Counter-hegemonic practices; dynamic interplay between agonism, commoning and strategic design

Práticas contra-hegemônicas; interação dinâmica entre agonismo, commoning e design estratégico

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Abstract

Today we can see new policies that suggest more participatory models to address societal challenges. The interest in design and different forms of urban labs is also increasing. This includes participatory design (PD) that has moved out of the workplace into the urban territory. In this paper we will argue that the main contribution from PD is to set up processes that can support and critically reflect on local democracy in relation to these challenges. We will look closer into the notions of commoning and agonism, two concepts that both contest the concept of participation and expand what could be required to constitute local democracy. Through a project journey spanning over seven years, we will discuss how these concepts could be used to guide processes of infrastructuring in democratic urban development processes. However, working with them poses several obstacles, including tensions between them as well as with the notion of strategic design. We will argue that in order to introduce them in a strategic design perspective, you need to consider long-term interventions and diverse levels of engagement as well as different phases where agonistic and commoning approaches are alternated with more strategic engagements of developing networks with powerful alliances.

Keywords: participatory design, democracy, infrastructuring, agonism, commoning.

Resumo

Hoje podemos ver novas políticas que sugerem modelos mais participativos para enfrentar os desafios da sociedade. O interesse no design e em diferentes formas de laboratórios urbanos também está aumentando. Isto inclui o design participativo (PD) que saiu do local de trabalho e se deslocou para o território urbano. Neste artigo vamos argumentar que a principal contribuição do PD é a criação de processos que podem apoiar e refletir criticamente sobre a democracia local em relação a estes desafios. Aprofundaremos as noções de *commoning* e agonismo; dois conceitos que tanto contestam o conceito de participação quanto expandem o que poderia ser necessário para a constituição de uma democracia local. Discutiremos, por meio da observação de um projeto de sete anos, como esses conceitos poderiam ser usados para orientar os processos de infraestruturação em processos democráticos de desenvolvimento urbano. No entanto, eles trazem consigo vários obstáculos, entre as quais as tensões entre eles, bem como com a noção de design estratégico. Sustentaremos que, para que eles sejam introduzidos em uma perspectiva de design estratégico, torna-se necessário considerar intervenções de longo prazo e diversos níveis de envolvimento, bem como diferentes fases onde abordagens agonistas e de *commoning* se alternam com os compromissos mais estratégicos da construção de redes com alianças poderosas.

Palavras-chave: design participativo, democracia, infraestruturação, agonismo, *commoning*.

Introduction: urban labs, participation and cross-sector collaboration

Today you can find many initiatives, policies and especially urban labs that ask for more citizen participation and cross-sector collaboration to be able to deal with societal challenges. This is, for example, highlighted in The European Commission's report *Cities of Tomorrow*, which also brings forward diversity in cities as an asset:

> We need to work on strategies for mutual knowledge between all cultures present in the city: European and non-European cultures, middle-class and working-class culture (and poverty cultures, which are not necessarily 'poor cultures'), 'high' and 'low' culture, and especially specific youth cultures […] In a diverse city, the different spatial and social perspectives that people have are respected. In the eyes of city dwellers, there is no such thing as one city: it resembles a kaleidoscope of views. The city is perceived differently by different people and they will use the 'urban fabric' accordingly (Hermant-de-Callataÿ and Svanfeldt, 2011, p. 35).

This might be seen as opening up for more democratized processes of urban innovation. However, several researchers, inspired by Foucault (1977), highlighted how empowerment and mobilization of active citizens is not necessarily a way to emancipate people but can be rather seen as a new way of governing and controlling them. For example, the engagement of citizens can seem to be a way to provide opportunities for them to play an active part in forming a future society, but their actual freedom of action is limited or rather governed through norms and obligations towards the surrounding society that are taken for granted and seen as the obvious and only way forward (Foucault, 1977; Dahlstedt, 2008; Pløger, 2004). From this perspective, participation can be seen as a way to strengthen and make existing structures more efficient rather than to invite diversity and voices that could challenge established structures. Pløger frames it in this way: "The policy makers do not want an empowerment process that can shape a politically transgressive and transformative form of participation, but wish to prove that it is possible to build more efficient institutional forms of governance" (Pløger, 2004, p. 81).

A similar perspective can be applied to cross-sector collaboration, where the notion of Triple Helix has become quite established. Triple Helix can be seen as a way to establish hybrid organizations of academia, government and industry where a complex dynamics of feedback loops between them could both enable and constrain the different sectors' operations and knowledge production (Etzkowitz and Leydesdorff, 2000). Others have suggested adding citizens or civil society as a further element and term it Quadruple Helix (Arnkil *et al.*, 2010; Ahonen and Hämäläinen, 2012). Quadruple Helix is also the model for many Living Labs that are often described as long-term environments for cross-sector innovation with citizens in real contexts (Følstad, 2008; Stålbröst, 2008). These approaches seem to offer a platform where diverse agendas, issues and focuses could potentially be negotiated or contested on equal terms between the sectors. Yet, the majority of the rhetoric in the Quadruple Helix and living lab literature seems to present a quite different and skew image regarding equal relations and co-ownership, where "citizens" are most often reduced to mere "users", rather than voices of alternatives, and where the value produced only relates to business opportunities (Arnkil *et al.*, 2010; Følstad, 2008).

