THE ABILITY TO MAKE A DIFFERENCE IN PARTICIPATORY DESIGN PROJECTS

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ABSTRACT

The case study presented here is an intensive nine-day community participation project in a Swiss town, aimed at fostering community food production. The approach to participatory design presented here seeks to emphasize the in-situ improvisatory 'doing' of collaborative activities. Using notions such as diffusing, reifying and catalyzing the study describes the iterative movement of the project that is bound up in material arrangements and social relations. Through a reflection in action approach, the author unpacks how the designer's agency is understood through social interactions and acts of summarizing, materialization and translation.

The paper concludes by discussing power and agency, both as an outcome and central to the design process. This reflective exploration through the lens of agency seeks to encourage the reflexivity of designers in collaborative practice.

INTRODUCTION

The work of participatory designers is not limited to the studio/lab but is often situated at multiple sites inhabited by heterogeneous communities (Bannon & Ehn 2012; Ehn & Badham 2002). Rather than a confined design space in which professional designers facilitate the co-creation of products, here a design space can be better understood as created by the iterative movements and transformative representations of stakeholders involved in the collaboration. Here, the socio-cultural environment, which I will refer to as the 'field,' forces the designers to face conditions beyond their control and challenges them to be attentive to the improvisatory process of collaboration with others. This perspective on designing represents a shift from predictability in the design practice, and taxonomical understandings of a studied phenomenon, towards enabling potential futures that can be negotiated and performed through collaborative and material processes of design and intervention (Telier et al. 2011). Here, designers often act as catalysts, developing open-ended infrastructures and collaborative processes that allow others to continue the work over time and determine the outcome (Binder et al. 2015). What might design look like, when done this way? And what tools and understanding would designers need to address and reflect this shift?

The case presented here falls within this tradition and reflects on the agency of designers. However, rather than making the assumption that (design) agency is a given, I suggest a relational conception of agency as emergent in the contestations of doing collaborative work. Taking from the experience of participating in an intensive nine-day design project to create a community food garden, this study reflects-in-action on the designer's collaborative process that is bound up in material arrangements and social relations (cf. Schön 1983). My methodological approach uses auto-ethnographic methods, direct observations and designing experimental interventions with a focus on practical concerns of 'doing' collaborative work in the field. And I have synthesized the arguments presented here based on my field notes, multimedia recordings and conversations with project collaborators.

A cultural and artistic organization initiated this project in a Swiss town. This organization (referred to as the cultural organization or simply as organization in the rest of the paper) is a multidisciplinary community of practice at the intersection of art, cultural work, and social change. The aim of this project is a temporal

intervention or public engagement focusing on processes rather than on a final product or a designed object.

Even though the political and artistic intention of the project was to encourage community gardening, the limitation of a short-term project is implicit. The movement from this project to any form of community farming demands more resources and long-term infrastructuring. Instead, the work presented here focuses on bringing forward a socio-political agenda. By choosing the theme of the project as 'Culture of Permanence,' it explores the ethics and aesthetics of resilient cultures. I interpret this to mean ways in which communities organize social relationships and as a way of doing things which demands participation over time. The theme also has parallels to permaculture principles, the connection to which I will trace in subsequent sections of the paper. The processual focus implies that rather than critiquing, provoking or describing the world, the project's methodology seeks to situate itself in the field of everyday life; hence attempts to make the world by staging engagements that foreground and build on the ethics-aesthetics of the place-based community.

In this paper, I describe the project in three main sections– diffusing, reifying and catalyzing. In the first section, I describe how I (as a designer and researcher) am invited to become a part of a community of practice tasked with orchestrating this project. I describe the process of 'learning to be affected' by challenging a priori assumptions and espoused theories to negotiate a situated and collaborative design process. In the section reifying, I describe the socio-material dialectics of mapping and prototyping a garden. Here, the term material includes the physical 'stuff' and its representations, as well as the effects it has on social interactions. In the third section catalyzing, I refer to making public the design process. These sections serve as vignettes of the project process that allow me to articulate three accounts of agency as performed by the designer. I conclude by discussing the broader implications for agency and power in participatory design.

