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When Self-Organization Intersects with Urban Planning: Two Cases from Helsinki

LIISA HORELLI, JOANNA SAAD-SULONEN, SIRKKU WALLIN & ANDREA BOTERO

Abstract

Participation as self-organization has emerged as a new form of citizen activism, often supported by digital technology. A comparative qualitative analysis of two case studies in Helsinki indicates that the self-organization of citizens expands the practice of urban planning. Together, they enable the mobilization of different groups around issues related to urban space. The consequences have become visible in temporary uses of places, event making and community development through bottom-up cultures. However, the lacking links to decision-making constrains new solutions and creative actions.

Keywords: expanded urban planning; community development; local co-governance; self-organization; mixed spheres

Introduction

The increasing pace of global news about financial crises, climate change and upheavals in different countries bewilders people in local communities, leading citizens to react with both withdrawal and stepping forward. Pertinent questions arise concerning, how to support one's communityⁱ and make it more robust and supportive of everyday life in this complex situation? And how to have a say in what is taking place locally as well as globally? The economic crisis has meant that many governments have to rely on citizens to solve wicked problems. On the other hand, a new urban culture has emerged in many countries, which is characterised by glocal efforts of self-organization around different issues, whether ecology, civil rights or living conditions.

The Netherlands has been one of the leading countries in the world seeking to make local communities more robust by conducting public participation in urban planning, but according to some critics, with meagre results. Currently, however, Dutch urban planning is taking steps towards

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"discarding the old modernistic principles of the past century and reinventing itself in a multi-vocational, fragmented and actor-relational way", based on the self-organization of different groups, associations and networks (Boonstra and Boelens, 2011, pp.108).

Also Finland, which is a small (population 5,5 million), technology savvy country that has excelled with mobile phones, GNU/Linux systems and other communication devices, has had a renaissance of self-organizing groups, events and happenings in many neighbourhoods of Helsinki (Botero et al., 2012). Some of the activities deal with issues that have traditionally been part of urban planning. However, the Finnish urban planning system is centralized, leaving little space for public participation, irrespective of the national Land Use and Building Act of 2000 that has a special paragraph on citizen participation, making it part of statutory planning. This kind of public participation is limited to top-down consultation. So far, there are not many intersections between formal urban planning processes and the flurry of self-organizing activities, but it is possible to identify potential new openings. We are interested in the following questions: How does self-organization intersect with urban planning, and with what consequences for shaping urban space? And, what is the role of digital technology in supporting the new intersections?

The aim of the article is to argue that self-organisation, supported by the use of digital technologies, intersects with urban planning through semi-formal, mixed discursive spheres that in turn expand urban planning from traditional planning processes to the actual implementation and co-creation of urban space. We will present a comparative qualitative analysis of two empirical case studies from Helsinki, the capital of Finland (613 000 residents). Case 1 focuses on "Pop-up cleaning day". It is an example of citizen self-organization assisted by social media, which transforms urban space in Helsinki through a large-scale event reflecting the theme of re-cycling and the society of consumption (Seppälä, 2012). The event, which is now established due to the positive support by the City of Helsinki, temporarily transforms the city into a big market place for a whole day, twice a year. Case 2 highlights the results of a long term, participatory local development project in a neighbourhood of Helsinki (Horelli, 2013). There, the initial efforts to form a local committee and the building of a neighbourhood website eventually provided opportunities for self-organization to take place, to some degree. The comparative qualitative analysis of the cases highlights two different ways in which self-organization intersects with urban planning. In Case 1, the intersection took place through the emergence of a semi-formal discursive sphere that was partly materialized by digital technology. In Case 2, the intersection was enabled through strategic network building and collaborative planning activities as well as the co-creation of a digital communication infrastructure. In both cases, the intersection of self-organized activities with urban planning had positive consequences for the shaping of urban space, but with many limitations too.

We will first describe our theoretical framework and the methodology after which the two case studies will be presented, compared and discussed.

Expanded Urban Planning as a Theoretical Framework

Self-organization as a concept has not been compatible with urban planning, but as the context of urban planning has dramatically changed due to globalization and digitalization along with related social megatrends, there is more space for self-organization too. The application of information and communication technologies (ICTs) has enabled new actors and forms of participation, according to the preference and skills of the users. Finnish experiences (Wallin et al., 2010) have shown a clear shift from the application of traditional, single-channel mapping instruments and websites, such as Internet forums and GIS-based tools, to the appropriation of multi-channel toolkits.

Furthermore, participation does not currently take place only in official workshops, but also in everyday life situations that enable the transmission of personal ideas and proposals through personal computer and mobile phone interfaces.

Expansion of Urban Planning

We have worked for a long time with the notion of expanded urban planning (Horelli, 2013; Staffans & Horelli, 2014) for exploring ways to better embed the planning process in the material and socio-cultural context, especially in relation to the issues of digitally mediated glocal everyday life. Expanded urban planning is based on communicative and post-structural planning theories (Healey, 1997; Forester, 1999), but it focuses on local community development more than other collaborative theories. It applies traditional collaborative enabling tools (Horelli, 2002), but expands them to include urban and community informaticsⁱⁱ, at the different phases of the planning cycle. In that sense, expanded urban planning holds similarities with the tool-oriented planning that Anttiroiko (2012, 16) calls "urban planning 2.0". The latter is a type of ICT- assisted communicative planning that has to face the dialectics between the local and the global, as well as between the real and the virtual. However, expanded urban planning goes one step further by identifying and mobilizing a variety of participations, whether 'staged' or self-organized, not only in urban planning but also in the design-in-use of technology (Saad-Sulonen, 2014; Dittrich et al., 2002).

