

Submission 1

DESIGN FOR SOCIAL RESPONSIBILITY: Perspectives on students' work

by

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Abstract – This paper seeks to analyze the educational experience on design for social responsibility conducted at the University of Sao Paulo, Brazil, during 2003 and 2004. I will analyze the main aspects of the discipline AUP 473 “Design of Urban Artifacts: focusing on the social-spatial inclusion”.

Introduction

During the past decade the debate on the role of design and its contribution to problematic social contexts has increased across the world, constituting a field of inquiry of high importance to design knowledge. In countries such as Brazil, particularly, contemporary poverty has become worse with the alarming increasing of the urban population. The level of poverty means millions of people living in unbearable conditions in cities, in high risk areas such as the banks of rivers, in “favelas”, shanty towns, and slums, while there are thousands of abandoned street children, unacceptably low levels of public health provision, basic education, and violence against landless peasants and urban homelessness.

In this context, it is important to define a proper body of design knowledge, as well as the corresponding pedagogical strategies, which will allow students to cross class boundaries in order to achieve the development and evaluation of socially responsible products, as well as a re-conceptualization of design practice and education.

Design of Urban Artifacts: a pedagogical practice

The aim of this paper is to analyze the educational experience on design for social responsibility conducted at the University of Sao Paulo, Brazil, during 2003 and 2004. I will analyze the main aspects of the discipline AUP 473 “Design of Urban Artifacts: focusing on the social-spatial inclusion” and the different projects presented by undergraduate students, ranging from urban artifacts that could minimize the conflict between a recycling cooperative and its neighborhood, in order to facilitate their relationship, to the recycler work apparatus.

Also examined is an important and innovative design experience within a women’s craft cooperative, Banarte, which uses banana plant fiber, as a raw material.

The course AUP473 is an investigation of an urban area in Sao Paulo city, characterized by an intense social-spatial conflict, due to its various uses, particularly for the location of a cardboard and recyclable materials collectors’ cooperative. The key question of the course was to re-think the role of the design of urban artifacts as mediators of spatial, political and cultural conflicts. The emphasis of the course was for students to examine what roles designers and design plays in resolving or exacerbating social, political or economic issues?

A variety of topics were covered throughout the course, including design of urban artifacts, historic overview of design for society, aspects of theory of need, new trends in the production of urban artifacts. The course was organized as a seminar, including lectures and studio work. Students were required to visit the place, to read the physical and social-cultural environment, perceive its characteristics, identify problems or potentialities, and suggest possible design solutions or interventions. A number of short assignments were given to the students, which involved observation, documentation, analysis and critical interpretation. Upon completion of these assignments, the students presented their work in class and in the cooperative, and as a final assignment students presented a public exhibition of their work right in the area that was studied.

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The Cooperative – COOPAMARE



Figure 1 View of Coopamare – discarded products and materials to be selected



Figure 2 Soft drink plastic bottles already selected and processes

The increasing joblessness and homelessness in Brazil in the last 20 years has lead to the development of a new strategy of income generation: to overcome poverty. Some urban residents

have started up recycling activities, as their major means of subsistence. They mainly collect discarded mass produced objects and all kinds of recyclable materials. COOPAMARE is located in Sao Paulo city, under the Paulo VI viaduct, in the western part of the city, right at the intersection of Galeno de Almeida and João Moura streets. Permission to use of the land under the viaduct was a city government concession, but working conditions are precarious. Gradually the collectors have improved the situation and now they have electricity, running water, and restrooms. Collectors are engaged in the development of an environment -friendly economy as they clean the city. The materials they find are sorted and reintegrated into the productive cycle. Although they play an important role in urban waste management, they receive no health, housing, social security or education benefits. They are looked upon as dirty people, and even delinquents, rather than productive members of our society

