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BEYOND A LIVING LAB: SCALING SOCIAL INNOVATION

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ABSTRACT

This paper reflects on experiences with practicing and scaling a social innovation concept that was co-produced between public and private partners and citizens in a living design laboratory in Denmark from 2009-2012. The concept is a public service supporting ad-hoc exercise communities for senior citizens in public parks, based on playful activities. This paper builds upon follow-up studies which have been made since the project ended. We discuss how practicing the service unfolded over time, and how two municipalities have attempted scaling the concept. We deepen the understanding of theoretical concepts of scaling with experiences from practice by e.g., discussing ownership, exchanges between formal institutions and informal civic engagement, and a need for clarifying new roles and responsibilities.

INTRODUCTION

In recent years, public sector and governmental units have explored how social innovation projects, co-produced jointly by citizens, and public and private partners, can transform a political agenda into meaningful proposals for change (see e.g., Bason 2010; Freire and Sangiorgi, 2010; Manzini and Staszowski 2013; Ehn et al. 2014; Manzini 2015; Tortzen 2016; Binder and Brandt 2018). We employ Ezio Manzini's definition of social innovation "as new ideas (products, services, and models) that simultaneously meet social needs and create new social relationships or collaborations"

(Manzini 2015, p. 11). Manzini argues that the overall ambition of social innovation is to contribute to the development of sustainable societies, and that they are advantageous benefits for society as such and enlarge society's capacity to act (ibid). In a Danish context, Tortzen argues that systematic empirical research on how co-production projects involving the public sector and citizens evolve in practice is lacking investigations of their value and gains (Tortzen 2018). To increase gains, the value of investments for the public sectors and other professional actors, there is an interest in scaling successful innovations beyond the initial local context and initiative. However, in our literature review, we have not found any longitudinal (design) research studies on how social innovation concepts in the public sector are: 1) evolving within the same local context over time, 2) spreading to other contexts. Often, design research projects are carried out within a limited timeframe, and the researchers withdraw from the project when the funding runs out.

However, we found two design research initiatives with a long-term perspective. Firstly, in Malmö, design researchers from Malmö University have from 2007-2019 engaged in three living labs (Ehn et al. 2014). An important difference between The Living Labs in Malmö and The Living Lab Valbyparken, which this paper is about, is that in Malmö, the collaboration was between local non-governmental organizations and citizens while the one in Valbyparken was anchored within Copenhagen Municipality. Secondly, since 2010, the design researchers from the INDACO Department at Politecnico di Milano promoted the *Feeding Milan: Energy for Change* project in partnership with University of Gastronomic Sciences and Slow Food Italy (Manzini and Rizzo 2011). *Feeding Milan* differs from The Living Lab Valbyparken in the sense that no public sector units have been involved.

SCALING SOCIAL INNOVATION

In distinguishing different practices and strategies of scaling social innovation, Westley and Antadze (2013) describe the distinctions of *scaling out* as disseminating

benefits to be felt by more communities and individuals, from the difficulties in *scaling up* as connecting to opportunities as resources, policies, and values occurring in the broader economic, political, and cultural context. Manzini (2015) further addresses these different strategies of *replicating as scaling out* and *connecting as scaling up*. *Replicating as scaling out* describes a strategy of recreating and reconfiguring horizontally the most promising practices across contexts, as for instance, replicating a project, while attuning it to a new context. Manzini stresses that no individual case can be reproduced because they will always be deeply rooted in the specific context and shaped by the main actors involved. Instead, he argues that when discussing how to replicate collaborative organizations, “we are in reality discussing how these ideas may spread and how different groups of people may recognize, adopt, and localize them (that is, adapt them to different contexts)” (ibid., p. 180). The second strategy, *connecting as scaling up*, deals with connecting and integrating several small collaborative projects into larger framework programs. According to Manzini, “it can be done by connecting them horizontally with similar or complementary initiatives, and vertically with other types of organizations (social, economic, and political)” (ibid., p. 180).

Rossitto et al. (2020) argue for shifting designers’ focus away from *scale*, as a mere quantitative growth, to one on *scaling*; that is the variety of practices, along with the role of human and non-human agents, that contribute to the ways local initiatives proliferate across contexts and over time. They point to how researchers such as Biørn-Hansen and Håkansson (2018) suggest different modes of scaling. *Sustaining* relates to the work of organizing initiatives such as defining practices and attracting members and resources. *Growing* includes processes to build up and consolidate the socio-technical infrastructure to enable more people to take part. *Spreading* deals with the creation and dissemination of new skills, ideas, and knowledge. Rossitto et al. (2020) further point to how transition scholars such as Naber et al. (2017) have distinguished patterns of upscaling practices as *growing*, *replication*, *accumulation*, and *transformation*. *Growing* and *replication*, respectively, relate to an increased number of actors participating in a given initiative and reusing the same concept in different locations. *Accumulation* and *transformation* are indicative of more qualitative changes: in the former, different initiatives are connected to each other; in the latter, a given initiative shapes a change at an institutional level.

