

Many designs in one design: materials/technologies, processes and life quality

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Abstract

This article focuses mainly on design as space for theories and practices that will be capable to ensure topicality in dealing with major issues that feature the contemporary way of life. It points to the need of improving methodologies. It is on the scenario of permanent pursuit of social innovation that processes, materials, technologies, and quality of life are highlighted. The choice of spaces, understood as a laboratory for experiments or creative inspiration, bases the choice of activities and learning engaged with real life situations, and alerts to the needs and expectations of user communities. In this sense, improvement or creation of methodologies will allow progress in the investigation process and qualification outcomes. The content of this article addresses these issues in design process.

Keywords

Co-Design; Materials; Technologies; Processes; Life Quality; Sustainability.

Introduction

Among the more or less distant past and the possible futures, there is a space of a tangible present, but by definition, in constant evolution. It is from that point that we can begin to elaborate traits of a future always to come. Terms such as sustainability, diversity, autonomy and cooperation are more general expressions that synthesize, in a broad sense, the expectations of society towards the demands of technical and scientific advances. Because these terms are given in the practices of the world we live in, it's upon that we want to think over.

In terms of design, the main focus of this paper, what it's being seen is the co-occurrence of many ways of thinking and doing design, meeting the common trait of materiality. What can be said about materiality and modernity to build a substrate of reflection? Without the intention of probe or questioning, materialism proposes to extrapolate common knowledge; it highlights the importance to start from the facts, to have an interest on reality at the expenses of ideas. From that It would be necessary to identify what is truly crucial to knowledge, the objections were not added to this statement. One must consider how life circumstances can modify, substantially, a point of view that would seem absolute and true, but that also it is subjected to the fickleness of perceptions, the hermeneutical process and the performance of language, that last expression way of knowledge in human society. Being this recognized the tension between a non-radical materialism and an autonomous subjectivity seems productive.

Understood, therefore, as a whole, the term materiality related to the division of language, which sometimes results in sensitive materiality indicates the theoretical displacement of the focus of the substance of the content to the substance of expression.

Two points are reinterpreted, based on the formulation of Greimas (1971) and Hjelmslev (1975): (a) the removal of the concept of form (formal relation systems), to substance (unique expressions of a given substance), and (b) an understanding of the importance of cut material (substance) for the production of meaning, but not the direct implication of one over the other, both established on the

level of expression.

About materiality in terms of semiotics, the inspiration comes from Fontanille (2005) on his proposal on levels of semiotic relevance for an understanding of semiotics hierarchical operations of cultural objects. The focus in terms of expression as an assumption for semiotic experience in dealing with objects transcends the acknowledgement of material structures of what they are endowed in terms of morphology or functionality, and reaches the surrounding gathering as instance of semiotic relevance.

About modernity, it is being pointed to the issues of our times. Compte-Sponville and Ferry (1999) work modernity as it matters to that concern since it is articulated with the way of understanding materiality. For these authors (p. 57 e ss.) Beauty can be read the aesthetic, the sense or design, is "both to the eye as to the object seen." From that, results that today is an operation always 'in doing it' and therefore still current by the eye that gets lost or finds itself as scrolls through these spaces. "What remains from the newness when no longer is? When the newness is not new anymore, reattaches the artwork as it is, or as our tiredness transforms it, finally, in itself." (p. 363).

This passing oscillation space hallmarks science and fiction, because in them is also the present and not the future that rules. Bachelard (2002) showed that, as much progressive science can be, it is enlightened by the present and not by the future, because it writes itself with the past evidence of truth. Therefore, predicting is not otherwise interpreting the opening traits that the present time offers us. It is the exercise of an oscillating hermeneutic between logic and imagination, between truth and fiction.

The purpose of the present times guides its certainty and into rummaging the past, identifies the progressive formations of truths. Thus, it is inconvenient to think that everything is explainable as science requires, because the principles of freedom, transcendence or autonomy would be harmed. It is in this theoretical context that it will be spoken about design in or of the future.

The axes themes organizers

Aiming to promote understanding of the considerations presented here, it was deemed appropriate to work with the concept of axes, that treated separately, allows proposing many interrelationships. Like this the axes are presented: of processes, of materials and technologies and life quality. (Added period)

Axes of processes

The evolution in design research has been indicating, among many trends, the displacement of the approach centered in the consumer to an approach that contemplates the practice of design focused in the field of collective creativity. It is expected from that development transformation that will choose more sustainable ways of living in the future. Sanders & Stappers (2008), when discussing the topic, they highlight the importance of the notions of cooperative design, co-design and co-creation, and the internship where different interpretations coexist in different areas, but articulated by the terms participation and community.

