New Approaches to Urban Planning

Insights from Participatory Communities

Edited by *Liisa Horelli*

Aalto University

Aalto University Publication series
Aalto-ST 10/2013

New Approaches to Urban Planning

Insights from Participatory Communities

Edited by *Liisa Horelli*

Aalto University
School of Engineering
Department of Real Estate, Planning and Geoinformatics
YTK – Land Use Planning and Urban Studies Group

Aalto University publication series
Aalto-ST 10/2013

Kannen kuvat Iso kuva Vesa Kanninen, 2012
Pieni kuva Heikki Kukkonen, 2013
Takakansi Heikki Kukkonen, Vanha oliivipuu, 2012

Taitto Marina Johansson

ISBN 978-952-60-5190-1
ISBN 978-952-60-5191-8 (pdf)
ISSN-L 1799-4896
ISSN 1799-4896
ISSN 1799-490X (pdf)

Unigrafia Oy
Helsinki 2013

Finland

Acknowledgements

This book could not have been written without the generous support of the Finnish Academy and its grant (127978) for which I am grateful. It made it possible to set up the research group, Palco (Participatory Local Community, http://wiki.aalto.fi/display/Palco), for conducting studies on urban issues over four years. I would also like to acknowledge YTK, the former Centre for Urban and Regional Studies at Aalto University, Helsinki, and its director professor Raine Mäntysalo, information specialist Maria Söderholm and office secretary Eija Saari for providing a most stimulating and resilient working environment.

In addition, I would like to thank Marina Johansson for the layout of the book, Heikki Kukkonen for designing the cover and Eeva Berglund for checking the English language. Last but not least, I would like to laud the members of the Palco-group – Sirkku Wallin, Joanna Saad-Sulonen, Jenni Kuoppa and Karoliina Jarenko – for their thought-provoking ideas and enthusiasm.

Helsinki 31.5.2013

Liisa Horelli

CONTENTS

FOREWORD

Citizen participation in urban planning is frequently described in the literature as an activity with limited impact in the outcomes of the planning process. In this context it is particularly noteworthy that this gap between what normative planning theory advocates and the planning practice is often rooted in circumstances that can be changed, if the right concept of participatory urban planning is applied. In 'New Approaches to Urban Planning', Liisa Horelli, Sirkku Wallin, Karoliina Jarenko, Jenni Kuoppa, and Joanna Saad-Sulonen address this gap and offer an innovative perspective of citizen participation (participation as self-organization different from the traditional staged participation). In particular, the authors examine two planning approaches that have not been extensively used in Finland, namely Participatory e-Planning (the use of ICTs in urban planning to foster citizen participation, including also participation in the design and use of digital tools and media content) and Time Planning (planning focused on the time schedules and spatio-temporal organization of people's actions). They do this based on several experiences of innovative citizen participation at the neighborhood level in Finland, some of which have been studied for more than a decade in the context of an action-research program in one neighborhood of Helsinki.

The authors rightly claim that, due to its extreme complexity, the transformation of urban space is the result of planning decisions and of other processes including the self-organization of different social groups and networks. Since urban problems are so complex, they cannot be solved by urban planning alone, requiring instead an active citizen engagement in the planning process. For that reason, the challenge is to find the

appropriate ways of engaging citizens, policy makers, planners and other stakeholders in the co-production of solutions for the everyday life of the local community including the use of community informatics. In a way, this book highlights the complex nature of the challenges confronting citizen participation in urban planning and offers insights on how citizen participation can produce more relevant impacts in the city and in the welfare of local communities.

As a book, it is distinctive in its core focus: the local co-governance approach applied to urban planning. This alone would provide a justification to recommend this scholarly contribution. But I can see at least two other reasons to acclaim this book. First, the authors make us understand the importance of multiple participation and co-creation in urban planning as well as in the design of the technology that supports it. Second the book offers descriptions of what works in the field of participatory e-planning and in time planning, based on real cases, even though they are taken from the Finnish cultural and social contexts. Last but not least, the book offers details of these participatory experiences that will certainly be of interest to the reader.

By recognizing this crucial link between the nature and roles assigned to citizen participation and the outcomes of the planning process, the book 'New Approaches to Urban Planning' is an important addition to the ongoing debate in the field of citizen participation in urban planning and in the field of planning theory. Although written from a Finish standpoint it is not intended and is not only relevant for a Finnish readership, but will certainly prove helpful to other European and non-European researchers, students, planners and to networks of self-organized citizens.

Carlos Nunes Silva
Institute of Geography and Spatial Planning
University of Lisbon

PART I
INTRODUCTION

1 Starting points

Liisa Horelli and Sirkku Wallin

The rapidly changing urban environment bewilders citizens and challenges political decision-makers as well as administrators. The transformation of urban functions and infrastructure is taking place at different levels and varying time-scales. For example, the growing population of the Helsinki Metropolitan Region means that authorities are compelled to produce public services in large centralised units which, in turn, make the everyday life of citizens living in their neighbourhoods less resilient. The planning of public services and urban space ignores the local level where they will actually be used. This means that functional networks begin to differ from territorial ones, leading to deplorable consequences for the local infrastructure of everyday life. This is not the case only in Finland, but in many European cities as well (Majoor & Salet, 2008).

However, the city still has a variety of territorial layers. The materiality of urban functions and the everyday life of a city's inhabitants are highly intertwined with and even dependent on their neighbourhood. Thus, citizens often have the motivation and the potential to participate in shaping their environment as part of territorial behaviour.[1] Such environmental transactions need not necessarily be conspicuous measures: they can

[1] Human territorial behaviour refers to the tendency by a person or a group to control or own an object or a place for social (identity, status, stability, family, community) or physical (caring for children, security, cultivation) reasons. It can be seen as building fences, personalizing one's own or the communal house, and by participation in neighbourhood improvement and community development (Altman & Chemers, 1984, 121; Horelli, 1981).

take place, for instance, in the practice of walking (see Kuoppa, Chapter 5). Nevertheless, the supportive infrastructure of everyday life is of utmost importance for ensuring the involvement of local citizens in community development. Infrastructure refers here to the physical, functional and participatory structures that local citizens can appropriate and transform into a supportive culture to provide a place-based identity and sense of community (see Chapter 4 by Horelli). Such structural props encourage citizens' self-organisation and creativity in a variety of forms, such as pop-up restaurants, new public spaces and dwelling types, as well as through on-line digital settings developed by local inhabitants. In Helsinki an ever growing enthusiasm for this has been witnessed recently (Kopomaa, 2011; Mäenpää, 2011; Botero et al., 2012).

The problem is that the traditional, centralised and top-down urban planning which is still current in many European countries, including Finland, does not yet recognise the significance of genuine citizen participation, nor the real potential of information and communication technologies (ICTs) for community development. In addition, it also fails to recognise the self-organising nature of the city as well as the potentials of co-governance. Consequently, urban planning turns a blind eye not only to the most important users of the urban environment, but also to the creators of the most current data and knowledge that should be applied in planning.

Definitions of urban planning tend to vary according to planning theory and the planning system of a country, region or city. Definitions range from those that focus mainly on physical form, such as "The branch of architecture dealing with the design and organisation of urban space and activities" (Commin, 2013), via "Part of societal planning, which aims at guiding human actions and the use of land in human settlements", to more holistic ones. For example, Sandercock (2004,134) defines urban planning as "An unfinished social project whose task is to manage our coexistence in the shared spaces of cities and neighbourhoods in such a way as to enrich human life and to work for social, cultural and environmental justice".

So how should urban planning respond to the challenges coming from citizens´ demands to have a sustainable and democratic everyday life? In particular we are seeking answers, to the following question: what are the new approaches to urban planning and how can they enhance participation in the shaping of communities and their supportive infrastructure of everyday life?

The changing scale, pace and nature of urban planning

This book focuses on new interesting approaches to urban planning that are emerging from Finnish experiences at the neighbourhood level. Thus, the context is a Northern European welfare state with a small population (5,5 million) but a vast territory (330.000 km^2).

These new approaches, as they will be referred to here, are based on an understanding that urban planning is facing challenges, not only related to the self-organising and self-steering character of urban reality and the way that the city is undergoing transformations at different scales, but also related to the massive spread of technology, a phenomenon that should be acknowledged in planning procedures and methods.

We claim that the transformation of urban space is not the result of urban planning processes as such, but rather is the complex outcome of contingent fluctuations of external and internal pressures in the city, including the self-organisations of different groups and networks (Wallin, 2013). Therefore, it is necessary to encourage the involvement of local actors – citizens, politicians, administrators, entrepreneurs and their networks – in the co-production of viable solutions for everyday life.

For urban planning this means that *new approaches should be adopted, ones which comprise methods that allow us to analyse, develop, implement and monitor physical, functional and participatory structures at the neighbourhood level*. Besides well-known community development instruments like those illustrated by Sarkissian & Hurford (2010) and McKnight (2003), these approaches also include urban and community informatics. These would enrich urban planning with new tools for gathering planning information. The development and appropriation of such instruments should change the way we see urban procedures, how we conceive of its actors and finally how we understand the actual meaning of urban planning processes for society.

This book describes approaches that have not been widely used in Finland before. Two approaches are important from a methodological perspective. The first is the use of ICTs in urban planning in a way that not only enhances participation in planning, but also provides accurate information of the social construction of urban everyday life. We call this approach *participatory e-planning*. It can be defined as the "socio-cultural, ethical and political practices which take place offline and online in the overlapping phases of the planning and decision–making cycle, by using

digital and non-digital tools" (Horelli & Wallin, 2010, 60). It also includes, as Joanna Saad-Sulonen (2012; 2013) points out, participation in the design and use of digital tools and media content which, in fact, further enhances participation as self-organisation.

The second approach is *time planning*. This has been experimented with as part of an almost decade-long action research programme in one neighbourhood of the capital of Finland, Helsinki (550.000 pop.). Time planning refers to those public policies and planning interventions that affect the time schedules and the spatio-temporal organisation that regulate people's actions and relationships. In the context of urban planning, this involves the actual mapping of people´s everyday chores, of the spatio-temporal patterns and rhytms of their behaviour at the local, regional and national levels, as well as a variety of solutions to support the quality of everyday life (see Mareggi, 2002; Henckel et al.,2013).

However, the shared approach in most chapters is the planning methodology that springs from the case-based planning process. This action-research-oriented process, which is called the *Learning-based network approach to participatory urban planning* (Lena),[2] applies a variety of traditional research and new enabling tools, including community informatics. These help to embed the planning process in the material and socio-cultural context in question. As Lena comprises a method and a set of tools to analyse, plan, implement, monitor and evaluate planning and community development processes in an iterative way, it also enhances the collective appropriation of the spatial and temporal structures and practices of everyday life (Figure 1.1).

The approaches with examples that we describe in the book, are based on the following principles:

- the urban planning process is participatory, aided by a variety of tools. It also enables the co-production of the tools themselves in the different phases of planning
- the urban planning *process* is integrated with the *substance* of planning, i.e. with the issues and practices of everyday life
- urban planning expands from physical planning to community development and co-governance.

[2] LENA was originally developed within participatory projects with young people and women, and later on applied in the context of time policy and time planning (Horelli, 2002; Horelli & Wallin 2010). Its methodology is based on communicative and post-structural planning theories (Booher & Innes, 2002; Hillier & Healey, 2008), as well as on the theory of complex coevolving systems (Mitleton-Kelly, 2003). The latter implies tensions rooted in the parallel existence of order and chaos, the emergence of phenomena and processes, the self-organisation of different stakeholders and the co-creation of products, events and activity systems.

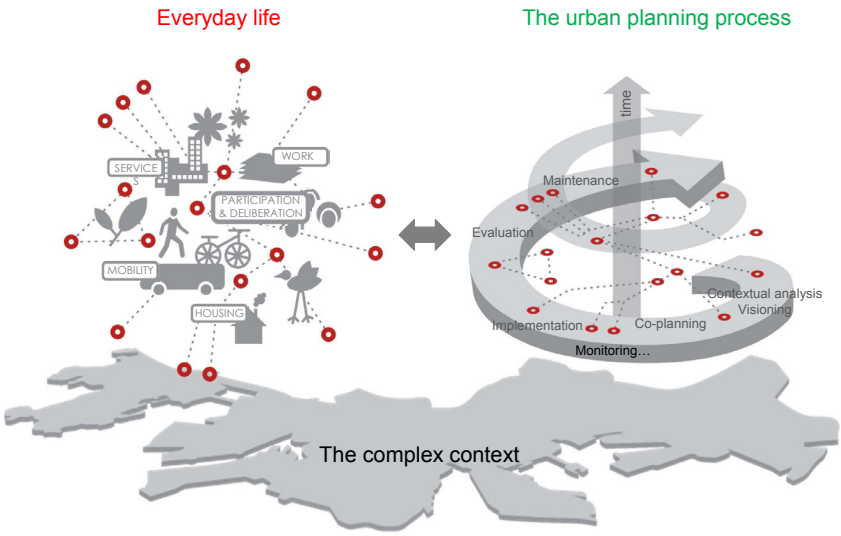


Figure 1.1. The Learning-based network approach to participatory urban planning and action research.

These approaches may improve urban planning in such a way that it can be a steering device at all levels of government and governance (Figure 1.2). Traditional government still steers through norms, economic incentives, information, policies and programmes, whereas the newer forms of governance (Pestoff, 2012) rely more on monitoring, deliberation and self-organisation. The steering devices of governance, seen in the lower right corner in Figure 1.2, have as yet not been developed in the context of urban issues.

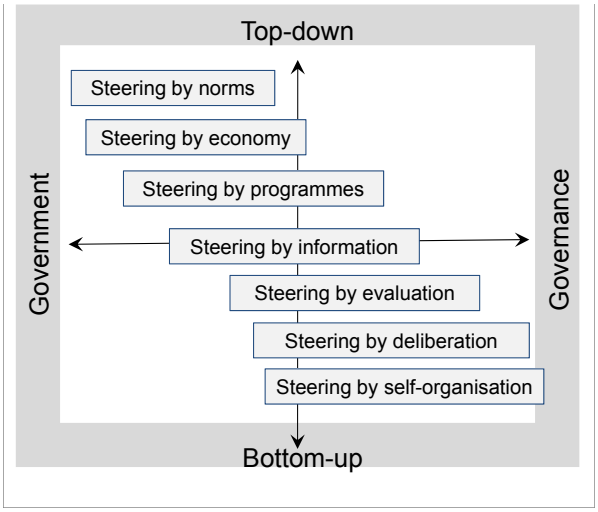


Figure 1.2. The range of steering devices in government and governance (Roininen, 2012, 34).