The dynamics of the course – teaching and learning for change

In the dynamic of the course, the students' experience was a central component. Initially, the students had some preparatory lectures, in order to discuss issues of gender, class domination, privileges, social equality and how design historically conveyed these aspects and values. The diverse ways in which students' experiences were produced and organized was of great importance in order to understand a new paradigm for the production of design knowledge. Besides the traditional ways of the production of knowledge, it is important to stress an important aspect, which was the direct contact between the students and the collectors, and at different levels, the contact between the students and the neighborhood and the municipality. The contact with the collectors at the cooperative was a very rich and productive experience and the students quickly understood and evaluated the complexity of the problem. They were also stimulated to ask to what extent the design of urban artifacts acknowledges the complexity of multiple scales, between artifacts, processes, social need and urban context. From the point of view of the collectors, this course gave them the opportunity to convey their extensive knowledge on practical aspects of discarded materials, their knowledge on the selection process and the collection process. During the meetings with the students, the collectors provided students with important information, such as the durability of cardboard and its resistance to the weather; in which points of the city they can rescue certain types of material; the noise of the broken bottles and glass scraps, how they hamper the collector's working process, at the cooperative. For instance they have commented about Tetra-pack milk and juice packaging, with the frequent presence of residual contents, which cause fermentation, deterioration and an unpleasant smell, according to Anderson, one of the collectors.

According to Manoel, another collector:

"we can teach our practice to the students and the students can teach us the theory, no-one knows everything"².

The course made possible the confrontation and comparison of the knowledge of the students and the collectors, and how the transformation of both collectors' and students' actions in the process, required a re-thinking of the knowing process. This was illuminated by Paulo Freire's methodology and critical education concepts.

Paulo Freire tells that:

"Knowing, whatever its level, is not the act by which a Subject transformed into an object docilely and passively accepts the contents others give or impose on him or her. Knowledge, on the contrary, necessitates the curious presence of subjects confronted with the world. It requires their transforming action on reality. It demands a constant searching. It implies invention and re-invention. In the learning process the only person who really learns is s/he who appropriates what is learned, who apprehends and thereby re-invents that learning; s/he who is able to apply the appropriate learning to concrete existential situations. On the other hand, the person who is filled by another with "contents" whose meaning s/he is not aware of, which contradicts his or her way of being in the world, cannot learn because s/he is not challenged"³.

Another aspect worth stressing is the improvement of students' observational and analytical skills in reading the urban environment for which they have designed urban artifacts, communication systems, etc. They have begun to pay attention to certain parts of the city that are usually taken for granted or even segregated, such as the area used by the cooperative, under the viaduct, the central part of the conflict area, between the neighborhood and the collectors.

Students' work has provided an opportunity to consider alternatives to the main paradigm of market-oriented product design education that dominates design schools. This is especially important, considering that at present we can observe an explosive increase in the number of

² Meeting at COOPAMARE, November the 10th, 2004.

³ FREIRE, Paulo. Extension or communication. In. Education for critical consciousness. New York, Continuum, p.100-101.

design schools around the world. It was reported in 2000 that the total number of students in design was up 24% over the last 4 years⁴.

At the University of São Paulo, students enrolled in the course discussed here, were highly interested in the inclusion of particular forms of knowledge that have been ignored by the traditional design curriculum, and they are enthusiastically committed to a critical practice of design, thus enhancing their interpretations of the social and material world. The various meetings with the collectors brought out the issue of voices and sources of knowledge about design, raising the following questions; Whose design of history are we addressing. Whose history are we talking about? For whom are we designing? These questions raised another crucial aspect, how does the interaction with diverse cultural identities impact on the methods and objectives for which design students are designing?

These questions reinforce the need to support and implement educational programs on social design in Third World countries, in order to shift the educational paradigms of design education: from serving only the needs of market oriented suppliers and affluent consumers, to the needs of local native populations.

The approach or method used in the educational experience

The main aspects of methodology to respond to the focal questions of the course and to clarify what is the role and responsibility of designers in these extraordinary times Brazil is facing, in order to overcome poverty, hunger, and social-spatial exclusion was a combination of tools of design history with aspects of cultural and critical education, based on Paulo Freire's work. We have worked with Freire's idea that in today's global society education can not be indifferent to the reproduction of dominant ideologies. He argues against "progressive liberalism" and its passive acceptance of an unequal world, where unemployment, hunger and homelessness coexist with opulence. Students have demonstrated that the creative practice of design can be employed to improve social justice, as well as can promote difference and tolerance and create spaces for audiences to share their values during times of conflict.