This paper theorizes and reflects based on these various notions of scaling and what issues are important when moving from a social innovation project to sustainable scaling in practice within a public context. We do this through a follow-up study on re-thinking public services; on what happened beyond ‘The Living Lab Valbyparken’ - an ad-hoc exercise community in a

public park part of the SeniorInteraktion project (Brandt et al. 2010, Malmborg and Yndigeegn 2013, Yndigeegn 2016, Foverskov 2020). We focus on ‘beyond’ the living lab, as *after* researchers left the project, including attempts to scale the concept and practice to other places and cities. The paper is structured as follows: Firstly, we present the SeniorInteraktion project, The Living Lab Valbyparken, and the additional empirical material that this paper builds upon. Secondly, we discuss how the ad-hoc exercise community in Valbyparken unfolded from a living lab to a sustained practice, and practices of scaling the concept to other public parks within the same municipality as well as scaling to another municipality. Lastly, we discuss ownership, exchanges between formal public institutions and informal civic engagement, as well as scaling as organizational transformations including needs for clarifying new roles and responsibilities.

THE SENIORINTERAKTION PROJECT

The SeniorInteraktion project was a practice-based design research (Vaughan 2017) using a participatory design approach (Brandt et al. 2013) to assist partnerships among Copenhagen Municipality and nine private and NGO partners in exploring new forms of public services to senior citizens, based on community building (Brandt et al. 2010, Yndigeegn 2016, Foverskov 2020). As collaborating partners, the design researchers come from two design research institutions: the KADK and the IT University of Copenhagen. The project owner was the Health and Care Administration at Copenhagen Municipality.

The SeniorInteraktion project focused on improving the quality of life and well-being by designing for social interaction among senior citizens. The project suggested a new horizontal service model resonant with Cottam and Leadbeater’s critique of the Public Service Reform, stating how “solutions need to be assembled around people and their distinctive needs rather than defined within organisational hierarchies” (2004, p. 17), further aligning with Meroni and Sangiorgi’s definition of collaborative service models “as a way to redesign public and community service” (2011, p. 119), and joining Morelli et al. (2021) who describe a recent shift toward services as processes of value co-creation. Our aim was to develop a new horizontal service model, including socio-material infrastructures that increased physical and social interaction among smaller groups of senior citizens contributing to social well-being (Brandt et al. 2012). Thus, our focus was on enabling self-organization and care among senior citizens.

As opposed to perceiving public service delivery as a conventional offer to the individual, we developed a horizontal service model supporting communities of senior citizens. These communities were intended to be driven by citizens, but firmly supported by what we later termed as ‘a helping hand’ (Yndigeegn

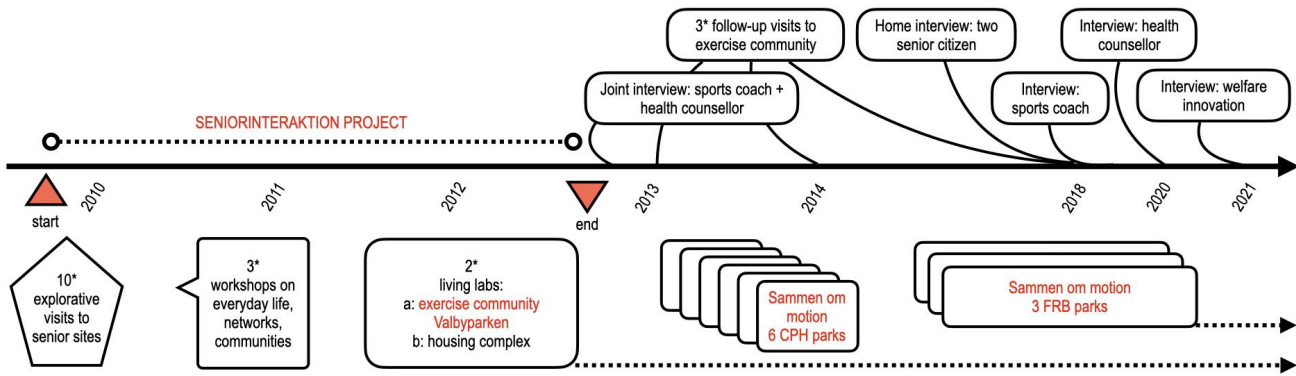


Figure 1: Overall project timeline and follow-up activities

and Aakjær 2018) for organizing and occasionally facilitating the communities from the public side. We refer to this constellation as a citizens-driven service.