The above-described conditions for urban innovation demonstrate some degree of progress regarding more democratic urban development, but they also show that much more work has to be done to address diversity, alternative voices and more equal relationships and formats of ownership. We will therefore argue that PD's main contribution is to explore practices that support local democratic development by paying attention to these aspects. We also think it's crucial to connect the lessons learned through local exploratory engagements of participatory design with opportunities to affect change on more systemic levels in society. However, this requires a long-term perspective and a combination of approaches that are propelled by almost opposite guiding principles. While the processes of agonism embrace plurality, mobilize marginal actors and bring together adversaries – and the notion of commoning pushes for equal and mutual ownership – the practice of strategic design rather focuses on mobilizing allies that can increase the power of the marginalized voices. In this paper we will try to demonstrate how agonism and commoning can challenge taken-for-granted views on participation and local democracy while the notion of strategic design rather focuses on making the strategic impact stronger. We will argue that although you will find tensions between these concepts, it's the dynamic combination of them that makes processes of infrastructuring successful. In the next section we will describe the context of our work, which takes place within Malmö Living Labs and builds on participatory design. We will then follow a seven years long journey and, in the third section, discuss our initial efforts of applying agonistic participatory design. In the next section we will provide examples of how we have been inspired by strategic design and in the following one present approaches relating to commoning. Finally, in the last section we will sum up our experiences and discuss the lessons we learned from performing participatory design guided by these concepts.

Urban participatory design and Malmö Living Labs

Participatory design research originated from a workplace context in the 1970s and 80s, but during the last decade many PD researchers have increasingly focused on public arenas as a part of engaging in dealing with urban and societal challenges (DiSalvo *et al.*, 2013; Björgvinsson *et al.*, 2010; Ehn *et al.*, 2014). However, the main views and values that were at the core of early PD, for example the understanding of design as doing and reflecting; the recognition of socio-material and situated practice; the focus on addressing power issues; the aim of mutual learning; the emphasis on ethical concerns and democracy, etc. (Greenbaum and Kyng 1991; Simonsen and Robertson, 2013) – all continue to be central parts also of current PD in public realms. The above described understanding of

PD was the starting point when we initiated our first living lab in 2007, which was later scaled up to three labs in 2009: The Neigbourhood, the Factory and the Stage (in this article we will focus our discussion on the first two of them). The labs have been operating in the city of Malmö. This is a city that is often presented through different contested perspectives. One of them emphasizes how the city has gone through an extensive transformation, from being an industrial city to a "knowledge city" and a regional growth engine. The other perspective stresses that Malmö is a segregated city with a high number of immigrants who live primarily in the southeastern part, which has some of the highest rates of child poverty and unemployment in Sweden.

Living Lab the Neighbourhood had its starting point in the tension between these narratives and has tried to build connections between the immigrant-dense and socio- economically poor areas of southeastern Malmö and the more wealthy western parts of the city. The lab has mainly initiated its explorations on the basis of needs and opportunities coming from marginalized citizens and grass roots initiatives located in civil society and immigrant communities. The focus has been to explore opportunities for collaborative services and social innovation that can enhance daliy life experiences and yield sustainable development in these communities (Björgvinsson et al., 2010; Hillgren et al., 2011). MLL the Factory has been focusing on exploring collaborative production practices through the establishment of a makerspace, a public workshop where citizens may make things and explore possibilities of technology by sharing knowledge and tools. Unlike the other two labs, Fabriken had a physical location, a space run by an NGO, STPLN, that functions as a platform to support grass roots initiatives within the cultural scene. This meant that Fabriken has been co-initiated by STPLN and the researchers and along the way other actors (users, small companies) have been involved in co-owning and co-running the lab (Seravalli, 2014). Both of these labs can be seen as "framework projects" (Manzini and Rizzo, 2011) that work as enabling platforms for grass roots initiatives, social innovation and collaborative services. The notion of infrastructuring has been crucial to move the work forward and build these enabling platforms. The concept originated in the work of Susan Leigh Star and colleagues on large-scale technical systems in which they emphasized that infrastructure should be seen as a relational concept where technology is always situated and learned as part of a local context (Star and Ruhleder, 1996; Star, 1999). Karasti and Syrjanen later argued for a more process-oriented, ongoing and long-term perspective and reframed it as infrastructuring (Karasti and Syrjänen, 2004, Karasti, 2014). Through our own work infrastructuring has become an approach that builds on open-ended and long-term processes of matchmaking between diverse stakeholders and perspectives and where a flexible allotment of resources makes it possible for opportunities to emerge along the way (Björgvinsson et al., 2012).