In sum, expanded urban planning can be regarded as a response to the challenges of the complex context in which planning processes expand to enable:

- The integration of planning processes with the content of everyday life
- The targeting of both physical and virtual realms
- The understanding of urban planning as a learning process covering the whole trajectory beginning from the political agenda and strategy setting with ex-ante evaluation, mandatory (statutory) processes and implementation to the ex-post evaluation of outcomes, including applied theories of change and implementation (Chen, 2005)
- The understanding of urban planning as continuous scaling from global to local and vice versa
- The recognition of different timescapes (long term, short term, real-time, rhythms)

Expanded urban planning and local co-governance

Expanded urban planning is also intertwined with community development and local cogovernance. Urban governance can be understood as a wide set of institutions and interrelationships, which steer economic and social processes beyond the formal structure of local, regional or even cross-national government. The hybridity of the different complex forms of governance - the networked modes, elected representations and the governmental institutions of local authorities - is, according to Parkinson and Boddy (2004), simultaneously an opportunity for political participation and a threat, due to the increasing complexity of coordination.

Governance is, however, highly context and time dependent. "Traditional Weberian government" and even the "New Public Management" still steers through norms, economic incentives, information, policies and programmes, whereas the newer forms of governance rely more on monitoring, deliberation and self-organization (see Figure 1), such as in co-governance or

New Public Governance (Pestoff, 2012). However, the steering devices of the newer governance forms have not yet been developed in the context of urban issues.

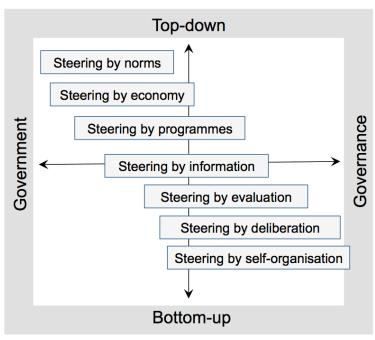


FIGURE 1. The range of steering devices in government and governance *Source*: adapted with permission from Roininen (2012, p. 34).

The new forms of local co-governance can be regarded as a local endeavour that takes place ranging from the formal (City boards and councils), to the semi-formal (Local fora or assemblies) and informal (Cafés, Community house), whether in terms of activities, networks, partnerships, structures or public spheres. The public or discursive sphere is, according to Nancy Fraser (2007), the arena or arenas in which citizens engage in deliberation of political affairs. It can take place face to face or through the social media the nature of which can be formal, semi-formal or informal.

The recursive movement between the informal and the formal is also a way to understand the role of administration and decision-making from a new perspective. Karoliina Jarenko (2013) suggests on the basis of Hendriks (2006) model that co-governance means linking the formal, semi-formal and informal networks and public spheres to form a deliberative system. The semi-formal mixed deliberative spheres, enhanced by community informatics, form a link between the formal and the informal ones, enabling a wider range of political activities to have an impact on decision-making. This will enhance communication between the informal arenas of grass-roots level participation and the formal decision-making arenas enabling public (municipalities), private (business) and people-partnerships.

The Methodological Approach

The methodology of the article is based on a comparative qualitative analysis of two empirical case studies that have applied action research, but from different temporal perspectives. The action research as a strategy was practical (Reason and Bradbury, 2001) in the sense that its purpose was to involve various stakeholders in events and interventions according to their interests in the

particular context. The first case was part of a wider action research on self-organized activities carried out by self-organised urban communities in Helsinki, which we examined from the perspective of the role of digital technologies and their design (Saad-Sulonen, 2013; Botero, 2013; Botero et al., 2012). The second case was a longitudinal action research on the creation and more permanent use of space in a neighbourhood of Helsinki, and especially on the co-creation of its community yard. Both cases applied a variety of data gathering technics (contextual analyses, participatory observation, field-notes, surveys, focus groups, interviews and analysis of documents and web-sites; see the details in the case-studies), as well as methods of data analysis and interpretation. The content analysis of the data was based on grounded theory and the constant comparative method (Strauss and Corbin, 1990).

The comparative qualitative analysis has partly borrowed its methodology from the metaanalysis of qualitative studies (Timulak, 2009) the purpose of which is to provide a more comprehensive description of a phenomenon researched by a group of studies (focusing here on the intersection of self-organization with urban planning) and to provide an assessment of the influence of an applied method (expanded urban planning) to the findings. The steps in the comparative analysis have been: the choice of the parts of studies relevant to the research question that leads the comparative study (the aim of the original studies do not have to be the same as in the metaanalysis; Timulak, 2009); a definition of what is considered as data in context (the publications on the cases that are relevant to the research questions); an analysis of data by assorting it into domains representing the conceptual framework (see for example Table 1); delineating the data in domains into meaning units which allow the categorization and comparison of different meaning units according to similarities in their meanings (cf. open coding or constant comparative method by Strauss and Corbin, 1990). This process enables the final synthesis, which focuses on the whole body of research with implications for theory and practice. The interpretation of the results is based on the network of empirical facts, relations and relevant concepts, such as the theoretical framework in this article.