More than 100 senior citizens, 15 codesign researchers, 9 industrial / NGO partners, and 10 municipality professionals were involved. The first part of the SeniorInteraktion project was conducted as a design laboratory (Binder and Brandt 2008) including field visits to 10 local senior homes and activity centers, and three full-day codesign workshops evoking and enacting, for instance, a number of future scenarios. The last part of the project was conducted as two living labs (Binder et al. 2011) running in parallel and lasting about one year each. Here we explored new potential practices through ‘rehearsing the future’ (Halse et al. 2010) with: 1) seniors in a municipal co-housing complex and; 2) a group of seniors and partners establishing an ad-hoc exercise community in a public park (Yndigeegn 2016, Foverskov 2020). Today, senior citizens from The Living Lab Valbyparken are still joining each other every second week to play games and drink coffee (see figure 1).

INFRASTRUCTURING FOR CONTINUATION

When we initiated the project, there was an increasing interest in the concept of ‘infrastructuring’ as introduced in the Scandinavian design community by Björgvinsson et al. (2010) and Binder et al. (2011), based on the work of Star and Ruhleder (1996), Suchman (2002) and Karasti and Syrjänen (2004). We applied this concept as a way to design for social innovations to sustain and continue after the project ended (Olander et al. 2011). Following Björgvinsson et al. (2010) we define infrastructuring as organizing social-material gatherings and contextual experiments to build arenas for social innovation. In this process, social aspects and what we call infrastructuring elements are connected to create possibilities for new things and practices to emerge and be sustained. In the Living Lab Valbyparken, we explored the overall horizontal social service model concept as an alternative way of creating activity offers in the public sector, that challenged the classic idea of

fixed rehabilitation courses. For nine months, we gathered every second Friday for three hours in the public park. Step by step, an infrastructuring practice of supporting the physical playful and social aspects of the gatherings including sharing stories of the activities in-between the gatherings were developed in order to support the ad-hoc exercise community continuing the gatherings, coordinating playful activities, and inviting others to join.

Physical infrastructuring elements included tools for playful activities such as croquet equipment with a twist, disc-golf, scorecards, a pull along wagon, a bench, a staircase tribune, and flagpoles. They were all developed and built in the park. A tool shed was borrowed from park officials and was provided with a code lock. The code lock was an important infrastructuring element as it helped distribute the shared ownership, and enabled new possibilities e.g., some of the seniors brought their grandchildren to the park between our Friday gatherings and used the playful tools. Other infrastructuring elements included flyers and a mobile app developed in order for the seniors themselves to suggest and coordinate activities, but also to invite friends and relatives within their networks to the exercise community. The app contained an archive of playful activities for inspiration, when the seniors were going to be on their own without the sports coach. Additionally, a blog ‘Aktivt udeliv i Valbyparken’ (active outdoor life in Valbyparken) was used between the gatherings in the park to share e.g., images and stories. Initially, it was primarily the design researchers who used it, but the seniors took over little by little (Malmberg and Yndigeegn 2013).

FOLLOW-UP STUDY: EMPIRICAL MATERIAL

We, the design researchers, left and the project ended in Fall 2012. The additional empirical material (see figure 1) consists of: A joint interview with a health counselor (from Copenhagen Municipality) and the sports coach (a private partner) immediately after the end of the project; participant observations and interviews with citizens in the exercise community in 2013, 2014 and

2018; a home visit and interview with two senior citizens in 2018; interview with the sports coach in 2018; interviews with a health counselor employed at Center for Health at Frederiksberg Municipality in 2020, and Head of Department of Welfare Innovation within Copenhagen Municipality in 2021. The people in the two last interviews were not part of the original initiative, but were interviewed to reflect on how practices have evolved in the two municipalities during the following years. The work has been documented via video, and audio recordings, and photographs. This empirical material has formed the base of the analyses in this paper.

PRACTICING A CO-PRODUCED SERVICE

In this section, we describe and discuss the continuation of the original ad-hoc exercise community as a co-produced social service including reflections on infrastructuring elements, and which concerns, and conflicts emerge as time evolves.

