Social Design Labs: infrastructuring publics through microplanning and design networks

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Abstract

This paper presents the initial results of the doctoral research in design held at the Faculty of Architecture of the University of Lisbon, which is based on the possibility of expert and non-expert designers acting jointly in co-designing processes, which make the infrastructure of design networks feasible from the engagement of young that living, working or studying in neighborhoods stigmatised by poverty and social vulnerability. From January 2016, participatory design dynamics are being conducted in neighborhoods located in Lisbon, Portugal; and in São Luís do Maranhão, in Northeastern Brazil. Here we present the developments of the field study conducted in the Desterro region, the historic centre of São Luis do Maranhão, Brazil, where the LABDeS -Desterro Social Design Laboratory was constructed, a platform for collaborative research based on design experimentation which is intended to search for solutions to complex social problems.

The question that arises in this experiment is how to continue the LABDeS platform beyond its initial scope. This involves the responsibility to reflect and to define strategies to ensure that the participatory design initiatives can continue when the expert designers cease to operate in the design network, understanding how they start, operate and not least, how they leave a project. In other words, we question the sustainability of the participatory design project when the designers or design researchers no longer have the central role in these

initiatives. We understand the ability to establish lasting relationships between various stakeholders to promote continuous appropriation of the problems of a particular design network as project sustainability. At first, reflections are presented from the theoretical framework of participatory design, co-design, micro-planning, infrastructuring and living labs. After this first phase, as the LABDeS design network was established, which used the participatory design approach, guided by "bottom-up" decisions and "peer-to-peer interactions" involving designers, members of the Desterro neighbourhood community and other stakeholders. The results presented explain the difficulties for the engagement of young residents. Apathy and resentment caused by the lack of continuity of actions undertaken in the past, hidden agendas, conflicts of power, the need for leadership and the legitimacy of the established leaders, the scarcity of resources, the impact of the use of social networking tools and the influence of the power of drug trafficking are the challenges that are presented to the sustainability of the lab project. In the discussion of the issues, planning, participatory design and low complexity prototyping tools were used, Action Research being used for the collection of data for action in the field. We conclude the paper by discussing strategies to support designers and researchers in their practice for training, performance and sustainability of design networks.

Keywords: social design, design labs, infrastructuring, micro-planning, participatory design

1. Introduction

This article presents partial results of the research that is underway in the PhD in Design program of the Faculty of Architecture of the University of Lisbon, entitled Social Design Laboratories: infra-structuring of project networks in socially vulnerable neighborhoods, whose objective is to develop a Critical

reflection of the action of the expert designers who work on social design initiatives, using the concepts of micro-planning and public infrastructure. This is done through the design of project networks constituted as "laboratories of social design", which seek to encourage actions focused on local participatory processes, analyzing their training dynamics from the performance of youngsters between 15 and 24 years old, in order to seek Solutions to social problems and to the sustainability of the network itself.

Since January 2016 the researcher has been conducting participatory design dynamics in two socially vulnerable neighborhoods located in Amadora, Lisbon, Portugal; And in São Luís do Maranhão, northeastern Brazil. With this it has been possible to identify issues related to the demands and potentialities, as well as the complexity for the formation of project networks in these territories.

Thus, it is intended here to present the progress of the field experience, held in the neighborhood of Desterro, the challenges encountered, the ongoing and future activities, which support the need for this study.

The unfolding generated by the beginning of the fieldwork together with the bibliographical research, presented to the researcher the importance and complexity of the designer's performance in the formation of project networks in communities in situations of social vulnerability.

Thematic choice becomes relevant at a time when discussions about the use of design thinking, and its role in the social area, in addition to its participatory forms of action, expand significantly. In this context design is seen as either a craft or a specialized field of study, but it is also recognized as a common capacity inherent in almost all human endeavor.

This "capacity" or "feature" of design is called designerly, and is usually exercised when faced with environments, issues and problems that require a

solution, and we can change them guided by our wants and needs (Stolterman, 2008; Cross, 2011; Bannon and Ehn, 2013a).

This insight has broadened the importance and understanding of design. Manzini (2016) emphasizes this by stating that in the present day the term "design" assumes three different meanings. The first is "diffuse design", which refers to the natural human ability to adopt a design approach, which results from the combination of critical sense, creativity and practical sense. The second is the "specialist design" where we find the designers Professionals who, by definition, must be endowed with specific skills and design culture, and the latter is co-design, where we find the total design process resulting from the interaction of a variety of disciplines and stakeholders - end users and design experts Included.

This research is based on the possibility of specialist designers and non-specialists working together with other actors to create project networks that seek solutions to complex problems in neighborhoods that are in a situation of social vulnerability.

The myriad problems faced today require all people to "design" and "reproject" their everyday and lifestyles through a "complex and interwoven system of design processes that involves individuals, enterprises, non-profit organizations, institutions Local and global contexts that imagine and put into practice solutions to a variety of social and individual problems "(Tuomi, 2003, von Hippel, 2004 apud Manzini, 2008a, 96).