Case Study 1: Self-organised Citizen Action Transforms Urban Space

The aim of the study was to understand the way self-organised urban initiatives emerge, what is the role of digital media and mundane Web 2.0 tools, and how these can be leveraged to disseminate and design civic events. The research on Pop-up Cleaning Day initiativeⁱⁱⁱ (*Siivouspäivä* in Finnish), a civic event organized by citizens in Helsinki, started with an online participant observation, which later led to several interventions that were co-created by the researchers, core members of the CD initiative, as well as master level university students^{iv}.

The idea for the Pop-up Cleaning Day (CD) started with a Facebook status update in February 2012 by a female activist asking, if someone would be interested in arranging a "Recycling day" on the streets of Helsinki. Around that status update, a working group of active people got together to create a platform (tools, information, resources, communication channels) that citizens could use to turn Helsinki into a flea market during one day. The first CD event took place in Helsinki, in May 2012. By then, the organizing team had set up a website where participants could mark their stands on an online map (http://siivouspaiva.com/), a Facebook page (first

https://www.facebook.com/kevatsiivous, then https://fi-fi.facebook.com/siivouspaiva) to inform about the event, and several private Facebook groups to coordinate their doings.

During the first CD 756 stands were marked on the online map. The working group estimates that there were around 3000 sellers. The national media endorsed it, due to its positive impact on the city. No damage was made to the lawns or public spaces, and no trash was left behind.

Consequently, a second CD was organized in September 2012 and a third in May 2013. Currently, the idea has spread all over Finland and to many other countries even beyond Europe.

Tinkering with digital media and technology

The creation of an online presence and the required tools to self-organize would not have been possible without the availability of easy access to a set of technology and media "building blocks".

Firstly, there were the building blocks required for the CD website platform to serve as a database of the selling stands and an information repository of what is being sold and where. The Google maps API (Application Programming Interface) enabled the visualization of the selling and recycling spots in searchable locations on the online map. The Facebook registration API provided functionality to link easily and cheaply the selling spots to user profiles that could be verified and contacted. The MySQL database enabled the handling of the registration information for each spot.

It was important that the creation of an 'ecology of tools' for CD was relatively cheap to achieve, as all the building blocks were available for free. Tinkering with the different functionalities to create a working whole requires a certain know-how, which in this case was provided through volunteer work. The core group needed, however, to buy server space to host the website.

Secondly, the CD Facebook page acted as the main interaction channel for the organizers, volunteers, and participants. It played a crucial role as it enabled CD to self-organize and scale up. The set of "building blocks" in this case were less technical. They related to the social and media practices that have been developing around the features and functionalities of Facebook (e.g. well-crafted status updates that trigger "likes" and "shares"). The CD activists were good at manipulating these features, and they quickly learned what worked and what did not. The Facebook page also created a certain intimacy and a sense of community between the chosen themes and the persons interested in the event.

The availability of technological, social and media building blocks was also taken as the basis for a Hackathon-like, face to face event, called 'digitalkoot'. It was co-organized by the research team, master students and core members of the CD initiative a month before the CD in 2013, in order to invite a broader community to produce new ideas, technologies and resources. During the Hackathon, 45 participants created 'How to' guides, price tags and promotional digital videos. A mobile application was also coded to support 'way finding' during CD.

The meeting of the informal and the formal through technology

CD is a good example of Jarenko's proposition for co-governance as an integrated deliberative system in which informal and formal activities can meet in the semi-formal sphere (Figure 2). CD started at the informal level, without connections to formal urban governance *per se*. In principle, anyone who wants to place a selling stand in public areas in Helsinki has to apply for a time-consuming bureaucratic permission from the Public Works Department (PWD), by filling an official form. The working group decided to encourage people to "just do it", to select a spot, act responsibly and cause no damage. As there was no desire to break the law, links with the PWD were sought. For the first CD, information regarding the need to fill the existing official permit form from the PWD was mentioned in the CD website. After this, the PWD approached the CD core group to discuss cooperation. An agreement was reached for the second CD in which registering for a stand on the CD online map became the equivalent of a permit from the PWD. Thus, there was no longer a need to go through the lengthy bureaucratic process. It was enough to register one's stand on the CD online

map. Several other municipalities in Finland have adopted the same procedure after being lobbied by active citizens.

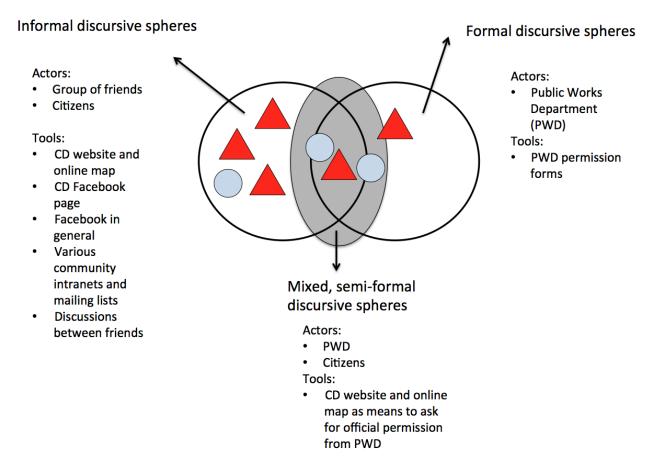


FIGURE 2. The informal meets the formal in the emergent mixed sphere after the first Pop-up Cleaning Day. The circles represent the different actors and the triangles the different digital tools. Source: Adapted with permission from Jarenko (2013).