In this course we began with the challenging situation of designing out of the mainstream agenda of design, as well as far away from the marketization of design education paradigms⁵. We have renewed a commitment to a critical design education process that is fundamental to the contemporary situation, and that was able to present an alternative design practice.

At this point, once again, Freire's concept of thinking critically has enlightened us, because, according to him conscientization [*conscientização*] is not considered as an end in itself, but is always joined by a meaningful praxis, which means that critical pedagogy concretely links theory and practice.

Within this context, the paper explores design knowledge production not as a form of knowledge transmission, but as a form of cultural politics, that can happen anywhere, both inside and outside the academy, not just in classroom or studios, but in any other places where people can congregate to share knowledge and share learning, on the basis of a problem-solving approach in order to creatively improve the quality of life of the populations in need. This not only challenges disciplinary boundaries, but also the institutional borders that shape design education, as well as re-defining the role of design education and the role of the public teacher as a cultural worker. Hence, in Brazil, questions regarding design education cannot be removed from issues such as homelessness, poverty, cardboard collectors, and environmental decay.

The main findings

The paper reflects upon the main products and out-puts from the students. They have created meaningful proposals, and have had important experiential learning opportunities around the theme of design and urban conflict, design and social justice, design and human rights, design and communication, as well as design and community development. They have worked with a wide variety of materials and strategies.

During this course we have widely discussed how critical design practices are important to deal with conflict, based on a collaborative and participatory process. The course has stressed the high importance of the collectors input and participation, either by their generous conversation, or by their open dialogue with the students. It is important to stress here that the dialogue between them was the key point of a successful pedagogical experience, because dialogue requires an equal participation of both sides, which involves the recognition and legitimization of the collectors as knowledgeable agents. In this process even the traditional teacher position as depositary of knowledge was re-shaped and we had an extraordinary opportunity to experience what Paulo Freire precisely explained as: "The mark of a successful educator is not skill in persuasion – but

⁴ According to The British Design Council, see UC Irvine School of Design Committee, 2002

⁵ An important analysis of marketization of design education and neoliberalism in New Zealand is a work in progress conducted by Amanda Bill. At The University of Auckland.

it is the ability to engage in dialogue, that educates in a mode of reciprocity". This pedagogical experience provided us a reflective and effective design learning process. It indicated that limits give us the impetus to making imaginative use of limited resources available and bring new solutions into design experience.

During the course each group made their presentation and the rest of the class, together with the collectors actively participated by asking questions and giving suggestions. Afterwards the students and collectors realized that they had developed a real comprehension of design alternatives re-using rescued materials and products from the city.

Below I present some of the projects developed by the students. Before presenting them, it is important to convey our feelings in words. We are tremendously thankful to the COOPAMARE collectors' community who have welcomed us in their working spaces and who have provided invaluable information and friendship to all of us.

Student's work: from observation, reflection to the design proposal

There is not the space here to detail the whole set of student's work realized during the courses, respectively in 2003⁶ and 2004⁷. I will analyze some projects in order to show the variety of student's design processes, abilities and learning styles. It is important to keep in mind that it is an undergraduate-level elective course, freely chosen by architecture students.

It is important to stress that during the course students have organized themselves in teams or individually. It was their responsibility to choose and develop a theme for their final project. They all selected something of high significance to them. Some students have worked with the re-use of materials, such as cardboard, tetra pack packaging, other students decided to concentrate on a communication design system focusing on the empowerment of the relationship between the community and the coop. Another young student focused on the production of a little cardboard fold seat.