The aim of this book is to discuss and reflect on examples of these new approaches to urban planning that seek to support the transformative potentials of the local community in the current complex context. In reality, ´participatory communities` are manifold with transformations through self-organisation, meaning-making, cooperative practice and shaping of the environment, even by walking.

The structure of the book

We will examine the transformations around urban planning in the local community from different perspectives. Chapters 2 and 3 sketch out the broad context and the idea of community, while chapters 4 and 6 zoom in on planning methods. Chapter 5 targets daily life and the individual level. The new potentials for change related to digital technology are dealt with in Chapters 6 and 7. What might be considered eternal issues to do with people´s appropriation of their everyday environment and tendency to shape it, are treated in all chapters.

The book is divided into five parts. The Introduction is followed by a chapter that sets the scene by describing *how urban complexity challenges urban planning*. Sirkku Wallin discusses what urban complexity is and how it should be dealt with in urban planning. She also seeks to answer the question: what is the role of urban planning in urban complexity? For Wallin the rationalistic urban planning approach with its procedural, ad hoc interventions has not been able to solve wicked urban problems, and neither has it enhanced sustainable development. The chapter presents an analysis of action research at the neighbourhood level that is intertwined with a three-fold typology of urban complexities. The application of a variety of urban planning methods enables the identification of different types of complexities, and the recognition of the problems that can be solved by urban planning procedures from those that cannot. Participatory planning and the new approaches to urban planning play an important role as providers of real-time planning information and deliberative sense-making, which serve even the disruptive future which cannot be approached by conventional means.

The third part of the book comprises accounts of local solutions and practices that have been applied in the Herttoniemi neighbourhood of Helsinki. In Chapter 3, Karoliina Jarenko examines *local co-governance as a form of deliberative democracy*. The latter implies a democracy model

that emphasizes wide participation and public discussions in political decision making. Deliberation in this context refers to the co-governance of structures and resources that support everyday life. The chapter presents the co-governance model developed in Herttoniemi as a deliberative system and analyses it with the aid of Carolyn S. Hendriks' (2006) model of integrated deliberation. This seeks to ensure communication between the informal arenas of grass-root level participation and the formal decision-making arenas. The analysis provides recommendations for the further development of Herttoniemi's governance model. The chapter is a starting point for the creation of similar types of practices of deliberative democracy in action.

Liisa Horelli analyses the Contributions of time planning in the Finnish context in Chapter 4. Time planning is a new approach in the Nordic context that has also been experimented with through longitudinal action research in the Herttoniemi neighbourhood. A key characteristic of the Finnish experiment is the nuanced and evolving nature of time planning. It started off in the continental style, by coordinating housing, work, services and mobility in a way that served families with small children especially well. Later, the focus shifted to the integration of time planning with e-planning, which further supported unofficial local co-governance. A distinctive feature of the experiment has been how it has identified collective and individual psychological presence as an indicator of how well everyday life is being mastered. Although time planning is not a sufficient condition for enhancing the experience of psychological presence, it seems to be a necessary one, as it can provide a much needed sense of temporal prosperity. This is an important observation, since even the recognition that different types of time intertwine with the management of varying kinds of complex problems has not appeared in the literature of time planning.

In Chapter 5, *Sensing, learning and transforming a neighbourhood through walking*, Jenni Kuoppa argues that the planning literature on participation has largely overlooked the meanings of place for inhabitants and the transformative potential of everyday life. She examines how the neighbourhood of Herttoniemi and its meanings are constructed and shaped in the inhabitants' everyday practices and experiences of walking. The analysis draws on interviews in the neighbourhood, and gives insights about the temporal tactics, socio-material practices and social categories through which people actively produce their places. The chapter describes the dynamics of sensing, learning and transforming the environment in the

timescales of fleeting experiences, routines and lifepaths. It concludes by considering the potentials and challenges of the experiences and meanings for the formation of participatory practices and self-organisation at the neighbourhood level.

The fourth part of the book deals with meeting the digital age. Joanna Saad-Sulonen pays attention in Chapter 6, *Multiple participations in e-planning*, to the role of participation in the design of digital technology. This is an aspect of participation that has been neglected in the e-planning and urban planning discourses. Digital technology is no longer limited to expert systems and ready-to-use tools. Mobile, web 2.0, and social media applications are mundane and adaptable, and besides, they provide features that support design-in-use. This situation calls for a shift in the way technology is understood in the context of participatory e-planning. Additionally, participatory e-planning needs to deal with how the new technologies support a novel type of participation in urban planning, namely participation as self-organisation. This participation is different from the ´staged participation`- type in the sense that it refers to community-initiated activities instead of to planner or government-initiated ones. The matrix of multiple participation types, described in Chapter 6, makes it possible to identify the area of operations that is necessary for bridging the gap between the current locus of participatory e-planning and the new situation, where participation as self-organisation is supported by the design-in-use of digital technology.

Liisa Horelli focuses on how *Participatory e-planning meets the glocal* in Chapter 7. Everyday life has become increasingly glocal, as daily activities are taking place at several different spatial layers. The author claims that participatory e-planning enhances ´playing with the glocal` where certain technical, organisational and institutional capacities, as well as supportive structures, exist. Both the international literature and the Finnish experiences indicate that dealing with the glocal is a complex, multi-dimensional process that takes a long time to develop. The lessons learnt suggest that e-planning measures have to be targeted at the design and implementation of online deliberative environments, and tools should be devised that enhance the integration of local with non-local perspectives. It seems that if we are to avoid the risk of local communities losing their identity, we should adopt explicitly trans-scalar policies and strategies, including relevant communication instruments, which enhance the co-creation of a supportive infrastructure of everyday life.

The fifth part concludes with reflections on the *architecture of opportunities*. We discuss and answer our question: how can urban planning respond to the challenges coming from citizens' demands to have a sustainable, democratic and supportive everyday life, irrespective of the complex context? Our conclusions can be crystallised into three points: the expanded meaning of participation for urban planning and the consequent architecture of opportunities, the comprehension of planning as part of the self-organising and self-steering urban reality, and the city as undergoing transformation at different scales. We also raise some new questions, concerning the trans-scalar policies and strategies that will affect urban planning.

References

Altman, I. & Chemers, M. (1984). *Culture and Environment*. Cambridge, Mass.: Camridge University Press.

Booher, D.E, & Innes, J.E. (2002). Network power in collaborative planning. *Journal of Planning Education and Research,* 21, 221–236.

Botero, A., Paterson, A., & Saad-Sulonen, J. (eds.)(2012). *Towards peer production in public services: Cases from Finland*. Aalto University Publication Series Crossover 15/2012. Helsinki: Aalto University. http://co-p2p.mlog.taik.fi

Commin The Baltic Spatial Conceptshare (2010). http://commin.org/en/bsr-glossaries/european-glossary/

Foth, M., Choi, J. H., & 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. http://eipcp.net/transversal/0605/fraser/en

Hamdi, N. (2010). *The Placemakers Guide to Building Community*. London: Earthscan Ltd.

Henckel, D., Thomaier, S., Könecke, B., Zedda, R. & Stabilini, S. (eds.)(2013). *Space–Time Design of the Public City*. Hamburg: Springer.

Hendriks, C.M. (2006). "Integrated Deliberation: Reconciling civil society's dual role in deliberative democracy". *Political Studies,* 54(3),486–508. http://www.politicalstudies.org/ (5.6.2011)

Hillier, J. & Healey, P. (2008). *Critical essays in planning theory. 3, Contemporary movements in planning theory.* Aldershot: Ashgate.

Horelli, L. (1981). Ympäristöpsykologia (Environmental Psychology). Espoo: Weilin & Göös.

Horelli, L. (2002). A Methodology of participatory planning. In R. Bechtel & A. Churchman (eds.), *Handbook of Environmental Psychology* (pp. 607–628). New York: John Wiley.

Horelli, L. & Wallin, S. (2010). The Future-Making Assessment Approach as a Tool for E-Planning and Community Development – the Case of Ubiquitous Helsinki. In C.N.Silva (Ed.), *Handbook of Research on E-Planning: ICTs for Urban Development and Monitoring* (pp. 58–79). Hershey, PA: IGI Global.

Jacobs, J. (1961). *The Death and Life of Great American Cities.* New York: Vintage books.

Kopomaa, T. (2011). *Lähiö 2.0 – utopia ja totta* (Suburb 2.0). Helsinki: Kake-julkaisu.

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

Mareggi, M. (2002). Innovation in Urban Policy: The Experience of Italian Urban Time Policies. *Planning Theory & Practice*, 3(2), 173–194.

McKnight, J.L. (2003). *Regenerating Community: The Recovery of a Space for Citizens*. In Distinguished Public Policy Lecture, Institute for Policy. Available at http://www.abcdinstitute.org/publications/downloadable/

Mitleton-Kelly, E. (2003). Complexity Research – Approaches and Methods: The LSE Complexity Group Integrated Methodology. In A. Keskinen, M. Aaltonen & E. Mitleton-Kelly, (eds.), *Organisational Complexity* (pp. 55–74). Turku: Finland Futures Research Centre, Turku School of Economics and Business Administration.

Mäenpää, P. (2011). Helsinki takaisin jaloilleen. Askelia toimivampaan kaupunkiin (Helsinki – getting up). Helsinki: Gaudeamus.

Pestoff, V. (2012). Innovations in Public Services: the Co-Production of Social Services in Europe. In S. Botero, A. Patterson & J. Saad-Sulonen (eds.), *Towards peer production in public services: Cases from Finland*. Helsinki: Aalto University. http://co-p2p.mlog.taik.fi

Roininen, J. (2012). *Alue- ja yhdyskuntasuunnittelun arvioinnin fragmentoitunut luonne ja eheyttäminen* (Fragmentation and Reintegration of Evaluation in Regional and Urban Planning). Helsinki: Aalto-yliopisto.

Saad-Sulonen, J. (2012). The role of the creation and sharing of digital media content in participatory e-planning. *International Journal of e-Planning Research,* 1(2), 1–22.

Saad-Sulonen, J. (2013). Multiple participations. In L. Horelli (Ed.), *New Approaches to Urban Planning, Insights from Participatory Communities*. Helsinki: Aalto University.

Sandercock, L. (2004). Towards a Planning Imagination for the 21st Century, Journal of the American Planning Association, 70(2), 133–141.

Sarkissian, W. & Hurford, D. (2010). *Creative Community Planning:Transformative Engagement Methods for Working at the Edge.* London: Earthscan.

Wallin, S. (2013). Urban Complexity Challenging Urban Planning. In L. Horelli (Ed.), *New Approaches to Urban Planning, Insights from Participatory Communities.* Helsinki: Aalto University.

PART II
SETTING THE SCENE

2 Urban Complexity Challenging Urban Planning

Sirkku Wallin

Introduction

Urbanisation is accelerating globally, not only in the developing countries, but also in highly developed regions. Urban agglomerations have continued to grow also in Finland. The enlarging population and the congested urban functions they bring about, augment the incidence of urban problems. For example, the inadequacy of apartments and public services, increasing living expenses, social and ethnic segregation, traffic jams and the failing quality of environments that were previously considered problems of large global agglomerations, have become part of daily experiences in the Helsinki Metropolitan Region (Kortteinen et al, 1999; Kortteinen & Vaattovaara, 2007). The rapid technological development is yet another transformation that has taken place in urban areas and changed the everyday life of inhabitants, especially their ways to work, travel and consume (Urry, 2003).

The objective of urban planning has been to plan and design functioning urban environments. Urbanisation is complicating this task (Christaller,1933; Bettencourt & al., 2007). The expanding scope and scale of problems have turned them into ´wicked` ones. These wicked problems are intricate by nature, comprising several environmental or societal

issues at the same time or they are difficult to solve due to their grand scale (Skaburskis, 2008; Weber & Khademian, 2008). There has been two ways to respond to wicked problems in urban planning. The first one has focused on the substance of planning, on the aims, means and expected outcomes of urban structures and functions. The second one has laid emphasis on the processes, actors and stages of planning. Unfortunately, there seem to be failures in both of them. The process of urban planning is detached from the other sectors of government, even if the performance of urban planning lays the foundation to them.

In addition, urban planning itself should better accomplish its task, as the planning process defines the substance and vice versa. The measures of urban planning are rarely in line with the objectives. Consequently, urban planning becomes less efficient, ecological, transparent and democratic, and the infrastructure of everyday life will not be supported even in the most professional planning cases.

For example, the idea of enhancing sustainable urban development through densification and compact urban structure has become an accepted norm in urban planning. Nevertheless, densification has not led to a more sustainable environment. On the contrary, the mobility and consumption patterns are increasingly burdening the ecosystem. At the same time, it has become ever more difficult for citizens to shape their own living environment and daily life. At least the aspirations of citizens are not reflected in the administrative and decision-making system. Even if public participation is endorsed by legislation, the statutory measures are limited to the specific phases of the planning or zoning process. In addition to the scarce public participation, also another legal procedure in urban planning is failing, namely evaluation. Evaluation in and of a planning case rarely acknowledges that the plan might not be implemented according to the plan or it does not affect the environment as intended. How should this kind of disruptive development be understood in urban planning research? And how can urban planning solve the wicked problems that are partly brought forth by urban planning itself.

The aim of this chapter is to analyse a longitudinal, neighbourhood level action research from the perspective of urban planning and development within this complex context. The chapter seeks to answer the questions: What is urban complexity? How should it be acknowledged and prepared for in urban planning? What is the role of public participation in the complex urban development?