By facilitating the process of applying for permission, the PWD has stepped outside the formal sphere. Thus, the CD website and online map have become mixed sites for formal and informal discourse (Figure 2). This represents the first step in the collaboration between a self-organized community and an official municipal body. The newly formed semi-formal sphere addresses the emerging needs of self-organised communities to claim their rights for shared urban public space. However, these rights come with obligations, which are identified and pinpointed by municipal administrators.

In sum, the social media and the availability of digital technology that can easily be tinkered with, enabled the CD initiative to emerge, become visible, to gather people around it, to facilitate the way urban dwellers can temporarily shape urban space via self-organization, and even to provide connections between the self-organized activities and the official actors and processes. It is also important to note that the success of the first Cleaning Day, especially the way in which people respected the use of public space (e.g. by making sure no trash was left lying around after the event), encouraged further cooperation with city authorities. For example, after the initial unsuccessful negotiations, the city authorities accepted later even to wave the land renting fees for setting up recycling spots in public spaces. Thus, the mixed-sphere was sustained due to the positive results of the first experiment, which respected the rules of the "shared urban game".

Case Study 2: Digitally Supported Community Development with Tangible Outcomes

The Participatory Local Community project was a longitudinal study on the sustaining of glocal everyday life through new planning approaches, such as e-planning, time planning, community development and co-governance. vi The project begun as a top-down initiative in the neighbourhood of Herttoniemi (20.000 residents), but with an action research methodologyvii, intertwined with theories of communicative planning (Horelli, 2013; Wallin & Horelli, 2012). This brought forth planning methods and arenas for inhabitants and neighbourhood activists, which enhanced their participation, not only in the planning processes but also in the production of urban space. The initial surveys, interviews and contextual mapping disclosed that the residents were quite satisfied with their living environment, although improvements were needed in several areas. Also, the local activists were identified and empowered to take action. The different stakeholders were encouraged to build up scenarios, to co-construct a vision around the supportive infrastructure of everyday life, and to choose implementation strategies along with on-going monitoring and evaluation. The main result was that the activists made several interventions to shape the infrastructure of everyday life. Some of them targeted the buildings and the management of the environment (metro-station; neighbourhood yard, safety issues), others focused on service innovations (bus routes, afternoon day-care services, virtual service desks etc.).

Towards a digital communication infrastructure

When the second phase of the local development begun, it became clear that some of the local activists wanted to initiate websites for the purpose of local management and communication. The researchers and other participants from funded research projects provided digital and internet-based tools, which could be embedded in the website. Thus, the application of urban and community informatics transformed the whole process into, what we then called e-planning (see Wallin et al., 2010; Horelli, 2013). This phase brought forth a free *digital communication infrastructure* comprising an assemblage of enabling tools and instruments, such as mobile and Internet applications and digital display screens for disseminating information just-in-time, retrospectively or in an anticipatory way.

The use of technology provided access to participation for larger groups of people – whether experts, users, entrepreneurs, professionals or politicians – who now had the opportunity to get involved irrespective of place and time. In fact, the expanded temporal scope and the application of community informatics allowed people to dig into the past (through archives) or envision the future with fellow participants. All in all, they engendered a new model and culture of shared governance, which was new to the urban planning processes in Finland.

Herttoniemi's local co-governance as a deliberative system

Unlike the other Nordic capitals, Helsinki has no formal local government structures at the neighbourhood level. Therefore, one of the main goals of the action research in Herttoniemi was the co-development of semi-formal and informal institutions of co-governance together with different civil society organizations, city officials and the community worker from the Department of Social Services and Health Care. The key elements of the local co-governance in Herttoniemi are a) the *Local Committee* that meets every second month, b) the *Neighbourhood Assembly* that meets twice each year, c) *self-organizing groups and activities*,

such as neighbourhood associations and co-operatives, and d) the *digital communication infrastructure* (see Figure 3).

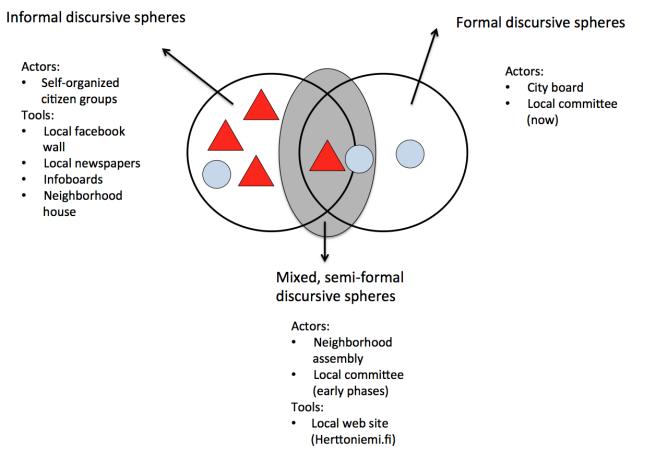


FIGURE 3. Local co-governance in Herttoniemi as an integrated deliberative system: the semi-formal infrastructure facilitates the establishment of the informal sphere. Source: Adapted with permission from Jarenko (2013).

