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Design and Ethnography on a Post-Tragedy Scenario

Intervention in the Itajaí Valley

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Climatic tragedies are becoming more frequent and intense. One of the most serious effects is the vast numbers of families who lose their homes and have no option but to go to temporary shelters. Those places are filled with plenty of problems. During 2011 we conducted a study using design and ethnography to assist those scenarios. We stayed in a temporary shelter for a period of time, and conducted a series of design workshops with multi-disciplinary teams formed in the spot. We identified problems, created alternatives, evaluated and implemented solutions. This article describes some of the effects of this research.

Problematic Scenario

Help and care for victims of climate tragedies usually starts with first aid and finishes with the social reinstatement of those who lost their homes. These actions are operated

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by multidisciplinary teams formed by technicians from all areas (civil defence, medicine, psychology, sociology) and many volunteers. At some point in this process, the homeless ones have no option but moving into adapted homes.

Even with a quick and depthless look on the post-floods situation on the Itajaí Valley in the Santa Catarina State, south of Brazil, which is where we conducted this research, we can already see degradation and a precarious scenario. In July 2010, two years after one of the biggest floods in the region, there were still 233 families living in temporary sheds and thousands of others living in houses rented by the prefecture.¹

The condominiums formed in those places are organized under a particular operation dynamics. In the Itajaí Valley's case, orientation and assistance at those temporary homes is offered by both the state's Civil Defense and SEMASCRI, an organization to socially assist children and teenagers from Blumenau. The problems in those environments can be noticed from the very beginning of the help and care. As stated by Santa Catarina's Civil Defense Department coordinator, Major Émerson Emerin:

Not everything means they didn't go through our inspection. Therefore, we had problems such as deviation and dirty and damaged clothes' discard. And you need people for these trials. And the first week we had thousands of volunteers, the second week we had half of that has worked out as we planned. The donations control was a big issue. Some people took the donations straight to the affected cities, which, and after a month there's almost nobody left.²

During preparation for this research, we interviewed the SEMASCRI's director, Alessandra Fandaruff, who has stressed other kinds of problems, such as: low level of victims' self-esteem; family disruption; difficulties in accommodating with dignity a large number of people in improvised sheds which have no privacy and almost no comfort; communication failures between technicians and the families which prejudices the shelters' organization, leading to significant delays, making those places very hard environments to live in.

Inside this complex scenario there is also a main issue: those shelters, built on a temporary basis, frequently become perennial for varied periods of time. Those who inhabit these homes (both the victims and the technicians who work there) slowly find themselves in the middle of common routine dynamics. They need to find ways to manage their own demands which include: suppliers' distribution; medical services' organization; help and care services provided by sociologists, psychologists and pedagogues; hygiene planning, or in other words, the general coordination of the community environment. The problem is, the dynamics that organize the shelters happen occasionally without a previously-arranged

plan. That diagnosis is emphasized by Jorge, the coordinator for the home we chose to do our research in: “we have got to adapt ourselves to what is going on. If something urgent shows up, we simply solve it. We don’t have time for many plans”. This happens for a few reasons. After all, the help and care work for such tragedies always has many variables such as: the nature of the destruction; the available resources; the number of involved professionals; the number of affected families, the time they will spend there and the general concerns that follow.

Methodology

The research was developed over two equally important axes. One is the ethnographic perspective. The other is design (understood according to design project methodologies such as Cross³ and Bonsiepe⁴ or by Burns et. al.⁵). The aim was to get design closer to ethnography, forming a mechanism to deal with the complex scenarios like the temporary shelters.

The ethnographic outlook involves the complex task of observing, from an outsider’s point of view, the investigated reality.⁶ This approach allowed us to follow closely the practices, the internal organization and the values that surround the everyday life in the shelters. The ethnographic field researcher attempts to conduct their research without unnecessary intermediations or distorted judgments. Information gathered on needs (from both the victims and the technicians) was sought to be accessed directly, without any outside evaluations.