The chapter also sheds light on action research as a method in urban planning and on the local patterns of urban development, which have been

dealt with in Chapters 3 and 4 of this book. However, the emphasis is on the reflection concerning the conclusions of the action research as part of a larger trend of urban planning research and urban planning.

From urban machinery to the wildly growing organism – the types and solutions of urban complexities

The city has been described in urban planning research with diverse concepts. In the era of modernism, rational planning conceived the city as a machine (Jauhiainen, 2002). It was an engine, produced by design and steered by administrative systems. The machine provided a source of livelyhood and a society, even a condensation of global economic and political domination (Faludi 1973; Porter, 2011). In the post-modern era, cities have prevailed their role, but the concept of urban planning and development has changed. Due to urban growth, social segregation and economic differences, cities look more like a self-organising organism than a disciplined machine (Taylor, 1998; Urry, 2003).

Jane Jacobs asked already in 1961, in her book Death and Life of a Great American City: *"What kind of a problem is a city?"* She answered that *"A city is a problem in"organised complexity"*. In complexity theories based on systems thinking, the problems caused by organisation represent just one type of complexity. The two other types are *simple problems* and *problems of disorganised complexity* (Baynes 2009). The management methods of the different complexity types differ from one another. According to Baynes (2009, 215),*"The basic assumption behind simple problems and disorganised complex problems is that the system being described seeks equilibrium and that this can essentially be approached with reductionist, deterministic methods"*.

In this chapter, simple complexity[1] is a problem which can be solved. At least, it can be split into units that can be detangled and therefore solved. Simple complexity is not about simplicity. Quite the contrary, it can also be intellectually a highly demanding problem. Traditional engineering questions seek to answer these issues. Examples of solving methods are life-cycle thinking, efficiency consumption calculations that are used in the planning of the urban structure and urban functions.

[1] According to the empirics of action research, some urban issues are complex but still simple and solvable by nature. Therefore, the term ´simple complexity` will be used here for those issues in urban planning.

Problems emerging from disorganised complexity are difficult to perceive and comprehend, as they take place in changing situations, contexts and logics. They have to be studied by applying advanced statistical analyses and modelling. Methods like forecasting and evaluation, are common in the field of economics and policy studies, but these are also applied in urban development issues, such as demographic change (Baynes, 2009). Disorganised complexity cannot be solved as such, but it can be examined and anticipated which provides solutions for adoption and adaption.

Organised complexity differs from the other types of urban complexity. Baynes (2009, 215) claims that"*The problems of organised complexity are characterized by heterogeneity, coherent local interactions, irreducibility, and persistent disequilibrium. Deterministic approaches and statistics cannot adequately represent the diversity or importance of interactions and dynamics that lead to aggregate observations in organised complex systems".* Organised complexity is a meshwork of formally acknowledged organisations, apparently rationally-led and well-steered but, when implemented in practice, they often end up in a ridged, competitive and overlapping system of administration that triggers wicked urban problems. Splitting them into smaller units does not solve the consequences of organised complexity, but might even worsen it. In addition, the mere description of the complexity is not enough, since the causes of the problem are known even without new research. The resolution lies in deliberation and social reconciliation, new models of governance and practical innovations that take over current systems and practices. None of these alternatives is plausible. New technology or political decision might be *"a juggernaut of destruction"*, a new layer on the prior mess, which makes the situation even more complicated (Urry, 2005).

Consequently, the different types of complexity affect the scope of urban planning, the understanding of what urban planning is and what means can be used to resolve wicked problems. Administrative and resolution devices that are based on the deterministic approach have a limited impact in urban planning. Knowledge production that is based on the causalities of phenomena and quantitative methods, such as technical and economic statistics, falls quickly into a cul-de-sac in the changing context (Fainstean, 2001).

One example of this kind of planning rationality is urban planning policy that seeks to curb down climate change by densifying the urban structure through spatial transformation. The aim of this policy has been to increase the quantity of people and activities within a smaller geographical

location in order to save energy and diminish Co2 emissions. It is based on the assumption that people in a compact city have less space to consume and less need to move around when everything is nearby. However, it is difficult to densify the existing structure in a sustainable way. Irrespective of the densification discourse, the urban structure has already expanded towards unbuilt areas of great ecological importance. Densification policies have been most effective in the affluent inner city areas in which sophisticated architecture and the skilled use of materials have created socially appealing environments. Nevertheless, the same urban pattern has increased massive consumption, cut down possibilities to have ecological food production and increased the mobility of masses (Heinonen, 2012). It should be questioned in urban development, whether densification in urban planning has evolved from a savor of an ecological strain (Ballarin, 2010).

There is also a lack of capacity to understand organised complexity in urban planning processes. According to research on participatory urban planning, the participants – local actors, inhabitants, entrepreneurs and different service provider communities – have not been sufficiently integrated in urban planning (Innes & Booher, 2010; Staffans, 2004; Bäcklund, 2007). The research has created and introduced several approaches to address the public and to mediate uprising conflicts, but it has not succeeded in integrating public participation in the process, neither in the substance of urban planning. Manzo and Perkins (2006, 341) claim that" *While this process may indeed require special management techniques, it has an uncovering of place meanings and values at its core".* This means that inhabitants` place-based knowledge should be acknowledged in urban planning. Participatory urban planning should mobilise people to bring their own history, the assets of their social relations and dreams of a better future to the content and substance of planning. Karoliina Jerenko illustrates this by presenting the third generation deliberation process in Chapter 3. Jenni Kuoppa, in Chapter 5, writes about the meanings that the residents´ environmental experiences and everyday practices, such as walking in the neighbourhood, can bring to urban planning.

However, there are inspiring examples of urban planning research which have managed to reach the changing scales and scopes of urban development, shedding light on the patterns of urban complexity in planning. Recent studies have been able to evaluate the consequences and impacts of urban planning, to demonstrate the reasons for the localisation of the service structure and the fragility of the steering power of master planning (Alppi & Ylä-Anttila, 2007), or the unexpected collective impact of

different plans for tourism in North-Finland (Staffans & Merikoski, 2011). It is also possible, for example, to count the increase of carbon dioxide emissions and the costs for the service users caused by the centralisation of public services (Lehtonen, 2012). These studies share the capacity to explain societally meaningful, difficult problems that are connected with urban structures and functions, by applying a multifaceted methodology.

Versatile methodological competence is part of a larger capacity to understand urban complexity and to resolve wicked problems. At the same time, it makes urban planning more transparent and more fit for purpose (Wallin & Horelli, 2009). The faculty to combine knowledge, produced through traditional quantitative methods with qualitative knowledge and modelling, enriches urban planning and decision making. The key is new knowledge sources, such as the place-based knowledge of inhabitants and other real-time urban informatics. The novel data, and the new approaches to use it, enrich the prior planning material and provide the possibility to understand and anticipate complexities (Horelli & Wallin, 2010). The expansion of data produced by the civil society increases the participation of residents and new groups – both in the process and substance of urban planning. Joanna Saad-Sulonen (Chapter 6) and Liisa Horelli (Chapter 7) illustrate, how participatory e-planning simultaneously facilitates the dissemination and reuse of information.

The systemic[2] gathering and systematic use of planning information can make the planning system more transparent, reflective and agile than it is today. In practice, this means the adoption of new approaches and new methods, not only during the on-going planning process, but before the actual planning begins. These contribute to the planning objectives, but also to the implementation of the plans when the ex-post evaluation of the urban setting takes place. Thus, they produce planning information for future initiatives (Figure 2.1; Horelli & Wallin, 2010; Wallin & Horelli, 2009).

[2] Systemic refers here to the systems approach which means the comprehension of isolated systems as affecting one another and making a whole or a system. The latter is the core concept in systems theory which refers to both natural and artificial, human-made systems. Systems are usually divided into three categories: closed systems, open systems and complex systems (Checkland,1981; Hummelbrunner & Reynolds, 2010; Reynolds & Holwell, 2010). The city is a complex system which can be understood and analysed in many different ways, also in urban research (Baynes, 2009). Perhaps the most renowned are the System Dynamics by Jay Forrester (1969) and the Cellural Automata Spatial Modelling by Michael Batty (1980; 2005) which has contributed to geospatial analysis. Understanding the city as a systemic whole is widespread. It can be seen in the techno-rational urban models that have been built since the end of 1800s till today (Christaller, 1933; Faludi, 1973). Recently, the systems approach has been popular in governance studies in which the city is a co-evolving, interactive system comprising different actors, networks and organisations (Sotarauta, 1996; Allmendinger & Haughton, 2010).

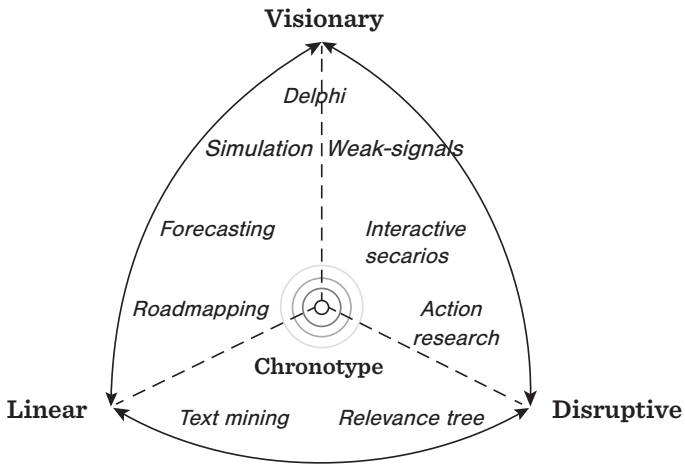


Figure 2.1. Examples of urban planning methods suitable for resolving different types of urban complexities (adapted with permission from Aaltonen, 2007 in Horelli & Wallin, 2010).

The next section justifies the claim of Jane Jacobs about urban complexity. It is still valid, although she made it 50 years ago in New York, and now the place is Herttoniemi, a Finnish neighbourhood of 40.000 residents. It comprises an analysis of urban complexity at the neighbourhood level, which was perceived, explained and partly resolved by the methodology of action research on urban planning.

Interpretation of urban complexity at the neighbourhood level

Herttoniemi, which is one of the oldest suburbs of Helsinki, provides a rich context for studying urban complexity. It has followed the general transformation of the metropolitan area. Therefore, it can be regarded as the mirror of urban development in the Helsinki region in which the internal and external push and pull factors take turns, enabling and constraining one another.

Systemic and human-driven urban research

Action research[3] is one way to conduct studies on urban change in a systemic way. Action research is well-established in social and behavioural studies

[3] Action research is a strategy in which the researcher, together with the subjects in the study, implement various interventions. These comprise simultaneous observation, monitoring and analyses. The process is transparent and co-evolves with the context. The dual role of the researcher, the so called ´sitting on two chairs`, is à dilemma characteristic

in which research is simultaneously an explanatory and transformatory factor in terms of the research object (Alasuutari, 1993). Systemic refers here to a trans-disciplinary approach in which, besides the structural and temporal transformation of the context, also the different agents and their rationalities are recognised as part of urban planning interventions.

In the action research on Herttoniemi, urban planning and community development interventions were intertwined with the study on different actors and their activities in the neighbourhood. The systemic approach by Kurt Lewin (1946) seemed to support well the understanding of urban transformation, because it combines specific development methods with the existing community action. The adapted action research approach was called LENA, *Learning-based network approach to urban planning and action research*[4] (See Introduction and Chapter 4). LENA expanded formal urban planning that traditionally deals with specific zoning and building projects to comprise multi-stakeholder processes. It transcended administrative and areal borders and explored new ways to gather inhabitants` place-based knowledge.

The aim of the action research was to integrate shared practices, known in the Anglo-Saxon countries as *community development,* in the process-based town planning, current in Finland. This meant in practice, the combining of *ABCD asset-based-mapping* by McKneight (2003) with the community development methods of Wendy Sarkissianin (Sarkissian &Hurford, 2010). The latter cut complex interventions into small events, in which participants from a variety of population groups have their own role in order to reach a shared goal (Horelli, 2002; Wallin & Horelli, 2010).

Contrary to the traditional urban planning process, the urban planner was not this time an organiser of the process but merely one actor. There was no primary object or target, but several intertwining projects that were simultaneously taken forward. These were, for example, the renovation of the metro station, bus routes, the planning and building of a particular yard, but also the activation of different resident and hobby groups, by developing a specific participatory structure. This meant, among others, the founding of local web sites and voluntary local governance institutions in the form of a Local Committee and a Local Assembly that started to meet regularly (see Chapter 3; Wallin & Horelli, 2012).

---

of action research (Horelli & Vepsä, 1995). Thus, the objectivity of the traditional research is lost, but the researcher ends up with examining his/her own activity within the research design.

4 Lena has been applied earlier in Malminkartano, another neighbourhood of Helsinki, and in the region of North Carelia (Horelli 2002; Horelli & Vepsä 1994).

In the light of this action research, the neighbourhood is no longer seen as an object of the town fathers or professional town planners. Herttoniemi unfolded as a self-organising, co-evolving system in which all actors had some meaning, even if the roles were not similar or comparable (Boolens & Boonstra, 2011). This conceptual approach meant that the residents and communities of the self-organising city, who traditionally had been regarded as users of activities and spaces, stood up side by side the authorities of urban planning. The prior actors had been officials, land owners and construction companies, who had wanted to engage local actors in planning, but only in the role of the end user.

Residents, civil society organisations and the workers of local associations, even passive actors who do not come to events, carry weight in terms of shaping the environment. The transformation can take place by conscious participation in development interventions or just by having an impact on the setting through everyday practices, such as walking (Kuoppa, 2013). Not only active involvement in a workshop or writing a statement, but even the chosen route or service, and a lived moment can be part of the evolving urban texture.

This kind of urban development might seem chaotic, when diverse interventions and research are simultaneously taken forward. However, in practice it is clear that the redesigning of the location of children's afternoon care, the building of a community yard and the changing of local bus routes are different planning processes, but together they make the neighbourhood a better place to live. The co-planning, timing and taking forward of these locally identified activities through action research enabled the description and even certain steering of the transformations in the neighbourhood (see Figure 1.1, in Chapter 1).

