glossy pastiche, a cult of sameness driven by the laziness and comfort of the technology”.

As we may deduce, design education focused mainly on craft and technology makes design a tool for market trends and fads, and not one that critically understands sociocultural processes and therefore its role. This is not to say that technique or craft are minor, what I suggest is that in the formal dimension of GD productions its communicational strength is.

Consequently, it seems pertinent to enrich design education with different field's theories to: Understand its productions as “devices” that not only attract attention as Rand held (Lupton & Miller: 2003), but that mean, therefore communicate, and also, to realize the complex processes of design doing, as a result and a producer of particular conceptual structures. Furthermore, enriching the theoretical design corpus could report GD as a discipline, in the sense Foucault understands it: as a set of objects and methodologies for learning, wider than a profession that is just concerned with the notion that design is an on-the-job experience, specialized on problem solving.

In GD practice and in its education, to focus only in the formal and technological dimensions may seem dangerous as it may be considered a marketing tool. Instead, applying a critical dimension could make a design producer more aware of his role in contemporary society, and his productions active devices, which could dialogue and conform reality. As graphic productions are cultural products, they help at the same time to generate them in a dialectical way.

In this way, the education of design has to transcend the notion that it is only a job, because this is a way to look at it as a profession. Maybe it is better to understand it in a wider notion, as a *discipline*, by the support of a varied and robust theoretical corpus, as a particular way of thinking and interacting with reality, not just by offering solutions, but also by asking questions.

In other words, a design practice and education that is oriented critically towards a reflection could make us understand it as a discourse in itself, transcending the idea that design productions are only for visualizing communication. In this sense, to foster a sense of curiosity leaving the laziness on technology, a *critical education for a critical practice* has to have a point of view, to be aware of the context and history as Cabianca says, and also understand the social implications that it may have.

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