What Got Us Here, Won't Get Us There

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Critical aspects of design research in Romanian doctoral studies

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Abstract: This paper prospects the relationship between Design as an academic field of research and innovation and the job market and emphasizes the importance of doctoral research in design as the main vector of improvement, change and synchronization of the Romanian economic and cultural framework with the international one. Taking into account the problematic historical context of this field in the Romanian post-communist education system, various discrepancies and gaps between the contents of design research at the academic level and reduced capacity for economic assimilation at the systemic level were identified and analysed. Based on the various models of multidisciplinary research in design within doctoral studies, the topics addressed by design researchers and theorists contribute decisively to the theoretical foundation of this field for systemic cultural, social and economic development, with legislative impact.

Keywords: critical design, eastern Europe, doctoral research, design process

1. Transgressions in design

From Bauhaus to the present day, the transdisciplinary nature of design has considerably expanded its boundaries, becoming a complex multifaceted tool for critical analysis of a wider relational contexts that aims, above all, to study the impact of this field on the natural environment, production systems, political, economic and social organization models.

More than ever, recent design research trends try to respond and provoke to new bio-technological challenges, in the context of IOT development, genetic engineering and, above all, with the unprecedented rapid evolution of AI. The predominantly utilitarian perspective of design on the cyclicality of the need-product binomial tends to fade out by diverting the purpose of this field from production/profit to process/experience by critically prospecting the pivotal role that multidisciplinary research plays in anticipating the long-term effects of extractive policies and overproduction on the living environment, both natural and artificial, beyond the colonial boundaries of the dominant economic paradigm.

Consequently, by some alternate research frameworks such as critical, speculative or controversial design, contemporary design exceeded the modernist-productivist perspective regarding the concept of the ideal product as a “desirable” perfectly balanced mass produced object, making the leap from the industrial culture of commodification to the meliorist philosophy of social innovation and social inclusiveness, oriented more than ever towards understanding the relational dimensions of the production process, enhancing the psychological, social, politic and cognitive quality of daily user experience “into the world of ideas rather than objects” (Dunne, 2005) and its reverberations on the various possible future scenarios, more or less dystopian, on a planetary scale.

> Designers can put to task their skills, techniques, and mentalities to designing futures aimed at advancing ecological, social, and technological conditions where multiple worlds and knowledges, involving both humans and nonhumans, can flourish in mutually enhancing ways. (Abdulla, 2019, p.130)

Transgressing the line between fictional or factual, the contemporary designer becomes, paraphrasing Dunne's terms, a "psychosocial narrator", a cultural agent of transformation, similar to Joseph Beuys' conception according to which the conceptual artist, like the sculptor who models the tangible reality of forms, possesses the same potential to transform society, by altering mindsets and behaviours, as a creative vector of *Soziale Plastik*. The prominent role of the designer to determine new interaction possibilities is deeply intertwined with the concept of behavioural improvement in relation to technology, not only at the passive level of cultural meanings and aesthetic experience, but also at the active level of social awareness, in terms of ethics and deontology.

> (…) design needs to be transformed, expanding its scope to include speculation on how best to provide the conditions for inhabitation. It must not just visualize a “better world” but arouse in the public the desire for one. (Dunne, 2005, p.83)

2. Romanian context

2.1 Discrepancies in the Romanian context

Although design was never completely forbidden in the Romanian context before 1989, the term itself was “imported” from English and gained popularity after the fall of the communist regime being strongly associated with capitalism. However, the deficient general education on the subject enhanced by the complexity of design’s nature due to its transdisciplinary approach and intriguing process generated in time a lacunar understanding of the domain in the job market. In some cases, design is wrongly defined only for its aesthetic value and is associated with its “beauty”, while in other cases designers are engaged in the decision making only at the end of the design process. Generally speaking, the overall perception in the Romanian context seams to position design as a poorly defined field associated more with decorative arts rather than research and innovation.