SHAPING A CITIZENS-DRIVEN SERVICE

The project ended late 2012 and the researchers withdrew at that time. Copenhagen Municipality hesitated with the continuation. Meanwhile, the community of seniors in Valbyparken continued on their own. They met every second Friday – and they formed the activities along their preferences, the weather, and the number of people. When the researchers left the project, the bench and the staircase tribune were removed from the park as the permission to have them in the park was temporary. However, the repertoire of tools for playful activities was continually expanded and stored in the shed between meetings. The seniors continued to develop their own everyday infrastructuring elements and practices, while the digital infrastructuring elements developed explicitly for the project gradually disappeared. “We know where and when to meet up so it is not necessary anymore,” they expressed in an interview (2018) about the mobile app and the website. Instead, they used a contact list, phone calls, and text messages. They also made new arrangements and routines. For instance, they started to sometimes go for lunch at a community center close by; and they arranged with the manned public playground in the park to drink coffee at their place. They paid a small amount of money for the coffee the personnel made for them. In the ad-hoc exercise community, a strong practice of looking after each other if some did not show up - or felt too ill to participate - also evolved.

To make the ad-hoc exercise community an integrated part of the infrastructure of the municipality’s service offers, the community was affiliated with the local Health Center as an exercise possibility for those who had ended a rehabilitation course at the center. Rehabilitation courses usually last 8-12 weeks, and the Health Center often lacked a possibility for continuing the training. This was a way to make the different

services reciprocally benefit each other. So, the ad-hoc exercise community in the park became an open exercise offer for other seniors and once in a while new people attended. The seniors in the park welcomed the newcomers, but after a while doubt about the arrangement started to surface. The seniors felt that they were given a responsibility for sometimes ‘weaker’ seniors, which they were not comfortable with. One of the women explained that it seemed like those personnel at the Health Center were not aware of what they were sending their senior citizens out to (Yndigejn 2016).

DEVELOPING A ROBUST PUBLIC SERVICE?

Nine months after the project ended, Copenhagen Municipality decided to employ the sports coach in a half-time position to take care of the initiative and to manage a scaling of the ad-hoc exercise community concept to other parks in the city. According to the sports coach (interview 2018), Copenhagen Municipality was in charge of recruiting participants for the new communities while his responsibility was to make sure they showed up again as well as to register those who attended. In his new position, he returned to the exercise community in Valbyparken with the intention to make it a robust service offer and to recruit ambassadors for the scaling out to new parks. His plan was to renew and expand the community’s repertoire of games and playful activities to continue to be a service that appealed to a broader range of senior citizens. From his point of view, it was important to be able to recruit new participants. However, different conflicts and tensions emerged from the reunion. The exercise community in Valbyparken felt intimidated when the sports coach returned and wanted to introduce new games. They felt that he dominated and did not respect what the community had shaped on their own after the project ended (interview 2018). Also, they understood that the municipality wanted to know how many people participated from time to time, but they felt that it interrupted their social gatherings as they had to register their participation online every time (interview 2013).

DISCUSSION: MULTIPLE PRACTICES OF SCALING

In our discussion of practices of scaling, we explore the relation between a sustainable and a scalable social innovation. To analyze how scaling took place in our study, we follow Biørn-Hansen and Håkansson’s (2018) definitions of the different ways of scaling, where *sustaining* means internal organizational activities of establishing routines and practices; and *growing* defines the practices of expanding beyond the initial users and with that create a bigger impact on society. The seniors in Valbyparken made the ad-hoc exercise community sustainable by creating their own practice through changing some of the games, adding the coffee arrangement with the staff at the manned playground, and adding lunch to the routines of their community.

The value and quality of this community for the seniors is without doubt high as many of them have met each other every second week all year round for more than eight years now. Our study shows how the seniors took ownership of the initiative and in that sense fulfilled the idea of making the ad-hoc exercise community mainly citizens-driven. The sports coach (together with the municipality) on the other hand, worked to make this concept scalable by trying to broaden this one community for others to join - and recruiting ambassadors for new communities. Here, their work of scaling aims at *growing* by making the community more robust as a public service that can be offered to a broader range of citizens, and in that sense be integrated into the existing infrastructure of a variety of public services.

SECURITY OF SUPPLY – AND OWNERSHIP

Tensions emerged between the attempts of sustaining and of growing, which points to challenges that might arise when the public sector enters into collaboration with citizens – here, also the ideas of the private partner: the sports coach. The public and private partners wanted to establish something that the senior citizens take ownership of in order to run it themselves and is deeply rooted in the community of senior citizens. Still, it raised problems when the citizens shaped it too much and perhaps became too close, since it meant that the “service” turned out to be too narrow or exclusive to be part of the catalogue of services offered by the public sector and thus enabling newcomers to join. It means that the municipalities cannot always account and argue for supporting this kind of services (Siira et al. 2020).