To adopt the ethnographic procedure it is fundamental to inhabit the investigated context. Therefore, during one week, between the 6th and the 12th of June 2011, I lived, in an integrated way, with the CESBLU⁷ dwellers, in Blumenau. At this time the shelter was inhabited by 42 families, which summed about 200 people, and 8 other SEMASCRI employees who worked on a rotation basis to help and care for the victims. My intention was to integrate myself completely into their normal routine. I slept where they slept. I shared their meals. I used the common areas. I participated in the cleaning and organization activities. I helped the technicians to assist the families. I have accessed the employees’ week rota. I saw some of their values, their drama, their moments of joy and apprehension. I have approached, in other words, the dynamics and rhythms from that place, and was able to access their particular elements.

Another quality of the ethnographic perspective, which gradually revealed itself to be of outstanding importance, was the possibility of gaining empathy from the informing community. Since the first day I arrived, holding my suitcase and sleeping bag, to the final days, I noticed that the informers were interested in my research. The looks of suspicion and fear that I had caused in the early days slowly disappeared. Thus, those people were ready to reveal the minutiae of their reality and to contribute somehow to the work I was

doing there. Nevertheless, I have no doubt that the information I had access to and the willingness to help that was offered in the last days would not have been reached in the first ones. Once those favourable conditions were created, we could definitely get the design closer to that scenario, and experiment with it as an intervention.

Since we got into that point, we would like to underline the reasons why I trusted design as a tool that could help in that scenario. Design dynamics are associated with aspects of agility, collaboration and effectiveness. About this collaborative aspect, Cross provides us with an elucidative quote:

Large Projects demand an important aspect of design ability, that of reconciling the variety of interests – technical, financial, social, aesthetic, etc. – that inevitably have to coalesce around a major project. In these cases, designing becomes not just a personal, cognitive process, but a shared, social process.⁸

We believe, therefore, that designing is a way of: forming and working with multidisciplinary teams, identifying and separating the problems; searching necessary information to treat those problems; generating concepts and alternatives for solutions; making quick tests on those propositions by creating prototypes and real schemes; identifying necessary mechanisms so that the solutions are implemented and used.

For this research we have adopted a particular design approach. That perspective has been called Human-Centered Design (Krippendorff⁹ and Steen¹⁰).

Original Scenario Description, First Field Contact

When I arrived at CESBLU I was welcomed by Jorge, the shelter's general coordinator, who was waiting for me looking a little suspicious. Although he knew about the intentions of my research, he seemed not to believe I was insisting to live in that hostile environment for a week. So, carrying that impression, I left my belongings in an improvised room that was used as a base for the technicians, and followed Jorge on a walk to start being familiar with the place.

The shelter was functioning inside a building that used to be a school. The building looked abandoned, paint was peeling off the



Figure 1
Front of the building and inside of CESBLU.



Figure 2
Kitchen (1, 2, 3) and common bathrooms.

walls, infiltrations were in every corner, and mould was everywhere. The classrooms had been converted into apartments, separated by some rudimentary wooden enclosures. In each classroom, there were two or three apartments. In each apartment there lived a family, usually an adult couple and three or four children. In these places there was electricity, but no piped water or a bathroom. The 42 families that were living there had to share two improvised kitchens and four outdoors adapted bathrooms in containers.

During the days I spent there, every time I could I followed the help and care work the technicians were doing for the families. There were always at least two SEMASCRI employees staying there. One was responsible for security. The other one was a technician (usually from the social service and psycho-pedagogy areas). Both of them would go round on a daily basis visiting some of the people living there. These visits were to assist the inhabitants regarding issues that concerned them. One of the main issues was the procedure for the acquisition of new apartments, subsidized by a federal government habitation program. There was huge anticipation shared by all the victims who had lost their houses, over the day they could buy the apartments where they could make their homes permanently. During that slow process of uncertain waiting time (because some of the families would never satisfy the minimum requires of eligibility for the program) problems would come up. These included drug trafficking and drug-taking, alcoholism, under-aged abuse, depression, prostitution, violence, apartments' hygiene, families' hygiene, and the children's attendance at school.



Figure 3
Inside the apartments.

These issues were part of the everyday life of many of the families. No matter what the nature, or how bad the detected problem was, the help and care service was always provided by the specialist working there at the time. Thereby, it was common that a security technician would be dealing with cases such as prostitution or drug trafficking. Thus there was decoupling between the nature of the problem and the technical capacity of the one who had to deal with it. One way or another, the SEMASCRI employees were responsible for giving assistance to those families. And they did, using all that was available for them.