On one hand, the National Trade Register Office include in the classification of activities in the national economy under the code 7410 a very limited selection of design jobs (industrial, fashion, graphic and interior decorating) which is directly correlated with the academic accreditation and its study fields. On the other hand, the proportion of design practitioners without a formal dedicated academic training is considerable and quality level questionable in some cases (engineers offer solutions in industrial design, programmers in graphic design and UX/UI etc.). Thus, in comparison with architecture field, there isn’t any specific legislation that designers are bounded to apply to be recognized and to obtain the right of signature on projects.

Simultaneously the curriculum, processes and research in Romanian universities are synchronized and updated and include contents regarding critical design, social innovation, design thinking, user centred design and aim an extension of design field beyond corporate problem-solving as a crucial player in shaping the society.

However, these ideological discrepancies can be diminished though various strategies formulated by Romanian Design Council or other cultural entities (design museums, NGOs etc.) that can not only organize events, campaigns or festivals that will create mediation for the general public and promote the core values of design but also modify specific legislation that links education and universities to the economy.

2.2 Methodological controversies in design

It is the controversial positioning of design between art and science that imposed some universities from Romania and other post-communist eastern European countries to generate a hybrid type of doctoral studies that include simultaneous theoretical and practical contributions.

> Design has tried, unsuccessfully to straddle aesthetics and engineering, resulting in an equivalent to two cultures, analogous to the art/science divide, with two very different definitions of design and a division of labour between the stylist who is in charge of the envelope for the works supplied by the engineer (Attfield, 2000, p. 21)

Rather than questioning it's framing in the arts or engineering field of research, it would be more useful to perceive it a *Gesamtkunstwerk,* a multidisciplinary domain with transdisciplinary results. The complex role of designers and the perpetual changing role of his status as a reflexion of the transformative society generates diversified definitions that transgress the designer's ideology far beyond its aesthetic and utilitarian mission or Dieter Rams's *10 principles on good design* (Lovell, 2011, p.191). This ambiguity and sometimes contradiction impose an update not on the design process itself, but rather on the shift of perception that can be achieved through design education.

Although the general Romanian perceptions on the status of designers and their role and attributions shifted in time, mostly due to the informational synchronizing facilitated by outbreak of the internet access and the accelerated technological progress, there are still many controversies regarding the variety of jobs in design and their positioning in the Classification of Occupation in Romania. The lack of official organizations or institutions that offer licenses to practice beside universities and, implicitly, a professional validation doubled by the ability to practice this profession without a recognized diploma and the common belief that specific software knowledge is the only digital skills required (Adobe Photoshop, Illustrator, SolidWorks, KeyShot etc.) generated numerous practitioners, some with questionable quality levels.

These confusions enhanced by the lack of insufficient theoretical studies in the field prevent design from creating its cultural stand and reduces it to a simple tool to increase the turnover of a company

> The design profession needs to mature and find ways of operating outside the tight constrains of servicing industry. At its worst, product design simply reinforces global capitalist values. It helps to create and maintain desire for new products, ensures obsolescence, encourages dissatisfaction with what we have and merely translates brand values into objects. Design needs to see this for what it is, just one possibility, and develop alternative roles for itself. It needs to establish an intellectual stance of its own, or the design profession is destined to lose all intellectual credibility and be viewed simply as an agent of capitalism. (Dunne & Raby, 2001, p.59)

In addition, the perpetual requirement for cultural synchronization with western society and the ongoing need of importing and possessing goods that are the direct result of overproduction imposes, more than ever, an ethical discipline in the field

> There are an amazing number of everyday things, perhaps twenty thousand of them. Are there really that many? Start by looking about you. (…) Consider the work area: paper clips, scissors, pads of paper, magazines, books, bookmarks. In the room I'm working in, I counted more than a hundred specialized objects before I tired. Each is simple, but each requires its own method of operation, each has to be learned, each does its own specialized task, and each has to be designed separately. Furthermore, many of the objects are made of many parts. A desk stapler has sixteen parts (Norman, 2002, p.27)

The current state of Romanian design research is a direct consequence of the influence generated by political and economic strategies lead from 1990 until present days, starting with allocation of reduced budgets for research and its delayed prioritization or the deliberate insolvency or privatization of factories (previously capable of producing industrial goods) that could have functioned as research partners in practical doctoral studies, to the need of high speed synchronisation which can risk develop superficial approaches or strategies, especially in the context of a lacunary traditional education.

