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Design wisdom: beyond the frontiers of reductionist discourses

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This paper aims to contribute to studies about the knowledge developed along with the design process, and which emerges from it

We have a common understanding of design as a human activity

Every design object is a cultural sign and belongs to a historical, social, environmental, economical and political context

Design and knowledge cannot be universalized and reduced to a hermetic and pre-deterministic issue

Design and knowledge must indeed be considered from an interpretative perspective of the complexity of the world

The wisdom of design is placed beyond the frontiers of reductionist discourses, which tend to generalize and fix what is essentially complex, plural, variable and sometimes unpredictable

We are faced with the crucial problem related to the cognitive dimension of knowledge

According to Edgard Morin:

"There is an increasingly large, profound and serious inadequacy in our disjointed, broken knowledge, compartmentalized between disciplines, and, on the other hand, more and more polidisciplinary, transversal, multidimensional, transnational, global, planetary realities or, ultimately, problems. In this situation the complex groups, the inter-relations and feedbacks between parts and the whole, the multidimensional entities, as well as the essential problems, become invisible"

This problem has also affected the design, whose research, education and practice have reflected reductionist visions and urges new paradigms

Social and cultural exclusion is another very important issue that is present in the development of artifacts for society

Within such scenarios, movements on behalf of a generically standardized design have coexisted with others that are more worried about the cultural diversity of individuals and societies, and their particular needs and yearnings

Next some **examples**

- 1) **Vernacular design** developed from discarded products
- 2) industrial design, which emphasize the relevance of considering product life cycles as a whole
- 3) rethinking of design knowledge, role and practice, where the particular and the universal dimensions, the fragmentation and the whole, the simple and the complex, coexist and are inter-related

DESIGN WISDOM

WITHIN THE CONTEXT

OF COMPLEXITY

Design represents an important role in the development of the material culture, considering that it involves planning, decisions and practices which affect people's lives, including that of the designer himself

Gui Bonsiepe:

"the designer is simultaneously subject and object of the cultural dynamics. He [or she] influences the material culture, which in turn influences him" Both design and knowledge

can't be generalized and

reduced to a hermetic

and pre-deterministic issue

It is necessary to consider the coexistence and inter-relations between

order disorder

simple complex

general particular

as well as the **uncertainty** that characterizes all processes of development of artifacts, whose interpretation and use vary, according to the culture of each individual

We understand culture as the network of meanings woven by people in the societies in which they develop their thoughts, values and practices as proposed by Clifford Geertz We consider that it is fundamental that knowledge developed along with and from the design process contributes to develop cooperative relations and to improve and satisfy people's needs and yearnings Within the context of **globalization** we observe the promotion of homogenization of production means, and the search for controlling societies' wishes.

But

such homogenization doesn't mean that resources, ownership and control of production means will be equalized between the various classes and societies Market industrialization and globalization

will probably **not** lead to design standardization and to "cultural variety eradication", due to the **CONSUMERS' resistance** to "the flood of uniform mass products", as argued by Ulrich Beck

In transcultural relations, individuals and societies must search for the understanding of other cultures' experiences, assimilating those that brin them benefit in terms of quality of life, but preserving their **cultural identities**

The strengthening of the globalization process, mainly from the 1990's, has intensified the international competitive strategies of dominant industrial oligopolies in world markets, altering structures of industrial parks

Multinational corporations have developed a non-centric relationship with their subsidiaries. Many of them have adopted an organizational strategy approach based on the diversity of the various contexts where they have been active, thus allowing their local units to have an organizational autonomy, as argued by Bartlett and Ghoshal

Electrolux and Whirlpool, the world's major home appliances producers at present, both have maintained regional centers of design, which have been different from each other, in terms of working organization and product design despite being linked to general corporate guidelines

For the Brazilian market, Electrolux proposed – at first and in parallel with strategies for the development of "global" products and interchange of components - some specific design guideline:

- 1) adequacy to existent products;
- 2) strong aesthetic appeal;
- 3) functionality;
- 4) low cost products

Such guidelines are based on certain characteristics of Brazilian consumer.

Japanese refrigerators are usually more compartmented than European and American ones, due to the difference that exists between them, in terms of practical requirements.

Example of Japanese refrigerator



In relation to symbolic requirements,

the shelf configuration of refrigerators that have been developed for the German and Swedish markets, for example, use to be simpler and more linear than those for the Brazilian market for which the design is usually more detailed and organic.