Urban complexity in Herttoniemi: simple solutions and the identification of non-solvable challenges

The neighbourhood of Herttoniemi has functionally been part of Helsinki since the 1950s. Industrial activities found their place there, and offered to the whole city harbour and warehouse services. Right after the Second World War Herttoniemi turned into one of Finland's first suburbs, which attracted people who wanted better housing conditions. Thus, Herttoniemi became a classic neighbourhood unit that provided its inhabitants all public and commercial services in addition to work places. Gradually its identity got stronger. It was divided into two residential areas: West-Herttoniemi

and Roihuvuori, which were separated from one another by an industrial and harbour area, and later by the eastern motorway and the Metrorail towards East-Helsinki and the South-East Region (Packalén, 2008).

By the beginning of the Third Millennium the urban structure of Herttoniemi is decisively different from that after the war. In practice, the neighbourhood has been rebuilt in terms of its functions, population, image and position in the central hierarchy of the metropolitan area. The social housing stock of apartment houses has been transformed into owner occupied dwellings by older people but also increasingly by young families. The once labour-class neighbourhood has now a conspicuous consentration of green urban activists.

Urban functions have changed even more drasticly. The old suburban structure is dissolving. The former harbour area has been replaced by a new sub-area with high density urban building, called Herttoniemenranta. The services are being moved into the new centre of Herttoniemi around the metro station and the former industrial area has evolved into an office and retail district. The old shopping centres in the West-Herttoniemi and Roihuvuori have been emptied of commercial services, except for small supermarkets. Currently, public services, such as the library, youth house and the local parish are moving to the commercial centre around the metro.

All the above described factors have transformed the urban landscape, and the change is continuing. The point-access block houses and slab blocks are being complemented by new buildings of latest architecture. A completely new neighbourhood, called Kruunuvuorenranta, is being built South-East of Herttoniemi. Herttoniemi has always been the transport node of South-East Helsinki, but now it is scaling up to a new level, while it is simultaneously being drastically changed internally.

The original aim of action research was to examine this transformation and to find out, how to support people´s everyday life and opportunities to participate in urban planning. The action research (2004–2009) comprised several distinctive development projects with different foci. In each phase, data was gathered from the area, especially place-based data of the attractiveness and functioning of the neighbourhood.

Two large surveys covering the residents of the neighbourhood, as well as focus group and individual interviews were conducted, in addition to observing the meetings of administrators and associations in Herttoniemi. The objective of the data gathering was twofold: first of all, to collect views of different actors concerning the ways to develop the neighbourhood and

to disseminate information for deliberation. Secondly, the data enabled to monitor the evolving context. The planning solutions and interventions have been described in several Palco-publications (https://wiki.aalto.fi/display/Palco/Publications). The planning targets and needs that came up during the action research have been gathered in Table 2.1. They have been assessed from the perspective of urban complexity and participatory planning.

Table 2.1. Urban complexity recognised by action research at the neighbourhood level.

Problems of urban complexity	Target of planning / action research	Role of participation
Simple problems	New timetables and routes for the bus, common yards, local websites	• Speeded up the finding of problems and their solutions • Enabled the implementation of solutions even through the means of co-production • Increased the fit of the solution and its sustainability
Problems of disorganised complexity	Uncertainty brought about by a multitude of service providers and a lack of planning data, such as childcare in the afternoon and the mobility for hobbies of young people	• Produced information about phenomena, events and trends that cannot be found in statistics or via surveys to particular groups • Enabled the comprehension and deliberation of different perspectives (see Chapter 3)
Problems of organised complexity	The chaos brought forth by different administrative systems, their varying ´temporal windows`, and the evolving context in general, for example the raising of real rents and the urban development of the new Herttoniemi Centre.	• Brought forth new active user groups as producers of planning knowledge – some of which might change the future direction • Enabled the use of digital data (e-planning) and time planning for foresight and anticipation, provided opportunities to envision solutions in the changing urban context

From the perspective of urban complexity, described at the beginning of this chapter, *the first result was the recognition of the disorganised complexity of the neighbourhood* (see Table 2.1).

The action research took off by collaboration with the Department of Urban Planning and The Department of Social Affairs at the City of Helsinki. The former was interested in Herttoniemi due to the need to find novel places for housing, as well as due to the many zoning and transport projects in the new centre of Herttoniemi, which was a reflection of the future neighbourhood of Kruunuvuori. The Social department of

Helsinki was worried about the lacking services of the 20.000 residents in Herttoniemenranta. They had not been built due to the financial recession in early 1990s. They also lacked local data on services. The social services were planned at that time according to age groups for the whole city in general and no longer according to local needs, as before. The principle meant that even the services of one family were planned in different administrative departments. This hids the fact that social problems were concentrated in certain neighbourhoods, even in particular blocks. The research showed that even if the strategic decisions of the two city departments had an impact on the area, the work of the local officials and their collaboration was even more meaningful.

Despite officials, there were many activists in the area, who had resources and motivation to organise services or to take part in the planning and financing of spaces in the neighbourhood. These were members of local associations or private service providers, who offer spaces for activities. The neighbourhood had also traditional residential activities among better off people who lived in the owner occupied area. The new residents of Herttoniemenranta and the tenants of social housing did not participate in the residential activities. The ways and instruments to increase social interaction were scarce, especially between the residents in different parts of the neighbourhood. The surveys disclosed that even if the different residential groups appreciated the neighbourhood for the same reasons, they could not find shared goals, except for the need of a public swimming pool. The location of the services became a conflict between the different subareas, especially as the newest one was almost totally without services. On the other hand, the centralisation of services around the metro station worsened the services of West-Herttoniemi, known for its activism. These were examples of problems in disorganised complexity that cannot be solved as such. However, they can be described which means that they can be divided into smaller controllable units (see Table 2.1).

These smaller units were not easy problems but it was possible to solve them. The simple complexities, which were separately solved from each other, were found through surveys and participatory observation. Some of the solutions were strategic, such as the creation of participatory arenas and instruments for local co-governance and the founding of the local websites (see Chapters 3 and 4). Others were operative, for example, the hiring of a community worker. All of them were ground stones for the participatory structures that enabled residents to resolve the provision of child care in the afternoon based on different partnership models, to

reconfigure the transportation system and to plan, build and turn the unsafe area of Roihuvuori into a multi-generational community yard (Wallin, forthcoming; Saad-Sulonen & Horelli, 2010; Wallin & Horelli, 2010).

Participatory planning proved to be essential for dealing with 'simple urban complexity'. The precondition for solving the complexity was the collaboration between the residents, associations, entrepreneurs and the administrators. The solution turned out to be successful, if the official responsible for the planning collaborated with the service provider and the users. The transition from participatory planning to participatory co-production speeded up and enabled a satisfactory outcome, for example, in the case of the Roihuvuori yard.

Participatory planning was also fundamental in the controlling of disorganised complexity. The participatory means produced new knowledge about the current and future situation of the neighbourhood. Besides statistics and expert surveys, a variety of co-planning methods was applied, ranging from informal events to structured workshops and charrettes. Thus, it was possible to approach the complex situation from different perspectives, to plumb the background of problems and to find common denominators, which made it easier than before to understand varying causal relationships. Although complexity as such was not decreased, the Lena approach of the action research enhanced the finding and creation of shared means and arenas for the neighbourhood actors, which in turn, enabled to make complex, even conflicting issues visible.

The recognition of the two types of complexity did not, however, solve all the challenges of the Herttoniemi neighbourhood. The solving of specific planning problems, or revealing different perspectives and creating shared understanding, are not enough to bring reponses to the situation that will emerge from the unknown future of the larger contextual transformations. The disruptive future cannot be competely coped with, even if the anticipation of and preparation for changes are the purpose of different administrative departments, especially that of the Department of town planning.

Similar observations were made in the action research on Herttoniemi as in the description of urban planning research at the beginning of this chapter. The current administrative and decision-making machinery is not capable of controlling the urban organism, especially if the timescale extends to years or decades. The planning system and city government cannot steer, not even together with the neighbourhood activists or associations, the most important activities and events related to urban

spaces. One example of this *organised complexity* that is difficult to steer, was the raise of real estate taxes. The city decided to triple the rent of the old housing areas, at the same time as they were in a desperate need of renovation. This, in turn, increased the dwelling costs to a level that was unbearable, at the time when housing and living had become extremely costly in the metropolitan region in general.

The raised rent endangered the possibilities of the residents and real estate owners to maintain their houses and even to live there. On the one hand, not increasing the rent was inconceivable. Old rental agreements were ending and new ones had to be made. According to legislation and good governance, lower rents will not be possible due to the principle of equality of citizens. Another, similar problem of organised complexity is the structural and functional challenge of Herttoniemi. The old suburban structure dissolves, when the services will be concentrated around the metro station, in the so called new centre of Herttoniemi. It is impossible to prevent this development during the times of current economic priorities. Services will be produced less expensively to larger groups of people, which means that the services will no longer be situated in the near environments where people live, like before.

How should urban planning relate to organised complexity that is emerging from the established administrative and planning practices, especially if the challenges cannot be solved through planning? The action research on Herttoniemi discloses that urban planning should be seen both as techno-rational problem solving and as part of a larger understanding and anticipation of the socio-political development of society.

It is not suggested in this chapter that action research should be applied as a planning device. However, it is proposed to profit from the applied methods and from the understanding of the meaning of participatory planning in different planning cases. With the aid of multiple methods and sufficiently long term examination, it is possible to understand the neighbourhood and to solve its challenges. Expanded urban knowledge that participation brings forth might enable the anticipation of the future and the understanding of plausible continuities or loose trends which organised complexity will be made of.

In sum, the new approaches to urban planning, which are based on localities and local actors instead of administrative sectors, can identify and split different types of complex urban problems and resolve many of them. This is, in fact, what urban planning has always been about. However, the contribution of the approach presented here implies that the limits of

planning have to be understood. The city is a living organism, a co-evolving adaptive system that transforms space and time the steering of which through straight forward urban planning processeses do not work. The contributions of incremental and rationalistic planning approaches have to be understood with their limitations in the context of the changing, multiactor and even disruptive urban reality in which planning takes place.

Conclusions

This chapter has described urban complexity in Herttoniemi from the perspective of action research at the neighbourhood level. It has sought to answer, what urban complexity means, how one can be prepared for it in urban planning and what the role of public participation is in the complex urban development.

The action research described here supports the outcomes of classic studies on urban planning. Complexity is an urban characteristic that emerges as a result of different activities, polymorphous structures and varying features of different people. In addition, both internal and external pressure affects the changing context. The pressure comprises, among others, urbanisation and the increase of population, the technological change and the transformation of everyday life. Worth naming are the new consumption patterns, the changing governance style and the rise of self-organisation, as well as the events and networks in different spatio-temporal dimensions which can be examined in the context of urban planning.

The comprehension of complexity in urban planning means that instead of turning the watchful eye of planning and governance to future urban structures and fragmented planning processes, it should be turned to the ways people live, especially to the curbing of consumption and mobility and to the development of the existing urban structure and its functions. The objective of planning interest should thus be human communities, not the implementation of specific activities or certain urban structures.

In the light of systems-based urban research and the action research on participatory planning in Herttoniemi it can be claimed that it is possible to solve wicked urban problems, if the understanding of urban functions takes place locally, comprising the acknowledgement of the special characteristics of local actors.

Secondly, it is important to understand the nature of the complex factors that emerge locally. Urban planning solves best simple problems.

These are well defined, often techno-rational planning objects and single cases in which building or reorganisation can change the neighbourhood and consequently improve the inhabitants´ daily lives. The action research indicated that participatory planning and even co-production can have a significant role in this respect. Collaboration with local actors succeeded in implementing some construction projects (the common yard of Roihuvuori) and in organising participatory structures for deliberation (Local committee and Herttoniemi website).

In order to be able to solve simple problems, they have to be distinguished from the group of situations and systems that represent disorganised and organised complexity. This is where urban planning can contribute. The baseline for urban planning is that it sets off in disorganised situations in which the prerequisite for success is to produce diverse planning information. The knowledge creation in urban planning has to be based on traditional high quality techno-social knowledge production. On the other hand, it should also be rooted in extensive knowledge on participatory planning which enables anticipation and decision-making even in disruptive situations. This means in practice that traditional data gathering modes, such as statistics and surveys, are complemented by data and methods of urban informatics comprising e-planning instruments and new deliberative models of action (self-organising resident activism).

Due to a multitude of planning information about the complex situation, it is possible to distinguish the different types of complexity-related problems, but not always to resolve them. Sufficient knowledge production can make urban complexity understandable. It is also possible to distinguish simple problems whose solving might decrease disorganisation. Simultaneously, it becomes clear which issues are caused by organised complexity. Neither urban planning, nor the means of participatory planning, can manage this type of complexity. Yet, the anticipatory knowledge production illustrates the situation for all parties. Thus, it is possible to change the planning policy and to affect the causes of organised complexity in the future.

In sum, the City is not only a problem in organised complexity, as Jane Jacobs claimed many years ago, but that of different types of complexity. It is not possible to solve all forms of complexity, but at least the planning policy in Finland and the production of planning should be knowledge renovated by recognising the meaning of new urban knowledge brought about by participatory planning, urban informatics and the self-organisation of citizens.

References

Aaltonen, Mika (2007). *The Third Lens. Multi-ontology Sense-making and Strategic Decision-making.* Aldershot: Ashgate.

Allmendinger, P. & Haughton, G. (2010). Spatial planning, devolution, and new planning spaces. *Journal of Environment and Planning C*, 28, 803–818.

Alasuutari, P. (2003). *Laadullinen tutkimus.* Tampere:Vastapaino.

A**lppi, S. & Ylä-Anttila, K.** (2007). Verkostourbanismi. *Yhdyskuntasuunnittelu.* 45(2), 10–26.

Ballarin, R.A. (2010). Can cities really be sustainable? *Sustainable Development essay*. Retrieved, 7 May, 2013, from http://urban-complexity.blogspot.fi/2010/03/can-cities-really-be-sustainable.html

Batty, M. & Hutchinson, B. (eds.)(1980). *Systems analysis in urban policy-making and planning.* New York:Plenum Press.