Thus, due to globalization and the liberalization of current informational contexts, the ideological synchronisation in the Romanian education had a much more advanced evolution than the organisational or institutional one, in terms of infrastructure and resources. From these considerations, keeping in mind the contemporary role and mission of designers and applying the design process oriented towards social innovation could be considered a valid hypothesis in solving this systemic gap.

However, integrating social casuistry into design research field implies a strong collaboration with specialist from various domains for one hand (social sciences, psychology, anthropology, engineering) and a profound understanding of the specific context on the other. Proposals to apply principles of social innovation in local design curriculum were created as semester projects or bachelor and master theses at “George Enescu” National University of Arts tackling various casuistic formulated by United Nations (the 17 sustainable goals SDG) from responsible consumption and production, clean water and sanitation, reduced inequalities or no poverty et al.

Some examples include Veniamin Gaciu’s work consisting in an individual, modular shelter proposed in case of natural disasters, Cosmin Morarasu’s attempt in introducing UV lamps in public transportation in order to sanitize surfaces COVID 19, Ian Serghienco’s shower that uses rain water that is, after usage, filtered and utilized in irrigation systems, Andrei Dila’s experiment in designing transport boxes that accommodate inflatable air pockets instead of cardboard or plastic wraps for proception of the transported object, Radu Medan’s pedestrian signalling that help citizens cross the street safely or Cezar Aromanesei’s proposal for a water kettle that contains a mechanism that help visually impaired persons to quantify the amount of water is poured.