The authors show the effects of co-creation practices and cooperative practices on many of the meta-project stages, from the moment of popping ideas to the moment of finals. A well understood process like that, assumes that people will be creative and competent, in other words, able to act in a cooperative way, out of strong prejudices and established hierarchies, according to which only some people can act, and from a strict disciplinary control situations.

The premise is to make possible to achieve success in business taking other paths than the ones until today ruling practices. The new generations have come up profiting from the development of sharing distribution practices and from the internet contribution empowering people. These changes

lead to the proposal of equal and democratic ideals which can bring together researchers, designers, customers and people to the pursuit of their goals. This ideal opposes, in an indirectly way, to the greedy consumerism and contributes to build the concept of creative consumption which balance creative experiences and sustainable practices. Also to that contributes the growing rapprochement between universities and industries that result in a collaborative exploration to pursuit innovation. Also a point to take in consideration is the process of complexity that society is going through, driven by technology. The concept of competitiveness now required impels to spotlight on the consumer, in its context and experience, but not only; in a word, pointing out not only to consumers, but for fostering future experiences of people, communities and cultures interconnected by digital media. It is foreseen a close cooperation between main actors in the process, in their several talents and skills, a loop that will depend on an effective intercultural communication. Such domain of collective creativity will have significant expressive effects on new methods and research techniques, and in framing learning curriculum on the journey of training designers.

Axis of materials and technologies

The intention to look into the present in its current role, but anticipatory, it does not put aside materials and technologies theming. The power of modern technologies requires much more responsibility on the part of the wearer. A dysrhythmia was generated between the vertiginous advance of the techniques and the slow progress of civilized forms of economic and social life familiarity. This mismatch creates a gap between the life 'we want to have' and the life 'we end up having'. "The need to interfere on that procedural chain, mean, in a way, has produced a technology critique and an almost dogged concern on the principles of humanity. It is not, however possible to ignore the power of capital and the financial system in the social settings, present throughout the twentieth century and intensified in these early years of the current century. Political and ethical issues should be developed in dealing with social or technological matters, if that was the scope of this work. What is intended here is to highlight money and consumption relevance as operating agents as life patterns in society and also feature the importance of maintaining the tension that exists between antithetical terms that rule social settings.

The tension between the imposed pattern and the desired one, gives place to a criticism that goes back in time, and touches the "Revenge of Gaia", compatible with specific, but systemic answers that society has been giving to the imposed powers by global physical environment disaster, and by socio-cultural damage structures. They can be considered as micro revenges of the social body, harmonized with earth vengeance. One possible way to guide the Meta Project activity on design field is the triangulation between the nature of capital/consumption, sustainable global politics and everyday life practices, all these angles steeped by ethical principles.

In technology aspect, digital technologies are emphasized by the potential they have on playing in a creative way to reframe human life in the ways society is perceived and interacts in its surroundings. Foucault 's thesis (1999) on the society of surveillance and control, for example by the action of cell phones that function as eyes that record and therefore monitor people's lives in times and spaces even unusual – is a good example of effective impact of technology usage in the design of socio-cultural processes . On the other hand, the use of these technologies expands the possibilities of communication, which, as a result, strengthens interaction spaces on social networks and consumption practices. These media, as they are known, are art and design tools to reconsider symbolic cultural goods as semiotic machines of ideological nature. Therefore, there is no way to ignore them as part of the cast of protagonists in designing that modernity that one speaks.

As regards material development, corresponding to techniques, the most encouraging picture comes from the fields of medicine, physics and chemistry that propelled throughout the twentieth century, they have come to unpredictable results and sometimes contradictory. It is true that the major global

political events encourage research for solutions to increase wealth. This process takes place, by the submission of the people, whether real, as the occupation and control of territory holders of natural resources, or symbolic, as culture appropriation and autonomy loss. Always guided by the intentions of increasing wealth, but not always committed to the planet quality of life, materials and techniques owe to events like territory occupation and ethnic or religious wars, the remarkable aspect to knowledge and information access. All this aspects respond to technical and scientific advances that human intelligence is capable.