The complex problems we face are those that are open, without specific formulations, that do not have a restricted number of possible operations and solutions. This concept relates to the idea of "wicked problems" proposed by Horst Rittel in the 1960s, "social system problems that have been poorly formulated, where information is confusing, where there are many clients and

decision makers with conflicting values, And where the ramifications throughout the system are totally confused. " (Rittel, apud Buchanan, 1992, p.15).

Manzini emphasizes that the recognition of a large and complex problem must be faced not by seeking a single, large and complex solution, but by dividing them into "less complex and smaller-scale sub-issues" (Manzini, 2016a, p.56). This is possible when we "embrace complexity" as opposed to trying to control it through top-down hierarchical command structures (Green apud Manzini, 2016a).

For Josephine Green (2013, p.57 apud Manzini, 2016b), "social innovation shows us how to embrace complexity," and this occurs when local initiatives directly involve the people affected - that is, those who know the problem best and Are directly involved.

In this direction, the formation of design networks that use the participatory design approach, driven by bottom-up or peer-to-peer decisions involving designers, community members and other stakeholders can provide an effective way to achieve Solving complex problems.

Bannon and Ehn (2013b) argue that there is a renewed interest in understanding innovative bottom-up practices, which seek to examine in detail the vernacular manifestations of "improvisation", and to make use of available resources in areas with scarce resources. They also say that it is necessary to involve users and 'prototypes' in a project and to explore collaboratively potential future use, what they call design-after-design:

Designing for a continuous appropriation and redesign where infrastructure work becomes the main activity. Infrastructure is a central issue, since contemporary design requires extensive collaboration over time and among many stakeholders. (Bannon and Ehn, 2013c, p.57)

This infrastruc- ture-building activity called infrastructuring is a particular or practical form of participatory design that develops and provides resources and socio-material experiences through linkages with the aim of creating an audience oriented by an issue. (Dantec and DiSalvo, 2013a)

Infrastructure is supported by the distinction between participatory design focused on one immediate use and another focused on future use, structured in such a way as to create a fertile ground for sustaining a community of participants, which can bring light to issues related to the maintenance of design networks . In this sense, it works to create socio-technical resources that intentionally allow adoption and appropriation beyond the initial scope of the project, a process that can often include participants who are not present during the initial project (Dantec and DiSalvo, 2013b).

Karasti et al. (2008) complements by stating that infrastructuring has emerged as a way of promoting global community interests. Integrating with ongoing community activities and being incorporated into multiple contexts relevant to communities over extended periods.

Micro-planning is aligned for this purpose because it is a design process where development is based on the experience of communities. It allows the formulation and implementation of programs that promote the common sense in a local, fast and collaborative way. It is a "scaling" process, which is based on instituting the capacity to manage decisions locally, as well as to act from them, as well as to implement the project tasks (Goethert et al, 1992a).

In this way, it encourages the organization of actions, providing tools that allow the rapid development of plans in small and medium-sized communities, designed with broad participation. Where it incorporates several quick and simple techniques for the preparation of plans, besides its execution and monitoring, presupposing the necessity of a strategic planning allied to

spontaneous local action.

Micro-planning is a learning and training process built to move parallel to its implementation, following the principles of "learn-doing", and then collaborate to boost local development. (Gomez et al., 2007)

Goethert et al. (1992b) state that the assumptions of their methods are supported by the challenge of addressing four main issues. The first of these is related to implementation, because there is a lack of adequate framework for articulating the problems, definition of solutions, besides building consensus and teamwork.

The second is related to the level of mediation between public and private organizations, donors and implementers, as well as policies and projects. The third points out the lack of sufficient incentives for the production of non-standard local solutions. The last one deals with learning, which is not enough, and most of the time it is not aligned with practical actions, ending with bulky reports that are rarely used.

It was possible to observe in previous experiences of the researcher acting as a design consultant, that this last question constitutes one of the main reasons for a great feeling of frustration on the part of the inhabitants of communities that have undergone similar initiatives in the past, the lack of knowledge and capacity Articulation needed to implement the projects. And this constitutes a great barrier for the entry of new researchers or consultants in social design in the communities, by generating apathy and discredit for the engagement around new initiatives.

What happens is that some of these processes when put into action, leave out the people who will be affected by their results. The principle of participatory planning and design is important here, therefore, in two ways.

It is important from the technical point of view as a way to increase the efficiency of creation, production, administration and maintenance. And also

from the social point of view, because without a great measure of self-determination, ownership, and control, people will generally be expecting a "savior," someone who comes out of nowhere and solves that presented question. And when, as happens most of the time, this person does not appear, they enter into a state of apathy and resentment, deteriorating environments quickly in the physical, political, and social sense (Goethert et al, 1992c).

Aiming at understanding these issues, the general objective of this research is to develop a critical reflection of the methodologies used in Social Design initiatives, where micro-planning and the infrastructures of publics to design project networks led by young people who live, study or work in neighborhoods in situation of Social vulnerability, seeking to solve demands and potentialize opportunities, observing and analyzing the interaction nature of its actors and processes and how they can achieve a project sustainability.

The territory where the fieldwork has been developed since January 2016 was chosen from an experience of the researcher in the year 2007, when at the time he acted as design consultant for SEBRAE - Brazilian Service of Support to Micro and Small Enterprises , In a project called "Sustain" to stimulate sustainable local development through the valorisation of cultural diversity in the district of Desterro, located in the region of the Historic Center of São Luís do Maranhão (IPEA, 2006).