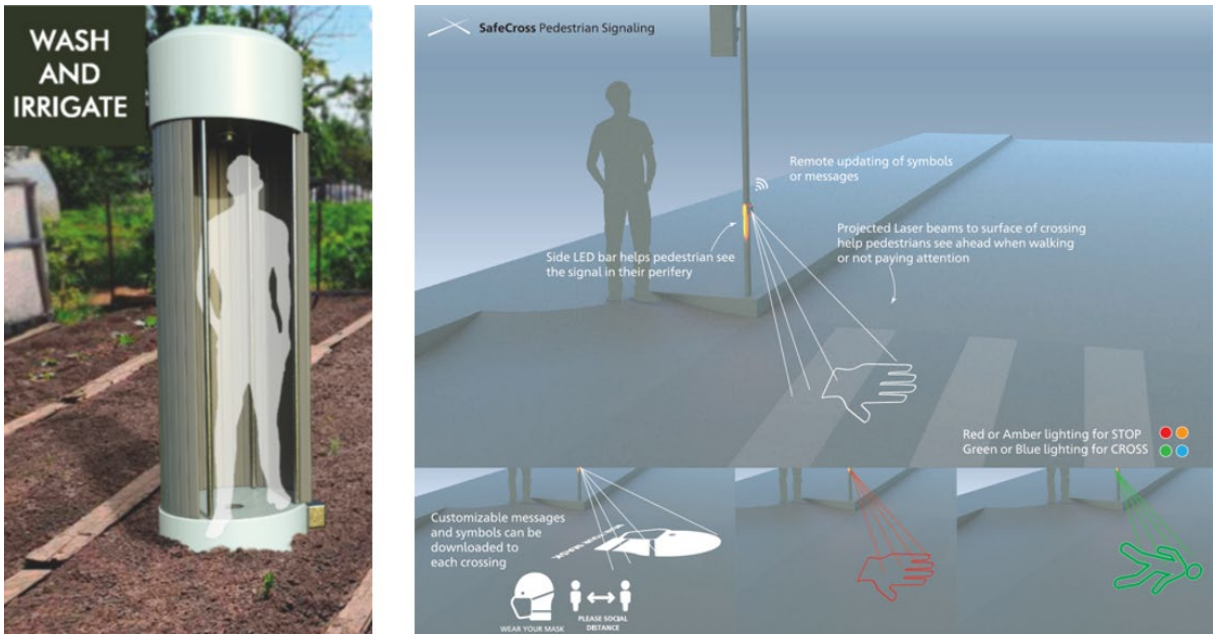

Figure 1. Outdoor shower proposal by Ian Serghienco "Wash and Irrigate"- photo credit Ian Serghienco (left); Pedestrian signaling by Radu Medan -photo credit Radu Medan (right)

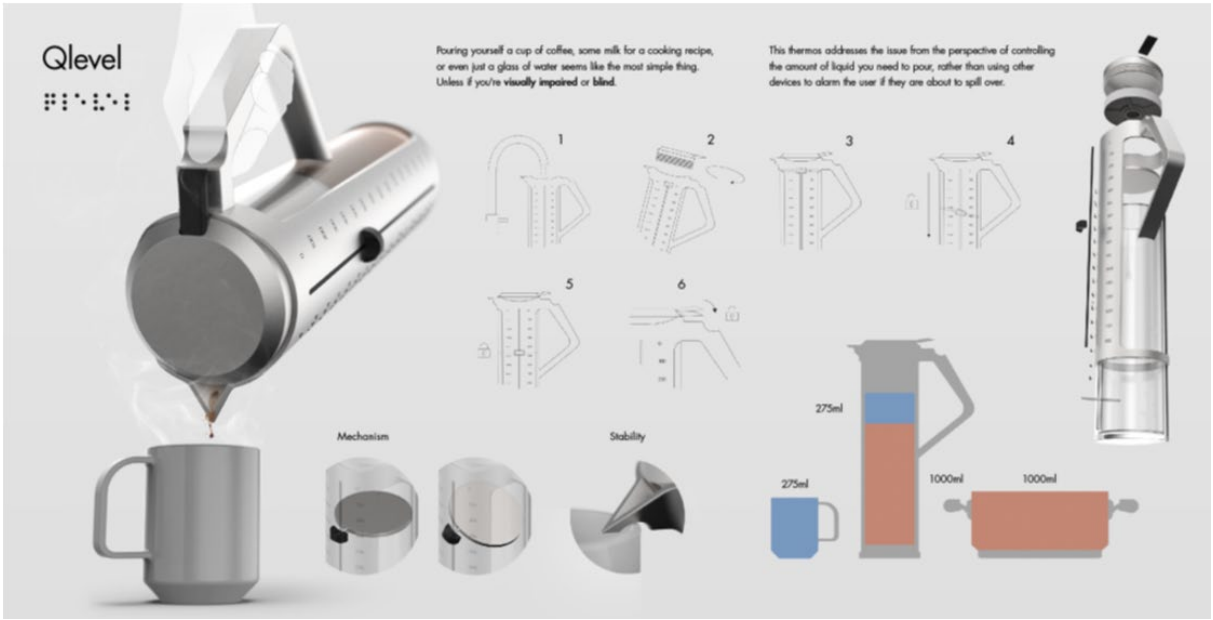

Figure 2. Water kettle for visually impaired persons by Cezar Aromanesei-photo credit Cezar Aromanesei

2.3 Evolution of Romanian design education. Case studies

The official beginnings of a recognized design school dates to 1969 with the foundation of the Department of Industrial Forms (Design) from "Nicolae Grigorescu" Institute of Fine Arts from Bucharest, continued in 1971 by "Ion Andreescu" Institute of Fine Arts, from Cluj, 1971 and the design Department from Iasi and Timisoara in 1990. However, due to the complicated political context, the evolution of design education in Romania followed a difficult path starting with the first initiatives from 1840 with the first Romanian School of Arts and Crafts established in Iasi, carried on with the first decorative art course at the „School of Fine Arts" taught by architect George Sterian in 1904 in Bucharest and continued with „Domniţa Maria" Higher School of Decorative Arts in 1905.