The reader should note that the aspects of the project that I highlight here do not summarize or show the entirety of the project nor are they issues that other project collaborators would find equally important. Also, consider that the author's voice is written as 'I' and 'my' when reflecting on practice and as 'we' or 'our' when speaking as the member of the design collective.

AGENCY

In what follows, I build on theoretical perspectives from actor network theory (ANT) as used in participatory design work. The reason I use ANT is that it considers agency as relational, arguing for the symmetry of agency between humans and non-humans/materials (Latour 2005). ANT is critiqued for favoring stability and is ill equipped to handle temporal and open-ended networks. Other figurations such as meshwork (Ingold 2011; Ingold 2008), patchwork (Lindström & Ståhl 2014) or cat's cradle (Haraway 1994), amongst others, are perhaps more useful metaphors of generative movement, which is itinerant, improvisatory and collaborative (Lindström & Ståhl 2015). Recognizing the limitations of ANT, I have found it beneficial to map actor networks in the design process before developing public interventions.

However, ANT does become problematic for designing when aspects of authority, empowerment, and intentionality are at stake. It would be counterproductive to strip the human subject of its agency to the extent that material agents start deflecting attention from human accountability and intentions. Thus, in this study, I am primarily concerned with human agency. And I discuss materials from the perspective of how they get enrolled into affecting this agency.

Agency can be said to be the ability of a person or a group to make a difference, to influence events, beliefs, and actions of other people. Typically the designer embodies this 'ability to make a difference' through the material interventions s/he designs. Ability is key to understanding agency as a constitutive force that draws together different elements, experiences, other people, materials and so on. At the same time, ability is conditioned by these elements (Dyrberg 1997). This idea can be understood using a crude analogy of a designer's ability to assemble a complex product, which is constrained or enabled by the materials used.

In the following sections, I present the vignettes of diffusing, reifying and catalyzing and reflect on specific, but partial perspectives on the designer's agency.

CONTEXT

The town where this project was based has about five hundred inhabitants and others who live in bigger cities and travel there for work. The inhabitants of the town are mostly occupied in the services sector and a fewer number in manufacturing and agriculture.

Before starting the project, the cultural organization procured land at the edge of town from the local municipality to develop the community garden (see Figure 1). The organisation's relationship with the town is not limited simply to being located there for many years but also that it is very much enmeshed in the local community. It's standing in the town introduced a different dynamic with the town's inhabitants, where the question – *how* a community garden would be made? Was more important than asking *what* forms it might take?

The organization took responsibility for contracting a multi-disciplinary group for the project and besides played an active role in the work. This group of eight consisted of an anthropologist, a permaculture specialist, artists and different kinds of designers. In this paper, I refer to this core group as a collective as its

members bring together different practices of design. However, for ease of comprehension, I refer to designers in the project's descriptions, not to individual members but the designerly capacity represented by the group.

Table 1: The map marks the allotted plot as site1 and the organization's premises as site 2.

Although I had experience of designing in unfamiliar environments, this was different. I would not be bringing back user-data from the field to the studio to translate into products. Nor would I be pursuing a design challenge where I needed to invite would-be users to give feedback. Here, I would be working with a team of designers and artists, whom I would meet for the first time, to manifest a prototype of a community garden driven by the theme Culture of Permanence. More so, apart from the inhabitants of the city, the stakeholders were not well defined. The limited timeframe for the project did not allow any form of extended contextual inquiry. However, three members of our collective who belonged to the region served as liaisons to the inhabitants. And in general, we made our identity and purpose known to all the people that we met, some of who were more than eager to inform us about the town.