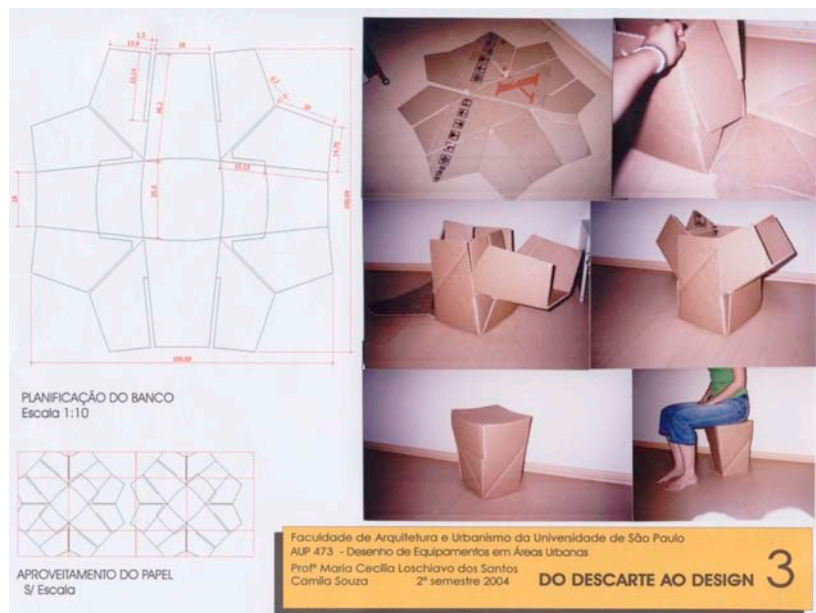


Figure 3 Cardboard Fold Seat

Another group of students designed a domestic waste container reusing tetra pack milk packing.

⁶ Students that participated in 2003 course - Miranda, C; Almeida, C.; Bracale, C.; Arruda, D.; Enoki, E.; Umakoshi, E.; Moraes, F.; Vargas, F.; Nagamatsu, F.; Ishyama, G.; Chammas, L.; Cara, M.; Vassao, P.; Moraes, R.; Kanayama, S.; Bortolato, T.; Carvalho, T.; Leonelli, C.; Ihara, E.; Cavalcante, L.; Endo, L.; Peres, A.

⁷ Students that participated in 2004 course – Ungaretti, A.; Sousa, A.; Minioli, A.; Oliveira, A.; Nogucgi, A.; Nascimento, A.; Silva, C.; Cunha, F.; Mendez, K.; Ishikawa, M.; Guerra, M.; Bingre, M.; Alasmar, P.; Miura, P.; Moraes, R.; Silva, T.

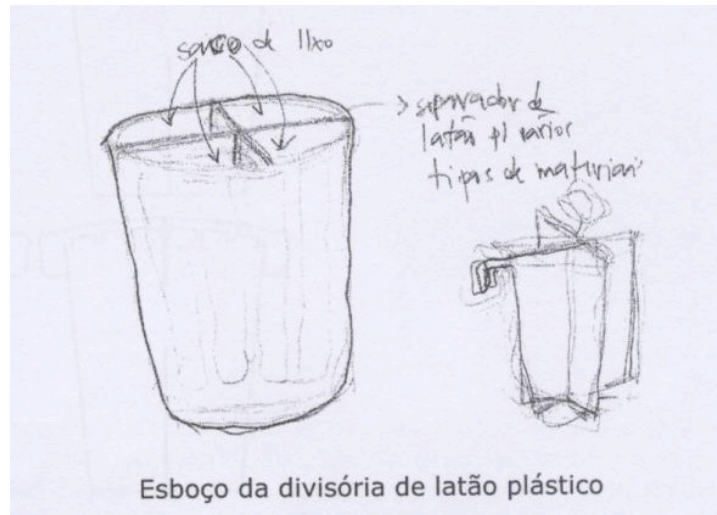


Figure 4 Domestic Waste Container

Two other students decided to concentrate on the production of a documentary video seeking to make visible the cooperative location and its relationship within the cityscape. Students prioritize collector's voice and faces, they have recorded the daily routine of the coop, seeking to re-design society's relation with the cooperative. Three other students decided to work through the process of role playing sessions with the collectors, questioning the diversity of society's responses to the collector, ranging from stigmatization, to feelings of solidarity with them. These sessions were of high importance in order to make possible to the students to put themselves in the collectors' position and to make them knowledgeable about their human drama in São Paulo metropolitan area.