An important challenge of co-production for Copenhagen Municipality is the concern regarding ‘security of supply’. To be a service that Copenhagen Municipality can offer and claim to be part of their catalogue, there has to be some security of supply as Head of Welfare Innovation puts it (interview 2021). Despite being valuable to co-produce and try out new ideas on a small scale, it might be too uncertain in the longer run. She stresses that they do not want to put the citizens in a difficult situation, and they do not want to get complaints in this regard: “What if we, for instance, managed to activate citizens in an initiative about overcoming loneliness, and then we had finally got some [people] out of their homes, and then those who started it got interested in something else and it [the initiative] is gone.” The example from the Head of Welfare Innovation shows how to scale and grow the socio-material infrastructure to enable more people to take part and that it requires a certain robustness that may not always be there - or that the municipality does not feel confident in when responsibilities are handed over to the citizens. Because it will often be the municipality that is held responsible if anything fails – even after the municipality’s withdrawal from the initiative. These concerns challenge the concept of a horizontal service model. Though, in relation to the ad-

hoc exercise community in Valbyparken the robustness measured in continuity over time seemed to be there. However, the seniors’ own uneasiness in having to take responsibility for ‘weaker seniors’ illustrates a misalignment or lack of negotiation of the terms of condition and expectations for the growing of this citizens-driven public service - and in that sense an issue that could be an obstacle for the security of supply.

What we have pointed to here are some difficulties and obstacles when attempting to sustain but especially grow the community by allowing more citizens to join the exercise community in Valbyparken. From the engagement between the citizens, the municipality and the private partner, different challenges emerge and raise questions of ownership - or who owns the concept and the right to define what practices and routines to establish; responsibilities in relation to the citizens’ role and whether they are supposed to be caretakers for others; and finally, the challenge between the citizens-driven part and the public institution in terms of the security in what is offered. This results in questions that point to a misalignment in how the continuation was imagined or practiced among the central partakers.

SCALING A SERVICE IN PRACTICE

In the following section, we describe and discuss a different attempt of scaling initiated by Copenhagen Municipality after engaging the sports coach to establish new ad-hoc exercise offers in five public parks in other parts of Copenhagen but also the spreading of the concept to another municipality initiated by the sports coach.

SCALING WITHIN THE SAME MUNICIPALITY

The first attempt of scaling to other public parks happened Summer 2013 - nine months after the project ended. Copenhagen Municipality created a new website for all the places and renamed the service offer to *Sammen om Motion* (together about exercise). Collaboration was established with several other Health Centers and counselors, to educate them in this way of running an ad-hoc exercise offer for senior citizens. By the end of 2013, the activities were running in six different parks in Copenhagen. The sports coach explained (interview 2018) how the original concept from The Living Lab Valbyparken was *adapted* to the different contexts. For instance, in one part of the city the focus was also on including people in wheelchairs, people using walkers, but also socially vulnerable citizens. The very different abilities of the participants made it necessary to adapt the various games to the people attending from time to time.

Different initiatives were taken to make this attempt of scaling viable. The project leader from Copenhagen Municipality in the SeniorInteraktion project promoted the idea internally also to the departments in charge of

running service offers for seniors. Civil servants tried to recruit new participants for the ‘new ad-hoc exercise communities’ - and the sports coach tried to make the seniors from Valbyparken be ambassadors and take part in promoting and establishing the new exercise communities. All these initiatives had cramped conditions. The seniors from Valbyparken were reluctant to travel to the other parks to be ambassadors because of practical transport issues (visit 2018). Thus, the sports coach did not succeed with including the seniors in the attempt of scaling to other parks. At some point, the project leader in the municipality left for another job, and the one who took over soon went on maternity leave. That happened with the person following her too, so after two to three years not much was happening with either the promotion of the service concept as such or in regard to recruitment of seniors. Without seniors attending the ad-hoc exercise communities, it was difficult for the sports coach to fulfill his part of the tasks, which according to him was to assist building up the new communities on site by establishing a repertoire of playful games that easily could be adapted to suit the people attending (interview 2018).

SCALING TO ANOTHER MUNICIPALITY

As the sports coach could not make a living at a half-time position, he reached out and offered the service concept to Frederiksberg Municipality. This smaller municipality was very interested, and employed him for a half-time position too. When *Sammen om Motion* were closed down in Copenhagen Municipality, the sports coach got a full-time position in Frederiksberg Municipality, where they had a greater success of getting this social service up and running. They integrated the communication of the new offering on their existing Health Center’s website and built a number of boxes with equipment and instructions to be placed in three public parks with the help of the sports coach. They connected the new social services directly to the local Health Center, but this time with a greater emphasis on integrating it into other courses. In an interview (2020), the health counselor explains that visiting and taking part in the weekly event in the park in *Sammen om Motion* has been part of at least one class during the 8-12-week rehabilitation course for some years. In this way, the Health Center secures a try-out through active participation, which seems better for potential new participants making up their minds about if this is something to do in the future. Thus, the health counselors in Frederiksberg Municipality *now* have an integrated practice, where new seniors join and get introduced to the ad-hoc exercise community in the park to create awareness of the exercise offer and make it more accessible to the potential participants. Additionally, the health counselor said that one senior exercise community recently reached out in order to get inspiration for new playful activities (interview 2020). Thus, they succeeded in making it part of their public

service infrastructure, which makes it sustainable and viable as part of the services the municipality offers.