This experience has brought the researcher closer to the region's leaders and residents, which could contribute to a new approach. This option to act in a field where there are "known people" may facilitate access to other residents of the neighborhood. This freedom of choice of the researcher is important because "social closeness and familiarity effectively ensure two of the main conditions of nonviolent communication" (Bourdieu, 1997, p.697).

These conditions allow the investigator to give guarantees so that the investigated person has "freedom to speak without threats and an agreement, even non-verbal, on the content and forms of communication" (Felippe, 2004, p.14).

Desterro is located in the historical center of São Luís, and is a neighborhood that forms part of the initial nucleus of the city. It consists of the urban complex that also includes the neighborhood of Praia Grande, where the second was the large commercial center of São Luís, the first being residential and port support (SÃO LUÍS, 2005 apud Noronha, Oliveira and Rodrigues, 2008) (figure 1).

While in the eighteenth and nineteenth centuries Praia Grande was a neighborhood of Portuguese merchants, Desterro was inhabited by Brazilians, people with less noble occupations, usually related to work in the port, and other functions such as caulking, locksmiths, Carpenters, practitioners, among others (SÃO LUÍS, 2005).

Desterro carries innumerable stigmas since its foundation. From a poor neighborhood that supplied labor to the region of Praia Grande, it was later linked to prostitution, and today it suffers from an image linked to violence and trafficking and drug use.

Figure 1. Region of Praia Grande and Desterro. Adapted from São Luís (2005) and Ferreira (2012) in Google Earth image.

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For many, the neighborhood is considered a dangerous place to avoid, a forbidden area, a no-go area where crime, marginality and moral degradation are present, and only members with less value to society (Wacquant, 2007; Gustafson, 2011).

Almost ten years after the investigator's first contact with the Desterro community, stigma persists, encouraged by the public image related to the growing deterioration of many of its historical constructions, caused by the absence of public policies to preserve the memory of the region, Presence of trafficking and drug users.

However, as was seen in 2007 when the Sustentar project was developed, it is still possible to identify a great cultural and creative potential in the community of Desterro, expressed through its manifestations and ways of life.

It is important to emphasize that Desterro preserves its traditions through the expression of diverse manifestations, such as: storytellers, folk dances groups, traditional cuisine, the samba school Flor do Samba, founded in 1939; The feasts of the saints in the month of June; And the Orixás procession held every year on September 8, when the foundation of the city of São Luís is celebrated.

The neighborhood also has a network of small services that include graphics, visual communication companies, paint and handicraft workshops, bars and snack bars, theater groups, recording studios, among others. The perimeter of the neighborhood is the Church of São José do Desterro, the first to be built in the city; Public institutions, educational institutions, as well as the Convento das Mercês, a building of great historical value and with a strong tourist appeal (Figure 2).

Figure 2. Aerial view of the Convento das Mercês, construction of 1654, in the image decorated for the feasts of the saints in the month of June (Source:

Kartagener2, Flickr, 2013).

Since January 2015, actions have been developed in the areas of social assistance and security, aimed at reducing problems related to drug trafficking and use in the neighborhood. At that time there was a joint action between state and municipal agencies for the removal of residents and drug users from an abandoned house located in Desterro.

The building, according to information of the Military Police of Maranhão, was one of the main points of sale and consumption of drugs in the Historical Center (The Impartial, 2015). Dozens of people, mostly crack users, used the place as a shelter irregularly, which also housed children and elderly people in an unhealthy situation (Figure 3).

Figure 3. The vacating action of a house on the corner of the streets of Palma and Health in the Desterro (Source: The Impartial, 2015).

For Manzini, this scenario that combines "demands and opportunities" is very favorable for the consolidation of "creative communities". The demands stem from the problems of everyday life. Opportunities, however, arise from the various combinations of three basic elements:

The existence (or at least memory) of traditions; The possibility of using (in a suitable way) a series of products, services and infrastructures; The existence of social and political conditions favorable (or at least able to accept) the development of diffuse creativity. Manzini (2008b, p.65).

The demands and opportunities presented, together with the proximity of the researcher to the field, establish a fruitful scenario for initiatives that promote the formation of design networks through design. And collaboration

between expert designers and non-specialists are beneficial to enhance

capabilities that facilitate the search for solutions to the complex problems that the neighborhood of Desterro faces.

2. Methods

In January 2016, the investigator began a process of rapprochement with the residents of the neighborhood of Desterro, aiming at consolidating their research object. At the time, a proposal was made to create a "collective of ideas", a "laboratory of experiences" with the intention of forming a project network that could pick up questions raised at the time of the Sustentar project, which took place in 2007.

The initiative was based on a design and collaboration workshop, which should involve young people aged between 14 and 25 years, living, studying or working in the district of Desterro. The workshop was supported by the IFMA -Federal Institute of Education of Maranhão, which gave the space to do it; And the Foundation of the Republican Memory, managing entity of the Mercês Convent.

Despite the efforts made by neighborhood leaders to engage local residents, only two young residents volunteered to participate with a group of IFMA students.