DIFFUSING

Our first step was to understand our position from particular vantage points. These vantage points were not distanced or detached positions often taken by designers. They troubled our disciplinary habits and prompted us to take on the ethos of peer production characterized by qualities such as anti-credentialism and equipotential. Anti-credentialism is when credentials are not formal requirements for participation. And equipotential implies that participants self-select themselves to the task to which they feel able to contribute. During our routine debriefings, we made it a habit to articulate our position before making our point. For example, "as an outsider in this town, I suggest…." or "as a non-gardener, I need a clear description on what and how to do things to be useful." Also, the various tasks and roles shared by the group, including caretaking, maintaining the garden, facilitating design events helped us embody these qualities.

To further engage in each other's language games the members organized workshops to share practices with other members of the collective (cf. Ehn 1988). Few of the examples of such exercises included: Learning to make a plant nursery, a conceptual exercise on expressing how we move in the world and learning to design tools for a caring practice. I hosted the inventive tool-making workshop with the aim of us becoming attentive to our design apparatus and its ability to mediate bodies, materials and sites. The workshop consisted of short improvised performances, for example 'designing tools for care' using assorted materials (earth, plants, string, wood, textile, etc.) and conducted outdoors on a site that resembled the allotted plot. The discussions at the end prompted a nuanced understanding of our own (caring) practices and the role of mediating tools. My notes from the discussion after the workshop summarize this understanding:

Mediating tools are not alone objects; they occur in a web of relations. It starts with an intention…followed by careful preparation before the tool is built and used. Accepting care through the tool's use on the part of the recipients is not a given and needs to be respected. To foster caring relationships between the land, inhabitants and us requires a sequence of such steps and developing a tool building practice on the go.

The sum of these activities sensitized and developed our 'ability to make a difference' or as Bruno Latour would say, become articulate subjects. An articulate subject according to him "learns to be affected" by the local, material and artificial settings (Latour 2004).


Figure 2: Observing while walking on the plot of land.

Further, we explored the plot of land assigned to the project. I would describe our mode of surveying as 'making observations while walking' as it stressed the experiential, embodied and affective dimensions of exploring. The permaculture specialist in our collective helped us to develop an eye for observing the landscape. In the process, we inspected the soil composition through simple sedimentation techniques, took samples of flora and fauna, and noted the weather conditions.

These examples imply a diffusion of agency within the collective by acknowledging expertise in others and suppressing the cognitive analytical aspects of action in favor of learning to be affected.

Figure 3: The picture shows the collective discussing over the representations and materials gathered from the workshops and site visits.

Next, we wrote down the outcome of these workshops and site visits as notes, used materials from the location and made visual representations. These materials (seen in Figure 3) would later be used to reify our understanding and intent through a mapping exercise.

REIFYING

Reifying is where the collected material is synthesized, and the designers have a higher degree of control of the process. Reification creates a boundary object, which is a material instantiation of the collective's intentions within a complex process of thinking, feeling, doing together. The making of a boundary object, in turn, is essential to recontextualizing its meaning and translating it into embodied experience (Wenger 1998). The agency of the designer is in reifying the map and its translation into the experience of prototyping a garden.

MAPPING

The map can be considered incomplete, as we base it on our partial knowledge of the town, its inhabitants and the observations of the plot of land. We used a studio space at the cultural organization to construct a large enough spatial mapping that would allow us to walk through it and discuss its various parts.

The following steps were used to map the actor network:

- Creating and placing a persona of yourself in the empty landscape
- Plotting the two sites – the allotted plot of land and the cultural organization
- Thickening the landscape with multiple actors, other sites and our materials (memos, media and collected materials from the allotted plot)
- Negotiating scenarios where the movement of actors and the borders of the sites are considered fluid
- Acknowledging the potential of the assigned plot of land e.g. describing the different plant species on the land and their possible uses
- Identifying 'what-if' scenarios based on relationship between actors and key stakeholders
- Later in the process, we made films that narrated a journey in this landscape to present possible futures.