One of the most outstanding projects was presented by a group of women's students, it is the cardboard modular structure. They have designed what they have called a spatial product, composed by cardboard modules in an equilateral triangle shape, making a semi-geodesic. The fitting of the modules is made with a screw that reuses the high part of plastic bottles and their caps, thus re-utilizing the material rescued by the collectors in their own favor, especially because the cardboard modular structure for multiple uses (Figure 5) was designed to meet different demands of the collectors, such as an exhibit space to show their work and to congregate them in the struggle of the National Movement of Recycled Collectors, which is engaged in the development of a solidary economy to generate income, through the organization of recycling cooperatives. The modules and screw production feature simplicity and are hand made, thus providing the collectors with a simple production technique.

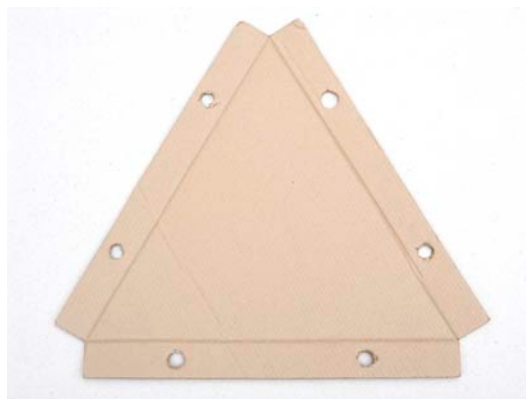




Figure 5 cardboard modular structure for multiple uses

When I initiated the course in the year 2003, students have presented a variety of projects, such as: proposing different solutions in terms of design, including work apparatus, manufacturing of basic uniforms, t-shirts and caps, communication system and identity re-design (Figure 6), web design of internet sites publicizing the cooperative activities, design of vehicles for waste collection and management, recycling bins to create a transition zone between the local community and the cooperative, where both can meet and better know each other, so that the social conflicts will diminish, wooden wagon PET cover (Figure 7), design of a recycling factory, tetra pack and cardboard recycled boards, as well as some devices for collectors resting using reused tires (Figure 8). Finally another group designed a cardboard chair (Figure 9).