The objective was to provide the favorable environment for the formation of a project network initiated by the youth group and guided by the researcher. The group should propose viable implementation solutions with resources provided by the project network itself and that did not have the initial support of state bodies and at the same time encourage community sentiment, would seek to generate more lasting links that would allow the network to be sustainable. From the ideas proposed, one would be chosen from the analysis of its complexity.

For Binder (2007a), the workshop is a model that has gained considerable attention, whether users and designers participate collaboratively in project

activities, in situations where many stakeholders are involved, in the emphasis as a collaborative vehicle, or in Design research in an academic environment.

The workshop began with a creative exercise, the Egg Drop Project, a project challenge that proposes the construction of a structure that will protect an egg from falling at a certain height, with the goal of keeping it intact. The exercise served as the basis for a discussion of how the designer deals with issues such as time and the scarcity of resources to solve a defined problem.

In order to facilitate the participants' understanding of how the specialist designer works and to explain in a simple and accessible way the possibilities of innovation through design, the workshop explored for five days the "double diamond design process" model proposed by the Design Council UK. The process is divided into four distinct steps that facilitate the understanding of how the design process works (Design Council UK, 2005).

The first one is the "Discover", where the context is explored in depth to understand its level of complexity. The second stage is the "Define", where the issues that arose in the previous stage are discussed so that the points are clarified and the objectives defined. Seven ideas were generated to bring solutions to the issues of public safety, leisure spaces, waste cleaning and treatment, access to medical care, child day care centers and decent housing, preservation of memory, among others.

The next stage, "Develop", includes the elaboration and testing of the proposed solutions, at that stage prototyping tools were used to refine their concepts, evaluating which would be the idea with more feasibility for implementation. The solution was evaluated to verify if its objectives were met, besides being structured for its implementation (Figure 4).

Figure 4. Stages of "The double diamond design process"

Researcher, 2016).

The group worked with the micro-planning perspective, and so chose an idea that could provide the incentive for community participation, making it the starting point for other transformations in the neighborhood. Thus, a proposal for intervention was developed in an area where there used to be a colonial-style house, which, according to residents, fell apart more than 40 years ago. This would require the cleaning of the land, the construction of temporary furniture from recyclable material, a micro-garden, the painting of one of the walls that would provide the projection of films for the community (what they called "cinema -wall"). Working the issues that met the needs of areas of leisure and interaction in the district of Desterro (Figure 5).

Figure 6. Stages of "The double diamond design process" (Source: Researcher, 2016).

In this sense it would be necessary to present the solution to the residents and the expansion of the project network with the necessary skills for its execution, in addition to the formation of a decision group that could think the evolution of the action in the space and from the established links, propose New interventions in the neighborhood. Thus, the group invited the leaders who had collaborated in the engagement phase, and these were responsible for taking printed invitations to the other residents for a presentation that was made in the same space that would pass through intervention (Figure 6).

Figure 6. Presentation of the intervention proposal (Source: Researcher, 2016).

At the time of the presentation, it was suggested to create communication

channels that would help to circulate information to a possible network of stakeholders around the action, and so a group was organized on facebook and another on WhatsApp, the most used social community. The use of these tools could streamline the participation process by allowing people to engage in activities and share their interests and concerns about the project.

For Bannon and Ehn (2013c), tools such as Facebook, Twitter, among others, can be important for the design of Participatory Design, allowing new forms of expression, dissemination and participation. They can bypass the traditional media channels allowing a more fluid disclosure, but with the risks that the lack of editorial curation.

The channels of communication established through social network software were fundamental for the researcher to observe the unfolding of the process of establishment of the network, since due to the academic calendar of the doctorate it was necessary for the researcher to return to Portugal. In addition to the individual reports, it was the analysis of the information generated in Facebook and WhastApp that presented the complexity in the construction of people's links with the design network.

In this phase, several questions were raised, where the first one was related to the ownership of the chosen space. Because it is an area listed as Cultural Heritage of Humanity by UNESCO. It was identified that its true owner was the Foundation of the Republican Memory, entity that manages the Convento das Mercês, which already supported the initiative and saw the intervention action with good eyes, provided that the rules of preservation for the region were respected.

The other issues such as the detailing of the ideas, the cleanliness of the land, the resources needed for the action, and the schedule of action were being defined as the assemblies were held. The researcher participated using

videoconferencing features like Skype or Google Hangouts.

Between the "design and collaboration" workshops held in January and the construction of the furniture in July 2016, twelve assemblies and five actions were carried out, including: public presentation, space cleaning and three "cultural occupations", which consisted of In the projection of films, children's plays and mini-market of products and artisan foods (Figure 7). Figure 7. Activities carried out to establish the project network (Source: Researcher, 2016).

However, from the cleaning of space, the participation process gradually emptied. That which was formerly considered an abandoned place, in passing, a "non-place", became a motivating element for hidden agendas that deteriorated the capacity of continuity of the project network. A hidden agenda is a personal goal of a member of a particular group that the other participants are unaware of and that can jeopardize collective goals (Zastrow, 2008).

The decision of the continuity of the action and accomplishment of the furniture workshop was shared between some members who still worked in the project network and the researcher, when it was verified that it would be important to finalize the previously defined schedule so that a "project abandonment" Would make it difficult to re-establish the network (Figure 8).