To do the mapping, we divided ourselves into smaller teams to address different parts of the landscape. Using the map as a discursive tool, we made explicit our understanding of in-situ rationales on why we found certain elements of the mapping more meaningful. The mapping exercise helped us in assessing sites and strategies with a potential for greater engagement with the inhabitants.

Amongst the mapped network, the organization's responsibility as a cultural promoter and initiator of this project prompted us to reimagine its role from that of a curator to a catalyst. Further, the 'what-if' scenarios spurred by the mapping focused on ideas to engage the inhabitants with the project's theme.

Meanwhile, we had received initial reactions on the plot, and some residents considered it excessively damp and the location out of their way. Knowing this, and our reassessment of the role of the cultural organization, we chose to engage the local inhabitants by making a proto-garden (prototype garden) on the premises of the organization itself. Based on our know-how of observing the land, we chose the spot for this garden and collected the materials for its construction. This activity would take the form of a day long guided workshop such that even those inexperienced in gardening could contribute.

We realized that the complexity of connections traced out in the map could not be completely internalized by us in a short time. It would require prolonged durations of time to be unpacked again and again as a dynamic ontological set of performances. Hence, we planned to revisit the mapping along with the inhabitants after making the proto-garden.

Figure 4: The spatial mapping of actor networks

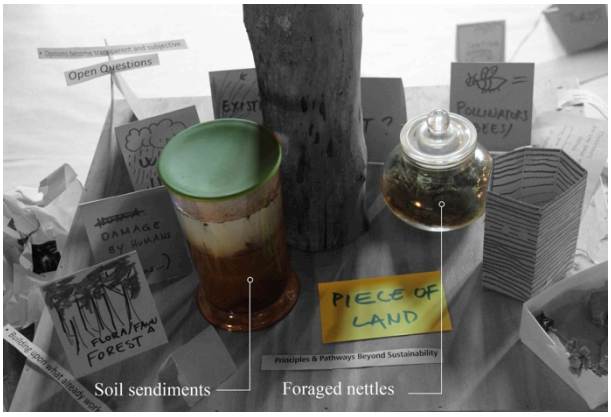

Figure 5: Materials such as plant species, soil and descriptions of actors are clustered around the plot of land on the map.

PROTO-GARDENING

A prototype here served a different purpose than as in a product development process. It belonged to the nature of mediating tools that would allow the inhabitants to deliberate from within the activity itself. We designed the workshop for the inhabitants to experience co-producing the garden. And afterward, we wanted to discuss with them the future steps towards community gardening on the allotted plot. We anticipated that the event would raise their curiosity and interest in the project and generate a multiplicity of associations to 'community' and 'gardening.' The discussions took place as informal conversations during the activity rather than interviews; as one of the collective members pointed out "these people are our neighbors and not participants in some kind of clinical research!"

But what form might this prototype garden take? During the observations of the plot, one of our collective's members had exposed us to permaculture. And we found the permaculture principles of promoting natural and cultural diversity appealing and fitting the theme of Culture of Permanence. Consequently, we chose to make an archetype of a permaculture garden called the keyhole garden. A unique feature of its structure is that it allows for neighbors to link their keyhole gardens in a tessellation. Hence, it has the potential to expand and connect many households. For the purpose of the workshop, we planned to construct a single unit. The garden's structure consists of a compost basket built into the garden itself. The homeowner feeds it with organic household waste to produce compost. It is raised a few feet above the ground for easy harvesting of food. The distinctive keyhole shape comes from an access path designed to help the user reach the compost basket (see Figures 7 and 8).

The workshop started by introducing the project Culture of Permanence and showing films about the construction of the keyhole garden followed by the actual construction work. The collective played the host and worked alongside inhabitants while guiding them through the steps.

During these conversations, one resident remarked- "none of the important people are here...what about the mayor? Wasn't he invited?" to which another responded, "There is some friction between newcomers and older residents of the town. Perhaps, there is a reluctance (from the older generation of inhabitants) to accept new ideas and change their way of life". This exchange points to salient power structures that we took for granted.