Batty, M. (2005). *Cities and complexity : understanding cities with cellular automata, agent-based models, and fractals.* Cambridge: MIT Press.

Baynes, T. (2009). Complexity in Urban Development and Management Historical Overview and Opportunities. *Journal of Industrial Ecology*,13(2), 214–227.

Bettencourt, L., Lobo, J., Helbing, D., Kuhnert, C. & West, G.B. (2007). Growth, innovation, scaling, and the pace of life in cities. *Proceedings of the National Academy of Science*.104(17), 7301–7306. (http://www.unifr.ch/econophysics/papers/topic/5224125913.pdf)

Boonstra, B. & Boelens, L. (2011).Self-organization in urban development: towards a new perspective on spatial planning. *Urban Research and Practice.* 4 (2), 99–122.

Bäcklund, P. (2007). *Tietämisen politiikka – Kokemuksellinen tieto kunnan hallinnassa.* (Politics of Knowing). Helsingin kaupungin tietokeskus, Helsinki:Yliopistopaino.

Checkland, P.B. (1981). *Systems Thinking Systems Practice.* Chichester: John Wiley.

Christaller, W. (1933). Die zentralen Orte in Suddeutschland. Jena: Gustav Fischer. Translated, by Baskin, C.W. (1966). *Central Places in Southern Germany*. New Jersey: Prentice Hall.

Fainstein, S. (2001). *City Builders: Property Development in New York and London, 1980–2000*. Lawrence: University Press of Kansas.

Faludi, A. (Ed.) (1973). *A reader in planning theory.* Oxford: Pergamon Press.

Forrester, J.W. (1969). *Urban Dynamics*. Boston: MIT.

Heinonen, J.(2012). *The impacts of urban structure and the related consumption patterns on the carbon emissions of an average consumer.* Helsinki: Aalto University publication series, Unigrafia Oy.

Horelli, L. (2002). A Methodology of Participatory Planning. In Bechtel, R. & Churchman, A. (eds.), *Handbook of Environmental Psychology.* (pp. 607–628). New York: John Wiley.

Horelli, L. & Vepsä, K. (1994). In Search of Supportive Structures for Everyday Life. In Altman I. & Churchman, A. (eds). *Women and the Environment. Human Behavior and Environment,* (pp. 201–206). New York: Plenum.

Hummelbrunner, R. & Reynolds, M. (2010). Systems thinking for enhancing evaluation practice. Workbook and Background Reading. Workshop, 5 October, Prague. European Evaluation Society Pre-Conference professional Development Session.

Innes, J., and Booher, E. (2010). *Planning with complexity: Introduction to the collaborative rationality of public policy.* New York: Routledge.

Jacobs. J. (1961). *Death and Life of Great American Cities.*New York: Random House.

Kortteinen, M., Lankinen, M. & Vaattovaara, M. (1999). Pääkaupunkiseudun kehitys 1990-luvulla: kohti uudenlaista eriytymistä. Development of the metropolitan regiona in the 1990s). *Yhteiskuntapolitiikka*, 64(5–6), 411–422.

Kortteinen, M. & Vaattovaara, M. (2007) Miten Helsingin käykään? (What is the fate of Helsinki?). *Yhteiskuntapolitiikka,* 72(2), 137–145.

Kuoppa, J. (2013) Beyond vague promises of liveability: an exploration of walking in everyday life. In Henckel, D., Könecke, B, Stabilini, S., Thomaier, S. & Zedda, R. (eds). *Space Time Design of the Public City*. Hamburg: Springer Publishers.

Lahtinen, J. (2012). Palveluiden sijaintistrategiat asioinnista koituvan ympäristörasitteen taustalla: Kirjastoasiointien tuottama hiilikuorma pääkaupunkiseudulla. *Presentation at the Annual Conference of Finnish Geographers,* 26.10.2012 at Helsinki Univeristy, Finland. http://blogs.helsinki.fi/mp-2012/files/2012/10/SAAVUTETTAVUUS-I_abstraktit.pdf .

Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues*, 2, 34–36.

Manzo, L.C. & Perkins, D.D. (2006). Finding Common Ground: The Importance of Place Attachment to Community Participation and Planning. *Journal of Planning Literature,* 20(33), 336–350.

McKnight, J.L. (2003). *Regenerating Community: The Recovery of a Space for Citizens***.** In Distinguished Public Policy Lecture, Institute for Policy. Retrieved 4 January 2012 from http://www.abcdinstitute.org/publications/downloadable/

Packalén, E. (2008). *Herttoniemi. Kylä, kartano, kaupunginosa.* (Herttoniemi as a village and a neihgbourhood). Keuruu: Otava, Helsingin kaupunginmuseon tutkimuksia ja raportteja, 2,

Porter, M.E. (2011). Competitive advantage of inner city. In R.T. LeGates & F. Stout (eds). *City Reader,* Urban Reader Serie (pp. 282–295). New York: Routledge.

Reynolds, M. & Holwell, S. (eds.)(2009). *Systems Approaches to Managing Change A Practical Guide.* London: Springer.

Saad-Sulonen, J. & Horelli, L. (2010). The value of Community Informatics to participatory urban planning and design: a case-study in Helsinki. *The Journal of Community Informatics,* 6(2). http://ci-journal.net/index.php/ciej/article/view/579/603.

Sarkissian, W., & Hurford, D. (2010). *Creative Community Planning: Transformative Engagement Methods for Working at the Edge.* London: Earthscan.

Skaburskis, A. (2008). The Origins of "Wicked Problems". *Urban Theory & Practice*, 9(2), 277–280.

Staffans, A. (2004). *Vaikuttavat asukkaat: vuorovaikutus ja paikallinen tieto kaupunkisuunnittelun haasteina.* (Influential residents). Dissertation. A Publication Serie of the Centre for Urban and Regional Studies, 29, Espoo: Helsinki University of Technology.

Staffans, A. & Merikoski, T. (eds)(2011). *Miten kestävä matkailualue tehdään? Käsikirja suunnitteluun ja rakentamiseen* . (Sustainable tourism). Espoo: Aalto University.

Sotarauta, M. (1996). Kohti epäselvyyden hallintaa: Pehmeä strategia 2000-luvun alun suunnittelun lähtökohtana. (Towards the management of uncertainty) *Acta Futura Fennica,* 6. Jyväskylä:Finnpublishers.

Taylor, N. (1998). *Urban Planning Theory since 1945*. London: SAGE Ltd.

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,* 8(3), http://www.ci-journal.net/index.php/ciej/article/view/883.

Wallin, S. & Horelli, L. (2010). Methodology of a user-sensitive service design within urban planning. *Journal of Environment and Planning* B, 37(5), 775–791.

Wallin, S. & Horelli, L. (2009). Arvioinnin paikka alue- ja yhdyskuntasuunnittelussa (The place of evaluation in urban and regional planning). *Hallinnon tutkimus,* 28(5), 109–116.

Weber, E.P. & Khademian, A.M. (2008). Wicked Problems, Knowledge Challenges, and Collaborative Capacity Builders in Network Settings. *Public Administration Review,* 2008, 68(2), 334–349.

PART III
LOCAL SOLUTIONS AND PRACTICES

3 Local Co-Governance in Herttoniemi: A Deliberative System

Karoliina Jarenko

Introduction

The theory of deliberative democracy has received much interest in recent decades, and its core ideas have been applied in various fields. The institutionalization of deliberative democracy is, however, not a simple task. The theory is comprehensive and draws from the normative ideal of democracy. Thus, there is an inherent gap between theory and practice. The assessment of applications always requires decisions: what the indispensable attributes are and what might be compromised due to practical reasons.

Deliberative democracy emphasizes public reasoning in its decision-making processes (Habermas, 1996; Elster, 1998). It pursues broader participation in public affairs and questions the legitimacy of centralized, political decision-making (Young, 2000). Deliberative democracy expects parties to be willing to "shift from bargaining, interest aggregation and power to the common reason of equal citizens as a dominant force in democratic life" (Cohen & Fung, 2004, 24).

One of the fields where deliberative democracy theory is applied is urban planning. Approaches that have applied the deliberative theory

have been named 'participatory planning' (Forester, 1999; Fisher, 2001), 'collaborative planning' (Healey, 1997/2006), 'communicative planning' (Innes, 1998) and 'discursive planning' (Ploeger, 2001). Common to these is the examination of urban planning and development as a collaborative process in which parties with different interests come together to find mutually acceptable solutions. In practice, the application of this theory has led to the development of participatory planning processes.

A second, related field with similar developments is governance studies. Participatory governance focuses on deepening democratic engagement through citizen participation in the state governance processes (Gaventa, 2006). John Ackerman refers to 'co-governance' as "inviting social actors to participate in the core activities of the state" (Ackerman, 2004, 447). Consequently, 'local co-governance' concentrates on the management of these activities at the local level. Participatory urban planning at the local level may be seen as one part of local participatory governance.

A third, related field is community development, which "addresses issues that are related to the self-organisation and self-management of communities" (Saad-Sulonen & Horelli, 2010). Together, these three fields create the "expanded or embedded urban planning" approach (Wallin & Horelli, 2010, see also Foth, 2009; Gurstein, 2008). Besides traditional land use and zoning, the foci of expanded or embedded urban planning include conditions for the development of socio-technical networks, assisted by urban and community informatics (Wallin & Horelli, 2010).

This chapter examines local co-governance from the perspective of the deliberative approach. It combines deliberative theory with participatory urban planning, community development and participatory governance. This approach creates an on-going comprehensive deliberative system that exceeds the usual one-time participatory interventions. This system comprises the collaborative planning, co-production and use of the infrastructure of everyday life, consisting of the physical, operational and participatory structures of the local living environment. Structurally it ties the official management and leadership processes of the political decision-making bodies to the informal networks, projects and working groups that operate at the neighbourhood level.

The local co-governance approach in the Herttoniemi neighbourhood of Helsinki[1] will be examined in the light of Carolyn M. Hendriks' system of integrated deliberation. Hendriks claims that the institutionalization of the deliberative theory requires the enhancement of both macro and

[1] Helsinki has 550.000 residents and Herttoniemi approximately 40.000 residents.

micro deliberative spheres and the creation and support of mixed spheres in which the micro and macro meet. Thus, the main tasks are to identify the micro, macro and mixed deliberative spheres and the functionality of their internal relations in Herttoniemi's local co-governance. The central question is, will Hendriks` approach prove valuable to the present analysis in terms of making recommendations to enhance the development of Herttoniemi's local co-governance..

This chapter aims to present deliberative theory as a framework that can be applied in a concrete case and to discuss the conclusions.

Deliberative theory as a framework

As there are many approaches to deliberative theory, it is useful to survey its development and diverse applications. This chapter first describes deliberative theory's 'coming of age' followed by a discussion of the challenges of its institutionalization and the combining of its different spheres.

Deliberative theory 'coming of age'

Deliberative democracy emphasizes public evaluative discussion as the basis for decision-making. According to Jürgen Habermas, the validity of a norm may be verified only in actual public discussion in which all who are affected by that norm participate (Habermas, 1996, 107). Habermas promotes a conception of deliberation in which participants present arguments for and against the principles of operation. In an ideal speech situation, participants have equal capabilities to deliberate and are free of all constraints that might affect the process or the substance of deliberation. Underlying this conception is the normative ideal of democracy: citizens collectively decide on the rules and principles to which they subordinate themselves (e.g. Cohen, 1989).

Deliberative democracy has been criticized for being too demanding in several respects. Public deliberation requires the ability and courage to speak in public, the capability to explicate oneself clearly, and to some extent, argumentation and rhetorical skills. Thus, despite the democratic aspirations of deliberative theorists and practitioners, the model has been criticized for challenging democracy (e.g. Fraser, 1990; Young, 2000). The requirement for 'deliberative skills' puts citizens in unequal positions in terms of participation. Many theorists set criteria for the process, which,

to the extent they are met, grant legitimacy to the decision (e.g. Habermas, 1996; Bohman, 1996/2000; Cohen, 1998). Recently, a wide interest has been taken in applying deliberative democracy to practice (Elstub, 2010; Mansbridge et al., 2010; Baber & Bartlett, 2005; Hendriks, 2006a, 2006b). These attempts always include a conception of the indispensable criteria and attributes of deliberation, and of those that may be compromised for practical reasons.

Another critique of deliberative democracy has dealt with the desire for consensus. The public give-and-take of reasons brings diverse views closer together, resulting *ideally* in consensus (Habermas, 1996; Bohman, 1996/2000; Cohen, 2003; Gutman & Thompson, 1996). In practice, decisions are to be made through voting. The consensus aspiration has been criticized by both opponents and proponents of the deliberative model. Iris Marion Young has been concerned that the consensus requirement will inevitably lead to the tyranny of the power elite (Young, 2000). Amy Gutman and Dennis Thompson (1996, 24–25), among others, remind us that there are many issues on which it is not possible for people to reach consensus. In these cases, disagreement is not based on incomplete knowledge or misunderstanding, but on the incompatibility of values. Abortion is a classic example of such a case. Chantal Mouffe (2000/2009) believes that the expectation of any sort of an agreement (whether it concerns the issue at hand or the agreement to make decisions based on public discussions) fails to embrace plurality in a radical sense.

Table 3.1. The three generations of deliberative democracy.