Thus, the first tendencies to unify the industry with the arts are observed, while design was perceived as a decorative and minor art in comparison with painting, sculpture et al.

The evolution of Romanian design continues in the interwar period with the „Academy of Decorative Arts" between 1924-1929 led by Andrei Vespremie which was originally founded by Max Hermann Maxy, according to the Bauhaus model of education, under the name of the „Studio of Deconstructivism Art" (Duculescu, 2014). It was only after the post-war context dominated by forced industrialization in the Socialist Republic of Romania that the need of a designer with a formal education arouse (around 1250 factories and mining operations, food, and agricultural enterprises - in total, until 1989-where the main industries were: automobile, petrochemicals, cement and construction, aircraft, textiles, food and beverages, mining, consumer durables, metallurgical and weapon industries)

In fact, according to design historian Mirela Duculescu's PhD Thesis "Romanian Design between the Democratic Design Issue and Socialist Practice (1970-1990)" on the 4th of March 1969 a member's meeting was held in Bucharest at the National Artistic Union regarding the opening of a design department in higher education systems that followed the Bauhaus curriculum. The participants debated the role and status of designers and the purpose, values and principles of the Bauhaus movement and its implications in founding a new school with a controversial affiliation between visual art and engineering.

Currently, according to IOSUD (Institutions organizing doctoral studies in Romania) there are 50 universities around the country that offer doctoral studies and 5 main centres that offer the possibility to attend doctoral studies in design- under the visual arts program: "George Enescu" National University of Arts (UNAGE) from Iasi, National University of Arts (UNARTE) from Bucharest, University of Art and Design (UAD) from Cluj and Western University from Timisoara.

"George Enescu" National University of Arts currently offers doctoral programs in music, theatre, and visual arts (which comprises painting, sculpture, graphics, mural art, textile arts, ceramics and design, and the scientific subfields: Painting, Sculpture, Graphics, Mural Art, Textile Arts, Ceramics, Design, Restoration, Visual Art Aesthetics and History of visual art). The candidates have the possibility to choose between a scientific PhD (which is more suitable for history and theory of art, pedagogy, anthropology, art criticism, and curatorship) and a professional PhD which is most focused on practices in subdomains as painting, sculpture, graphics, mural art, textile arts, ceramics and design.

The specificity of research in the two doctoral fields in visual arts and design requires the delimitation of a general methodological framework determined by several fundamental objectives, from the dynamics of which various strategies result in the development of research projects: multidisciplinary approach, joint inter-institutional artistic and scientific research activities and their synchronization with current European trends, identifying the target audience, implementing and applying research in specific contexts in real life, establishing a protocol for mutual research information regarding the future development of viable research models, which will contribute to improving the quality of ongoing or new projects, the development of the reflective qualities of artistic research, which is understood as a way of producing knowledge, not just aesthetic experience.

From a methodological point of view, research in doctoral studies in visual arts and design is carried out according to a similar scenario to other academic fields: identification of the theme or area of interest, documentation or study of the relevant bibliography, identification of the working hypothesis in the elaboration of one's own theoretical discours, problematization, comparison and questioning of bibliographic data, formulation of main theses and analytical determination of content and conclusion or outcomes.

Depending on the chosen program, the student's outcome can be oriented to production of objects, experiments with innovative materials, processes or services, exhibitions or collaborations with manufacturers or further theoretical studies questioning specific areas from design that are presented as new theories in peer reviewed publications. Undeniably, both directions assume theoretical support in development of the thesis and share the same general objective: to represent a contribution in the field of research that is oriented towards problem solving in design.