By interpreting the co-governance in Herttoniemi through Hendriks' (2006) model of integrated deliberation, it is possible to see, how the self-organizing groups and activities operate in the informal sphere and the Neighbourhood Assembly in the semi-formal, mixed sphere. The Local Committee, which was originally a mixed forum with strong representation from the third sector has gradually become the site of formal, multi-sectorial local civil servant cooperation. One of the main outcomes of the work studied in Case 2 was the establishment of these networks, which brought different stakeholders together. This facilitated the development of the local digital communication infrastructure and the co-design of a shared yard. However, the links to the City Councils – representing the wider formal sphere – were and still are weak, almost non-existent. This made it difficult to balance the interplay between the formal, semi-formal and informal activities, networks, partnerships and structures.

The production and use of space through expanded urban planning

Some of the digital communication infrastructure tools were applied in the participatory e-planning of a shared community yard. Children, adolescents, adults and seniors took part at different stages

of the planning, implementation and maintenance cycle (Saad-Sulonen and Horelli, 2010). Later, the shared community garden became the site of cross-generational activities between young and old.

The assessment of the processes of planning and implementation in Herttoniemi reveals that it shares many of the characteristics of the conceptual framework of expanded urban planning (see also Staffans and Horelli, 2014). The planning has been based on multiple participations, enhanced by urban and community informatics. It comprises the integration of global and the local, institutional and everyday life, the physical and the virtual, different temporalities as well as a variety of methods. However, also limitations existed in the approach. For example, some self-organized groups remained outside the new configurations (e.g. a group lobbying for a kindergarten). In addition, the planning trajectory did not start from an overt political agenda in which the self-organizing groups could have participated. However, the self-organization went on as implementation and co-creation of the shared Roihuvuori yard.

The lacking links to political power has also challenged the balancing of the formal, semi-formal and informal activities, as described above. All in all, small improvements were brought forth, but decisions over the big issues and meaningful spaces, such as the new Herttoniemi centre, have taken place without the input of the resident groups.

Comparison of the Cases

The two cases differ in terms of the spatial and temporal focus as well as of the intensity of action research. However, they share many characteristics, such as the theoretical background, public, private people-partnerships, research methods and tools, nature of governance, the role of ICTs, the intersection of self-organization with planning through semi-formal mixed spheres, but also the lacking links to decision-making (see Table 1).

Figures 2 and 3 highlight the importance of the mixed spheres in which self-organization that normally takes place in the informal spheres, intersects with formal urban planning. The mixed spheres can emerge from self-organized activities and they can be sustained by public partners, when the latter are willing to recognise them (Case 1). However, the mixed spheres can also be strategically built and nurtured by various stakeholders as a deliberate attempt to collaborate, which was the case in Herttoniemi (Case 2). Thus, the two cases show two different ways through which the semi-formal sphere can either emerge from self-organized activities (Case 1) or be strategically built (Case2) with the help of action research.

TABLE 1. Comparison of the two cases

Characteristics	Case 1 Pop-Up Cleaning Day (CD)	Case 2 Neighbourhood of Herttoniemi
Spatial & temporal focus	Many parts of the city but one day at a time	Long term development of the whole neighbourhood
Interventions within action research	Bi-annual city-wide flea market event, Hackathon, tinkering with digital tools to support the event	Several physical & sociocultural interventions concerning urban planning and its implementation
Actors	A group of friends, self- organizing citizens, Public Works Dep., PPP-partnerships, city authorities, entrepreneurs	Self-org citizen groups, Local Committee, Neighbourhood Assembly, Youth Centre, Service Centre for Elderly people, Local Council, politicians, PPP-partnerships
Research &Enabling tools	Participatory observation, focus groups, interviews. CD web-site, interactive on-line maps, PWD permission form, Facebook & other social media	Participatory observation, focus groups, surveys, interviews. Urban Mediator, participatory eplanning methods, Local website & other social media
Outcomes	Continuation and dissemination of the CD; a new permission model; collaboration with different partners	Local, self-organizing networks. Building & managing the environment; service innovations; a neighbourhood yard; a new culture of shared governance; CI-tools
Nature of co-governance	Informal meets the formal in the mixed sphere. Lacking links to formal decision-making	Co-governance as a deliberative system but weak links to formal decision-making
Intersection of self- organization with urban planning	Through deliberations in the mixed spheres	Through deliberations in the, mixed spheres
The role of ICTs in the intersections	ICTs as a catalyst in informal and mixed spheres influencing the formal	ICTs enhancing the actual planning process and the balancing of the formal, semi-informal and informal in various ways
Production and use of space	Temporary appropriation of public spaces and branding new bottom-up places	Many small improvements but conflicts with big solutions. New methods to plan, produce and maintain urban space
Application of expanded urban planning (see the framework)	Integration of planning processes with everyday life. Lacking links to decision-making. Multiple ICT-assisted participations; selforganization.	Integration of planning processes with everyday life, with planning & implementation. Lacking links to decision-making. Multiple ICT-assisted participations; selforganization

Conclusions and Discussion

We have presented a theoretical framework, which has guided our comparative qualitative analysis of two case studies in Helsinki. We asked how self-organization intersects with urban planning, and what the consequences are for the shaping of urban space? In addition we inquired, what the role of digital technology is in these intersections? We have shown that self-organization takes place informally, but also in mixed spheres. Within these spheres, new forms and arenas of co-creation have extended public participation beyond planning into actual implementation, which, in turn, challenges the practice of urban planning itself.