	1st generation	2nd generation	3rd generation
Focus	The normative justification of deliberative democracy	A fusing of Habermas and Rawls with practical requirements	Institutionalization of deliberative democracy, macro and micro spheres
Deliberation as...	Public reasoning through which viewpoints unite	Communication in which viewpoints are publicly justified	Communication in which diverse viewpoints are integrated in decision-making
Source of legitimacy	Consensus	Public justification	Informal discursive sources of democracy linked to formal decision making
Central figures	Habermas; Rawls	Gutman &Thompson; Bohman	Baber & Bartlett; O'Flynn; Hendrikson

Today, deliberative democracy theory has 'come of age' (Bohman, 1998), matured and solved many of its weaknesses. Different developmental phases may be identified, each evolving from the previous one (see Table 3.1). The first generation is affiliated with the concern for the normative justification of the theory. The above-mentioned consensus had a central role in this discussion. Elstub mentions Jürgen Habermas and John Rawls as 1st generation theorists. The second generation "has moved away from the language of 'reason' (...) to a focus on mutual justification" (Mansbridge et al., 2010, 67). A key term among the second-generation theorists is 'reciprocity'. According to the reciprocity standard, the reasons given in public deliberation must be mutually acceptable in that the reasons should be acknowledged by each citizen in circumstances of equal advantage (Gutman & Thompson, 1996, 54). Consensus is not considered realistic. The goal is a deliberative agreement, a so-called "agreement to disagree" (Gutman & Thompson, 2004, 74). The third generation has taken a step further along this path: deliberation in this context is considered successful (i.e. legitimate) even when parties advocate only their own interest, and public reasoning takes the form of intense negotiation. What remains after these modifications (and distinguishes these decision-making models from, for example, the agonistic ones) is the fact that parties have agreed to make decisions together based on the communication of their views. They also aim at finding a solution that most of them deem acceptable (for a similar formulation see Elstub, 2006, 303). This may be taken as the core idea of deliberative democracy.

Challenges of the institutionalization of deliberative democracy

The justification of political power in deliberative democracy is based on decisions made through free and equal public deliberation. Free and equal deliberation, however, is an ideal. It is "methodological fiction" (Habermas, 1996, 326), employed to guide practice. A gap between theory and practice is inherent in this approach and poses a challenge to the legitimacy of the decisions made (Gaus, 2003). The task is to bring practice as close to the ideal as possible. Proponents of the deliberative approach have addressed this challenge from several perspectives. These may be roughly divided into those aiming at quality and those aiming at quantity.

The central question is that of who deliberates. Deliberation inevitably means representation in modern societies. How is representation formulated and who takes part in the deliberation? Some have suggested

the arrangement of public deliberation through associations (Cohen & Rogers, 1995). Others suggest that interest groups present diverse viewpoints (see Mansbridge, 1992; Hendriks, 2006b). These are examples of partisan deliberation, meaning that those who take part in the deliberation are directly influenced by the decision; they are stakeholders. So-called 'mini-publics', on the other hand, are often made up of ordinary, non-partisan, lay citizens who are representative enough that the process can be deemed democratic. Mini-publics are small enough for genuine deliberation. They have generally been the preferred method for conducting deliberation, as it is thought that non-partisan participants are more likely to transform their preferences according to new appealing arguments. A downside of mini-publics is that, if a random selection of citizens is to deliberate, there is no way to make them accountable for their decisions (Baber & Bartlett, 2005; Elstub, 2010).

Participatory methods are carefully designed to guide parties closer to the norms of the ideal speech situation, i.e., closer to the ideal of free and equal participation. For example, sufficient information is provided to the participants, the rules of dialogue are specified (e.g. Isaacs, 1999) and paroles restricted (e.g. Robert's Rules of Order).

The deliberation facilitator is also given various roles. S/he may be seen as strictly an enabler of the collaborative process or as a networker between stakeholders (Roivainen, 2002; Leadbeater, 2004). Urban planning theorist John Forrester (1982) defers to the planner the responsibility to identify and prevent distortions of power. A similar conception of a reflective and balance-seeking planner is present in Sari Puustinen's model (2006). Puustinen presents a reflective professional, but she sees the role of the professional as an expert.

Another strategy to reach the ideal of deliberation is to mobilize as many participants as possible. Argumentative deliberation may then be supplemented or substituted by other forms of input, such as voting on predefined options, pinning down opinions concerning the built environment on a map (Kahila & Kyttä, 2010) or by creating an alternative plan for a development site from gingerbread dough. A large repertoire of methods may enhance wide inclusion, as citizens may then choose the most comfortable and convenient medium for them.

The development of ICTs has exponentially extended the scale of participation. ICT-mediated citizen participation in urban issues comprises aspects of the relationship between participation and technology in such areas as governance, urban planning, information systems and interaction design, geography, citizen activism and community development

(Saad-Sulonen & Horelli, 2010). Community informatics (CI) is the field and practice of applying ICTs for "enabling and empowering community processes" (Gurstein, 2007) or "the online deliberation of communities" (Kavanaugh & Isenhour, 2006). Typically community networks are gradually emergent and bottom-up, meaning that they are co-developed by the participants themselves (Wellman, 2001). Community informatics may then encompass genuine deliberation, that is, argumentative discussion in which viewpoints are justified to fellow citizens and a common (public although local) opinion is formulated. Community informatics may also serve the dissemination of information, in which case, it enables later enlightened deliberation.

One way to conceptualize the above-mentioned challenge of institutionalization and its solutions is to examine the concept of 'public sphere'. This concept originates from *The Structural Transformation of the Public Sphere* by Jürgen Habermas (1962). Since its publication, it has been "an important part of critical social theory and democratic political practice" (Fraser, 1990, 57). The public sphere is the arena in which political participation is enacted through the medium of talk. "It is the space in which citizens deliberate about their common affairs (...), [the] institutionalized arena of discursive interaction" (Ibid.). The feminist tradition has assimilated the public sphere with anything outside *oikos*, the domestic sphere, thus including civil society, the market and the state. The Habermasian conception is narrower than this, only including the space in which people enter as citizens to discuss public affairs. Habermas defines the public sphere in his *Between Facts and Norms* (1996, 330) as "a network for communicating information and points of view (i.e. opinions expressing affirmative or negative attitudes). The streams of communication are, in the process, filtered and synthesized in such a way that they coalesce into bundles of topically specified *public* opinions". Thus, Habermas describes the public sphere as a single system, just one arena of communication.

Nancy Fraser has contested the claim that public discourse in democracy should be conceptualized as a single public sphere. In her article *Rethinking the Public Sphere,* Fraser argues that the public sphere is in fact "governed by protocols of style and decorum that [are] themselves correlates and markers of status inequality" (Fraser, 1991, 63). She concludes, that a "plurality of competing publics better promote the ideal of participatory parity than does a single, comprehensive, overarching public sphere" (Ibid., p. 66).

These ideas have been put to use in the institutionalization of deliberative democracy. Carolyn M. Hendriks (2006a) identifies two streams of thought in the mobilization of civil society in deliberative democracy: '*micro deliberative*' theorists encourage civil society to engage in collaborative practices with the state and 'm*acro deliberative*' democrats concentrate on informal discourses in the public sphere, and perceive civil society as something operating outside and against the state. Neither of these approaches seems independently viable. Hendriks (2006a) models an integrated deliberation structure that combines the micro and macro spheres. Public deliberation is then conceptualized as an activity that takes place in a variety of discursive spheres engaging many actors. One could say that this model aims at both the quality and the quantity of deliberation.

Combining the micro and macro spheres of deliberation

In the institutionalization of deliberation, two approaches to the enhancement of public deliberation can be identified: the micro and macro spheres (Hendriks 2006a). *The micro sphere* focuses on ideal deliberative procedures and encourages the civil society to engage in collaborative practices, usually in public institutions. This context often entails deliberation among representatives in order to allow for genuine deliberation. In this context, deliberation is typically oriented towards decision-making.

The problem with micro-sphere deliberation is its elitism. Jon Elster (1998, 8) formulates a legitimacy argument of deliberative democracy in the following way: "the democratic part of deliberative democracy refers to collective decision making with the participation of all who will be affected by the decision or their representatives". This notion, however, is implausible because not everyone can participate in the governance of modern pluralistic societies. If the group is to truly deliberate, the number of participants in any given deliberative forum is necessarily small. A solution would be to accept that representatives could deliberate on behalf of others; in this case, however, we need to question how this is substantially different from the elitist versions of democracy.

Another issue in the organisation of micro-sphere deliberation concerns representation; a number of problems have been identified and approaches suggested. Interest groups eager to pursue their own agendas might not be willing to engage in collective reasoning that accommodates diverse views towards a common good. Instead, the opportunity might be

used for strategic reasons, such as to gain media presence and to persuade the public (Hendriks, 2006b). These strategies, however, go against the ideals of deliberation, and may lead to situations in which only parties with open preferences will be called for deliberation. One approach to representation is associational democracy, in which the state 'opens up' to certain associations, allowing them to take part in decision-making (Cohen & Rogers, 1995) or service provision (Hirst, 1994). The problem is that this model assumes that the associations neatly represent the whole of society and that these associations are capable of deliberation. Another approach to representation includes mini-publics, i.e. random groups of lay citizens who are representative enough. Mini-publics are difficult to use in actual decision-making, because there is no way to hold them accountable for their decisions. Mini-publics are most effective when they inform decision-makers about 'the public opinion'.

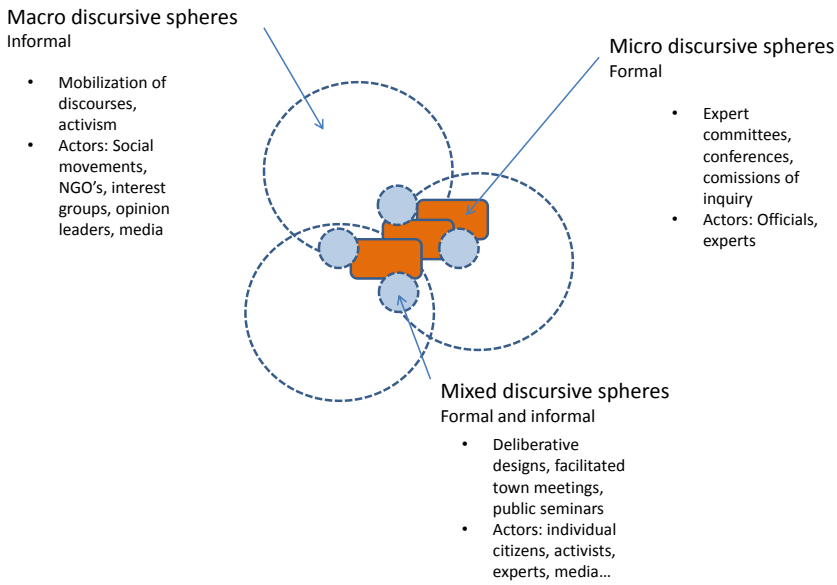


Figure 3.1. The Hendriks´ (2006a) model as an integrated deliberative system comprises a variety of discursive spheres.

The m*acro-sphere* democrats view deliberation in less structured terms in which people engage in open, public discourse via associations, networks, social movements and the media. Deliberation is typically oriented towards opinion formation. According to Benhabib (1996,74), macro-sphere

deliberation produces a public conversation "of mutually interlocking and overlapping networks and associations of deliberation, contestation and argumentation". It takes place in informal and "wild" spaces (Hendriks, 2006a, 494). It may also take more strategic forms of action, such as protest, boycott and radical activism (Ibid.). Macro-sphere deliberation is a more inclusive version of deliberative democracy. It often plays an oppositional role against the state.

The problem with macro-sphere deliberation is its weak and indirect link with formal decision-making. Having an impact is more demanding on citizens than in cases of publicly led participation. Macro-sphere deliberations also bear the risk that when the weak and marginalized fail to muster enough deliberative potential, deliberation may easily collapse into the very politics of adversarial interest group that deliberative democrats reject. In addition, not all social movements respect democratic and liberal ideals, and thus cannot provide an environment for democratic deliberation.

The Herttoniemi approach

I will first describe the context and structure of local co-governance in the Herttoniemi neighbourhood and then the contents and rationales of deliberation in the area.

The context and structure of co-governance in Herttoniemi

Municipalities represent the local level of administration in Finland and act as the country's fundamental, self-governing administrative units. They have the right to levy an income tax and they provide two thirds of public services. Public participation is often arranged by municipal officials because the addressed issues belong to the responsibility of municipalities.

Consequently, ´local decision-making` in Finland refers to the municipal level (some municipalities are cities). Neighbourhood-level decision-making bodies, like in Copenhagen, Stockholm and Oslo, do not exist in Helsinki. Centrally-made decisions are implemented in the neighbourhoods by sectorial administrators.

Local civil servants, however, are free to organise multi-sectorial collaboration and mobilize residents and entrepreneurs to achieve common goals. These collaborative networks do not have official status

in the administration, but political decision-makers are increasingly acknowledging them. The government is also slowly realizing the potential and value of self-organised residential groups, for example, those evolving around (guerilla) gardening and local food circles and those helping elderly people with daily errands. Because collaborative networks lack official status they must be identified as informal or, at best, semi-formal. Public officials and civil servants may also mobilize residents and local entrepreneurs in participatory processes. These processes have an official status and may be identified as formal.

The unofficial co-governance in the neighbourhood of Herttoniemi is structured around four key elements or bodies: the neighbourhood or local committee, self-organising groups, such as the cooperative '*Hertsikan Pumppu*', the neighbourhood assembly and the hybrid infrastructure of communication (Figure 3.2).

The 'local committee' is a collaborative body led by a local social worker. It was originally created to bring together actors of the public, private and third sector to discuss local issues, organise activities and share information (Horelli & Wallin, 2006). Today, the local committee focuses on multi-sectorial co-operation among different actors (see Chapter 2). Committee meetings are announced on the local webpage, and everybody is welcome to attend. In practice, the attendants remain more or less the same and random visitors are rare. The core group is built around public-sector agents: civil servants from the care sector and a few active citizens who represent Civil Society Organisations (CSOs), such as the Resident Association.

The 'neighbourhood assembly' is a forum of wider participation. Residents, municipal politicians and local actors discuss local issues, such as land-use plans and other emerging matters. Wallin (2012) describes the neighbourhood assembly and the local committee as the parliament and the cabinet respectively. The neighbourhood assembly assesses proposed development initiatives and proposes new ones; the local committee attempts to realize the initiatives with the resources of its members. Two elements in the neighbourhood assembly are especially important from the perspective of democratic deliberation. First, the assemblies are genuinely open to everybody. The threshold to attend is low and participation is wide, including residents who are not (politically) active in any other way. Second, municipal politicians living in the area attend the forums. Their participation creates a shortcut from the neighbourhood to the city-level decision-making.