Co-producing the garden revealed a social stratification, where the politics of belonging, influenced by personal histories would impact the project outcomes. I would argue that the proto-garden, based on running the workshop, can support social cohesion but is also shaped by what is considered pleasurable, normative and 'to belong' to the town by its inhabitants.

The durability of the keyhole garden posed new challenges for the cultural organization. For example, who was going to maintain it? Could it become a new connection point between inhabitants? For it to be able to do that, we designed a planting calendar that would come with instructions on how to maintain and care for the keyhole garden. The calendar was to be placed in the kitchen, directing attention to the garden and becoming a record of its use. And as the name suggests, it would prompt the homeowner of seasonal planting cycles.

Figure 6: The workshop participants prepare the bed for constructing the keyhole garden.

Figure 7: The finished keyhole garden

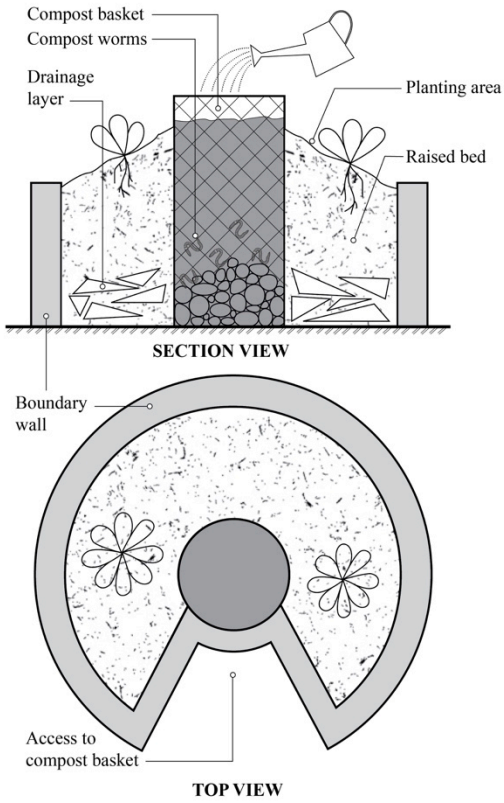

Figure 8: The section and top view of the keyhole garden.

CATALYZING

In the following account, I describe how the inhabitants were invited to explore the actor network mapping and deliberate on the possible ways to use the plot of land for communal gardening. Onboarding the inhabitants onto the collective's materialization of its intent opened up the inquiry on Culture of Permanence for multiple interpretations.

We invited the inhabitants through social media and in person to come and discover, discuss and enrich the vision for the allotted plot of land. The inhabitants who were involved in making the proto-garden could now explore their actions retrospectively and imagine potentials within the frame of the project but also beyond. The event started with a tour of the plot of land, the proto-garden and the mapping, summarizing the project in a cohesive narrative. And ended with a forum discussing how to relate to the theme of Culture of Permanence and use the allotted plot.

In the forum, there were many concerns about the plot of land, such as, “the springs in the area make the plot very damp for cultivation, it does not get much sun, and currently the steep slope makes it hard to work it” and “there are other plots in town that get good sunlight…and also land that is lying un-utilized. Perhaps we can use that instead”. The unfavorable location and condition of the plot left its utility up for debate.

The inhabitants expressed more enthusiasm for appropriating the keyhole garden within their domestic routines. They conveyed that in the past they used to have smaller individual patches to grow food and favored a self-reliance approach rather than a free for all communal plot. As one person remarked, “opening it up could lead to anarchy!”

The theme also incited debate, especially around the changing identity of the town as newer residents moved in. And in ending the forum, the inhabitants expressed the need to continue this conversation and elicit suggestions from a wider public not present in the room.

After the project had ended, the cultural organization took up the responsibility of carrying the conversation forward and continuing to share the planting calendar. The project was further reported in the regional newspaper making it a bigger public affair.