Self-organization intersects with urban planning through mixed spheres

The comparison of the two case studies (Table 1) indicates that a great deal of self-organization takes place in the informal spheres. The activities range from small project planning events and discussions to the application of social media and even the design-in- use of the technology. When self-organization intersects with urban planning, it does so in a semi-formal, mixed sphere in which deliberations take place between local people and the representatives of public institutions or enterprises. In the case of Herttoniemi, the mixed sphere was first created together with the residents and the Helsinki community worker, who facilitated the founding of informal cogovernance bodies. In the CD case, the website and its online map provided a new way to deal with the official selling permission thus reifying the mixed sphere (see Figures 2 and 3). In both cases, the intersection with urban planning took place at the local level, with local actors. On the other hand, sustained links to higher-level formal decision-making have been scarce, which have constrained the implementation of creative ideas.

According to Jarenko (2013), it is important to support the semi-formal mixed sphere, as it works in favour of democracy and enhances political participation. We think that it is even more important to balance the interplay between the formal, semi-formal and informal spheres in local co-governance, as they complement one another. (see also Hamdi, 2010) Consequently, self-organizing activities intersect with urban planning only if the latter is expanded to deal with the interplay between the formal, informal, and mixed spheres. This is in line with our previous work on the necessity to expand urban planning to include, for example, community development and local co-governance as well as multiple participations.

Thus, expanded urban planning can be seen as a response to the complexity of everyday life and its settings. It can also be regarded as a vehicle that enhances processes leading towards the vision of a sustainable and liveable community (see Staffans and Horelli, 2014). Therefore, it is a contribution to the collaborative and deliberative tradition of planning (Healey, 1997; Forester, 1999), but as it relies on the third generation of deliberative theory viii, it also allows conflicting views (Mäntysalo and Jarenko, 2014). However, the general characteristics of expanded urban planning get materialized in a myriad of ways in different contexts and planning cultures (Nadin and Stead, 2009). Consequently, the outcomes of its application depend on the way it is being deployed in specific cases.

Digital technology as a catalyst

Information and communication technologies had an important role to play in both cases. The citizen-created CD website as well as the citizen-run Herttoniemi site both acted as reifications of

the semi-formal sphere. The CD website and online map provided means to connect citizens to the infrastructure of everyday life (through the selling permit) that had been constrained by the authorities. Now, it was accessible without bureaucratic hurdles. Furthermore, the Herttoniemi website provided and still provides 'filtered' information about the neighbourhood. It decreased the difficulty to face the bureaucratic jungle of the city, which disseminates information according to its own departmental logic and not according to local interests of citizens. Digital technology has acted as a catalyst for citizens to 'have things done' in an easier way, by providing concrete sites. It has also enabled in many ways deliberations by different parties.

The social media has also been a catalyst in terms of information dissemination and mobilization of followers. Setting up a Facebook page is easy and advertising it to friends and to friends of friends does not require much effort. However, one must not forget the commercial nature of many of the social media platforms. As Gurumurthy (2012) reminds us, the terms of use of such platforms are not always clear. Where does the information posted on Facebook go? Who owns it and controls it? The kind of community informatics that is truly democratic requires the empowerment of communities, which also implies the control of the technologies they use (Gurstein, 2007). If control is not possible, at least some understanding of the ways in which available technological and media building blocks work, is necessary (see Evans-Cowley, 2010). For example, the *digitalkoot*/hackathon approach that was experimented in anticipation of the last CD, was a collaborative endeavour that supported the self-organization around both technology and political mobilization. Nevertheless, one of the remaining challenges concerns the provision of technical interfaces between informal and formal technologies to enable the exchange of data.

Consequences of self-organization for urban planning and the shaping of space

Self-organizing activities and urban planning take place non-simultaneously, with different intentions and objectives. Participation as self-organization brings about new people and novel thoughts. For example, without urban events, such as the Pop-up Cleaning Day and other self-organized happenings, some of the new implementations in Helsinki would not have taken place. These are, for instance, the temporary use of many places and areas or making visible and branding new neighbourhoods through alternative urban cultures, such as ecological cultivation and food co-operatives in Herttoniemi. Such outcomes, in turn, impact self-organizing activities in new spaces and the ways of using them. Perhaps the most important impact of self-organizing is the pressure it puts on traditional planning and the exercise of power in cities.

The question arises from our comparative analysis to what extent has expanded urban planning, supported by action research, affected the results of the case studies as a methodology? This is difficult to answer. First of all, the case studies implied only a few characteristics of expanded urban planning. However, the action research sought to nurture the self-organizing of citizen groups according to their intentions. In addition, self-organization has begun to transform the processes, purpose, content, scale and participants of urban planning in Helsinki.

Multiple participations have had an impact on both the planning process and the use of urban space. Even the meaning of participation has started to change, as the new category, 'participation as self-organization' is rapidly spreading. Self-organization enhanced by ICTs certainly will be at the core of the new approaches to urban planning. However, the lack of power in the form of the participants not having a say in the urban agenda setting and the frail links to the decision-making level, is still a great challenge.

Although Boonstra and Boelens (2011) wish to separate (staged) participation from selforganization, we claim that self-organization as participation complements and stands up to the formal top-down processes. Thus, they can together impact the quality of community activities and urban space with transformative consequences for any type of urban planning. The versatile characteristics of expanded urban planning, however, enable a most flexible and fair response to the complexities of current environments which still requires a great deal of further research.