'*Self*-organising' *groups and activities*, such as the *Hertsikan Pumppu* cooperative (also known as 'Pumppu') was founded in January 2012 as a social business for managing local resources and organising activities. Founded and run by residents, Pumppu also aims at improving local services, manages and maintains open meeting-33locations and administrates some parts of the communication infrastructure. Activities are open to all, and anybody with an idea is welcome to develop it with the help of the cooperative.

'The hybrid infrastructure of communication' refers to the assemblage of all the area's tools and instruments that enhances communication, including the local websites, mobile and internet applications and urban screens (Wallin et al., 2010; see also Chapter 6 by Saad-Sulonen). It plays a key role in the management of local issues and co-governance. Besides dissemination of information, it has an important role in building local identity and mobilizing the community. Thus, the hybrid infrastructure of communication also comprises various types of fora and media from different public spheres. The traditional media are newspapers and bulletin boards in the Resident House, the metro station, the library and the grocery stores. The local Facebook wall especially attracts the youth. The local website (Herttoniemi.fi) provides a place for meeting announcements, news, local initiatives, reports and information from housing companies, and also includes a discussion forum for deliberating local issues. The website was originally created by a group of residents; today, the responsibility of its administration is officially given to the cooperative *Hertsikan Pumppu.* Anyone interested will be given the rights and taught the skills required to update the webpages.

A wide range of organised activities takes place outside these arenas, but they do not focus directly on the co-governance of local issues. Such activities include, for example, sports and hobby associations, the neighbourhood circle (for neighbour help), and the local food circle. They have a role in community building, as do the non-organised activities, such as meetings at cafes, pubs and at the playground. Local issues are discussed, opinions formed, and various initiatives originate from these casual encounters.

The positioning of the Herttoniemi governance structures in the Hendriks' model of integrated deliberation is not a "clear- cut case" (Figure 3.2). It requires interpretations of what is most important for, or most characteristic of, a certain activity or organisation. For this paper, these interpretations were made in terms of the purpose of this paper: to present

a concrete example of institutionalized deliberative democracy in the context of urban planning and community development. It is important to show what kind of structures may enhance the integration of participation in the everyday life of the residents and what are the core challenges of the (Finnish) political structures from the perspective of the grass-root- level resident activity.

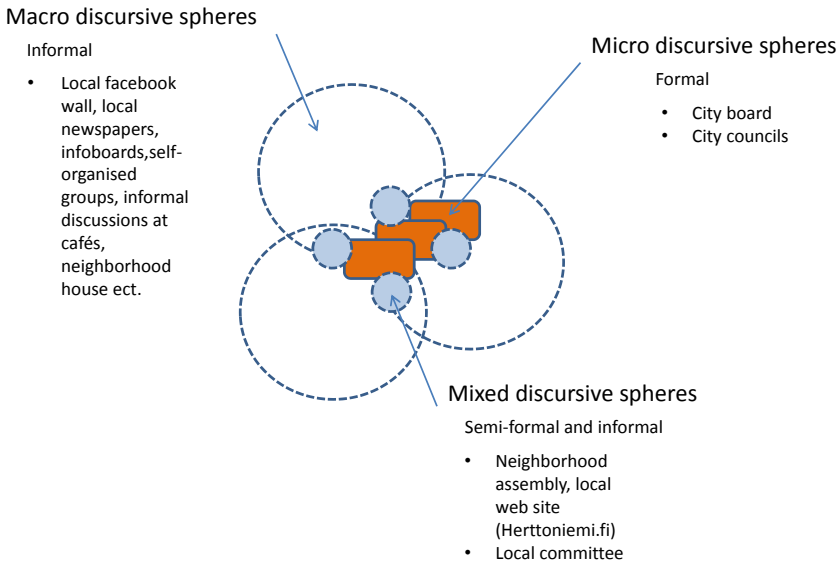


Figure 3.2. Local co-governance in Herttoniemi as an integrated deliberative system.

In Figure 3.2, the local committee is both in the semi-formal and formal mixed sphere. Originally the committee was clearly a mixed forum with strong representation from the third sector. It has, however, become more and more the site of multi-sectorial civil servant cooperation. Although 'lay residents' are welcome to attend, city officials dictate the meeting structure. If neighbourhood-level democracy had a formal status in the Finnish decision-making structures, the local committee would be the main forum linking the neighbourhood and higher political levels. The neighbourhood assembly is more clearly a mixed forum, bringing together actors from different spheres. It is open to a variety of conversation tones, and allows new agenda topics to be introduced. In Hendriks' terms, the neighbourhood assembly most effectively enhances the 'cross-pollution' of ideas and information.

The self-organising groups, such as the Hertsikan Pumppu co-operative, must be placed in the macro sphere even though the activity is organised, structured, and aims at contributing to the management of local issues. It is possible that it was created, at least partly, in response to the disappointment regarding the local committee's mode of functioning (see Wallin, 2012).

The hybrid infrastructure of communication is operated in the macro and mixed spheres. In addition to spreading information, it increasingly supports identity- and community-building by means of concrete actions as well as events, such as discussion forums in which local issues are addressed and public opinions formulated.

The City Board and the City Councils are part of the formal, micro-discursive spheres with which the local co-governance agents have a minimal role.

In sum, all the elements contribute to Herttoniemi's unofficial co-governance as an integrated system of deliberation.

Contents of deliberation in the Herttoniemi approach

Deliberative democracy asks that political decisions be made not only through public reasoning, but also an open reassessment of the decision-making processes (Bohman, 1996/2000; Gutman & Thompson, 1996). The latter requirement is necessary to maximize the capacity of citizens with diverse participation capabilities. The exposition of decision-making procedures to deliberation is one way to ensure equal access to the public sphere(s). It allows citizens to develop procedures that they find comfortable and easy to use.

The application of Hendriks' model of integrated deliberation leads inevitably to a situation in which civil society has a strong role in the development of participatory structures and methods. Micro- and mixed-deliberative spheres ought to be developed in collaboration with the public, private, and third sectors (the citizens). The macro sphere is self-organised.

Hendriks' conception of deliberative democracy has been put to use in the neighbourhood of Herttoniemi. Local co-governance structures have been developed with and by the residents. These structures have changed along the years according to the needs and aspirations of the parties. A clear example of this type of change is the founding of the Hertsikan Pumppu cooperative, which is an arena for resident-led activities, enabling the local committee to concentrate more on the multi-sectorial cooperation of local public officials.

Methods and structures of participation have been developed in discussions dealing with urban planning, community development and co-governance. This means that deliberation as a process has not been a separate task but embedded in decision-making about everyday-life infrastructure, which is comprised of the physical, functional and participatory structures of the community (see Chapter 4 by Horelli). Initiatives have been introduced, planned, and implemented, and the outcomes evaluated and maintained in an ongoing collective process. Participants in different discussions and phases vary according to the interests and needs.

Rationales for local co-governance

The lack of neighbourhood-level democracy in Finland has strongly affected the development of local co-governance in Herttoniemi. However, there is no official feedback-loop from the neighbourhood-level co-governance system to the city-level decision-making bodies. The civil servants naturally create a link to the sectorial administration, and so do the municipal politicians who live in the area. Also, the hybrid infrastructure of communication enhances operations at diverse scales and information dissemination in-between. Nevertheless, there is no formal decision-making structure that extends to the neighbourhood level in Helsinki. Thus, the rationales for local co-governance in Herttoniemi are primarily found in the collective management of the top-down decisions that affect the neighbourhood and in the co-governance of everyday life (Figure 3.3). Neighbourhood-democracy and participatory budgeting are current issues in public discussions. If the discussions were transformed into practice, the local co-governance structures would provide a natural forum for piloting.

Unofficial co-governance facilitates the application of public policy in neighbourhoods. Local civil servants find it useful to bring their work issues to the local committee, seeking synergies with the participants. The local committee is able to translate administrative messages into 'everyday-life language'. The local services are dealt with holistically instead of dysfunctionally, following the logic of the sectorial government.

The local co-governance also facilitates the coordination of civil society activities at the local level. CSOs do not need to operate on their own, as they find support from each other and from the public sector. The arenas of local co-governance also provide a site for private sector agents to participate in local issues and develop partnerships.

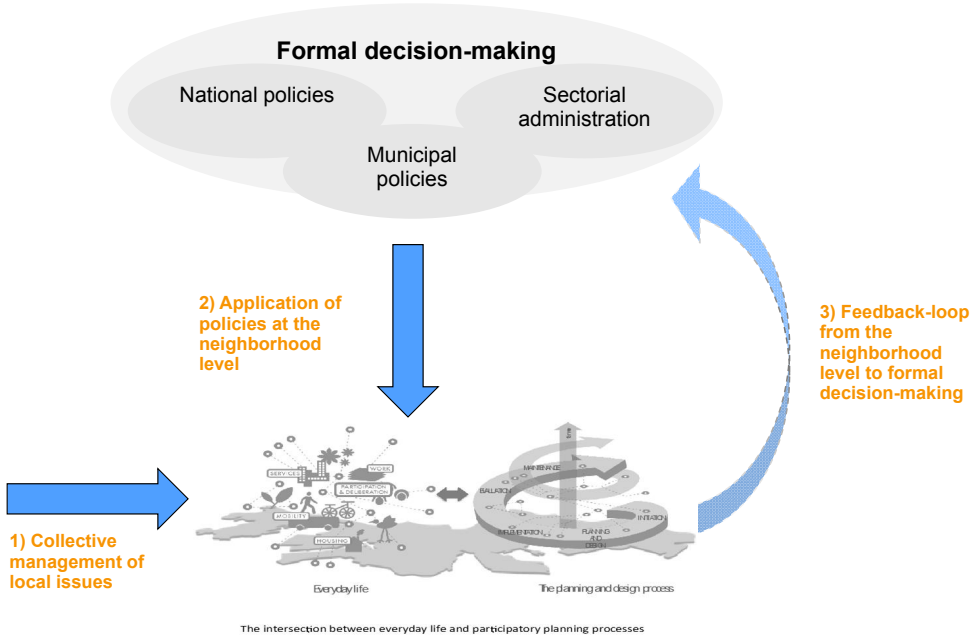


Figure 3.3. Rationales for local co-governance in Herttoniemi.

Conclusions

The aim of the chapter was to present the deliberative theory as a framework that can be applied in a case of urban planning and community development. Further, it examined, whether Carolyn M. Hendriks' model of integrated deliberation could provide additional value in terms of potential recommendations for the development of Herttoniemi's local co-governance.

The Herttoniemi case demonstrates the theory of deliberative democracy with participatory urban planning, community development and local co-governance. As stated earlier, the Hendriks´ model is not a clear-cut case, when applied to Herttoniemi. Nevertheless, it illuminates the structure, contents and rationales of the local co-governance approach. The main elements and links in the co-governance approach are readily identifiable, and the different discursive and public spheres in the area distinguishable.

It was argued, on the basis of the Hendriks´ model, that mixed spheres are important in deliberative institutions. Mixed spheres form a link between the wild, macro deliberations of the civil society and the formal, official micro deliberations. Everybody is not willing to participate in formal deliberations. Macro-sphere deliberations, on the other hand, bear

the risk that the weak and marginalized fail to muster enough deliberative potential to have an impact on decision-making. This was also the case in Herttoniemi, where the informal and even semi-formal activities suffered from the lack of powerful decision-making.

The mixed spheres form a link between these two discursive spheres, enabling a wider range of political activities to have an impact on decision-making. Mixed spheres are a practical solution to the problems of representation and elitism. They work in favour of democracy and equality of capabilities to political participation. The creation of mixed spheres is especially significant in the current phase of increasing self-organisation among civil society movements. The Herttoniemi case also indicates that mixed spheres are useful to embed participation in everyday life.

The creation of well-functioning mixed spheres is currently one of the central challenges in the Herttoniemi-approach. The local committee has concentrated more on multi-sectorial public-official collaboration, where as the *Herttoniemen Pumppu* cooperative has become the locus of macro-level management. Currently, collaboration between the two is slowly searching for the right form. The Henriks model implies that success with this task might be crucial for the future of Herttoniemi's local co-governance.

Academic discussion about the institutionalization of deliberative democracy in participatory urban planning and co-governance provides new openings. It is known that successful local governance requires linking formal management and leadership processes to local informal networks. The presented approach brings forth community development as a newcomer to the discussion on the institutionalization of deliberative democracy. Simultaneously, it discloses that deliberation has acquired a novel meaning in the discussion about the institutionalization of deliberative democracy, as deliberation in this context means the on-going process of the collective management of the infrastructure of everyday life. This has also involved a new task of development, namely the creation of a viable infrastructure of communication with a variety of different discursive and public spheres that may enhance democratic processes.

The lack of official neighbourhood-level democracy in Finland maintains that Herttoniemi's local co-governance approach has, at best, only a semi-formal status. Official acknowledgement of the local co-governance approach could be a way to enhance (deliberative) democracy, which is currently one of Finland's national policies.

References

Ackerman, J. (2004). Co-Governance for Accountability: Beyond 'Exit' and 'Voice'. *World Development*, 32(3), 447–463.

Baber, W. F. & Bartlett, R. V. (2005). Deliberative *Environmental Politics: Democracy and Ecological Rationality*. Cambridge, MA: MIT Press.

Benhabib, S. (1996). Towards a Deliberative Model of Democratic Legitimacy. In S. Benhabib (Ed.), *Democracy and Difference: Contesting the Boundaries of the Political* (pp. 67–94). Princeton: Princeton University Press.

Benhabib, S. (2002). *The Claims of Culture: Equality and Diversity in the Global Era*. Princeton: Princeton University Press.

Bohman, J. (1996/2000). Public deliberation. Pluralism, Complexity, and Democracy. Cambridge, MA: MIT Press.

Bohman, J. (1998). Survey Article: Coming of Age of Deliberative Democracy. *The Journal of Political Philosophy*, 6(4), 400–425.