In our labs infrastructuring processes have aimed at highlighting opportunities and possibilities on the margins. Now we are increasingly concerned with how these marginal futures might be brought forward and how we might work more with strategic design and a systemic

perspective to rework structures and policies that hinder these alternatives from moving forward.

This has also led to an increased collaboration with municipal departments in the city of Malmö. One such on-going collaboration, which can also be seen as a combination of the Factory and the Neigbourhood labs, is ReTuren, which is the first upcycling station in Malmö, an initiative that has been developed by the municipal waste company (VASYD). The station is located in one of Malmö's neighborhoods characterized by socio-economic challenges and it aims not only at improving waste handling in the area but also increase awareness about environmental sustainability as well as contributing to the regeneration of the social fabric in the area (by offering makers activities with a focus on upcycling). We will get back to this case later, but now we will go back a couple of years to see how the notion of agonism can come into play as a guiding principle for infrastructuring.

Agonistic participatory design

How can agonism contribute to urban participatory design?

The concept of agonism has become popular through the work of the political philosopher Chantal Mouffe, who has argued that a vital democracy is characterized by plurality and a contestation between radical perspectives. According to Mouffe, the dominant deliberative democratic discourse ignores this crucial basic condition of democracy. Instead, most democratic processes aim for consensus, which risks reinforcing established hegemonies in a society in which specific core values have been internalized by large parts of the population and are taken for granted. She argues that this is very problematic because alternative voices and values are excluded (Mouffe, 2000, 2009). She phrases it this way:

Things could always have been otherwise and every order is predicated on the exclusion of other possibilities. It is always the expression of a particular configuration of power relations. What is at a given moment accepted as the 'natural' order, jointly with the common sense that accompanies it, is the result of sedimented hegemonic practices; it is never the manifestation of a deeper objectivity that would be exterior to the practices that brought it into being. Every order is therefore susceptible of being challenged by counter-hegemonic practices (Mouffe, 2009, p. 549).

For Mouffe, the way forward is to embrace conflicts and aim for agonistic spaces where actors with radically opposing views can struggle against each other, but where they also respect the opponent. According to her, what is "important is that conflict does not take the form of an 'antagonism' (struggle between enemies) but the form of an 'agonism' (struggle between adversaries)" (Mouffe, 2009, p. 551). Several researchers within the participatory design community have been influenced by the concept of agonism as an approach that can inspire counter-hegemonic practices that can challenge existing structures and consensus based on dominant (taken-for-granted) perspec-

tives in society by paying attention to marginalized views and perspectives. Rather than aiming for consensus, this approach allows for and embraces controversies and opposing perspectives during innovation and design processes. Instead of supporting existing societal structures, it focuses on exploring alternative future-making and alternative framings of societal challenges (see Björgvinsson *et al.*, 2010, 2012; Hillgren *et al.*, 2011; Emilson *et al.*, 2014; DiSalvo, 2010). During the rest of this section we will describe how agonism has been helpful for us and how and why we believe that it will be an important element in urban development guided by PD. We will start by discussing how agonism can provide a framework that can guide you in the setup of an urban lab, especially regarding how to form collaborations and pay attention to the particularity of the different potential partners.

Cross-sector collaboration as an agonistic space?

Cross-sector collaboration could be seen as a good opportunity to create an "agonistic space" that allows for heterogeneity, diverse perspectives and creative, respectful and contested collaboration. In an earlier publication we described an agonistic space as *a polyphony of voices and mutually vigorous but tolerant disputes among groups united by passionate engagement* (Björgvinsson *et al.*, 2010). However, looking closely at the different societal sectors reveals that they are not that different from each other or represent very different perspectives anymore; expressed with some simplification, you might argue that there is no polyphony of voices! You will rather find a quite homogeneous landscape characterized by consensus.