In this scenario, two highlights, among many other possible: nanotechnology development to manipulate matter in atomic and molecular scale and nature mimicry proposal, not only restricted to the processes, but extended to materials and shapes of nature that man greed to control. The scarcity of resources leads to reproduce in laboratory the products and processes that nature generously offer. If the reason is not social and environmental sustainability, economic bias, a learning desire and a calling for innovation are important elements in this process. A special place should be devoted to advances in nanotechnology, in regards of materials and technologies. It deals with structures in the nanometer range and includes materials or components development that stimulate many areas of knowledge, such as medicine, electronics, computing, physics, chemistry, biology and material engineering. Its basic principle is to build structures (stable) and new materials from atoms, also known as 'basic brick blocks of nature' "If we put together the terms technology and nanotechnology, is because they both have similar challenges in dealing with issues such as potential environmental impacts and effects on global economy.

Literature disclosure when listed the greatest advances of the early years of the twenty-first century, presented genetic microsurgery (discovery of active genes), the expansion of visibility (clarity and transparency in view of the brain), human cloning (stem cells), building micro-organs (plural potent organized cells in tissues), accelerators for cosmic particles (high-energy protons and acceleration), the "cleansing of the brain" (expansion of neurons), germs and health (interaction between cells and genes), the new solar batteries (power on energy conversion) and the design of vaccines (antibodies in the body) as aims of inspiration for future construction. These among others, are the so many ways future design should walk through in its updating and growing process.

Life quality axis

Design (also strategic) has been dedicating itself to think and to the proposal of ways to contribute to processes that will lead to innovation and improvement of environmental conditions, both committed to life quality. In this direction, there are projects that reconsider the use of natural resources and life forms in society, heightened theming by the current reality considered unfriendly to the expectations of wellness and sustainability. Jégou & Manzini (2003) recognize the failure of social welfare, guided by the equation life quality and consumption of goods and services, and the need to reframe life patterns in society.

A promising approach to meet these expectations is to recognize innovation as a productive concept capable of thinking about social coordinates as able of being designed by new development strategies concerning the characteristics and values of the groups, but resetting the scenario toward a desirable future. On the set of skills demanded by this challenge, a special place is given to design by the fact that, currently, is a niche expertise committed to social innovation.

What stands out is the ability the designer may have to recognize specific human needs, work in collaborative processes with multiple actors and use creativity and projective tools to promote disruptive transformations. Manzini (2008) when proposing the importance of understanding the context dialogs with Fontanille (2005) the concept of semiotic environment or situation. It also reaffirms the importance of research in terms of sensitive materiality (expression) and substance (expression and content) previously mentioned.

Experiencing Design: Concepts and implications

As a thinking stimulus on the relevance of the conceptual grid chosen and to verify its potential for developing projects, the conceived Trans LAB space was chosen. It was not a random choice, but motivated by the convergence of points of view that favor dialogue. Design organization of this laboratory is not strictly followed, since in a scenario of autonomy and transformation, not even the format of activities presented by him forms a closed set.

The TransLAB (also known internationally for Living Lab) on his site is defined as a living laboratory for research, as an open ecosystem for innovation centered on the customer, often operating in a territorial context (for example, city, agglomeration , region), integrating innovation and investigation processes simultaneously and in public-private partnership. The concept is based on the customer and on the co-creation processes and integrates research and innovation. That integration occurs through exploration, experimentation and evaluation of innovative ideas, scenarios, concepts, and technological devices related to usage of real life situations. The place engaged by customer communities is different because they are seen as sources of creation, in other words, this initiative involves customer communities as agents of creative processes in all stages of projecting system-product-services, and it goes so well that it is both valued by its overall performance, as by its potential usage by society as a whole.

About research methods, there are already many recognized (such as action-research, design centered on the customer, participative design, among others), but it is necessary to refine methodologies that will enable customers to co-create in open development environments. In this sense, digital technologies are well used in pursuit of crowdsourcing to create new content or applications. The commitment is with using the resources of co-creation to explore emerging ideas, revolutionary scenarios and innovative concepts and devices. From that comes a differentiated kind of learning directly committed with social subjects in the design of its present and its future. The projective practices in space so conceived favor the formation of public spaces in which new policies, standards or models of real life can be created, with broad potential revolutionary impact.

Anyway, it is about working in a collaborative environment, open to co-creation and therefore willing to accrete people in committed projects with sustainable environmental issues, to improve quality of life. Innovation is the main point at the intersection between art, science, technology and society whose methodologies include autonomy, interaction, freedom, transversality and multiplicity. It is easy to identify harmony on these purposes with the assumptions of contemporary science that finds inspiration in the complexity theory. On this transversality is also reflected the attention given to quality of life , measured by caring with physical and mental health of human beings, a condition dependent on a geo-psycho-social context equally healthy. Science and technology achievements honor human intelligence, but also dignifies it the concern with personal and collective well-being. They are ethics that pervade the diversity of scientific doings.

