POWER OF *DESIGN AGENCY* IN BUILDING AND SUSTAINING COLLABORATION: TWO CASES IN SÃO PAULO

ENGAGEMENTS

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ABSTRACT

Design research has considered the power of collaboration in terms of the politics of artefacts, services and practices to build or to support publics. Working within a framework of "commons" as continuing processes of negotiation in collaboration, this study asks: How can design skills and agency build up collaborative capacities in urban communities for sustained processes of social innovation? This qualitative research explores two case studies in Brazil, where design agency is identified in social practices carried out by both designers and non-designers. Three key processes involved in designing collaboration were identified: experimenting, disrupting and sustaining. This work concluded that design skills facilitate the distribution of power to build collaboration through co-production of common spaces. This investigation contributes to the ongoing discussion of design and "infrastructuring," identifying the power of design agency in building and sustaining collaboration in a complex social landscape of an emerging city.

INTRODUCTION

Collaborative practices are constantly emerging in various forms in contemporary urban spaces. Through bottom-up practices, collaboration can build alternatives to achieve more sustainable common life through the development of activities such as urban gardening and co-housing. Moreover, collaboration is considered to be an innovative tool for business in the development of technological systems and services, such as rental platforms for private cars and rooms, or even urban spaces sold for a "collaborative life" (Reimer 2011). Thus, there are typically different interests and power relations at play that drive the political dynamics of collaboration. This context of generally unequal power relations raises questions of how an effective collaborative culture can be cultivated locally, creating capacities able to interact with the market, as well as to create local alternatives of production and consumption of goods and services based on common needs.

These are challenges that design has attempted to tackle in various ways. Collaboration in design can be associated with co-creation, enabling multiple stakeholders to participate in the design process. Participatory design was from the beginning a highly political enterprise oriented toward democratizing the design process in order to enable worker participation in decisions about how work was done (Ehn 1988). Codesign contests top-down decision-making structures and associated power hierarchies, opening for mutual learning processes for exploring and solving societal problems (Fuad-Luke 2009).

However, other approaches shift the design focus of defining and solving problems to ways of intervening in social practices, articulating issues, or even creating ruptures and dissensus for building collaborative publics (DiSalvo 2009; Markussen 2013). In this sense, these

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other approaches explore design efforts towards "infrastructuring" socio-material-assemblages, which will be able to raise situated relevant issues (Bjögvinsson et al. 2012). From this perspective, recent studies explore the notion of "infrastructuring commons" (Seravalli 2014; Marttila 2016; Franz & Elzenbaumer 2016), which is understood as designing new ways of living in common through the articulation of open modes of access, collaboration, and sharing material and immaterial production.

Collaboration for social change thus entails challenges with respect to coordination when it is done in a bottom-up manner that does not rely on existing organizational structures. And when it is in fact challenging those structures, power dynamics are only compounded. Moreover, there are challenges regarding the sustainability of collaboration over time, particularly when trying to maintain a strong bottom-up dynamic. This requires infrastructuring processes that can enable participation over time in particular local contexts. These are important dynamics to understand when looking for design opportunities to catalyze or support these kinds of collaborative social processes.

In order to further this understanding, this paper presents a study of two collaborative urban projects located in the city of São Paulo. Specifically, the cases show how design skills articulated local collaborative processes through the co-production—or commoning—of public spaces.

Thus, this study argues that the process of designing sustainable collaboration can be better understood when it emerges in a bottom-up manner out of the project level situation (rather than orchestrated from the top down), where significant elements of the collaboration can be revealed in specific socio-material contexts. It also looks at the role of design agency and how it can contribute to the development of sustainable local collaboration that enables future social innovation.

Importantly, *design agency* is seen here not as a characteristic of professional designers, but rather as a skillset and mode of working that also non-designers can leverage. In this sense, the paper explores the power of design though the notion of *design agency*, speculating how this could become a form of power able to confront, play, and disrupt other kinds of social power structures.

The paper is structured as follows. The next section will set up a sense-making model (Figure 1) of designing collaboration, which resulted from theoretical exploration of the transdisciplinary "commons"

background and approaches of community-based participatory design research. In the "Case studies" section, the projects are described and the concept of *design agency* is introduced (Figure 2). In the "Methodology of analysis" section the field data is explored through a coding method of qualitative analysis. In the "Results and discussion" section three

processes that emerged as key expressions of design agency in the case studies are discussed (Figure 3). Finally, the paper closes with final thoughts in the "Conclusions" section.