Civil society is a sector that has got an increased attention in recent years as it can mobilize resources and perspectives that can potentially deal with societal challenges. Many have especially emphasized how this sector is vital for the development of democracy and alternatives; for example, how it operates through an alternative rationality (Svedberg, 2005), how it adds alternative information and plural and critical voices (Amnå, 2005), how it signifies the 'freedom to imagine something different' and plays a watchdog role on government (Edwards, 2004), and how it creates resistance (Garsten, 2005). Several researchers have argued that some of civil society's specificity and unique qualities of providing alternatives might be at risk of disappearing. Many of the arguments behind this concern are that many organisations in the civil sector have recruited people and borrowed leadership models, financial strategies and terminology from the private sector (Amnå, 2005; Wijkström and Malmborg, 2005). Some have described this as a resource trap where many NGOs today struggle to locate and apply for money (e.g. from different development and innovations funds). This can potentially force these organisations to develop the mindset that is the most successful in bringing in monetary resources (Wijkström and Malmborg, 2005). This denotes a shift in civil society in the Nordic countries, where marginal groups traditionally have been able to make their voices heard and participate, but today the requirement of specific competencies excludes many from participating (Svedberg, 2005). What does this shift in civil society mean for a lab that wants to produce counter-hegemonic

practices and aim for plurality? We would argue that it's not enough to set up a Penta Helix consortium; rather, you need to pay attention to the more specific agendas among potential partners to ensure that they represent alternative, marginal and potentially challenging perspectives. When we started Malmö Living Lab our first strategy to deal with this was to try to find and engage marginalized NGOs and local residents in some of Malmö's more immigrant-dense and socio-economically deprived neighbourhoods and then, through processes of infrastructuring, build connections between them and stakeholders in the more wealthy areas. We imagined that, by bringing these potentially diverse actors together into processes of exploration and prototyping, this could constitute an agonistic space. However, as we will see later, this turned out to be hard. One obstacle was how to find and engage marginalized NGOs, and another was how to connect them as adversaries (not enemies) with actors representing some opposing perspectives.

Finding and engaging marginalized and potentially agonistic actors

Our approach to find marginalized NGOs was a slow process consisting of several iterative steps where we first gained trust in the grass roots organization RGRA, which then introduced us to the even more marginalized NGO Herrgårds Womens Association (HWA) – a multi-ethnic group of women who organized themselves because they felt excluded from society. Instead of inviting them to our project as participants (or objects of study), we explored how we could enter into their everyday activities and support them. We were not explicitly pushing for agonistic perspectives. Instead, we slowly tried to establish trust with them through open-ended and playful explorations. A crucial factor in our efforts to establish an agonistic space was that the coordinator of this organization was extremely skillful in engaging citizens from marginalized immigrant communities. They were harder to find and engage and much more work with them was required compared to initiating collaboration with more established NGOs, but we would argue that they were a crucial starting point for our agonistic endeavors.

Establish an agonistic space by connecting stakeholders as adversaries

Connecting this marginalized group to more established actors as adversaries (as counterparts that respect each other but represent radically opposing viewpoints) turned out to be an even harder challenge. We initiated a series of small-scale experiments and prototyping activities with HWA that were based on the women's request to become an acknowledge resource in society. One of these prototypes explored how they could support newly arrived refugee orphans by offering cooking classes. The prototype was very successful from the perspective of the orphans and the women (Hillgren *et al.*, 2011). The prototype not only proved the value of the service, but it also created the ground for an agonistic space, because at that time acknowledging an immigrant NGO as a valuable resource for society and not as a cost was considered

radical by many. Maybe the most agonistic aspect of this prototype was that it challenged the notion of what could constitute a "job". Is it only production that is required by the market or could this notion be contested through adversarial means?

With this prototype as a firm ground we then tried to set up several encounters between the women (seen as a resource for society) and public and private sector stakeholders representing an opposing view. We tried to see each encounter as an agonistic space, but most of them failed in that respect. Often it turned out that the more powerful actors (that represented the established hegemony) opted out of the processes. These have been described in detail elsewhere (Emilson *et al.*, 2014). We got some few partial encounters that initially looked like successes, for example when we connected HWA to a network of businesswomen. The businesswomen truly respected the HWA women as resourceful persons and initially the process generated several potential business ideas. However, after a while it turned out that the businesswomen expected and demanded that the HWA members should develop these ideas as individual independent women while the HWA group wanted to do it as a collective. This conflict might have created a fruitful agonistic space, but at this stage the process was controlled by the businesswomen and we were not able to convince them about the relevance of such an approach. At this point someone also put fire on the HWA premises, which put an end the process. This was also the end of our collaboration with the women, but we continued to aim to reach an agonistic space where the controversy regarding what constitutes relevant and acknowledged resources in society could be kept open, explored and debated. We have been doing this through two interrelated and parallel processes. One has been to use strategic design to search for and build alliances with other research disciplines to be able to strengthen our case, something that will be discussed in the next section. The other has been to continue to explore what kind of practical interventions could potentially create a strategic platform where we could elaborate and discuss questions relating to the Herrgårds Women case (we will get back to this in a while with the example of ReTuren.

Participatory and strategic design

A temporary move from adversaries to alliances and strategic design

It was clear to us that we needed to strengthen our and HWA's claims that an immigrant NGO could be acknowledged as a valuable resource in society and that it would be worthwhile to explore this opportunity further. The prototype was a good starting point, but it was not strong enough to stand up as a case that would be respected by an adversary. Instead of continuing to look for opponents, we started to look for alliances. This can be seen as a temporary move into the area of strategic design. This is an approach that can be seen as quite contrasting compared to striving for agonism, as it's about mobilizing allies and creating coalitions that share values and converging interests (Ceschin, 2013; Manzini, 2015).

