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VERNAVULAR DESIGN: CULTURAL DIVERSITY AND OTHER MEANINGS

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ABSTRACT

This paper presents results of a doctoral research about vernacular design and possible interactions with professional and academic design. By using ethnographic research techniques we registered practices and material expressions of local culture in farming and fishermen communities in the region of Barra do Rio Mamanguape, situated in Paraíba, Northeast of Brasil. Then we interpreted meanings embedded in their material culture able to stimulate a more responsible design culture regarding to sociocultural and environmental questions and systematized a set of correspondent practices. The analysis shows that vernacular design is based on a series of practices that can be replicated or reinterpreted particularly with the objective of making design material solutions more culturally adapted which in turn can represent a material world more diverse and suited to social and environment aspects.

Keywords: Vernacular design, design, cultural diversity, environment

1 INTRODUCTION

It is already spread out that we live a transition period for new ways of thinking and acting due to the unsustainability of our lifestyle. We can choose face the challenge and try to embrace new values and behaviors for a happier and perennial experience of life or we could “let it roll” and just resign the opportunity of taking part of a fundamental creative effort to rethink the course of humanity

This paper fits in the first perspective and attempts to get aligned with an epistemology that is still under construction and that embraces the cultural diversity dialogue to mould integrative knowledge about reality and urgent socioenvironmental issues.

Design has a responsibility to take up – to strengthen the socioenvironmental meaning in its culture and practices. And we think that learning from different cultures and from the way they deal with material dimension of life can be very fruitful for that.

Many studies have been held in vernacular design discussing the possibilities of its interaction to professional/academic design (e.g. REITAN, 2007; HERNÁNDEZ, 2014). In this trend, we suggest the epistemic dialogue between design and non urban/industrial cultures. We analyzed artisanal production of artifacts in farming and fishermen villages from Brazilian Northeast – both qualitative data about production and the identified artifacts themselves. We described some artifacts and then we interpreted embedded meanings able to stimulate designers' self criticism about some important responsibilities in material world production. Practices of vernacular design were graphically systematized in order to show its pertinence to other contexts of application.

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We begin by presenting some of the interdisciplinary theoretical contribution about the integrative epistemology trend. It establishes the basis for discussions about consistent changes in our way to think and act through the appreciation of epistemic diversity - including in design.

2 DESIGN BEYOND DISCIPLINE

Comprehension of world phenomena has always been an aspiration of mankind and the diversity of cultures spread throughout the globe represents a heterogeneous set of ways to understand it. Despite this, in the course of history, western modern science became the prevailing model to depict reality and has led the repertoires of experiences gained by man outside the scientific circle to lose credibility.

Global socioenvironmental dynamics triggers attention to prevalent worldview and arises important questions concerning humanity's future. Many authors believe that there is a serious conflict between fundamental beliefs of modern science and the perspective of (re)construction of cultures of wellbeing and quality of life, considering the relevant state of crisis we face and its relations with emerged values in globalized contemporaneity (e.g. LEFF, 2009; SANTOS, 2000).

In this context, contemporary epistemologists foresee a change in the way we depict reality and nature. Leff (2002) envisions the emergence of a more complex thought pattern and of an interdisciplinary research methodology as elements for a new epistemology able to provide the basis for changes in our worldview. He suggests a rational that is open to diversity, to interdependence, and to complexity. A way of thinking that is aware of social conflicts and oriented by values for ecological sustainability of development, social equity, democracy, and cultural diversity.

Acceptance of cultural diversity - by means of a dialogical relationship with other forms of knowledge - lies among the fundamental epistemological strategies for the construction of this paradigm (LEFF, 2002; SANTOS, 2000).

This epistemological strategy aims to understand the reality from distinct views about the world. The question is, therefore, searching for alternatives of life reproduction when facing socioenvironmental difficulties generated by the predominant way of thinking in the western world (RIBEIRO et al. 2011).

Thus, to build knowledge through dialogue with world epistemic diversity it is fundamental to overcome values that deny history and accumulated knowledge by man in diverse contexts of sociocultural reproduction and environmental interaction.

In design theory we have important thinkers that nurtured these ideas. They are embedded in terms like vernacular design, "non-professional design" (PACEY, 1992), "pre-design" (MAGALHÃES, 1997) and "spontaneous design" (SANTOS, 2003), understood as material solutions that transcend the academic and institutional contexts.

By the 1940s, Papanek had already offered an integrating view on design, having searched for contact with other cultures, such as the Inuit, and having

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observed their material solutions to facilitate survival in harsh environments or, in his own words, "working solutions immediately applicable to real-world problems" (PAPANEK, p.249, 1995).