According to information from the neighborhood leaders, only two days after the temporary furniture was placed on the site, part of it disappeared and another was allegedly "sold" by drug users.

In this way, it became relevant to identify the hidden agendas in the action developed in the year 2016 to understand how much they hindered the level of

engagement and participation, in addition to the loss of the bonds established by the members of the project network and thus to be able to identify ways for their reestablishment.

Thus, a qualitative methodology was adopted, through a two-stage research, where the entire process (mainly the second stage) was adapted as the needs and questions were presented during the investigation.

Figure 8. Workshop on the construction of recycled material furniture (Source: Researcher, 2016).

The research was exploratory, where its objective was to identify the problems to build criteria and understanding of the research context. The first step was the use of semi-structured interviews to analyze the motivations for participation and the agendas of the actors in the action held in 2016 in the neighborhood of Desterro.

Being the main object of this investigation, the projective networks initiated by young people who live, study or work in neighborhoods in situations of social vulnerability, we use as guide for the interviews four important components for the understanding of the concept of young participation: the context; Motivations; Power relations; And the effects of participation (Rizzini et al, 2008).

Four interest groups were defined based on the reports collected by the researcher through the voice dialogues, e-mails and written messages via the Internet: the young people who participated in the action, the leaders who supported the action, the representatives of organizations that participated in the action, and Lastly, what the locals called "The Others There," a group identified as those who hindered action and supposedly destroyed their results

From the analysis of the elements of motivation for participation and the perception of the experience carried out between January and July 2016, we hope to point out more consistent ways to deepen the questions in the field research.

We will then go to the second stage of field research, where we will use a methodology of interventionist research, action research, which according to Michel Thiollent is:

An empirically based type of social research that is conceived and carried out in close association with an action or with the resolution of a collective problem and in which researchers and participants representing the situation or problem are involved in a cooperative or participatory manner (Thiollent, 2011, p.20)

The researcher's role in this type of research is active both in the analysis of the problems presented and in the follow-up and evaluation of the unfolding of the actions that were delineated from the problems. Thiollent says that it is not simply a question of collecting data or reports to be archived. In this type of research the researchers must act "in the reality of the facts observed" (Thiollent, 2011, p.22).

The next step was the alignment of action research with design research. In 2016 we worked in Desterro with the use of the workshop as a strategy to structure the research in design.

However, Binder (2007b) proposes that design research be conducted as a "laboratory for change." He emphasizes that even if this approach can make extensive use of the workshop format, the notion of a laboratory where stakeholders explore solutions In an open and collaborative way through a transparent and scalable process, can provide a more consistent framework for design research.

In this type of "laboratory" the design process must be conducted in a way where experience is given good use, where projects should be organized as "experiments." The formation of such laboratories is one of the first moves to be made in infrastructure Of a participatory environment, to construct a favorable and productive scenario for social innovation (Manzini, 2016c).

For Boronowsky et al. (2006 apud Concilio and Riso, 2016) Living Labs are a format of cooperation where resources and opportunities are shared with the focus on finding answers to problems, in order to help each other achieve their goals. They are environments where people (both experts and non-specialists) interact and work in an active way, designing and implementing cooperative experimental activities that result in collective learning and shared understanding.

Bannon and Ehn (2013d) complement by stating that Living Labs act with a belief in the right of people to co-determination of their living and working conditions, awareness of how participation can lead to more appropriate and usable systems, the need To use different modalities of experimentation in the development of solutions, besides the value of working with prototyping forms during the design process.

They also emphasize that the main focus of the Living Labs approach is to prioritize the importance of the role of users and real-life contexts in innovation. This precept is aligned with the purposes of micro-planning, the knowledge used in this research.

The Social Design Laboratory will seek to solve problems and respond to social needs or issues related to the communities studied.

Veiga and Almendra (2013) argue that these "social" problems are often not only "social" but also "cultural", "environmental", "economic" and "political".

However, since these are inherent aspects of the human condition and all are produced by society or at least are their responsibility - environmental - in a final analysis, all of them can be considered a "social" issue.

The action developed in the first months of 2017, used the foundations of micro-planning and infrastructure as a theoretical basis for the constitution of a "Social Design Laboratory", which in turn was supported in the format of a Living Lab.

3. Results and Discussion

In the period from January to March 2017, fourteen interviews of the eighteen predictions were carried out and they took place parallel to the process of constituting the Laboratory. Of the eighteen planned, fourteen were held.

The main goal of LABDeS was to understand and seek solutions to complex social issues in the Desterro community, through the formation of a project network initiated by young people who live, work or study in the Neighborhood region, seeking the development of a socio-technical infrastructure that enables the construction of links that enable its sustainability.

The four components used for the interview script: the context; Motivations; Power relations; And the effects of participation pointed to issues that were not clear at the time of the 2016 action.

In the contextual issues, the interviews reinforced the stigma faced by the neighborhood. In addition to the current image linked to drug trafficking and violence, the area of prostitution that existed until the end of the 1990s, popularly known as "zona" or "28", because most of the brothels were located on 28th Street July, serves as a symbolic frontier for internal divisions and reinforces the negative image of the neighborhood.