Manzini describes it as a process where you involve actors that could potentially provide hope for success (Manzini, 2015). Strategic design also emphasizes the importance of exploring all technical, sociocultural, institutional and organizational contextual conditions that can increase the potential for successful implementation (Ceschin, 2013). Help came from an unexpected source. In 2010 a politician (now mayor) launched a commission inspired by Michel Marmot (Marmot, 2008) to investigate the status and causes of unequal health in Malmö. It was termed "The Commission for a Socially Sustainable Malmö", and the final report of this process was presented in 2013. Since then it has been one of the most important policy documents for development processes in the city. It turned out that many of the suggestions in this report could be used to strengthen our case. One of the core arguments in the report is that a low social position is strongly associated with living conditions which constitute an increased risk of ill-health, compared to the living conditions associated with a high social position. The report describes how factors such as education and having a job or being unemployed affect your social position, but, more importantly, it also stresses that if your skills are not acknowledged as being valuable and you don't feel like you can contribute to society, your social position is significantly weakened. It also states that immigrants are overrepresented among those with a low social position (Stigendal and Östergren, 2013): "this is about building a society where everyone is needed. With the goal that people who is born here or who moves here having the prerequisites to develop, believes in the future and achieves their full potential" (Isacsson *in* Stigendal and Östergren, 2013, p. 3). These arguments help explain why the HWA case is important. If you don't support groups like HWA, you are not only risking losing their capacities; in addition to that, if they can't maintain or improve their social position, their health will decline and this will result in higher costs for society. We also got the two main writers of the report to actively support our work. Mikael Stigendal, a professor of sociology, described our work as very valuable in one of the interim reports, and Per-Olof Östergren, a professor of social medicine, invited us to collaborate closer in a project on integration of refugee immigrants. Both of these researchers are also actively discussing and challenging the notion of what constitutes a job and valuable societal resources.

In our search for alliances we also brought in voices from a local unemployment agency in one of the neighbourhoods we worked in. They presented their everyday work as quite frustrating. On one hand they are often meeting unemployed immigrants who are "quite skilled" in different forms of traditional craft. At the same time these skills are not requested in the market. "Craft skills, my companies are laughing at that. If they need craft skills, then they are requiring highly specialized skills". They also gave an example of how a newly arrived man from Iraq had extensive skills in how to fermenting vegetables. No one valued that at that moment, but today fermented vegetables are extremely popular. This shows how quickly skills that had been previously seen as having no value suddenly became desirable in the market.

Another area where we could see the need to assemble resources and build alliances to strengthen our case

related to New Public Management (NPM). During our efforts to find support for HWA in the public sector NPM was often brought up as a major obstacle by the few civil servants who expressed an interest in the case. (NPM is often associated with management approaches imported from the business sector that stress the importance of formulating clear and unambiguous goals that can be operationalized within given time frames and a strong command and control system.) We therefore arranged a seminar to discuss NPM and its relation to innovation in the public sector and brought together strategically important people such as the director of La Region 27 (an organisation supporting innovation in France), a professor from the Academy of Public Administration. We also invited representatives from the public sector, design researchers, practitioners, policymakers and government representatives. One of the lessons learned was that it became clear that NPM has become institutionalized and taken for granted as something good. It has to be challenged because it creates obstacles for innovation, but you must do that with respect for all the civil servants who have been trained and built their work identity in relation to this approach. By bringing together this group of strategic people we were not only able to learn more about the connections between NPM and innovation processes in the public sector. We also formed a network with strongly established and influential actors on the national level that could potentially support us in our future work.

All the arguments that we mobilized into our work throughout these engagements were expressed in non-academic language, so that they could make sense to potential adversaries but also help us expand our network of alliances in the city of Malmö. Today this network includes many civil servants working as project leaders but also several directors of municipal departments and local municipalities. This has also had the consequence that we have been invited to do several lectures for the majority of city directors, including the mayor in Malmö. We have been invited by the Swedish Innovation Agency Vinnova to discuss future innovation in the public sector. Altogether we believe it has been crucial with these more "strategic" design interventions. It will not be possible to trace what kind of effect all these alliances will have, but we will argue that, step by step, they have created strategic networks that can start challenging norms that is taken for granted in society.