Santos (2003) developed the subject focusing on urban social groups and understood "spontaneous design" as "the practice of creative resistance to search for inventive solutions applicable to solving concrete problems in a context of severe resource scarcity" (SANTOS, 2003).

Santos (2003), like Papanek (1995), extends the understanding of design beyond an academic view, searching for the spontaneous social responses in which individuals seek to meet their own material needs and, in the case of her study, enabling their survival in the face of severe situation of social exclusion.

Walker (2002) also discussed a way of thinking design in interaction with non-institutionalized knowledge categories. According to Walker (2002), vernacular design refers to the production of artifacts by traditional cultures, characterized by creativity, use of limited resources available in their environment and with a strong symbolic value often embedded in the objects, whose values exceed the functional benefits.

The author highlights the "characteristic of improvisation" of vernacular design that enables creative solutions fitted to contingent realities of limited resources and also draws attention to the local dimension of this kind of design. In his words "Vernacular design can provide us with at least some insights into the diversity and richness of locally appropriate design" (WALKER, 2002, p.8).

Manzini's (2013) perspective about co-creation in design can also be comprehended as a way of including non-professional or academic designers in the conception of material culture, as the author says, by a "diffuse design". He draws attention to the "coalitions" in the "era of network and sustainability" as a way to strengthen the dimensions of problem solving and sense making in design practice.

For this, Manzini (2013) highlights the value of social resources – by means of its critical sense, creativity and practical sense - as an active power to recreate design, arguing that design is a human capability that everybody has. By these means, Manzini encourages projects for social innovation and sustainable ways of living through collaborative initiatives that enhance wellbeing - understood not as richness or abundance, but as healthy ecosystems and relational goods.

3 VERNACULAR DESIGN: FROM ETHNOGRAPHIC RESEARCH TO APPLICABLE PRACTICES

Human culture is manifested in multiple forms over time and across space. Such plurality comes from specific references and peculiarities of experienced social context and is also articulated with the environment's diversity (VIERTLER, 2002).

Since the end of nineteenth century, anthropologists embraced the ethnographic method developed by Bronislaw Malinowski, to try to understand peculiar lifestyles and different cultures around the world (ANGROSINO, 2009).

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Ethnography is the “art and the science of describing a human group – its institutions, interpersonal behaviors, material production, and beliefs” (ANGROSINO, 2009, p.30). This method relies on field research, mostly in detailed participant-observations of behavior and in-depth interviews (ANGROSINO, 2009).

Regarding the profound differences in the use of such methods in these two areas, both Business and Academia have valorized ethnographic research techniques. Industrial design has applied it in order to enhance product and systems development and researchers have discussed design processes based on studies about interactions between humans and artifacts (PLOWMAN, 2003; ONO, 2007). In different ways, design practice and design academic research have recognized the importance of understanding cultures – habits, practices, traditions, tastes and so on.

From results of a doctoral research based on ethnographic research techniques¹, here we discuss how cultural diversity expressions can help us to improve designer’s activity, considering social and environmental values. We describe the identified vernacular design production and reflect about its meanings providing some useful insights that can help to enrich design practice and material culture.

Brazilian sociodiversity is not studied as much as its biodiversity. According to Diegues (2005), Brazilian cultural diversity gathers at least 215 indigenous groups, with more than 170 different languages, plus a dozen of traditional communities, from miscegenation between local indigenous people, enslaved Africans and European settlers. Among them we have the *caipiras*, *caboclos*, *caiçaras*, *ribeirinhos* and artisanal fishermen communities.

These are commonly known as traditional societies, but each of them has its peculiar culture and traditions. They differ from urban societies for being associated with a way of production in which labor force and nature itself are not seen as objects of purchase and sale, besides their great dependence on natural resources and the cycles of nature. They develop a small mercantile production, where the dependence on the market already exists, although it is not complete, and its activities are not directly profit oriented (DIEGUES, 1994).

We studied the lifestyle of small Brazilian farming and fishermen villages in Barra do Rio Mamanguape area, situated in the state of Paraíba, Northeast. This populations can be considered “traditional societies”, as they are established in that territory for a long period of time and because their peculiar lifestyle. This population fuses cultural attributes from Potiguaras (indigenous people originally settled in this region before the arrival of European explorers), with African and European that arrived in colonial period (16th Century).

Local lifestyle is adapted to the peculiarities of occupied environments and the relationships with the available natural resources. The majority of the communities is located in rural environments and interacts directly with the diverse ecosystems –that is an estuary area with mangrove habitats, islands and

¹ Doctoral research supervised by Prof. Maria Cecília Loschiavo dos Santos and Fapesp Scholarship n. 2011/21336-1.