DESIGNING COLLABORATION FOR COMMONING

The old term "common" is a noun when describing a specific regime of property, which is when resources are neither private nor public but rather held by a community collectively. As an adjective, the word means something that belongs to everyone and is managed by everyone; and as a verb can be written as "commoning", corresponding to the practice of collectively producing and using what is produced in common (Linebaugh 2008; Susser & Tonnelat 2013; Euler 2016). Commoning practices are made up of self-management mechanisms that involve means of production, consumption and distribution, which guarantee equitable access to the necessary resources within a community (Ostrom 1990).

Based on this, commoning practices follow the principle of social action on resources, which allows conflicts to become explicit, since the use of the resources depends on the negotiation processes between the individuals that will be included or not as beneficiaries. Thus, negotiation is a continuous and complex process that is adjusted over time, not bringing fixed solutions, but rather adjusting to experiences and needs (Euler 2016). Besides that, the negotiation process causes power relations to be constantly re-evaluated, opening possibilities to generate new social relations based on sharing for a common life (Linebaugh 2008; Stavrides 2016; De Angelis & Stavrides 2010).

Therefore, if collaboration is understood as a *process of negotiation*, issues related to the political role of the agency of design are raised. Thus, design assumes a political role in *articulating issues* in agonistic ways that can reveal and challenge established power structures (Mouffe 2013; DiSalvo 2012). According to this perspective, design projects can work by "projecting" issues, communicating possible future scenarios and their implications; as well as "tracing" issues, facilitating the disclosure of the origins of some issues and their hidden structures and boundaries, such that it becomes possible to understand and criticize them.

Instead of assuming the role of articulating relevant issues, the notion of "infrastructuring" proposes the immersion of design skills in ongoing situated issues sustained by ongoing social practices. Here, design practices assume forms of *infrastructuring assemblages* to raise "matters of concern", opening up new ways of thinking, behaving and making in common (Latour 2005). Infrastructuring "things" constitutes the activation and recognition of socio-material-assemblies resulting from relevant issues located at a certain time and place among stakeholders (Bjögvinsson et al. 2012). In this sense, different capacities are invited for "democratic experiments," opening possibilities of making things public (Binder et al. 2015).

In dialogue with these approaches, recent perspectives in design research have discussed the notion of "infrastructuring commons". Commons/commoning theory has brought new insights for design research in relation to participation, in order to build more inclusive practices geared towards sustainable models of production and use of common resources. This discussion involves the intangible production of commons through tools and practices for the free sharing of knowledge and information (Marttila 2016); the common production of objects and artefacts in maker spaces (Seravalli 2014); and ways of providing rich visibility of ongoing commons, inviting for experimentation, exploration and interconnection (Franz & Elzenbaumer 2016). Therefore, "infrastructuring commons" discusses the involvement of design skills in processes of use, management, ownership and maintenance of shared resources, as well as the cocreation of the conditions to build common principles. vocabularies and ideals that support communities.

This previous research helps us to further understand and articulate the concept of collaboration, and points to more effective designerly ways to produce collaboration for social innovations within micro urban spaces. Here, design skills are used in efforts to sustain continuous processes of social change, opening up capabilities for re-reading and replicating practices, as well as promoting more decentralized decision-making processes.



Figure 1: Roles for design in collaboration for commoning.

It is thus possible to identify several different potential roles for design in collaboration for commoning, as presented in the analytical map in Figure 1. Here it is possible to link the notion of *commoning* with the idea of designing, as a continuous process for social change. Thus, designing collaboration for commoning moves among the roles of articulating issues, infrastructuring socio-material assemblages, and negotiating power relations. This cyclical process considers the temporality of the design practices, exploring the boundaries of design work in engaging with publics/communities (Lindström & Ståhl 2015).

CASE STUDIES

The case studies were conducted in two public spaces of São Paulo, the main financial center of South America with approximately 12 million inhabitants (IBGE 2010). The two projects are called "A Batata Precisa de Você", which means "The potatoes need you"; and "Acupuntura Urbana", which means "Urban acupuncture." Design practices emerged in these projects due to the lack of public spaces for participation, the lack of dialogue between bottom-up and top-down participation initiatives, and weak community ties.

The "A Batata Precisa de Você" project was born in 2014 in a central public space of the city, a part of the city that is undergoing significant gentrification. It is an ongoing initiative of a group of residents who have been transforming this space into an open laboratory. The initiative developed collaborative practices based on gambiarra, a Brazilian term that is associated with the construction of artefacts through improvisation by the subversion of industrialized artefacts. "Acupuntura Urbana" is a small social enterprise founded in 2013 that works with the design of products and services through the transformation of public spaces, with the aim to find solutions that connect citizens, communities and stakeholders in the city.