References

- Boonstra, B., & Boelens, L. (2011) Self-organization in urban development: towards a new perspective on spatial planning, *Urban Research and Practice*, 4 (2), pp. 99-122.
- Botero, A. (2013) *Expanding design space(s) Design in communal endeavors*. Doctoral Dissertation (Helsinki: Aalto University, School of Arts, Design and Architecture).
- Botero, A., Paterson, A., and Saad-Sulonen, J. (Eds)(2012) *Towards peer production in public services: Cases from Finland*, Aalto University Publication Series Crossover 15/2012, (Helsinki: Aalto University). Available at: http://co-p2p.mlog.taik.fi (Accessed 15 October 2013).
- Chen, H. T. (2005) Practical program evaluation: Assessing and improving planning, implementation, and effectiveness. (Thousand Oaks, CA: Sage).
- Dittrich, Y., Eriksén, S. and Hansson, C. (2002) PD in the Wild: Evolving Practices of Design in Use, in: T. Binder, J. Gregory & I. Wagner, (Eds) *Proc. of the PDC 02*, pp. 124-134 (Palo Alto: CPSR).
- Evans-Cowley, J. (2010) planning in the age of Facebook: the role of social networking in planning processes, *GeoJournal* (75), pp. 407-420.
- Forester, J. (1999). *The deliberative practitioner. Encouraging participatory planning processes*. (Cambridge, MA: The MIT Press).
- Foth, M., Choi, J. H., and Satchell, C. (2011). Urban informatics, in: *Proceedings of the ACM 2011 Conference on Computer Supported Cooperative Work*, pp. 1–8 (Hangzhou, China: ACM).
- Fraser, N. (2007) *Transnationalizing the Public Sphere On the Legitimacy and Efficacy of Public Opinion in a Post-Westphalian World*. Available at: http://eipcp.net/transversal/0605/fraser/en (accessed 15 October 2013).
- Gurstein, M. (2007) What is community informatics (and why does it matter)? (Milano: Polimetrica). Gurumurthy, A. (2012) Public participation in the network age A critical feminist perspective. Paper presented at the Asia Pacific Consultation 'Women's Public and Political Life in Asia Pacific', Dhulikhel, Kavre, Nepal. September.
- Hamdi, N. (2010) The Placemakers Guide to Building Community (London: Earthscan Ltd).
- Healey, P. (1997). *Collaborative Planning: Shaping Places in Fragmented Societies*. (London: Macmillan).
- Hendriks, C.M. (2006) Integrated Deliberation: Reconciling civil society's dual role in deliberative democracy, *Political Studies*, 54(3), pp. 486-508.
- Horelli, L. (ed.)(2013) *New Approaches to Urban Planning, Insights from Participatory Communities* (Helsinki: Aalto University). Available at: http://urn.fi/URN:ISBN:978-952-60-5191-8 (accessed 15 october 2013).
- Horelli, L. (2002) A Methodology of participatory planning. In R. Bechtel and A. Churchman (Eds.), *Handbook of Environmental Psychology*, pp. 607-628 (New York: John Wiley).
- Jarenko, K. (2013) Local Co-Governance in Herttoniemi: A Deliberative System, in: L. Horelli (ed) *New Approaches to Urban Planning, Insights from Participatory Communities*, pp. 45-64 (Helsinki: Aalto University).
- Kukkapuro, I. (2012) The day of independent restaurateurs, in: H. Hernberg (ed.) *Helsinki Beyond Dreams: Actions towards a Creative and Sustainable Hometown*, pp. 140-147. (Helsinki: Urban Dream Management).
- Majoor, S.J.H. & Salet, W.G.M. (2008) The enlargement of local power in trans-scalar strategies of planning: recent tendencies in two European cases. *GeoJournal*, 72, 91–103.