By borrowing from social sciences, the concept of transvention is used, retrieved on research in architecture, art and design fields. According to the material available on network, is a concept that deals with the relationship between society and public spaces where it circulates, including the city and its institutions. An intervention action has as priority collaboration and subjectivity as a guiding line manifested in activities marked by hyper-connectivity, open interactions and network permeability. The network represents opportunities for new developments and directions. His proposal is to open dialogue and create interaction zones of transversality and transparency that will allow access and understanding. Both transvention and network are allies in rejecting ready and crystallized ideas, and on statement relevance on the principle of doubt and practical experience. Following the project sequence where this reflection starts, transvention and new formats activities will be given particular attention.

Initiatives and learning

The set of initiatives that already exist or will be proposed is aimed to social innovation. It is believed that the emphasis on "healthy connections between civil society, government, private enterprise and academia", although rebound the economic and financial view of the triple helix (government, company, university), do not practice it literally, but reframe it by sociability and citizenship agenda. The transformative projects that the Trans LAB space stimulate are favored by the environment and the independence and fluidity of network interconnections. These characteristics of the Laboratory are in harmony with the axes (processes, materials, technologies, and quality of life) proposed in this paper, and with the general concept of quality of life.

The projects thus inspired propose collective and autonomous creation. As an ideal basis for this experience, especially in urban Brazil that today replaces the countryside, the city as a physical and social space that offers all the possibilities for exploiting the relationship between citizens and their city. To feel their needs, interpret their longings, strengthen their vocations are some of the goals of contextual research for project designing.

The Lab (also in an article published on its website) so categorizes its activities: pathways, meetings and conversations, workshops, experiences and Working Lines. Defines pathways as theoretical and practical immersion processes, in pursuit of discoveries for project development, concept elaboration and prototyping until implementing experience. Meetings and conversations aim to gather people based on one or more specific themes; exercising dialogue, exchange and experience, submit assignments, to exhibit materials and meet and expand perceptions. On workshops and live experiences opportunities are planned to get in touch with doing, in introspective activities, dedicated to reflective doing, or extroverted, guided to material development. As for the procedural and continued development of theoretical and experimental studies in specific areas, working lines are emerging. They happen when meeting people with common interest in a particular subject.

This research chose to experience the route named 'Visionaries of the City' so inviting participation: "This is a course for people who want to connect with social entrepreneurship and art activism. An immersion on critical urban observation and co-creating projects with potential to transform the city. "The activity provides immersion in creative economy concepts, social innovation and art activism. Besides theoretical moments, the course develops practical and experiential approach to the construction of new projects and initiatives that have the potential to transform into social businesses. On the process is highlighted economy or industry creativity.

Dialogue between spaces

It is of interest to consider the parameters proposed by industry / creative economy for being convergent to the parameters of this work. In Brazil, creative industry is conceived as a space for knowledge and wealth production to discuss the conditions for research enforcement to be developed in an organic way, and in partnership, guided by humanistic values in the pursuit of social innovation. The designations 'creative industries' and 'creative economy' have been both taking place when naming a number of initiatives that respond to contemporary challenges of scientific and technological development, in contrast to the economic and financial crisis. The UNCTAD Report, 2013 – Creative Economy – makes an overview of the demanded themes by the current socio-cultural framework The potential resulting from trade expansion is inspiring private and public industries in defining developing policies and strategies for promoting development in partnership, and inspired by creative nexus of transdisciplinary nature, interconnecting culture, technology, economy and environment Operations by flexible network production and service systems that span the entire business value chain must respond not only to economic needs, but also the demands of the communities in terms of their full development. Thus opportunity for

interconnection opens with theoretical proposals of strategic design, and moreover, other points of convergence are highlighted with the concepts and initiatives proposed in this paper.

Alves (2011) was dedicated to analyze the conditions for creative economy achievement in Brazil. He could identify two empirical investigation fronts: on the one hand, the diversity of cultural expression and the hybrid character of the symbolic – cultural events featuring Brazilian culture, and constitute difficulties and opportunities. Global changes that have set recreational activities and entertainment, side by side with wealth and power ideals drive the desire to access to the so called humanistic entertainment, in other words, to a society focused on having, but also on being. The scenario of market formation of national symbolic goods, the development of information and communication technologies, improving audio-visual techniques and globally market openings are demanding policy implementation, performance and management from different profiles organizations. So they can face the challenges of post-industrial society whose speech emphasizes creativity, culture, enjoyment, business and sustainability.