These case studies were chosen because they presented micro-scale experimental practices of designerly ways of doing collaborations, conducted in a city of a developing country. One of the main objectives in these cases was to develop and enhance local collaboration between different capacities through the mediation of the use of public space in order to make public (i.e., visible) what is Public. The design "tactics" (De Certeau, 1984) of these projects were based on recycling, openness and sharing resources, making up an integrated open process rather than an end product.

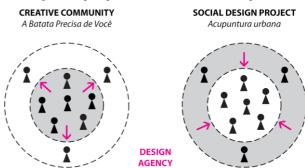


Figure 2: Two situations of design agency carried out by the case

The analyzed practices present two different configurations of design agency (Figure 2). This notion emerged from the analyzed cases and it is used here to refer to an energy of action activated by designers and non-designers, who used design skills to "make things happen" (Manzini, 2014) in the process of building collaboration, as well as to distribute or replicate this energy by the participants of the projects. Rather than a

static thing, *design agency* is something that flows and contaminates others, generating micro ruptures in consolidated power structures of thinking, doing and living through the symbiosis of humans and non-humans.

As shown in Figure 2, "A Batata Precisa de Você" is a Creative Community, where design agency is led by a group of residents, who collaborated and improved innovative solutions for new ways of life. "Acupuntura urbana" is a Social Design Project, where design agency is led by an external group using tactics of design to engage and empower people for social changes. Thus, in the Creative Community case, we can look at how (or if) a community can build a design project. In the Social Design Project, we can look at the opposite configuration, when a design project is used to try to build a community. Here we ask: What do these two configurations of design agency affect in the power dynamics of acting together? How do we think in a transition space in which these two configurations could work together?

METHODOLOGY OF ANALYSIS

Material for the cases was collected over two years through fieldwork using participant observation and field notes, in order to understand how participation and interaction was activated in the urban initiatives. Semi-structured interviews (Bardin 2007) were used with the aim of mapping conflicts and challenges of collaboration. The interviews were carried out with representatives of three profiles of stakeholders involved in the projects: agents (designers and nodesigners), public sector, and users (residents, workers and participants). Information was also collected on documents, videos, images, texts and artefacts produced by the studied projects.

The collected data was interpreted using coding methods, which is an interpretative process though an exploratory problem-solving technique without specific formulas to follow, exploring both the tacit and intuitive senses of the researcher (Saldana 2009). Thus, the "grounded theory" (Glaser & Strauss 1973) resulted from a cross analysis of a set of categories, which were developed though a cyclical process of aggregating to similarity and regularity of codes. In this sense, some specific kind of codes were used in the coding cycles: the "in vivo coding" identified the key phrases and words of the interviews; "versus coding" identified the conflicts in the discourses; and "process coding" identified the collective and individual actions that took part of the practices; and finally, the "pattern coding" allowed for elaborating the three final categories analyzed in the next section (Saldana 2009).

RESULTS AND DISCUSSION

Three final categories of design agency resulted from the case studies analysis: *experimenting*, *disrupting*, and *sustaining*. These categories highlighted design agency and its temporal, political, and power aspects (Figure 3), where design skills acted in mediating or catalyzing collaborations. In this sense, the construction of collaborations is part of a cyclical process in which design participates in negotiating, articulating, and infrastruturing of social practices.

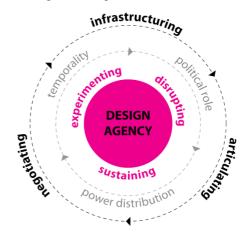


Figure 3: Three expressions of design agency in designing collaboration for commoning.

In the next sub sections, CC refers to the Creative Community case (*A Batata Precisa de Você*), and SDP refers to the Social Design Project case (*Acupuntura Urbana*).

EXPERIMENTING THE DESIGN AGENCY

Experimenting involves the constitution of the bases of design agency though experimentation with methods and tactics for co-production. Co-production involves collective activities of production and the use of this production. This process involves subjective relationships with what is produced and with the production process; and fostering a common identity through knowledge exchange, sharing of motivations, principles and ideas (Seravalli 2014; Marttila 2016).



Figure 4: Co-creation of group identity in weekly informal meetings in the public space. Photo by CC case.