DISCUSSION: TRANSFORMING ROLES AND RESPONSIBILITIES

What emerges from our analysis is scaling as different variations of *spreading*. Following Biørn-Hansen and Håkansson (2018), *spreading* means *replicating* the concept to other places or helping others to start up. Yet, *spreading* also includes “more abstract forms of growing that involve making ideas, skills, and knowledge available to others” (Biørn-Hansen and Håkansson 2018, p. 8). The question is what can be replicated – and spread?

In the replication of the ad-hoc exercise community, infrastructure elements (e.g., games, how to play, meeting times, and the sports coach) of this community were replicated to the other sites. Together with the development of a shared website and the idea of ambassadors, these elements should enable the spreading of the concept. However, in relation to replication, Manzini (2015) emphasizes that collaborative organizations are difficult to replicate, because they are so deeply rooted in a specific context and largely shared by the characteristics of their promoters. Manzini points here to aspects of social innovation that are not easily replicate-able. In present study, the idea of ambassadors as well as the sports coach to follow the new communities were steps taken towards spreading the fundamental aspects of the ad-hoc exercise community. However, this was not all successful in practice cf. the seniors as ambassadors.

Another aspect that emerges in scaling the concept of a horizontal service model, is the need for clarifying and distributing new roles and responsibilities. The municipality’s role changed from being the direct provider of a senior course or service to citizens, to a role of supporting the citizens and the private partner in being the one organizing the ad-hoc exercise communities. It included integrating the local health centers and counselors to the new communities as well as recruiting seniors. The role of the sports coach changed from a private collaborator to an internal part of the public sector (an employee), where he was on ‘accord salary’ (based on whether the seniors returned) and at the same time, he had to fulfill the formal role of making sure that the participants registered their attendance. Finally, the seniors’ roles were *expected* to change from seniors taking part in an exercise activity to seniors taking care of others and becoming ambassadors at the new places to support the public-private collaboration of spreading the concept. These changes in the different actors’ practices point to a need for a more fundamental change.

TRANSFORMING ORGANIZATIONAL CHANGE

In our study, we observed scaling sometimes require transforming organizational change. For the horizontal service model to be a practically viable concept in the long run, there was a need for an organizational change including new roles, responsibilities, and practices. This way of scaling goes beyond replicating and spreading. Naber et al. (2017) describe this as *transformation*, which is how an initiative shapes a change at an institutional level as indicative of more qualitative changes. These changes of practices were actually central in the discussions in the SeniorInteraktion project group. Especially in relation to the public partner, where we engaged with various municipality employees at different times in the process. The focus was on getting them to be familiar with this new way of engaging citizens in service development as well as involving them in this kind of innovation of a service model.

However, what was mainly rehearsed in The Living Lab Valbyparken was the local practices among the citizens and the sports coach. When looking back and critically reflecting on the project, there is an important learning in how to create a transformation in the public organization, which also could have supported the sports coach's work. In retrospect, the project as such could have benefitted from even stronger presence by the design researchers in the municipality, e.g., supporting the project leader in spreading and grounding the horizontal service model in the organization through creating more infrastructuring elements by means of design (e.g., building on previous experiences of the DAIM toolbox, Halse et al. 2010). These initiatives and infrastructuring elements could have enabled a support for the organizational transformation.

The challenges of *spreading*, *replicating*, and *transforming* the horizontal services model are here contrasted with the accumulations of replicated practices within another Health Center and other municipal practices. Following Manzini's (2015) point, it is one of the strongest promoters (the sports coach), who had a central part in characterizing and developing the concept, who took the initiative for the spreading as in our study connecting to another organization. At the same time, our follow-up study also points to an organizational readiness in the Frederiksberg Municipality to adapt the concept. The ad-hoc exercise community becomes closely connected to the existing courses at the Health Center. This, together with more clear definitions of roles and responsibilities among the citizens, the sports coach, the health counselors, and in general, the municipality made the concept of the horizontal service model practically viable in a new municipality. It means that the spreading by replicating to other sites becomes more successful - and it might already have been tapping into an ongoing organizational transformation.