The term "zone," "I am from the zone," "I live in the zone" functions as an instrument of "self-stigmatization" expressed between everyday relationships. The inhabitants of the region "from above" which corresponds to the area where in the past understood the "zone" is stigmatized by the inhabitants of the region "from below" as "place of people of low moral level". The "Desterro de baixo" is classified by the inhabitants of the region "from above" as "pseudo-elitist" and "pseudo-moralized" (Ferreira, 2012, 36).

These divisions make it difficult to combine efforts around common goals. Perhaps the area chosen for the 2016 action was located on this border between the two regions and although the leaderships on both sides supported and worked for the intervention to take place, other leaderships that did not appear in the forums established in the neighborhood worked from An active form for the non-engagement of the residents and the emptying of the group constituted around the action. They were classified as "the others there" that referred to representatives of an entity that operates on the site; And the "movement personnel," the way residents treat those who are linked to drug trafficking.

Several participants were intimidated not to take action because the land "already owned" and that was to "leave as is", and these adverse facts were not shared with the investigator through the possible means, the leaders only said: When you return, we talk in person "(verbal information, 2016).

For other interviewees who do not live in the neighborhood, the fact that only the leaders participated and the absence of other residents who were personally invited to the assemblies, caused mistrust, discouragement and questioning whether "action was really necessary for the residents" (information Verbal, 2017).

In the "motivations for participation" component, issues such as: the need to improve the quality of life in the neighborhood, the preservation of the memory

and history of the Historic Center, the willingness to help transform the degraded environment and curiosity (mainly by youngsters) What would be social design.

When we deal with the low participation of the young residents of the neighborhood, an apathy was identified related to the lack of opportunities and expectations for the future, low schooling, domestic violence, harassment of drug trafficking by presenting possibilities of access to the consumption of goods and Products, "an easier path" as some report, and the perception that many entities and researchers have promised changes that have never materialized, causing discredit and withdrawal from new initiatives.

In the "power relations" component, the dynamics, established leaderships, how they exert influence on the participation of residents in community actions, and other leaderships that do not act openly in the decision-making forums of the Desterro, but were able to impose the demobilization of the group Constituted around the action in the year 2016.

When we refer to the effects of participation, most spoke of the disappointment in not being able to demonstrate that the success of the action would be positive for everyone in Desterro, the perception that "people do not want to help and so nothing changes in the neighborhood" (verbal information , 2017). They said they believed that the design network needed clear leadership and that communication channels could not reach all those interested in the process, that information was fragmented and that it also discouraged many people who left the network during the process.

The interviews presented important questions for the reconstitution of the design network in Desterro, they ran parallel to the engagement of participants to the Laboratory of Social Design between January and March 2017.

With the collaboration of the House of the Neighborhood of the Desterro we present the investigation for a group of young residents of the neighborhoods of Desterro and Praia Grande. The conversation was marked by good interaction between the participants, where questions were asked about the approach, the functioning, the possible personal and collective gains. It was explained that we would function as an "assembly of doing things", because in the Brazilian northeast we use the verb "to thing" in the sense of "action", "solving something" (Figure 9).

Figure 9. Presentation of the research and the proposal of the Laboratory of Social Design (Source: Researcher, 2017).

The process between engagement, viability of a physical space and materials and the first attempt to start the "participatory creative assemblies" occurred in about twenty days. However, only three young people from this initial group remained in the initiative, which required further interviews with the new interest group, "the youths called for LABDES". The intention was to verify the motivations for the permanence, desistência or abandonment of the laboratory.

A second stage of engagement was started with the dissemination of the laboratory through the creation of profiles on Twitter and Instagram, and visits to the homes of young people in the neighborhood. Parallel to this movement were made visits to IFMA Centro Histórico classrooms. After this process we were able to constitute a group of fifteen participants.

The "participative creative assemblies" began on 11/02/17 with a group of five youth from the neighborhood, seven from the IFMA and three others who

demonstrated interest through social media software. At first the group of young people participated in design challenges that were interspersed with thematic discussions on design thinking.

Then they were invited to map the problems and opportunities of Desterro, through the recognition of the territory and interaction with people who live and

/ or work in the neighborhood. From this mapping the LABDeS members sought solutions that could solve the demands and potentiate the opportunities present in the Desterro, generating eight proposals presented by the participants

(Figure 10)

Figure 10. Participatory Creative Assemblies of LABDeS

(Source: Researcher, 2017).

Using open access rapid prototyping tools, the participants visualized the complexity level for the execution of the proposed ideas, and so they chose one of them, where the challenge was to be able to implement it in a period of one month. The idea chosen was "Rua da Palma Viva", whose main purpose was to intervene in a street space of the same name, with the presence of colonial houses abandoned and degraded, where the accumulation of garbage is quite significant (Figure 11).

Figure 11. Colonial houses in abandoned state in Palma street and development of the intervention proposal (Source: Researcher, 2017)

During the process of developing the idea until its implementation on April 1st and 2nd of this year (Figure 12), a number of issues were addressed for the infrastructure of the Laboratory, such as: the form of communication of the assemblies, the conflict between the possibility of using tool kits that would collaborate with the organization and planning of ideas, and the willingness and haste to "do it soon"; The challenge of equating personal and collective agendas in voluntary work; The difficulty of overcoming the initial bonds of the young residents of the neighborhood, IFMA students and the other participants

improving the cohesion of the group; The need for some residents to have personal gains to collaborate with action, among others.