The activation of participation in the CC case began with the occupation of a public space by a small group of residents with home furniture. The meeting was a form of protest against the total absence of urban furniture and green spaces in that public space. After some meetings, the group of participants was expanded

due to three factors: the regularity of weekly meetings, the use of colorful umbrellas that signaled the microspace of the encounters (Figure 4 and 5), and the use of social networks that gave visibility to the occupation. Once the participation has broadened, people began to split into interest groups to create and make activities together.



Figure 5: Folder of invitation to participate. Image by CC case.

The activation of participation in the SDP case started with the construction of affective and handcraft maps by the invited participants. The mapping experiment involved several steps. First, activities were conducted to awaken subjective relations between the participants and the space. Second, informal conversations with users of the space were carried out in order to survey the potentialities of the neighbourhood. Finally, collective constructions of handcrafted maps and models were made to facilitate common decision for the co-(re)creation of the public space. After the mapping process the participants were invited to be integrated into different working groups according to their own interests.



Figure 6: Affective mapping. Photo by SDP case.



Figure 7: Collective handcraft mapping of the public space. Method of *Acupuntura Urbana* and *Elos Institute*.

Thus, the formation of a common identity and selforganization occurred in two different ways. In the CC case, the occupation of the public space through informal meetings fostered the formation of common symbols, which attracted people with common interests that later raised the need for an internal organization. In the SDP case, the collective mapping caused interaction and sense of collective among the participants, resulting in the internal organization of the group. Therefore, the two methods, ritual encounters and collective mapping, constituted effective means for the elaboration of the following tactics of design: urban furniture construction, urban gardening activities, and a temporary collective kitchen.

In the CC case, the occupation raised the need for the construction of urban furniture, which prompted some participants to begin to build public objects in wood and other available materials. The group started prototyping urban furniture that could both test the potential of the public space and solve the immediate needs of the city square. Thus, while the objects were being built, they were installed in the space, being used until their deterioration. The construction of the objects was done by open workshops that temporarily transformed the public space into a public laboratory (Figure 9). The CC also created a manual that teaches how to do occupation of public spaces, facilitating the replication of its tactics (Figure 8).

In the case of the SDP project, the pre-established mapping activities raised the needs of the public space, such as the construction of new objects and the maintenance of existing public urban furniture. The intervention occurred after the articulation of local partnerships in order to gather material resources for the co-production of the space.



Figure 8: Manual of occupation of the public space with temporary furniture, produced by the creative community.



Figure 9: Public workshop of urban furniture in the public space. Photo by CC case.

The urban gardening activities conducted in the CC case also occurred in response to the total absence of green areas in the public space. The collective kitchen was a tactic mostly employed in this SDP case, which transformed temporarily the public space into a collective house, where everyone could share experiences and celebrate the co-production of the place.



Figure 10: Urban gardening activities in the public space (CC case).



Figure 11: Collective kitchen in the public space. Photo by SDP case.

In this sense, the case studies revealed the experimentation of co-production of temporary spaces for democratic participation and local collaboration (Barbosa 2016). Here, the temporality and the configuration of the design agency are important factors to be considered.

In the CC case, the participants with design skills were immersed for long periods in the activities, which allowed the gradual formation of a more organic organization, as well as the development of the autonomy of the participants to make things together. However, informal conversations with local workers around the public space denounced social barriers that prevented collaborative processes between different social classes and publics. In the SDP case, the designers were immersed in the community for four months and then left the community. The temporal schedule generated a collaborative organization among the stakeholders, who are usually in conflict or distant from each other in the daily life of the community. However, the interviews with residents revealed that a more sustainable collaboration was not reached in the short time of the project.

DISRUPTING FOR NEGOTIATION

Disrupting comprises the disruptive aspect of tactics of design that facilitates the negotiation process. The "disruptive aesthetic" defines the designerly nature of tactics when they reorient the perceptual space by interrupting the standard follow-up of a process (Markussen 2013; Rancière 2003). In the case studies this aspect was identified when the tactics projected hidden problems, raised awareness, and enabled conflicts and dissensus.

Urban tactics were used in the two case studies, such as activities around body performances and paintings in the streets (Figure 13), which emerged from the lack of signalling for pedestrians next to the public spaces. These disruptive tactics opened up the negotiation process with the public sector, which later on officialised the signalling made informally by the participants. The urban gardening activities in public spaces are also presented as disruptive tactics when they created micro-spaces of food production in the public square where workshops with children and adults were held.