- Mäntysalo, R. & Jarenko, K. (2014) Communicative Planning Theory Following Deliberative Democracy Theory: Critical Pragmatism and the Trading Zone Concept. *International Journal of E-Planning Research*, 3(1), pp. 38-50.
- Nadin V. & Stead D. (2009). Planning cultures between models of society and planning systems, in: J. Knieling & F. Othengrafen (Eds), *Planning cultures in Europe: decoding cultural phenomena in urban and regional planning*, pp. 283-300. (Farnham: Ashgate).
- Parkinson, M. & Boddy, M. (2004) City Matters: Competitiveness, Cohesion and Urban Governance (Bristol: Policy Press).
- Pestoff, V. (2012) Innovations in Public Services: the Co-Production of Social Services in Europe, in: A., Botero, A. Paterson & J. Saad-Sulonen (Eds) *Towards peer production in public services: Cases from Finland*, Aalto University Publication Series Crossover 15/2012, (Helsinki: Aalto University). Available at: http://co-p2p.mlog.taik.fi (Accesses 15 October 2013).
- Reason, P. & Bradbury, H., (Ed.)(2001) The SAGE Handbook of Action Research. Participative Inquiry and Practice. (London: Sage).
- Roininen, J. (2012) Alue ja yhdyskuntasuunnittelun fragmentoitunut luonne ja eheyttäminen (Fragmentation and Reintegration of Evaluation in Regional and Urban Planning). Doctoral dissertation (Helsinki: Aalto University).
- Saad-Sulonen, J. (2013) Multiple participations, in L. Horelli (ed.) *New Approaches to Urban Planning, Insights from Participatory Communities*, pp. 111-130 (Helsinki: Aalto University).
- Saad-Sulonen, J. (2014) *Combining participations. Shifting the locus of participatory e-planning.* Doctoral Dissertation (Helsinki: Aalto University, School of Arts, Design and Architecture).
- Saad-Sulonen, J. & Horelli, L. (2010) The Value of Community Informatics to Participatory Urban Planning: a case-study in Helsinki, *Journal of Community Informatics*, 6 (2). Available at: http://ci-journal.net/index.php/ciej/article/view/579/603 (accessed 15 October 2013).
- Seppälä, P. (2012) Tiny social movements: experiences of social media based co-creation, in: S. Botero, A. Patterson & J. Saad-Sulonen (Eds) *Towards peer production in public services: Cases from Finland*, pp. 62-75 (Helsinki: Aalto University).
- Staffans, A. & Horelli, L. (2014) Expanded Urban Planning as a Vehicle for understanding and shaping Smart, Liveable Cities. *Journal of Community Informatics*, 10, 3.
- Strauss, A. & Corbin, J. (1990). *Basics of Qualitative Research. Grounded theory procedures and techniques*. London: Sage.
- Timulak, L. (2009) Meta-analysis of qualitative studies: a tool for reviewing qualitative research findings in psychotherapy. *Psychotherapy Research*, 19(4-5): 591-600. DOI: 10.1080/10503300802477989
- Urry, J. (2003) Global Complexity (Cambridge: Polity Press).
- Wallin S. & Horelli L. (2012) Playing with the glocal through participatory e-planning. *Journal of Community Informatics*, vol 8, nro 3. Retrieved 5.6.2015. http://ci-journal.net/index.php/ciej/article/view/883/934
- Wallin S. & Horelli L. (2010) The methodology of user-sensitive service design within urban planning, *Environment and Planning B: Planning and Design* 37(5), pp. 775 791.
- Wallin, S., Horelli, L. and Saad-Sulonen, J. (Eds)(2010) *Digital tools in participatory planning* (Espoo: Aalto University, Centre for Urban and Regional Studies).

Notes

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- ^{iv} The interventions included a hackathon-type of event, where participants worked during one day on several tasks. The participants were later asked to answer an online survey that dealt with the experiences of the event and the nature of participation. Other interventions were in-situ ones during the CD of May 2013, which implied practices of sharing, as well as attempts at data visualisations.
- ^v The word 'digitalkoot' is a combination of 'digital' and the Finnish word 'talkoot. It is loosely translated as 'digital barn raising'. Organising the event was part of our action research activities with the Cleaning Day initiative (http://thirdsector.mlog.taik.fi/2013/04/22/siivouspaivan-digitalkoot-cleaning-day-hackathon-results-and-small-questionnaire/)
- vi During 2004 2006, the project was funded by the European Social Fund with the aim of constructing and testing models of time planning in the Finnish context. The experiment continued in 2007-2008 as part of the Ubiquitous Helsinki-project, funded by the Finnish Funding Agency for Technology and Innovation, the Innovation funds of Helsinki City and several private enterprises. Its aim was to encourage citizens to the co-production of events and so-called ubiquitous services for everyday life in partnership with private, public and community stakeholders in Herttoniemi. In 2009-2012, the action research turned into analysis and reflection. This phase was funded by the Finnish Academy, and the aim was to study the different characteristics and methods of new approaches, such as Expanded urban planning.
- vii The action research comprised several interventions by the researchers together with the community worker and several neighbourhood activists, such as putting up charrettes, helping with the service desk on the web-site etc. The methodological package comprised classical research methods, such as surveys (questionnaires to 1600 families distributed through day-care centres and elementary Schools with a response rate 35%), analysis of local stakeholders, thematic interviews with 20 families (chosen from the surveys) and their employers, time-use diaries and the analysis of documents and field notes. Also, the dwellings of the families were assessed. The methods also comprised a set of enabling tools (Horelli, 2002): diagnostic (mobilizing mapping exercises and visits to meet local actors); expressive (community art, future workshops and brainstorming with ICT techniques); conceptual (model building); organizational (networking, consensus building, forums and work groups) and political (goal setting and prioritizing, panels, lobbying). The content analysis was based on the grounded theory and the constant comparative method (Strauss and Corbin, 1990).
- viii Deliberation in the first generation deliberation theory is seen as public reasoning to achieve consensus, in the second generation, it is about communication in which viewpoints are publicly justified, whereas in the third generation, deliberation is communication in which diverse viewpoints are integrated in decision making (Jarenko, 2013, pp.48).

ⁱ We are aware of the changing meaning of community, which used to refer to a local territory or to a community of interest, which also could be partly virtual. Currently, community is no longer considered a territorial container but a relational, glocal space intertwined with regional, national and even international links, in need of trans-scalar strategies (Majoor and Salet, 2008).

ii Community informatics means the application of ICTs for the empowerment of communities (Gurstein, 2007), whereas urban informatics is a non-normative term referring to the study, design, and practice of urban contexts that are created by ubiquitous technology (Foth et al., 2011).

iii One important source of inspiration for CD was the Pop-up Restaurant Day, which was launched in Helsinki in May 2011 for the first time (Kukkapuro, 2012).