Example of Swedish refrigerator



Example of Brazilian refrigerator



Designers from Electrolux's and Whirlpool's Brazilian subsidiaries assert that the cultural diversity has also been reflected within the work organization.Brazilian designers, usually present more flexibility in the performance of various activities in the design process, such as developing renderings, mock-ups and presentations of proposals, amongst others

Regional centralization of product development has also delimited in certain way the particularization of the design, according to the various local contexts.

In the context of design wisdom, going beyond the frontiers of reductionist discourses we would like to consider on of the more troublesome contemporary social problem and rethink its relationshi with design products

There is a significant portion of the population that still has not had access to consumer markets, thus being forced to search for palliative and usually inadequate solutions, in terms of dwelling-place, for example, by redesigning some discarded products, thus creating the informal habitat and everyday life objects

These informal habitats created by the homeless in global cities, such as São Paulo, Los Angeles and Tokyo, are of high visibility. With their spontaneous living arrangements and everyday life products homeless people have transformed the concept of the city

The product of the **spontaneous** design is very present on the streets in urban centers across the world, is completely integrated in our daily life, such as small cars, pushcarts and wooden wagons used by the homeless recycler.

The material environment of the homeless culture is constructed from the trash of our technological and industrialized culture, creating plastic and cardboard cities that are part of our daily life.

Facing the experience of diving vertiginously into the shadows, into the depth of the material that allows the construction of a fragile habitat, moved by the need of shelter, the use of salvaged materials and products to build their habitats allows them to express their creativity and ingenuity, as well as generate income through recycling

For a long time the informal habitats have been associated with Third World cities, **but** in the latter part of the past century some of these

cardboard and plastic cities

began to appear in the world's major cities, exposing to the public the miserable status of huge numbers of homeless people in their community and

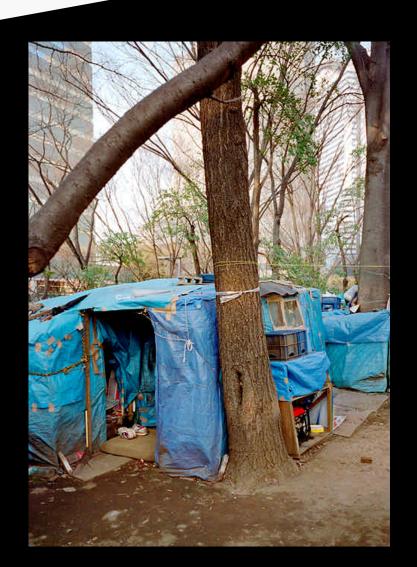
araund tha world

Below we present some images on discarded products, design and homelessness in global cities

Nishi-Shinjuku Homeless



Nishi-Shinjuku Homeless



Homeless laundry - City Hall



These images are not only an alarming symptom of the present situation of the homeless and their desperate search for shelter and life protection, but are also the portraits of the homeless from different countries and cultures We hope these images create an awareness of the dimensions of the lives of the **homeless** in the urban context, making their plight more visible and demonstrating that research on homelessness and design, as well as comparative research are urgently needed

Problems like that emphasize the importance of being more attentive, in relation to the products lifecycle, as well as that designers and other professional involved in products development have social responsibility and commitment when developing artifacts for society

The search for more adequate answers to the issue of knowledge in design is therefore **fundamental**

The approach of design must be related to the human being, to the material culture and to the environment in an interdependent and integrated way

According to Humberto Maturana R. e Francisco Varela G., "every act of learning produces a world" and "the phenomenon of learning is an integrated whole"

Based on this understanding, we emphasize that design knowledge must be developed and act basically aiming to contribute to people's emancipation, self-realization, self-organization and improvement

Moreover, they must promote cooperative relations in society as a whole, making easier the harmonic interaction between people and societies, as well as the integration of systemic components in all levels of organization

Design and knowledge must indeed be considered from an interpretative perspective of the complexity of the world

Complexity, as observed by Silvia Pizzocaro, "cannot be experienced if acting within the conventional disciplinary boundaries", but in the multidimensional intercessions of technological, scientific, epistemological, philosophical and anthropological questions

FINAL CONSIDERATIONS

Design education, research and practice still present significant links with the positivist paradigm It is necessary to rethink their strategies, structures and actions, through the development of transdisciplinarity, of studies and projects for the real world, especially

attentive to peripheral societies

It is essential to adopt an interpretative approach in design, considering the complexity that characterizes life within a world where diversity must be focused on the fulfilling of people's requirements for artifacts, from an approach of cultural responsibility and social commitment

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