Merging Living Lab the Factory with Living Lab the Neighbourhood

In the spirit of strategic design, and equipped with many of the arguments described in the previous section, we could see an opportunity to continue our work by bringing in inspirations from the "maker movement". Thus we initiated a process where we could explore how the idea of a makerspace could potentially make sense as a platform for civil society actors such as HWA and other marginalized citizens. Preferably, as a place where they could amplify, enhance, and visualize their skills and capacities as valuable societal contributions and where potential links between them and other actors could be established through processes of mutual

sharing and learning. Some of the arguments could be lined up as follows:

- Many immigrants are skillful in craft, but these skills are not regarded as valuable in the market.
- These craft skills make sense in relation to up-cycling activities where there is a need to re-make cloths, furniture, equipment etc.
- To provide the opportunity for people with these skills to engage in up-cycling activities could be a way of acknowledging their competences as valuable resources in society. This could potentially also increase their social position and health, and possibly also lead to new job opportunities.

Our approach to move this opportunity forward consisted in merging the work that had been done in Living Lab the Factory with the work in Living Lab the Neighbourhood. On a practical level this meant to explore how diverse maker activities could make sense in the area Lindängen in Malmö. These collaborations included groups similar to Herrgårds Women Association, but also school classes and larger more established NGOs, such as the Red Cross, and several civil servants working both in the local municipality and in the environmental and planning offices. The interventions created a stronger curiosity for maker activities in the area, where different stakeholders could see maker activities as potentially meaningful in relationship to their everyday work. When we heard that the municipal waste handling company VASYD had plans to establish local recycling stations in Malmö we thought that our case was strong enough to approach them and suggested that we could collaborate to explore how these stations could be enriched through notions of maker activities and up-cycling. They happily accepted, and the collaboration that followed turned out to be our so far best opportunity to co-create a platform that could be supportive of cases like HWA.

Commoning and participatory design

How can commons contribute to urban participatory design?

When we merged the work in these two labs it was also a merging of different but related approaches to collaboration; the Neigbourhood had been guided by agonism and the Factory by the notion of commoning. We will, therefore, present some of the core elements of commons/commoning here and partly look back on the work in the Factory, but also see how ReTuren can be seen as a continuation of the work we discussed in the previous sections.

Commons have recently been gaining momentum within the Participatory Design community (Martilla *et al.*, 2014; Seravalli, 2014). This is related to the rapid diffusion of initiatives that rely on shared resources and collaboration in value production processes, such as open source software, community gardens, makerspaces etc. These initiatives are characterized by the fact that participants are involved in imagining, developing and running them as well as by co-ownership, meaning that participants are directly taking decisions on how to collaborate and share re-

sources within them. Thus they resemble commons, which are collaborative arrangements for generation, access, use and management of one or different shared resources (Ostrom, 1990). Commons studies have been articulating possibilities and limits of sharing and collaboration in the use and management of different kinds of resources (Rose, 1986; Ostrom, 1990; Lessig, 2002; Benkler, 2006; Hess and Ostrom, 2007; Hess, 2008) also within urban contexts, with a special interest in how co-ownership may lead to alternative governance forms (Foster, 2011). The focus is on how more horizontal decision-making structures can support the participants' commitment and at the same time create new opportunities for citizens to take part and influence the development of their areas as well as to exert their right to the city (Harvey, 2011). Thus, commons provide also the ground to further explore democratic concerns within participatory design, for example, by thinking about processes that move beyond participation towards co-ownership. With the work of the MLL Fabriken first and then with ReTuren we have been exploring how it might be possible to design in and for commons, and thus try to further understand to which extent commons might work as a design principle to support local democracy and systemic change in urban contexts.

From design for commons to commoning

Commons emerged as a grounding principle within MLL Fabriken, which has focused on production practices based on sharing, collaboration but also on co-ownership. Since the beginning the focus was on creating a lab developed and run in collaboration by the researchers, the NGO and the participants, where agenda-setting and the organization of the space would be decided together. This exploration led to the fact that the space changed its organizational structure three times over a four-year period looking for a way to support co-ownership but at the same time allow for openness and deal with transient participation. What emerged was a tension between the need for commons to have a stable organizational structure and having participants coming and going at Fabriken with a quite different understanding and different ways of valuing it. In order to support sharing and collaboration among participants with different interests, co-ownership has been progressively reduced (Seravalli, 2015). This highlights an interesting dilemma when working with commons: while they do entail more horizontal decision-making structures, they also need a certain level of consensus in relation to aims and views, which may easily lead to exclusion. Fabriken revealed quite well how designing in and for commons requires a tentative and iterative process that considers the different rationalities that are at play, as well as power relationships. This is in line with the concerns expressed by other scholars who have been calling for an understanding of commons that account for different rationalities and power relationships that are at play in collaborative arrangements (Nightingale, 2011). It is also in line with the concerns about ossification (Daniels, 2007). Traditional commons literature has looked at stable organizational arrangements as a way to ensure the long-term sustainability of commons. However, organizations entail the formalization of rules and actions, which

means prioritizing a particular way of valuing and understanding sharing and collaboration. This means that organizations have limits when it comes to account for different rationalities and they also tend to resist changes in relation to such basic views (Daniels, 2007). This issue appears to be central in urban commons, which often gather a diversity of actors whose views and values may strongly differ. Thus we suggested that it might make more sense to think about commoning as a guiding principle rather than design for commons. Commoning entails understanding commons as a socio-material practice where different rationalities might be at play and which require the creation of arrangements that can be changed continuously (Seravalli, 2014).