After a week living in that context, and feeling closer to the SEMASCRI workers and to the victims that were living in that place, I formed a team with a heterogeneous group of technicians and inhabitants for and the first design workshops.

Interventions

The first workshop was conducted five days after my arrival. I had assembled a ten-people team comprising two educators, two social assistants, a psychologist, the home coordinator, and four inhabitants of distinct profiles. All the members of the team were part of the context we were examining. The workshop took place in a small room which was used by the technical team, and it took approximately three hours. Purposely, I did not participate effectively in the workshop stages. I acted only as an organizer of the collaborative project section.

The workshop stages were: (a) identification of the problems related to the home; (b) transformation of these problems into challenges and; (c) generating alternatives for the challenges.

I requested initially that each participant identify at least five problems related to everyday life in that home. Those problems were to be written down on Post-it type cards and later attached to a regular desktop. After exposure, the problems were grouped according to requirements like thematic proximity and complexity. This resulted in the following groupings: (1) drug-taking related problems; (2) cleanliness and hygiene; (3) living aspects of the residents, such as warmth, education, cooperation, respect; (4) the assistance of the technical team or the government. After the classification, we tried to prioritize the problems in complexity and possibility to be



Figure 4
Participants involved with the first design workshop.

dealt with by our workshop. Once those aspects were evaluated, the team chose to deal with the problems of the apartments' cleanliness and hygiene. Participants understood that this kind of problem could be solved easily because its aspects were somehow reachable, which was not clear for the other problems (like drug-taking or the problems relating to state resources).

To transform the chosen problem into challenges, and to stimulate the generation of alternatives in a brainstorming session, I suggested the group think about “how can we...” solve the problem. Once again each participant was asked to write solutions on the Post-it notepads that were distributed, and then fix them again to the desk we shared. After the notes were organized and displayed, we had a debate about the solutions. It was decided that an artifact would be developed, which was called a “hygiene measurer”. It would be confectioned on a magnetized platform that could be displayed on the refrigerators in the apartments. It's useful to point that all the flats had brand new refrigerators that were donated by private companies. So, the magnetized card would be used to encourage the inhabitants to control the cleanliness of their apartments. The idea was to display images of a perfect clean apartment on one side and images of a dirty and messy one on the other. Linking both images would be a scale in which the inhabitant would rank the hygiene level of their home.

We built prototypes; we distributed the prototypes to ten families; we made tests during ten days; and we sought statements about the usage of the artifact. Quickly, we saw that there were problems of comprehension. The inhabitants said it was “too confusing” and told us they could not understand how it was supposed to be used. When we came back to the apartments, the prototypes were intact and had not been used at all. The inhabitants, a little embarrassed, slowly revealed that the artifact did not help them the way it was intended.

Therefore, we picked up the prototypes and conducted a second workshop. The participants evaluated the scale system between the clean and the dirty apartment images as being really confusing; the images were also considered not adequate because they were



Figure 5

Proposition generated at the first design workshop; sketches and prototype.



Figure 6
Second workshop: first proposition's verification and adjustments.

not representative of those people's reality. This meant there was no connection between the magnet images and the apartments inhabited by those people. The project team understood it was important to simplify the propositions. And they suggested that the images be replaced by abstract schemes, which could not be taken wrongly. The magnet surface was supposed to be constituted by "good-looking" graphic elements, so they could be used as a prominent visual object, associated with decorative attributes.

In the second workshop, the participants thought about another use for the artifact. Instead of being used as a hygiene measurer, it would work as a cleaning calendar. That proposition was approved by the participants, who saw it as something usual, frequent and easier to assimilate.

The proposition was still to develop a refrigerator magnet. It should be composed of an abstract and attractive surface design and be able to be used as a cleaning calendar. Other small magnets would represent the rooms in the apartment (bedroom, kitchen, laundry room, bathroom, living room). The calendar user would distribute the small magnets (each room) over the weekday that corresponded to the cleaning. The educators, who were part of the project team, highlighted the importance of including all family members in deciding together the distribution of rooms over the weekdays. To make them participants in this stage would be a way to include them naturally in the cleaning process.



Figure 7
Prototype of the projected calendar.

We developed prototypes that were again distributed to ten families for testing. As they were receiving the artifact, the educators instructed them on the importance of keeping the home cleanliness updated. We left the prototypes to be used for 15 days, and we visited the families to verify the project's pros and cons.