Figure 12. Day of action "Live Palm Street" (Source: Researcher, 2017)

5. Conclusions

Several questions were presented to the researcher during the process initiated in 2016 in the neighborhood of Desterro and that obtained its apex participation in the action "Rua da Palma Viva" (Figure 13). The first one is related to the possibility of establishing what Manzini (2008c) calls "enabling solution", "a system of products, services, communication and whatever else is needed to implement the accessibility, effectiveness and replicability of a Collaborative organization "(2008c, 84). This is not a simple task because it runs counter to the quality of interpersonal relationships, which are a precondition for collaborative organizations, they are very fragile and are always at risk for each action.

Figure 13. Results of the action "Live Palm Street" (Source: Researcher, 2017)

Another issue is related to the possibility of developing strategies to motivate key actors, volunteers and residents of a neighborhood to remain in the project network, without at first, tangible individual gains can be offered.

Difficulties in the engagement of young residents, as well as the apathy and resentment of the adult residents caused by the lack of continuity in actions developed in the past, present themselves as barriers to be transposed. Conflict

management, the balancing of individual and collective agendas, and the establishment of leadership in the design network also need to be deepened.

It is also necessary to provide communities with sufficient knowledge to enable them to create conditions for challenging regulatory authority structures by providing ways of taking whatever measures they wish to find alternative solutions. (Dantec and DiSalvo, 2013).

Is it possible to encourage a "maker" attitude from the development of "doing" and "designing" skills that were once natural to being-human, and then "stunted" with industrialization? (Cross, 2011; Sennett, 2012; Ingold, 2013).

The problems related to the implementation of the ideas proposed for the neighborhood of the Desterro were diverse and the questions about the role of the designer in a new creative context where there are no "clients" or companies that bank the design works, which generates the dependence of Institutions that finance social projects presents itself as challenging (Del Gaudio, Oliveira and Franzato, 2016a).

Still in this territory, would the area of social design be a possibility of sustainable survival for a professional designer? Since the practice requires a complex dynamics of time and funding.

Another important issue is how to explore the collaborative capacity of new online communication technologies as a stimulus for people to act politically in the offline world. (Castells, 2000, Sennett, 2012).

Finally, the difficulties inherent in the implementation of projects of this kind should be explored in order to avoid community disrepute and "the inevitable frustration of failure among young designers and design researchers, and to continue to promote hope in a Social design. "(Del Gaudio, Oliveira and Franzato, 2016b, 122)

References

ALMENDRA, R; VEIGA, C. *Social Design Principles and Practices*, Proceedings of the Design Research Society Symposium (DRS-2014), 2014. p. 572-583.

BANNON, L. J., & EHN, P. *Design matters in participatory design*. Routledge International Handbook of Participatory Design, 2013. p. 37-63.

BINDER, T. 'Why design: labs?', in Design Inquiries. Stockholm: Nordes Conference. 2007.

BOURDIEU, Pierre. *A miséria do mundo*. Petrópolis: Editora Vozes, 1997. BUCHANAN, Richard. *Wicked problems in design thinking in design*. Design Issues. V. 8, n. 2. Spring, 1992. p. 5-21.

CASTELLS, Manuel. A sociedade em rede. Vol. 1. 8^a ed. totalmente revista e ampliada. São Paulo: Paz e Terra. 2000.

CASTRO, L. R. de. Participação política e juventude: do mal-estar à responsabilização frente ao destino comum. Revista de Sociologia e Política, 16(30). 2008. p. 253–268.

CROSS, Nigel. *Design thinking: understanding how designers think and work*. Oxford/New York: Berg. 2011.

CONCILIO, G; & RIZZO, F. (Org.). Human Smart Cities: Rethinking the Interplay between Design and Planning (Urban and Landscape Perspectives). Milan/Bologna: Springer, 2016.

DANTEC, C. L; DISALVO, C. (2013). *Infrastructuring and the Formation of Publics in Participatory Design*. Social Studies of Science, 43(2), 2013. p.241–264.

DEL GAUDIO, C; OLIVEIRA, A. J; FRANZATO, Carlo. The influence of local powers on participatory design processes in marginalized conflict areas.

DIEESE. *Aspectos sociais da vulnerabilidade Social*. São Paulo: DIEESE/MTE, 2007.

ENDEAVOR. *Ferramenta: Análise SWOT.* 2015a. Disponível em: https://endeavor.org.br/ferramenta-analise-swot/. Acesso em: 01 Ago. 2016.

ENDEAVOR. Ferramenta:5W2H: Aprenda a responder às perguntas certas de Gestão dos Projetos. 2015b. Disponível em:

https://endeavor.org.br/5w2h-aprenda-responder-

perguntas-certas-de-gestao-dos-projetos/> Acesso em: 01 Ago. 2016.

ENDEAVOR. *Minha empresa pode apostar em Crowdfunding*? 20/08/2015. Disponível em https://endeavor.org.br/crowdfunding/. Acesso em: 20 Jan. 2017.