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islets (the latter formed by sandy clay loam banks), surrounded by reefs, Atlantic forest areas, dunes and other landscapes.

These communities also interact with urban lifestyle due to the proximity to urban areas and also for the modernization and globalization - mainly through the media, trade relationships and the search for alternative work.

According to Morales (2008), artisanal production today occurs in two different realities: the first is the indigenous and farming communities, in which the artifacts are produced to complement the farming and domestic activities, characterized by low investment in raw material and the objective of supplying local needs; and the kind other provides specialized markets in its diversified demands.

In Barra do Rio Mamanguape region, artisanal production of artifacts is deeply related to local demand for domestic and subsistence activities, this is the first category defined by Morales (2008). And as explained by Martins (1978), the necessity to answer a function and the frequency of its incidence determine an artisan production in a community. In this area, the productive activities of fishing, agriculture and gathering made arise a material culture integrated to these kinds of work, as well as to the environments in which they are practiced – the rivers, mangrove, sea, forests and domestic areas.

Artifacts are produced by artisans on their own, made by request in a slow pace that follows the personal demand of the producer or the buyers request – people from the same community or from nearby villages.

Not by chance, their design is clear and objective and that practicality in use is a serious priority. Thus, there is no place for superfluous elements or for creation of countless versions of the same object to achieve the same end, as occurs in design for mass production. Such practice also does not result in virgin natural resources loss, super generation of waste or habitats degeneration.

Oral tradition in knowledge transfer, observation and trial and error processes characterize the learning of artisanal production. Also, the regional availability of natural resources is directly related to this kind of practice (MARTINS, 1978; VIDAL & SILVA, 1995). In the case studied, materials come from the forests (e.g. parts of plants) and its use is part of a transgenerational dynamics of knowledge and technique building about natural resources and environments.

This interaction leads to an empirical comprehension of the environment that combines a body of traditional ecological knowledge (BERKES & FOLKE, 1998) techniques and skills, as well as the notion of complementarity and dependence in relation to the environment and its resources. This interaction with ecosystems also widens the sense of belongingness, of being part of these systems, opposing to anthropocentrism and individualism that are predominant in the urban context.

The artifacts gather the meanings of man and nature integration and cooperation which are also represented by the tangled straws, splints and slats joined by insertion, ties or joints to deliver the totality of a functional object. Also, the sense of flow and respect in the everyday relationships between these men and nature can be read in the spaces left between the pieces that, in

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different measures, allow the air, water and the gaze to pass through the artifacts.

Although the use decrease caused by modernization, the objects more frequently produced today are the baskets, the 'samburás' (a peculiar kind of basket), the brooms, the 'urupemas' (a kind of sieve) and the 'covos' (a fishing trap).

The 'urupema' [Figure 1(a)] is a sieve made in variable sizes and its use is related to the cassava processing method, mainly to the artisanal flour production. It is also useful to make tapioca and corn food, like couscous, and for washing fishes and shellfishes.

The 'covo' [Figure 1(b)] is a trap to catch fishes and shrimps in the mangroves and rivers. The fisherman puts the 'covo' in the river bottom and leaves it there for one night, while baits inside it attract the prey.

The predominant technique is the weaving, whose origins date back to the early days of mankind and refers to the intense relationship between Brazilian indigenous people and nature (VIDAL & SILVA, 1995). The products of weaving hold simultaneously rustic and delicate features that refer to rural lifestyle, characterized by the use of natural materials and simple technologies. It also represents the artisan's care and dedication to accuracy and uniformity in weaving measurements and moves. If not so, the artifacts would not get firmness and durability, or simply "would not work", as they say.

This material legacy makes it impossible to remember ideas like planned obsolescence. The constructive quality and the selected materials work to the durability of the artifacts and are priorities to the artisan – the opposite is not worth it, since the objects are essential tools to subsistence activities to him, his family and neighbors. Besides, many times the material extraction requires long distances of walking and heavy work in dense forests under many risks.

This production also aggregates the artisan's experience in handling the artifact he makes, since in that region artisanal production is an associated practice to other main productive activities. This means that for several generations the producers experienced these tools directly in their tasks leading to empirical improvements in the course of time. These objects represent collective appropriations made by anonymous actors in a co-creation process that crossed several generations.

Although the artisans produce successful products in the communities, profit does not overcome the social and cultural meaning of the artifacts. For many times the work is made even if the "client" just provides the material to the artisan's work and even if the "client" does not bring the materials or pay for the service, the artisan does not deny himself to make the artifact.

Other aspect of this artisanal activity in Barra do Rio Mamanguape is that it is part of a health and quality of life plan – the artisans work also for pleasure and continue to work at an elderly age so they don't turn inactive to not get sick in that age, as some have explained.