When we interviewed the technicians who had used the magnets during the help and care sessions, we got significant reports. According to Elenize Terezinha de Souza, who was part of the educators' group who assisted the families, the magnet "was important to explain in an easy way the significance of home-cleaning". The artifact brought agility to the assistance being given to those families. For Elenize, instruction on the importance of the apartments' hygiene usually took at least thirty minutes. According to her, that was reduced to half thanks to the operational and didactic qualities of the artifact.

When we returned to the apartments after the testing period, we managed to talk to some inhabitants who were using the artifact. For Lurdes, mother of Gabriel and Vinícius, the magnet stimulated the children to help with the cleaning. She determined that each of her children would be responsible for a magnet color (each color represented a room). Therefore, each child had autonomy to place the magnet on the weekday they were supposed to clean that specific room. The platform would remind the children of the agreement they had made with their mother.

Sonia and Pedro, parents to three children, said the magnet established another dynamic on the apartment's tidiness. "Before the magnets it was usual to leave the cleaning for later. Now we feel obliged to fulfil what we planned with the kids. Many times the children themselves remind us to clean that specific room. "They're always watching the calendar".

In all the visited apartments the magnet platform remained on the refrigerators, with clear signs that they were being used. The effects described by the participants were usually positive. Jorge,

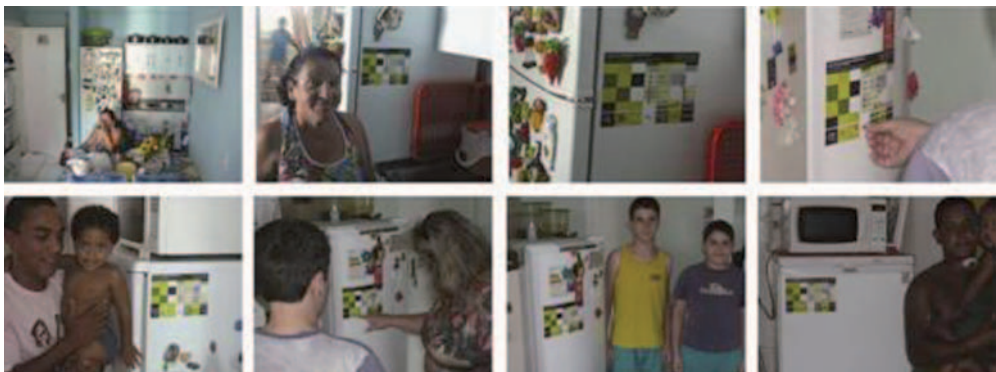


Figure 8

Prototype being tested in the apartments; educator giving instructions over the calendar usage.

the general coordinator for the home, emphasized the value of the artifact, because it made the technicians' instructions on the necessity to keep the apartment clean something real to the families: "it is different than just telling them to clean their houses. The magnet works as a reminder that stays on a place they see all the time... It is as somebody from SEMASCRI was always in their houses, as a watch-guard".

Partial Considerations

The involvement of the project team in each stage in the workshops was central. Proximity between the team and the artifact's context of use helped to reveal aspects that were difficult to reach. This is confirmed by the team's perception regarding the first proposition's inefficiency, for instance. The participants felt they were part of the problems and capable of cooperating in possible solutions. The technicians evaluated the activity as beneficial, and declared interest in using the design workshop dynamics in their everyday life.

Using an ethnographic approach followed by design workshops with a multidisciplinary team, we managed to identify many problems that existed in the temporary homes. We built a systematic context that related the identified problems to major thematic groups. We ranked importance and degrees of complexity for each group of problems. We selected problems that seemed to us to be amenable to intervention. We have considered ways to intervene in the chosen problems. We created prototypes. We undertook detailed testing, evaluation and improvement of the propositions. And we have projected real solutions into that catastrophic scenario.

Design and ethnography revealed themselves as ways to conciliate people of different profiles, languages and interests. These elements are, occasionally, hard to conciliate, given the differences mentioned above, and the emergency character of the place, in which the main issue is subsistence. In promoting collaborative work between agents of a heterogeneous group, we identified a relevant trading, sharing and socialization instrument; a way to transform complex scenarios, in which what is at stake are the most important aspects.

Notes

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