FELIPPE, Flávia. Ética em Pesquisa no Serviço Social: Porque e Como?. In: Ética: teoria e prática: uma visão multidisciplinar. EDIPUCRS. Porto Alegre, 2006. p. 244-263.

FERREIRA, M. M. G. Quando a história acaba e a memória fica: uma etnografia do Centro Histórico de São Luís. São Luís: Café & Lápis/Editora da UEMA. 2012.

FUAD-LUKE, A. *Design Activism: beautiful strangeness for a sustainable world*. London: EarthScan. 2009

GEHARDT, T. E; SILVEIRA, D. T. Métodos de pesquisa. Porto Alegre: Editora da UFRGS. 2009.

GOETHERT, R; HAMDI, N; GRAY, S; SLETTEBAK. La Microplanicácion: Un processo de Programación y Desarrolo con Base en la Comunidad. Washington: Banco Mundial. 1992.

GUSTAFSON, Katarina. No-go-area, no-go-school: community discourses, local school market and children's identity work. Children's Geographies, 9(2), 2011. p.185-203.

INGOLD, Tim. *Making: Anthropology, Archaeology, Art and Architecture.* New York: Routledge, 2013

IPEA - Instituto de Pesquisa Econômica e Aplicada.. *Turismo - Um país para todos.* 2006. Disponível em: <http://www.ipea.gov.br/desafios/index.php?option=com_content&view=article &id=989:reportagens-materias&Itemid=39>. Acesso em: 04 Abr. 2014.

HILLGREN, Per-Anders; SERAVALLI, Anna; EMILSON, Anders. *Prototyping and infrastructuring in design for social innovation*. CoDesign, 7(3/4), 2011. p. 169–183.

KARASTI, H; BAKER, K. S. *Community Design – Growing One's Own Information*. Proceedings of the Tenth Anniversary Conference on Participatory Design 2008. p.217–220.

LASKI, J. Design and Social Impact: A Cross-Sectoral Agenda for Design Education, Research, and Practice. In Social Impact Design Summit. New York: Smithsonian Cooper-Hewitt National Design Museum, e Lemelson Foundation, National Endowment for the Arts. 2013.

MANZINI, Ezio. *Design Culture and Dialogic Design*. Design Issues, 32(1), 2016. p. 52–59.

MANZINI, Ezio. *Design, when everybody designs : an introduction to design for social innovation*. The MIT Press. 2015.

MANZINI, Ezio. Design para a inovação social e sustentabilidade (1st ed.). Rio de Janeiro: E-papers. 2008.

MARTIN, Bruce; HANINGTON, Bella. Universal methods of design : 100 ways to research complex problems, develop innovative ideas, and design effective solutions. Beverly: Rockport Publishers. 2012.

NORONHA, Raquel; OLIVEIRA, Hamilton; RODRIGUES, Carlos D. Lugares comuns: a marca territorial do Desterro, identidade e etnografia. 2008. Disponível em

<:https://www.academia.edu/5539676/Lugares_comuns_a_marca_ter ritorial_do_Desterro_identidade_e_etnografia>. Acesso em 3 fev. 2014.

O IMPARCIAL. Operação conjunta desarticula maior ponto de venda de crack no Centro Histórico de São Luís. São Luís, 29 jan. 2015. Disponível em: <https://oimparcial.com.br/noticias/2015/01/operacao-conjunta-desarticula-mai or-ponto-de-venda-de-crack-no-centro-historico-de-sao-luis/>. Acesso em: 18 jul. 2016.

O IMPARCIAL. "*Casa do Bairro*" *inicia atividades sociais no bairro do Desterro*. São Luís, 07 mar. 2016. Disponível em: <<u>https://oimparcial.com.br/noticias/cidades/2016/03/casa-do-bairro-inicia-ativid ades-sociais-no-bairro-do-desterro/</u>>. Acesso em: 18 jul. 2016.

RIZZINI, Irene; CALDEIRA, Paula; CALDEIRA, Alessandra; FONSECA, Denise. *O que motiva o engajamento social de jovens cariocas?* in Cadernos de Pesquisa. Anuário da Graduação do Departamento de Serviço Social, número 1, 2007 (publicado em agosto de 2008).

SÃO LUÍS. Prefeitura Municipal. **Desterro**: um bairro além dos mapas. Prefeitura Municipal. São Luís: QG Qualidade Gráfica e Editora, 2005.

SENNETT, Richard. *JUNTOS. Os rituais, os prazeres e a política da cooperação.* Rio de Janeiro: RECORD, 2012.

STOLTERMAN, Erik. *The nature of design practice and implications for interaction design research*. International Journal of Design, 2008, p. 55-65.

THIOLLENT, Michel. *Metodologia da Pesquisa-Ação*. 18^a ed. São Paulo: Cortez Editora. 2011.

WACQUANT, Loïc. *Os condenados da cidade: estudo sobre marginalidade avançada*. Rio de Janeiro: Revan, 2007.

ZASTROW, Charles. Trabajo Social con Grupos. 6^a ed. Madrid: Paraninfo/ Cencage Learning. 2008.