The temporary furniture in the public space also appears as a disruptive tactic in the CC case, since they were installed informally without permission of the public sector (Figure 12). This tactic raised dormant conflicts, as well as a channel of dialogue with the local public sector and private organizations. Thus, a local partnership provided funding for the co-production of three permanent urban furniture installations for the public square, which allowed testing new forms of production (such as computational methods) that opened up for a process of do-it-yourself, replication and maintenance of the objects (Figure 15). One of these objects was appropriated by a group of skaters (Figure 14), which not only denounced the lack of leisure equipment in the square, but also was a means of negotiation that resulted in a social agreement between the skaters, the public sector and the CC.



Figure 12: Temporary urban furniture in the public space (CC case).



Figure 13: Urban tactic of a crosswalk painting performed by the community (SDP case). Photo by Daniela Giorno.



Figure 14: Permanent furniture being appropriated by skaters (CC case). Photo by Roger Tilskater.



Figure 15: Object created by the *Quasares* research group through computational methods of production (CC case).

The urban context in which these practices were situated is characterized by strong social gaps that build up the city's aesthetics, ways of doing, interacting, and living together. Disruption in worldviews, habits, and professional directions of the involved stakeholders were identified. The interviews revealed the conflict between activism and work, when the design agents found in these practices freer space to innovate and to create new forms of work based on the collaboration. Finally, the disruptive aspects expressed the political role of design agency when it was able to change sociomaterial configurations through experimentation of more horizontal and less centralized participatory processes.

SUSTAINING THE COLLABORATION

Sustaining refers to evidence of factors that contribute to the replicability of design agency, contributing to the continuing process of social change and sustainability of community collaborative practices. This involves the sense of collective ownership, and the autonomy to participate, negotiate, and collaborate.

In the CC case, the organic organization allowed the development of the collective sense of belonging and ownership, where the stakeholders constantly used and maintained the space. The use of an open and online

calendar and the manual (Figure 8) tools helped to get participatory autonomy, leading to the use of the space by a diversity of audiences though small self-organized cultural events. Currently, the CC is experimenting with a new form of internal organization that facilitates the replication of the experimented tactics in other squares of the city. Moreover, the CC was invited by the local public sector to participate in planning workshops in order to create permanent public furniture in the occupied square.

In the SDP case, the design team returned to the community sometime after the project finished in order to facilitate the process of appropriation of the space. Thus, the designers once again tried to catalyse design agency among the stakeholders of the community. This return to the community was done through one meeting, where tools mediated the articulation of the common use and maintenance of the co-created space. It was observed that this moment promoted the breakdown of social barriers and opened a space for future local collaborations.

The design agency of the both analysed cases has allowed for testing and projecting future prototypes of models of democratic participation in public spaces. The design skills translated by design agency contributed to distributing power in decision-making processes at the local scale. However, the effectiveness of these practices to promote wider and more sustainable changes depends on their combination with top-down policy measures.

CONCLUSION

This paper presented a qualitative analysis of two case studies of design acting in public spaces in the city of São Paulo in Brazil. The first part of the text explored the background theory of commons and collaboration in design research, suggesting an analytical map of designing collaboration for commoning (Figure 1) which indicates the roles of design in the production of local collaborations. In this map, we added three categories of analysis that emerged from the two case studies: experimenting, disrupting, and sustaining (Figure 3).

The analysed cases have revealed that in the Brazilian context both the design agency of non-designers and tactics of design applied in communities (Figure 2) contributed to social change and further local collaboration through the co-production of public spaces. However, design opportunities were identified on the frontiers of collaborations, where there is constant risk of reinforcing established social boundaries, even if collaboration is activated from inside or outside of a socio-material collective.

In response to this risk this paper has proposed the notion of *design agency* as a way to think about power through design. This exploration showed that power can be a cyclical process, rather than a stable structural thing. Thus, the energy of design agency can build up

another kind of power and actually sustain this dynamic. In this sense, the design role moves from activating collaboration to actually performing the power of collaborations among human and nonhuman assemblages.

Finally, the design agency was expressed here through experimenting, disrupting and sustaining, which speak to specific challenges of design for social innovation: the immersion in short/long time of design practices in communities; the political role of design to catalyse social changes; and the actual sustainability of these processes. Future studies on the cross-referencing of different expressions of design agency could help to build a deeper understanding of the power of design in situated configurations.

ACKNOWLEDGEMENTS

This work was supported by the CAPES-Brazil. Thanks for the inspiring contributions of the participants of the initiatives from São Paulo, the PhD students from the Umeå Institute of Design and the Professor Maria Hellström Reimer from the Malmö University.

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