Relating to the question of transformation, Copenhagen Municipality made a large re-organisation in 2016. The Department of Welfare Innovation was established, and as something new it was within their mandate to make sure that successful social innovation projects were entrenched and implemented in full in collaboration with the departments which were to be responsible of the services in the long run. Head of Welfare Innovation (interview, 2021) stresses that this organizational change has been very important in relation to scaling and securing the establishment of more sustainable practices.

FINAL DISCUSSION

The focus in this study has been on what happens beyond a living lab, understood as an investigation of what unfolds after design researchers leave a social innovation project carried out in collaboration with the public sector, private partners, and citizens. In the Valbyparken Living Lab, the actors co-designed and co-produced a public horizontal service model where the public service provider supports an open ad-hoc exercise community of senior citizens. Overall, the horizontal service model contributes to a political agenda on improving quality of life and well-being as well as promoting self-organization and care among seniors.

BETWEEN FORMAL INSTITUTIONS AND THE INFORMAL CIVIC ENGAGEMENT

This horizontal service model blurs the roles and exchanges between the formal institutions and the informal civic engagement. We argue that the benefits of this new mode of collaboration is that the social innovation concept is mainly driven by the citizens themselves. It affords a new service-thinking where the citizens take ownership and shape the content of the playful gatherings in their own way, which supports democratic participation and civic agency. Thus, it dissolves the conventional one-fits-all public service offers. Our follow-up study shows that the blurring of the roles and exchanges between the formal institutions and the informal civic engagement is also what creates challenges and tensions in the different attempts of scaling the social innovation concept after the initial project ended.

The ambitions of the seniors contain a practice of *sustaining* as keeping and attracting members and resources (Biørn-Hansen and Håkansson 2018) to secure the continuation of their own local community. However, our study also showed that the formalization of the informal civic engagement made seniors into someone who took responsibility for others, more vulnerable seniors. Something that exceeded the limits of the seniors as they expressed to us. At the same time, in order to create better value of the initial effort, the Copenhagen Municipality's ambition is to make the

social design concept scalable, which includes institutionalizing practices. In our study, it means that *replicating* the social innovation concept of open ad-hoc exercise communities including the infrastructuring elements supporting these, are challenged by aims of formalizing procedures in order to make a robust service offer, to maintain security of supply and being able to evaluate the performances quantitatively and qualitatively. As addressed by Siira et al. (2020), it can be problematic for the public institution if a mainly citizens-driven social service becomes too narrow, so it cannot be offered to, or is excluding, a broader group of citizens. It means that the benefits slowly dissolve, and it becomes difficult for the public institution to argue for supporting the initiative. This is in line with Manzini who argues that in order for initiatives to be “truly effective and have the needed impact on the overall society, they should spread and drive changes at a larger scale” (Manzini 2015, p. 177).

In contrast, Biørn-Hansen and Håkansson (2018) argue that “there is a value in the small-scale and very local action, as it leads to other results that matter too, for example, the enjoyment and inspiration that keep people going. In addition, even the organizations or concepts that will not scale, contribute to a critical mass of people who want to see a change in society” (Biørn-Hansen and Håkansson 2018, p.10).

In relation to aims and ambitions of social innovation projects, we argue that there are two important implications from this study. Firstly, the very local actions are highly valued and not all actors are concerned with scaling. It would be a pity if social innovation initiatives and living lab experiments would never be initiated due to uncertainty about if scaling is possible or not. Decisions on scaling or not should be based on and evaluated from lived experiences. In line with Biørn-Hansen and Håkansson, we will argue that not all community-based services need to be scaled. Secondly, we will argue that there is a need for balancing the various actors’ ambitions and efforts, so they reciprocally benefit each other - and that the one is not dominating the other.

SCALING PRESUPPOSES OWNERSHIP

Our analysis of what happened beyond The Living Lab, made it clear to us that scaling presupposes ownership. This is in accordance with Manzini’s argument that social innovation “can only work if groups of dedicated people decide to adopt them and commit themselves to its implementation” (Manzini 2015, p. 18). Given this, our study shows that ownership means different things to different actors, which complicate scaling in practice. The citizens participate on a voluntary basis whereas the engagement by others is part of their work life. The senior citizens clearly take ownership of the initial community in Valbyparken. Most of them have gathered every two weeks for more than eight years and in their *sustaining* of the community they take

responsibility for the continuation by meeting up on a regular basis, including welcoming newcomers. Some have also taken ownership by buying new equipment, acting as contact persons, visiting members if they fall ill or, for instance, suggesting additional activities like celebrating someone’s birthday. It all illustrates sincere care for the community. The private partner (sports coach) also takes ownership. In his view, he invented the overall concept about creating open ad-hoc communities for physical interaction, which is not defined by a certain disability, diagnosis, or health issue. His dedicated commitment revolved around two issues. Firstly, he worked hard to develop a repertoire of playful activities that could easily be adapted in the situation depending on the participants’ abilities, interests, and needs. At times, his sometimes-strong opinions created friction as the seniors did not necessarily agree. Secondly, his ambition was to make a living by *replicating* the physical and social service as widely as possible. In relation to adopting the idea and taking ownership, the commitment of Copenhagen Municipality has changed a lot over the years, which we argue is key in understanding both successful and failed scaling attempts.