Some changes affected the lifestyle of the villages of Barra do Rio Mamanguape in the course of history and had effects in traditional practices of artisanal

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artifacts production. Some of these were: the deforestation of large areas of Mata Atlântica (Brazilian forest biome) to sugar cane monoculture nearing the territory occupied by the native people; changes in lifestyle and access to new products by modernization and industrialization of cultures; and land use restrictions by the government environmental policies.

Those transformations could be noticed in a series of artifacts identified in field. Moreover they caused the extinction of another series of regional traditional artifacts, considering interviews with members of the communities and data from previous research (COSTA & COSTA, 1989).



Figure 1 – examples of vernacular design from Barra do Rio Mamanguape region: (a) urupema; (b) covo; (c) shoe; (d) covo.

The innovative artifacts documented are characterized by the fusion of traditional knowledge and techniques; local natural resources; new materials available (waste and other industrialized elements); and innovation in knowledge and techniques derived from the access to other materials and artisan creativity.

Figure 1(c) shows a shoe created to protect the crab catcher's feet in the mangrove, an environment that offer risks like slippery mud, hidden pointed roots and cutting oyster shells. The tire chamber rubber was used by the artisan to avoid injuries in his feet and to enhance his stability on the mud.

Figure 1(d) presents a "covo" made by the reuse of PET bottles that are now part of local everyday life. The trap goal is the same as the traditional version and its construction follows the same principles: two apertures, one for the fishes to enter and the other for the fisherman to remove the fishes plus internal conic elements that make fishes unable to escape. And to ensure that the object

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does not float, the artisans made little holes all over the trap, obtaining an effect similar to the traditional object.

The broom is another example of local vernacular design. It is a common household object and is locally used to clean unpaved backyards, as its bristles are practical to segregate small residues from the soil.

Figure 2 shows that the artisan kept a traditional material (coconut leaf) used in local brooms, and as innovations he reused the industrialized broomstick and new components (plastic deodorant container and pieces of wood and rubber from tire chamber) to improve durability and functionality. The plastic tube fixes the bristles for a longer period of time and the wooden plaque with the rubber divides the bristles giving the broom a garden rake effect. The origin of the plastic tubes is another interesting thing about this artifact. They come from the neighbors that save it after use for the artisan.



Figure 2: Broom

These artifacts make us notice that the hybrid artisanal production maintains the social meaning of traditional material culture and add to its legacy a resilience aspect. Even in face of serious adversities that affected local lifestyle and threatened its material expressions, those people continued their sociocultural reproduction. New solutions were presented to everyday tasks that are suitably contextualized in that region, also motivated by the autonomy of that culture.

These “hybrid artifacts” (BURKE, 2003) represent an adaptation to the several environmental and sociocultural transformations in the region and correspond to a persevering attempt to proceed with the sociocultural reproduction, even in face of many factors that inhibit it and make it dependent from the urban, industrial and globalized context.

The access to waste from industrial consumption (from their own use or the ones increasingly found in nature) made artisans appropriate it and manipulate

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its discard meaning. They promoted a fusion of things that were apparently useless with traditional knowledge, techniques and habits (embedded of constant and close contact to nature and subsistence social meaning) to materialize innovative solutions.

Figure 3 summarizes the identified vernacular practices that can be replicated and reinterpreted in other contexts so it can benefit different societies and environments.



Figure 3: Graphical representation of vernacular design practices and outcomes

Some of those practices are sociocultural outcomes per se or are linked to meanings of cultural diversity conservation or social empowerment (e.g. traditional knowledge use and transmission, community participation, elderly engaging, local commerce, artisanal work, supplying of artifacts suited to local needs). And some of them can be related to positive effects on environment (e.g. artifacts produced from a combination of reused components and abundant natural resources and local resources use).

4 CONSIDERATIONS

The design culture we envision is based on values of cultural diversity and socioenvironmental issues as priorities. As we observed, vernacular design has a

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great potential to enrich professional and academic design projects and different communities in this direction. Vernacular expressions are particularly replete of local adapted practices of designing, which in turn are important to build a more culturally diverse and environmentally healthy material culture.

Ethnographic research techniques allow us to better know different practices and behaviors about man and material world relationship, and widen the repertoire of responses for many kinds of problems.

Aligned to that, in order to add those kind of meanings in designers formation, it is crucial to recognize that in our period of transition "priorities such as technological innovation, ergonomics, mass production of uniform products for wide distribution to international markets, and even economic viability can, indeed must, be at least temporarily set aside so as to more freely develop design possibilities that embrace and are expressive of new sensibilities" (WALKER, 2011, p. 20).

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