New challenges for PD: joining initiatives during use time

Commoning opens new perspectives for PD regarding the possibility to move beyond traditional participatory formats, where the designer has a recognized role as facilitator and invites others to participate in processes where framings and agendas have already been settled. Commoning entails that agendas and framings must be negotiated among the different participants. Thus, in striving towards co-ownership it might make more sense for designers to join other actors' initiatives rather than starting their own projects and inviting others to participate. This has been true both for Fabriken but also for ReTuren, where we have joined the VASYD initiative rather than continuing our own process. By infrastructuring from a commoning perspective, different actors have been gathered around ReTuren: VASYD, STPLN, researchers, civil servants, local initiatives and inhabitants, who, to different degrees, have a sense of ownership of the upcycling station.

Leading towards new opportunities for systemic change?

Besides the challenges it raises, commoning is also creating new opportunities in relation to local democracy and systemic change. As already pointed out, co-ownership entails a different way of organizing decision-making processes and may represent a possible alternative to local democracy. A less evident opportunity might be related to systemic change. Particularly in the work with ReTuren, co-ownership require a close collaboration between the project leader, the coordinator, the involved researcher as well as other actors in the area, such as civil servants, librarians from the local library and active citizens in the neighborhood. This collaboration demands a continuous exchange of knowledge and the establishment of mutual learning processes when it comes to the neighborhood, makers' culture, citizens' involvement and sustainability. Approaches and ideas that have been used in ReTuren, regarding how to adress local needs, have been diffused and intertwined with the approaches and ideas that other actors are using in the area. Such exchange is boosted by the fact that most of the actors in the area recognize not only the value of ReTuren per se, but also that the development of the station may benefit their own interests and aspirations. Thus new alliances are emerging across structures

and roles in the area. At the same time the deep involvement of one of us in a project which is driven by VASYD is also opening up opportunities for spreading new ways of thinking and ideas within such an organization, creating openings for change relating to practices and decision-making about waste handling. Commoning in ReTuren is supporting mutual learning between the participating actors on a local level but also on a more systemic level.

Summing up for a discussion

We started by presenting the increasing request in policy documents and urban labs for more citizen participation and cross-sector collaboration to be able to deal with societal challenges. We also argued that several researchers have been questioning if this actually bring forward all kinds of voices and possible transformations or if processes of mobilization of active citizens and participation is only a strategy to mobilize the ones who already support the established hegemony (Dahlstedt, 2008; Pløger, 2004). We have also seen how cross-sector collaboration 'per se' is not enough if you want to ensure a plurality of voices and perspectives. Although the civil sector traditionally has been regarded as especially important for democracy because it challenges and provides alternatives, many NGOs today have moved away from this more critical role. The same critique can be directed towards universities that have gone through a shift from the Humboldt university ideal, where researchers clearly kept a critical distance towards the state and the private sector, towards an ideal that rather views research as something that should serve these sectors (Haraldsson 2010; Melander, 2006). This put the focus on us as researchers and what we represent when we engage in collaborations in the city. It also evokes questions about whether we are still free to challenge taken-for-granted practices. In similar lines you can argue that the public sector has also lost some of its uniqueness due to the strong influence of new public management. This is of course a simplified image, but we would argue that if you, in line with Mouffe, see real and radical plurality as a necessary base for democracy then you need to work hard to find it and even harder to make it productive.

We have tried to show how urban living labs driven by participatory design can take on this challenge through processes of long-term infrastructuring guided by principles of agonism and commoning. In our own work these processes have gone through quite different phases. The first phases were guided by an agonistic perspective and included locating and building relationships with marginalized actors as well as initiating prototypes that could potentially challenge established and taken for granted norms of how we are supposed to live and work in the future. In our example the agonistic issue related to the question of how immigrant NGO could be regarded as a valuable resource in society. During the next phase we tried to create an agonistic space by connecting our work to stakeholders that potentially could be seen as adversaries, which turned out to be extremely hard. To be able to move our struggle forward at this point we realized that we had to form alliances that shared our perspective and work with strategic design to strengthen our case. This

phase of strategic design can be seen as successful in the sense that it helped us mobilize arguments, researchers, policy makers, civil servants and directors of several municipal departments. It also made several civil servants begin to get interested in the concepts of agonism and commoning, and, as a result we have been invited into municipal projects to provide spaces for reflection regarding value production and participatory approaches. Today the city of Malmö is initiating new huge innovation projects that will build on the living lab methodology and other participatory approaches, and we are invited as experts to guide them in this process. This is a huge shift from the time when we started our work and where we (and HWA) had a hard time to be acknowledged as legitimate.