In comparison with other universities around the globe that constrain the topics of research to certain areas of expertise, the PhD candidate from Romania has the liberty to choose any topic from the field of design, if the research resulted is qualitative, innovative, and relevant in international context. The projects cover a variety of subjects from history of the domain and its evolution in Romania, to innovative studies that present, in a multidisciplinary or transdisciplinary approach, multiple areas of interest: Loredana Gaspar's fusion between Romanian mythology and design, Andrei Lazar's interest in the study of light and multisensory interfaces or Tiberiu Roibu's focus on geometry implemented in contemporary design to name a few.

In her thesis from 2015 entitled "Elements of Romanian mythical space capitalized in graphic and object design" (published in 2023 under the title "Romanian Symbols- decoding and interpretations"), PhD. alumnus Loredana Gaspar analyses symbols and patterns from the Neolithic (Cucuteni), Thracian-Getho-Dacian and Romanian traditional period and researches new strategies of inserting mythology elements into contemporary design using archetypes. The extensive study follows how myths impact nowadays users and the way that pagan rituals manifest in the collective mind through motifs and symbols with a specific chromatics used in Romanian ornamentation that are manufactured through both emerging technologies and traditional artistic crafts and materials. The outcome of the research (that extended over a period of over 10 years) materialized in numerous results like books, peer reviewed articles, furniture sets, boardgames, phone covers, hand bags, wooden toys etc.

Figure 3. Examples of works resulted from Loredana Gaspar's doctoral thesis "Elements of Romanian mythical space capitalized in graphic and object design"- photo from author's website- www.ziurel.ro

Another relevant example of a multidisciplinary doctoral thesis revealed by Andrei Lazar in his study "The multisensory experience of light, the interaction with the user in design" which analyses and demonstrates how the interaction of light as a complex multisensorial stimulus influences the design process in manufacturing lighting fixtures and their interfaces. In addition, he follows how emotional

design and the cultural memory impact the user's experience and how to connect and implement in them intuitively into current technologies.

Figure 4. Interactive installation (with light and sound) created for a private hospital from Iasi- a component of the practical research from the doctoral thesis published by Andrei Lazar – photo credit Andrei Lazar

Figure 5. „Hey, body!" lighting series - a component of the practical research from the doctoral thesis published by Andrei Lazar- photo credit Andrei Lazar

Furthermore, in his doctoral study "Visual geometric systems, between objective and subjective" from 2017, Tiberiu Roibu founder of the platform „Geometry matters" researches at the „George Enescu" National University of Arts paths to decrypt geometric visualisations from universal

principles to human interpretations and to reveal through visualisations new forms of realities starting from Antiquity and Renaissance (*Musica Universalis*- Pitagora or *Plato's Solids*) to contemporary applications identified in graphic design or architecture (Stefan Sagmeister or Zaha Hadid).

Figure 6. PointDecibel- one of the practical contributions of the study that consists in a mathematic formula to calculate the adequate dimension of a font- photo credit Tiberiu Roibu

2.4 Applying the design process into doctoral research methodologies

Thus, in order to address the casuistry of the methodology applied in design doctoral studies we could argue that by translating and applying the utilitarian design process itself (from a manufacturing point of view) into academic research could generate new strategies of collecting information and facilitate identifying, checking and planning strategic phases, while keeping an open relationship with other domains.

The well-known design process usually follows 5 stages which implies briefing (defining the problem), research (understanding the context of reference), creation (both digital and physical though prototyping), implementation of the concept in real scenarios and commercial promoting of the results.

In case of the practical doctorate, the preliminary phase is similar with the briefing and debriefing stage of the design process and consists in establishing which research methods are efficient and the general goals of the study, noting the innovative character of the final results.