In terms of understanding cultural policies and the organization of contemporary Brazilian cultural market, the following topics are perceived as relevant : (a) respect for cultural diversity and Brazilian ethnic, (b) features of tropical country and the process of ‘carnivalization’ in constituting the culture; (c) competitive advantage of a country of continental dimensions; (c) historical and political processes of a country of large dimensions unified by internal borders and language; (d) competitive advantage of a country of continental dimensions (e) religious devotional people, (f) preservation of folk traditional cultures in specific consumption and fruition niche, (g) job and income security, among many other points that could be listed as constituents of socio-cultural structures of this country to be considered in the formulation of policies and market social welfare. It is in this scenario that the lab experience will unfold.

Final Thoughts

This text corresponds to a part of the ongoing research project entitled: "Contexts and design practices." In a way, the text is a mosaic of possibilities for theoretical and practical development, which will require time and dedication of the research group "Strategic Design for Cultural and Social Innovation".

The abstract presents the terms that seek to define the current reality, namely sustainability, diversity, autonomy and cooperation. They summarize, in a way, the expectations of society facing the demands of technical and scientific advances. How these terms are expressed in the practices of the living world and how inspire design projects is what we seek to know. Materiality recognizes the importance of life circumstances capable of modifying, substantially, a sight that would seem absolute and true, but also submitted to the variability of perceptions, to the hermeneutical process and the language performativity. These statements anchor the critical conceptual apparatus that leads to interpretative developments. This apparatus includes studies on: (a) sensory motor schemes and harmonic synesthetic correspondences, (b) meaning and resolution of heterogeneities (c) multi-modality and syncretism, (d) living metaphor as significant synthesis of experience narratives, (e) polyphony and poly-sensorial rhetoric, and (d) functions of identity coverage.

Theming axis articulators are the categorizations that organize reflection and represent the chosen themes as leading to think over the design project activity of different designs into one design. The axis of the processes give emphasis to the processes that guide the activities in the area, and the axis of materials and technology recognizes on the sustainable materials (traditional or in research) the conditions to achieve the project design quality of life. Digital technologies are responsible for increasing opportunities for dissemination and development on a global scale and the axis of quality of life is the motivator and driver of the topic text.

Regarding practices, the experience design will work on two spaces: the one inspired on the proposal of Trans LAB with the preview of a set of initiatives and learning to be experienced, and the one of creative industry, with the practice of set of principles that organizes their actions. Both spaces are oriented to social innovation. It is this convergence point, among others, which led to propose the 'dialogue between spaces'. This whole set of effort aims to reach consistent results that can stimulate the production of innovation by project design practice.

Bibliography

- Greimas, A. J. (1971). *Semântica estrutural*. Madrid, Gredos.
- Hjelmslev, L. (1975). *Prolegômenos a uma teoria da linguagem*. São Paulo: Perspectiva.
- Fontanille, J. (2005). *Significação e Visualidade: exercícios práticos*. Porto Alegre: Sulina.
- Comte-Sponville, A.; Ferry, L. (1999) *A sabedoria dos modernos: dez questões para o nosso tempo*. São Paulo: Martins Fontes.
- Bachelard, G. (2002). *A formação do espírito científico*. Rio de Janeiro: Contraponto.
- Sanders, E. B., & Stappers, P. J. (2008). *Co-creation and the new landscapes of design*. *CoDesign*, v. 4, n. 1, p. 5-18.
- Foucault, M. (1999) *A ordem do discurso*. São Paulo: Loyola.
- Jégou, F. & Manzini, E. (2003). *Sustainable everyday*. Scenarios of urban life. Milão: Ambiente.
- Manzini, E. (2008) *Design para a inovação social e sustentabilidade: comunidades criativas*. E-Papers: Rio de Janeiro.
- Alves, E.P.M. (Eds.) (2011). *Políticas culturais para as culturas populares no Brasil contemporâneo*. Maceió: Edufal.
- <http://www.translab.cc/>
- <http://www.estudionomade.com.br/>
- <http://unctad.org/en/Pages/DITC/CreativeEconomy/Creative-Economy-Programme.aspx>