Figure 6 Identity Re-design

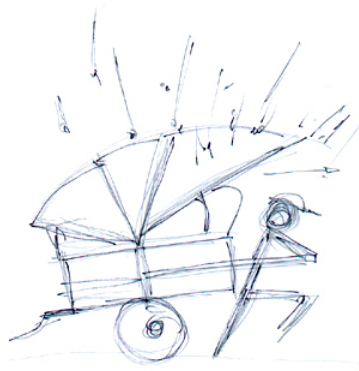


Figure 7 Wagon PET Cover

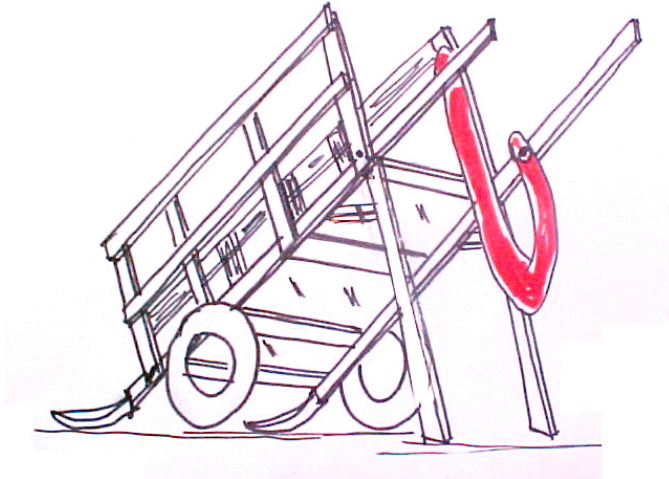


Figure 8 Collectors Resting Device

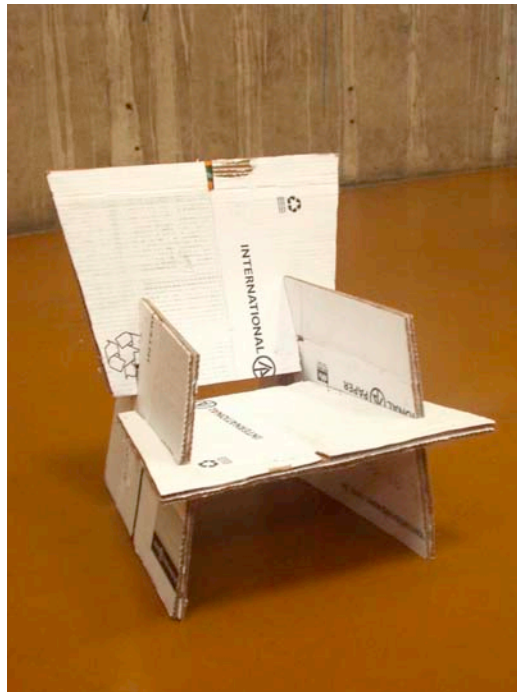


Figure 9 Reused Cardboard Chair

As a complementary analysis of the experience with coops, I would like to present the results of a final project, supervised by me, at the University of São Paulo⁸. It is an important and innovative design experience within a women's craft cooperative, Banarte, which uses banana plant fiber, as a raw material. The aim of this work is the design of a sustainable product with the participation of a local community of artisans located in Miracatu, in São Paulo state. It is important to stress that even though the banana plant fiber is abundant in Brazil, it is not much used for design solutions, leading the student to explore its uses as a furniture covering.

Final Comments

I am deeply grateful to my students who helped me to move between theory and practice, between idea and form. They provided me with a better understanding of their own learning process, such as learning by doing, learning by handling and manipulating materials, learning by critically exploring their environment, in all its dimensions.

During both experiences of 2003 and 2004, we have created a sense of community, in the classroom and at the cooperative. Together, students, teachers, collectors and social workers have enjoyed the powerful experience of discovering and learning about design.

The teaching of this course gave me an important opportunity to re-think about Paulo Freire and Ira Shor comment:

"The official pedagogy constructs them [students] as passive/aggressive characters. After years in dull transfer-of-knowledge classes, in boring courses filled with sedating teacher-talk, many have become non-participants, waiting for the teacher to set the rules and start narrating what to memorize. These students are silent because they no longer expect education to include the joy of learning, moments of passion or inspiration or comedy, or even that education will speak to the real conditions of their lives"⁹.

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Author's short biographical:

Maria Cecilia Loschiavo dos Santos is philosopher and associate professor of Design at the Faculty of Architecture and Urbanism, University of São Paulo. She achieved her master at University of São Paulo, Philosophy, in Aesthetics, 1985 and her Ph. D. at the University of São Paulo, Philosophy, in Aesthetics, 1993. She was visiting scholar, in postdoctoral program at the following universities: University of California, Los Angeles. School of Public Policy and Social Research, 1995-96; University of Campinas, Brazil, Institute of Philosophy and Human Sciences, 1997; Nihon University, Tokyo, College of Design and Arts, 1999; Canadian Center for Architecture, Postdoctoral, Architecture, 2001. She has had many articles published and is the

⁸ The graduation project conducted by Hino, D. in 2004.

⁹ Paulo Freire and Ira Shor, *A pedagogy for liberation: dialogues on transforming Education* (South Hadley, MA: Bergin and Garvey, 1987), p.122.

author of several books, among them *Móvel Moderno no Brasil*, which was sponsored by FAPESP and joint published by University of San Paulo Press and Studio Nobel in São Paulo. She is a scientific consultant for Brazilian Research Agencies, such as FAPESP, CAPES, FAPEMIG and CNPq. Currently she is the coordinator of the Workshop of Social Design at the Institute of Advanced Studies, at the University of Sao Paulo. Dr. Loschiavo dos Santos current research is about Discarded Products, Design and Homelessness in Global Cities and she is deeply committed to design and social responsibility issues. She was awarded with the First Prize by the Museu da Casa Brasileira, for her book *Móvel Moderno no Brasil*.

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