The fact that it took nine months for the municipality to make a decision about if they wanted to adopt the concept beyond the running of the SeniorInteraktion project, can be interpreted in different ways: doubt about the value of the social innovation concept, long internal decision-making processes, finding funding for scaling, lack of personnel. In contrast to this, the municipality’s commitment increased when they hired the sports coach, engaged the health counselors, recruited seniors - and spent money on making a dedicated website. Apart from this, the Copenhagen Municipality’s dedicated commitment including the various actions succeeded in replicating the social innovation concept to five other parks in the city. However, other issues relate to discrepancies among hierarchical layers in organizations. Our study shows that Copenhagen Municipality, soon after the researchers left the project, was challenged by several shifts in personnel. Even though the leader of the department felt ownership, actual operations were hindered by sometimes not having an employee to do the work on the operational level. Knowledge about the social innovation concept was also mainly anchored within the people involved in the initial work so when they left, the hand-over was further challenged. In the interview with the Head of Welfare Innovation (2021), she highlights the importance of securing that the ‘institutional memory’ is built up and sustained. They have made procedures for this to ensure that things are not lost when passionate employees find a new job. Still, finding the best way of documenting and passing on this kind of experience and knowledge is not easy.

A key insight from our study is that ownership means different things to different actors. We argue that

ownership is needed on all levels in collaborative organizations to secure scaling in practice. However, it needs to be combined with negotiations of terms of condition in relation to commitment and responsibilities among all actors, including the citizens.

To summarize, in this paper we have deepened the understanding and conceptualization of notions describing scaling in different ways based on experiences from practices in and beyond The Living Lab Valbyparken in the SeniorInteraktion project. The aim has not been to suggest new concepts for scaling per se, but to acknowledge and relate to concepts presented by other scholars when analyzing our own research in order to share practice-based insights, which can be of value for future innovation projects. Still, we will propose the term ‘ownership’ as a short description for what Manzini (2015) points to with social innovation “can only work if groups of dedicated people decide to adopt them and commit themselves to its implementation”. This term is easier to use in everyday language and practices.

The paper contributes to filling the gap mentioned by e.g., Tortzen (2018) that systematic empirical research on how co-production projects involving both the public sector and citizens evolve in practice is lacking. Her own research is based on 3-10 months of interviewing and making observations in top-down co-production projects initiated in three Danish municipalities. Our study is also carried out in a Danish context. It differs by being a local longitudinal study spanning 10 years in all and includes us researchers taking active part in developing the social innovation concept and doing follow-up studies. If the ambition of design research is to contribute to sustainable societal changes, we would like to encourage more design researchers to conduct longitudinal studies, as they are essential for contributing to understanding scaling better, including how infrastructuring process work and how various socio-material infrastructures evolve after the design researchers have left.

SCALING OUT AND UP

We initially introduced two forms of scale as defined by Westley and Antadze (2013) and Manzini (2015), as scaling out and scaling up, and how these forms of scaling strategies have led to identifications of different scaling practices, nuancing modes and patterns such as sustaining, growing, spreading, replicating, accumulating and transformation (Biørn-Hansen and Håkansson 2018, Naber 2017). They all point to the importance of the reflexive learnings that need to take place to challenge the existing institutions and bring in the systemic change that allows such organizational changes to happen. These reflexive discussions are important for the design community when evaluating our design practices and projects. We will argue that design researchers need to inquire and learn more about the gains of co-production of social innovation to

improve both methods and processes of engagements, but there seem to be a general lack of long-term evaluations within design communities, as also pointed to by Bossen et. al. (2016).

Design researchers need to better understand the patterns of accumulation as *how* our design experiments and projects are linking to other public initiatives before and after we leave project collaboration.

And *if* or *when* organizational transformation shapes wider institutional change within the public sector. These reflexive learning processes of looking back and analyzing long-term retrospective studies and the implications thereof are as important to the design researchers as they are to our collaborating public and private partners as well as citizens. They have all come together in co-producing enhanced visions of how our shared welfare societies are able to progress within the everyday practices of both citizens lives and welfare systems. Even though these changes might seem as small as playing a game, sharing a walk and coffee in the park with peers during a period of eight years.

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