The second phase implies theoretical research through data collection from specific literature that was already written on the subject (peer-revied articles, PhD. Theses, books), statistics that underline the importance of the study that are relevant for the user's behaviour (a helpful indicator that could be easily translate into a pattern), interviews, case studies or surveys and a practical dimension of research by attending to international conferences, visiting manufacturers learning about new materials and emerging technologies, analysing exhibitions, learning about certain practices from design studios and meeting specialists from multiple fields. This phase can be equated with the research stage of the design process in which data about the competitive market, materials and their proprieties and technologies, user profile et al. are studied.

The third phase of the educational process is a creative and experimental stage where various materials, methods, technologies, products or solutions are suggested and tested aiming to propose new approaches towards identifying goods, services or processes oriented towards new strategies that focus on problem solving complex contexts according to previous. This can be achieved using several resources and techniques from 3-dimensional modelling, rapid prototyping, actual model making, sketching e.g. (this stage is similar to the creation stage from the design process).

The next phase implies enhancing the solutions found in the previous phase, which can be developed in collaboration with multiples specialists or organisations from various fields of research in order to obtain a multi- or trans-disciplinary advanced result. This step entails choosing the best manner of action, validating or dismissing various hypotheses and finding solutions in materializing it into tangible forms.

The last step of the process is attributed to the actual elaboration of the thesis from a theoretical and practice perspective which involves connecting and synthesizing all the information obtained from previous stages of research and presenting new premisses, theories or definitions that represent actual contributions to the research field. The desired outcome is further presented in conferences/lectures, articles or other type of publications.

3. Conclusions

The biggest challenge for design research in Romanian Doctoral studies is to prospect viable solutions to reduce the distance between the theoretical perspective, deeply speculative and oriented, most of the time, towards the production of discourse or fictional objects, products, processes, and the practical one, still deficient due to the dysfunctional economic and political context, as it usually happens in former colonies and post-totalitarian countries.

However, the design research framework has expanded, by adapting the curriculum to the new challenges of fields such as social innovation or critical design, even if these disciplines do not appear *per se* in the education plans, pursuing, on this basis, especially the cultural synchronization, despite the economic one. The leap of knowledge that this ongoing curricular update implies is still disproportionate to the economic and technological capacity for assimilation.

From an institutional point of view, one of the most important improvements in the relationship between the academic offer in design theoretical research and the job market was determined by the emergence of mediation institutions such as the Romanian Design Council and other NGOs that advocate for various politics of Design.

References

Abdulla, D., Ansari, A., Canlı, E., Keshavarz, M., Kiem, M., Oliveira, P., Prado, L. and Schultz, T. (2019). *A Manifesto for Decolonising Design. Journal of Futures Studies*, 23(3), pp.129–132.

Attfield, J. (2000) *Wild Things: The Material Culture of Everyday Life* (pp. 21), Oxford: Berg 2000

Duculescu, M. (2014). *Designul românesc între problematica designului democratic şi practica socialistă (1970-1990) [Romanian Design between the Democratic Design Issue and Socialist Practice (1970-1990)]* (pp. 69), Bucharest: UNArte

Dunne, A. (2005). *Hertzial tales: Electronic products, aesthetic experience, and critical design* - rev.ed.(pp.83), Massachusetts: MIT Press

Dunne, A. & Raby F. (2001) *Design Noir. The Secret Life of Electronic Objects* (pp.59), London: Birkhauser

Gaspar, L. (2023). *Simboluri romanesti decodificari si intereptarii* (pp.15)*,* Iasi:Performantica

Lazar, A. (2022). *Experienta multisenzoriala a luminii. Interactiunea cu utilizatorul, in design [The multisensory experience of light, the interaction with the user in design]* (pp163, pp204), Iasi

Norman, D. (2002), *The Design of Everyday Things* (pp.27). Basic Books (revised edition)

Roibu, R.T. (2017). *Sisteme geometrice vizuale, intre obiectiv si subiectiv [*Visual geometric systems, between objective and subjective*]* (pp.111), Iasi

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