I argue that in these interactions, the collective is neither reducible to its members nor the network of participating inhabitants or the materials produced. The collective is simultaneously an actor who draws together heterogeneous elements and a network that can redefine and transform what it is made of (Callon & Law 1995). The overspills from the forum demonstrate the expanding of participation beyond project limits.

The work of summarizing, translating and materializing that designers do, are central to catalyzing social relations. This requires the designer to be increasingly aware of how participants are assembled (or not). In the conversations described above the planting calendar, social media, inhabitants, design interventions, sites, other designers, the newspaper article, etc. constitute this assembly of relations.

Figure 9: The actor network mapping presented and discussed with the inhabitants.

Figure 10: The calendar accompanying the keyhole garden.

DISCUSSION AND IMPLICATIONS FOR PARTICIPATORY DESIGN

As I have pointed out earlier, the short duration of this project is limited to performing the socio-political agenda set out by its theme. In this account, I make explicit an ordering of participatory practices that are attentive to in-situ social-material and political contingencies. Further, I articulate how the designer's agency can be understood in this process. To do so, I borrow from ANT as it is operationalized in participatory design work.

Using the vignettes of diffusing, reifying and catalyzing, I show three ways in which the designer's agency is enacted. In the first vignette, I point to how the designer learns to become an articulate subject by diffusing his/her authority and disciplinary expertise. Giving examples of learning workshops and site visits, I point to the importance of being attentive to the context and developing a collaborative practice that acknowledges others as expert in their practices.

The second vignette describes the actor network mapping and the proto-gardening and the backtalk of materials experienced as object-relations in the events. Here, I point to the designer's agency in shaping the relational events and thereby stimulating the dialectic between the materials and the inhabitants. As described in the section, the map did not exist outside the experience of the design collective, and the discussion around it influenced the making of the keyhole garden.

In the final section catalyzing, I articulate the agency of the designer as networked and redefined through the drawing together of network elements. These vignettes point to the relational and emergent nature of the designers 'ability to make a difference' and are closely tied with the politics of his/her practice. The reflection on agency presented here can be useful for participatory designers to re-frame familiar situations and understand the parameters that enable its emergence.

With regards to the broader concerns of power, participatory designers would agree that both power and agency are outcomes as well as central to the design process itself. As outcomes, they are modes of drawing together or ordering that act as mini-discourses (Law 2009). The discourse refers to particular stories about specific social and material relations, which in turn enforce power. This allows designers to ask – How does this mode of ordering differ from other modes? And how does it define the conditions of possibility? And in turn, make some social relations easier and others more difficult (ibid.). In this paper, the practice of diffusing, reifying and catalyzing would constitute such an ordering. This ordering points how to a sequence that empowers the inhabitants to self-determine the outcome and organize around concerns they most care about.

Power and agency in and through the participatory process, refer to the formation of human subjects. Subjects can said to be under someone's dependence/influence, but also tied to own-identity (Dyrberg 1997). In this study, the emphasis shifts from 'power-over' or 'power-to,' to what it means to act when designing with others (ibid.). An example of this is when the author positions himself vis-à-vis other's in the collective in an equipotential relationship. The same can be argued in the case of the collective being affected by the local, material and artificial settings.

Within the scope of this project, it has not been possible to present how the power structures already present in the field affect the designer's agency, thus, the account is limited to the frame of the project. Further, the influence of movements between multiple sites (both physical and digital) before, during and after the project is reserved for future study.

CONCLUSION

The approach to participatory design presented here proposes that for design to become meaningful in a particular place, it needs to shift the emphasis from deterministic solutions to the in-situ improvisatory 'doing' of collaborative activities. Further, the focus on the politics of practice, the *how* rather than the *what*, is described through acts of diffusion, reifying and catalyzing. The designer's agency in this process is considered to be relational and emergent. I further explain how power and agency can be seen as outcomes as well as central to the design process.

The discussion on agency presented here encourages participatory designers in their reflexive practice and aids them to see familiar situations from this perspective.

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