However, this success also brings our attention towards a very crucial question regarding strategic design seen as building networks. What kinds of networks are established If we look at this from a classical ANT perspective? Several scholars often argue that the hard work of mobilizing and creating socio-material alliances is not only about making connections. It's a process of translations where heterogeneous actors and voices become homogenous and where one actor can become spokesperson for many others (Callon, 1986; Callon and Latour, 1981). However, we have most often tried to think of our engagements in building networks as infrastructuring, where we, in line with Susan Leigh Star, pay attention to heterogeneity and inclusion of marginal voices (Star, 1991; Björgvinsson et al., 2010). Star has also criticized ANT for ignoring marginal actors and for only giving attention to the "winners" (Star, 1991). With this said, it might be good to be aware of our own emerging consensus culture and the risk of blackboxing and closing in the controversies that we have embraced during our period of more agonistic infrastructuring. This is especially relevant today when our networks and alliances through strategic design are stronger, more 'stabilized' and in unison start to embrace "open-ended experimentation" rather than "New Public Management" and suggest new models of what might be seen as valuable societal contributions rather than "jobs". Also, Herrgårds Women Association is no longer an active member of the network; we have become spokespersons for them, and Star reminds us that a stabilized network is only stable for some, especially the ones that actively take part in it (Star, 1991).

In working with commoning we have seen how exploring co-ownership and more horizontal decision structures within Urban Labs may be used to experiment with organizational forms based on co-ownership, more horizontal decision-making and striving towards mutual learning. From the experiences with Fabriken and ReTuren it strikes us how striving towards commoning in Urban Labs entails opening up not only agenda-setting but also the running of the lab itself, thus putting a strong focus not only on collaboration and sharing but also co-ownership. This supports a deeper commitment of participants which, in turn, can foster mutual learning and the establishment of quite strong alliances across sectors. Moreover, this might also open up some black boxes, since it requires that decisions have to be made in negotiation among different participants' interests and perspectives and action has to be continuously coordinated among them. Such negotiations and ongoing coordination, in or-

der to be manageable and actually allow for action, tend to be organized in more or less formal structures. Such organization requires to establish shared knowledge and values around the lab as a commons. As already pointed out, this can be problematic because it might lead to the organization's ossification (Daniels, 2007), which means its inability to adapt to changes as well as account for diversity. Commoning entails a sort of paradox. On one side it provides the opportunity to open decision-making to more inclusive and collective forms, on the other such forms require participants to have a shared understanding in order to function and, thus, they have limitations when it comes to the degree of diversity that they can bear. This becomes particularly relevant in relating commoning with agonism. Commoning emerges per se as a sort of counter-hegemonic practice in relation to ownership and decision-making, a practice that proposes co-ownership and collaborative management as an alternative to the private and the public model. For example, ReTuren represents within the waste handling sector an agonistic perspective, since it experiments with ways in which social sustainability, citizens and makers can have a central role in a sector which is otherwise dominated by material flows and engineers. Agonism can also be at play as a grounding principle in commoning itself, for example in ReTuren, where the notion of holistic sustainability has become a matter of developing co-ownerhsip among participants with different expertise and coming from different sectors. However, in ReTuren there is also a clear limit to how much diversity can be embraced in commoning. For example, involving someone in the upcycling station who does not recognize the importance of having a holistic perspective on sustainability or why co-ownership among diverse actors is so important will simply make it impossible to continue the work with ReTuren.

Conclusion

Although we can see an increased interest in more inclusive and participatory models that can address societal challenges, we have tried to demonstrate how participatory design can, through processes of infrastructuring, push the boundaries of local democratic urban innovation further. Agonistic participatory design is a good starting point to ensure that marginal and plural voices are included in these processes. However, we have also learned that you need to complement this approach with phases that are characterized by strategic design to ensure that the claims and voices of marginal actors can grow stronger. In a similar way we have tried to argue that PD guided by commoning can contribute to democracy by emphasizing processes of co-ownership. At the same time, being too dogmatic regarding commoning might risk creating coalitions that are too homogenous regarding norms and values and where controversies are avoided. Through the seven-year long infrastructuring process that have described in this paper we have seen how controversies have been more or less open and marginal voices have been more or less present during different phases. We have also seen tensions between agonism and commoning as well as between agonism and strategic design, but we believe that these tensions are productive for democracy. Our conclusion is that it's the dynamic interplay between these approaches that can provide the constructive way forward to challenge established structures, especially when you see these endeavors as long-term trajectories.

Acknowledgements

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