Cohen, J. (1989). *Deliberation and Democratic Legitimacy*. Retrieved May 5, 2011, from http://www.law.stanford.edu/publications/details/3477/Deliberation%20and%20Democratic%2 0Legitimacy/

Cohen, J. & Rogers, J. (1995). *Associations and Democracy*. London: Verso.

Cohen, J. (2003). Procedure and Substance in Deliberative Democracy. In T. Cristiano (Ed.), *Philosophy and Democracy, an Anthology* (pp. 17–38). New York, NY: Oxford University Press.

Cohen, J. & Fung, A. (2004). Radical Democracy. *Swiss Political Science Review,* 10(4), 23–34.

Elster, J. (1998). *Deliberative Democracy.* Cambridge, UK: Cambridge University Press.

Elstub, S. (2006). A double-edged sword: the increasing diversity of deliberative democracy. *Contemporary Politics*, *12*(3–4).

Elstub, S. (2010). The Third Generation of Deliberative Democracy. *Political Studies Review, 8,* 291-307.

Fisher, F. (2001). *Building Bridges through Participatory Planning*. (Part 1) Retrieved June 29, 2012, from http://www.unhabitat.org/pmss/listItemDetails.aspx?publicationID=1371.

Fisher, F. (2001). *Building Bridges through Participatory Planning*. (Part 2) Retrieved June 29, 2012, from http://www.unhabitat.org/pmss/listItemDetails.aspx?publicationID=1432.

Forester, J. (1989). *Planning in the Face of Power.* Berkeley, CA: University of California Press.

Forester, J. (1999). *The Deliberative Practitioner. Encouraging participatory planning processes.* Berkeley, CA*:* University of California Press.

Fraser, N. (1990). Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy. *Social Text*, *26*(25), 56–80.

Foth, M. (Ed.) (2009). *Handbook of Research on Urban Informatics: The Practice and Promise of the Real-Time City.* Hershey, PA: IGI Global.

Gaus, G. F. (2003). *Contemporary Theories of Liberalism.* London: Sage Publications.

Gaventa, J. (2006). *Triumph, Deficit or Contestation? Deepening the 'Deepening Democracy' Debate.* Brighton, UK: Institute of Development Studies.

Gurstein, M. (2007). *What is community informatics (and Why Does It Matter)?* Milano: Polimetrica.

Gurstein, M. (2008). Governance and Community Informatics: Developed and Less Developed Country Experiences. *The Journal of Community Informatics Special Issue: E-Governance and Community Informatics, 4*(2).

Gutman, A. & Thompson, D. (1996). *Democracy and Disagreement.* Cambridge, MA: The Belknap Press of Harvard University Press.

Gutman, A. & Thompson, D. (2004). *Why Deliberative Democracy?* Princeton: Princeton University Press.

Habermas, J. (1994). *Järki ja kommunikaatio: Tekstejä 1981–1989* (2nd ed.). Eurooppalaisia ajattelijoita -sarja. Helsinki: Gaudeamus.

Habermas, J. (1996). *Between Facts and Norms, Contributions to a Discourse Theory of Law and Democracy.* Cambridge, MA: MIT Press.

Healey, P. (1997/2006). *Collaborative Planning. Shaping Places in Fragmented Societies.* New York, NY: Palgrave MacMillan.

Hendriks, C. M. (2006a). Integrated Deliberation: Reconciling civil society›s dual role in deliberative democracy. *Political Studies, 54*(3), 486–508. Retrieved June 5, 2011, from http://www.politicalstudies.org/.

Hendriks, C. M. (2006b). When the Forum Meets Interest Politics: Strategic Uses of Public Deliberation. *Politics Society, 34*, 571.

Hirst, P. (1994). *Associative Democracy – New Forms of Economic and Social Governance.* Cambridge, UK: Polity Press.

Horelli, L. & Wallin, S. (eds.). (2006). *Arjen ajan hallinta.* Helsinki: Tieke.

Innes, J. E. (1998). Information in communicative planning. *Journal of the American Planning Association, Winter Volume*, 52–63.

Isaacs, W. (1999). *Dialogue. The Art of Thinking Together.* New York, NY: Doubleday, Random House Inc.

Kahila, M. & Kyttä, M. (2010). SoftGIS as a bridge-builder in collaborative urban planning. In S. Wallin; L. Horelli & J. Saad-Sulonen (eds.), *Digital tools in participatory planning* (pp. 13–36). Espoo: Aalto University, School of Science and Technology, Centre for Urban and Regional Studies (YTK).

Kavanaugh, A. & Isenhour, P. L. (2006). Designing Technology for Local Citizen Deliberation. *Journal of Community Informatics, 2*(2).

Leadbeater, C. (2004). *Personalisation Through Participation. A New Script for Public Services.* London: Demos UK.

Mansbridge, J. (1992). A Deliberative Theory of Interest Representation. In M. Petracca (Ed.) *The Politics of Interest.* Boulder: Westview Press.

Mansbridge, J.; Bohman, J.; Chambers, S.; Estlund, D.; Føllesdal, A; Fung, A; Lafont, C.; Manin, B. & Martí, J. L. (2010). The Place of Self-Interest and the Role of Power in Deliberative Democracy. *The Journal of Political Philosophy, 18*(1), 64–100.

Mouffe, C. (2000/2009). *The Democratic Paradox.* London: Verso.

Ploeger, J. (2001). Millenium Urbanism – Discursive Planning. *European Urban and Regional Studies*, 8(1), 63–72.

Puustinen, S. (2006). Suomalainen kaavoittajaprofessio ja suunnittelun kommunikatiivinen käänne. Vuorovaikutukseen liittyvät ongelmat ja mahdollisuudet suurten

kaupunkien kaavoittajien näkökulmasta. Espoo: Centre for Urban and Regional Studies, Helsinki University of Technology (Aalto University).

Roivainen, I. (2002). Täällä Kaino – kuuleeko kunta? Päättäjänä kuntalaisten ja virkamiesten välimaastossa. *Janus*, 10(3), 266–273.

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). Retrieved October 4, 2012, from http://ci-journal.net/index.php/ciej/article/view/579/603.

Wallin S. & Horelli L. (2010). The methodology of user-sensitive service design within urban planning. *Environment and Planning B: Planning and Design*, 37(5), 777–791.

Wallin, S. & Horelli, L. (2012). Playing with the glocal through participatory e-planning. *Journal of Community Informatics*, 8(3).

Wellman, B. (2001). Physical Place and Cyberplace: The Rise of Personalized Networking. *International Journal of Urban and Regional research*, 25(2), 227–252.

Young, I. M. (1999). Justice, Inclusion, and Deliberative Democracy. In M. Stephen (Ed.), *Deliberative Politics. Essays on Democracy and Disagreement* (pp. 151–159). New York, NY: Oxford University Press.

Young, I. M. (2000). *Inclusion and Democracy.* New York, NY*:* Oxford University Press.

4 The Contributions of Time Planning in the Finnish Context

Liisa Horelli

Introduction

Changes in economic, societal and urban conditions have complicated the mastering of everyday life. Competition between nations and cities has hardened. The nature and content of work have become more complex, family size has shrunk, municipalities have grown and local services have become distant. The consequences can be experienced at the individual level as problems of work-life balance. Enterprises, in turn, suffer from absenteeism and low employee motivation. Local communities are afflicted by the fragmentation of urban structures, inequality in access to services and scarce opportunities for public participation which hinder the development of social capital. One significant dimension of all these challenges is time, its use and meaning.

For current purposes, time can be considered a resource like money. Time that is tied to obligatory actions is unequally divided between young and old, employed and unemployed, women and men. Time has become a gender issue in France, Germany and especially in Italy, where the first law on the harmonization of time was passed in the 1980s. In fact, for more than two decades, several Southern European countries have experimented

with and applied a new approach to urban planning, which focuses on the temporal qualities of social and spatial structures supporting the everyday life of citizens (Boulin, 2006).

The first so-called time offices were established in the 1990s in Milan and Cremona, followed by the Bureau de Temps in Paris and Zeitburo in Bremen (Zedda, 2008). Their task is to reflect on how to synchronize economic, social and cultural activities. How to coordinate, from the users′ and the city′s perspectives, the time-tables of enterprises, administration, health and education services. Users can be producers, consumers, parents, communities or elderly people.

Time policies intersect with urban planning and community development as they affect the coordination of activities, spatio-temporal patterns and relationships, as well as new forms of participatory governance in which women and men, specialist and politicians form partnerships and enter into contracts. According to Teresa Boccia (2013), the shared focus is on the enhancement of the gendered bodies and their daily habits in the temporal and spatial microarchitecture to find quality of life and the possibility to put resources in action.

The policies relate to many activities and concern several fields, leading to varying consequences. One example of new temporal policies is the one-stop shop for facilitating the start of the new school year in Poitiers, France, where families with children can find out about and register for hobbies in one single location. The French city of Belfort (population 300.000) has specialized in mobility management that is demand and environment-oriented. Its flexible mobility system comprises, besides traditional bus and tram connections, call taxis and buses, shared cars and car pools, as well as special rides for adolescents in the evenings. More than a hundred experiments have been conducted in the Netherlands on daily routines, such as the Sunday openings of libraries, which has effectively meant providing a new accessible public space for locals (Dialogos, 2004).

Perhaps the most advanced time policies are conducted in the Northern Italian town Bergamo. Its time office regards the whole city as a chronotope the analysis of which discloses how the urban structures intertwined with varying activities take place at different times that can then be planned for. The time office is responsible for the coordination of the the Area Governance Plan (AGP), the Services Plan (SP) and the Territorial Times Plan of the City of Bergamo (TP) which support both the local and urban scales (Gelmini & Zambianchi, 2013).

Urban time policies refer to those public policies and planning interventions that affect the time schedules and the spatio-temporal organisation regulating people's activities and relationships at the local, regional, national and even European level (see Mareggi, 2002). Thus, time policies seek to deal with the globalization and decentralization processes that affect the reconstitution of time and the reconfiguring of space (Castells, 1996; Boulin, 2008).

In addition to legislation and time offices, local time policies have strived to build up new ways of synchronizing individual and collective times, by inventing a variety of new methods and practices that improve the local infrastructure within which everyday life unfolds. This takes place through *time planning*, which implies a ´cubistic` perspective, an approach to urban planning that targets and coordinates several activities – such as child care, public transport, safety in open spaces etc. – at many levels simultaneously.

Time planning comprises at least three models of the contemporary city. In the *market-led, 24/7 model*, shops, restaurants and bars are open day and night. Normal working people and their children suffer from this dynamic but noisy model due to its restlessness. The *centralised model* strives to manage change by dragging out the opening hours of basic services and by constructing large hypermarkets where households can do a range of things besides shopping. This model means a decrease in the quality of life for people without cars. The *resilient everyday life model* seeks to build holistic but multidimensional solutions by applying participatory time planning as part of complexity management, together with different stakeholders represented by politicians, administrators, entrepreneurs, experts and civil society organisations. This chapter provides examples of the application of the last model in the Finnish context.

Although the roots of time policies lie in the time geography of the Swedish researcher, Torsten Hägerstrand (1975), time planning has not been on the agenda of the Nordic welfare states, despite the increasingly pressing working conditions, the deterioration of welfare services and a new kind of urban poverty coupled with a frantic densification of cities. However, action research on time planning has been conducted in the Herttoniemi neighbourhood of Helsinki[1] for the past eight years (Horelli, Wallin & Saad-Sulonen, 2012). In this article I am asking: what are the characteristics of ´Finnish time planning`[2] and how does time planning

[1] Herttoniemi has 40.000 residents and the population of Helsinki is 550.000.

[2] "Finnish time planning" is here used metaphorically, as the experiment in Herttoniemi is so far the only one in Finland. Hopefully, there will be several examples in the near future.

contribute to the mastering of everyday life. In addition, how does this example compare with the international experiences?

I claim that the recognition of different times and their relationship with urban planning enhances local co-governance and the mastering of everyday life.

The aim of the chapter is to describe and discuss the results of a practical meta-analysis of the time planning experiment in the Finnish context. After explaining the theoretical framework that was applied in the original research, the results will be examined and the research questions answered.

Theoretical Framework

As time policy is a complex phenomenon, its comprehension requires an integrated framework that draws from concepts and methodologies from different fields of research. The most relevant concepts that I shall examine are time itself, the infrastructure of everyday life as understood in the theory of urban planning, and "Lena", a special approach to participatory planning and action research that has been explained in the Introduction to this book.

Conceptions of time

Philosophers have not reached consensus about what time is, but they do agree that the concept of time is important (Dowden, 2001/2011). A general shift from the cyclical and biological time to the measurable linear time has taken place through history. Time has been experienced as a decreasing resource since the industrial era. According to Einstein, time is "what the clock measures". The clock can be the calendar, the rumble of one's stomach, a metronome, tide or mandala. Anthropologist Edward Hall (1983) regards time as a central cultural structure and he identifies nine different temporal dimensions. In addition, there is the *time of care* (Bryson, 2007) and *ecological time*, meaning the time it takes to restore human activity in the ecosystem (Salleh, 2009). Thus, the conception of time depends on culture and the phase of societal development. As time is a complex phenomenon, there are many ways to classify it. The following dimensions are important in the understanding, monitoring and evaluation of time-related activities relevant to urban planning (see also Table 4.1):

Chronological, (linear) time versus 'kairological' (experiential and meaningful) time.[3] The former refers to the measurable time that can be monitored by time-use diaries. However, tapping into the experiential quality of time requires interpreting events against the temporal background and the larger narrative in question (Szerszynski, 2002). *Individual versus collective, social time* (of the family, work, community, society). Since people have their individual time schedules, which might be in conflict with collective ones, it is important to analyse both. Time policies focus, in general, on collective time. *Time as past, present and shapable future.* Historical and cultural patterns of time have an impact on current and even future opportunities to manage time and space. Thus, it is necessary to analyse former and current patterns (through archives, maps and surveys), and also to envision future scenarios with the participants in time planning interventions. However, "the present is the only moment which we can feel and change" (Kabat-Zinn, 1994, 55).

According to Seligman and Csikszentmihalyi (2000, 5), the subjective criteria for wellness are "well-being, contentment and satisfaction (for the past), hope and optimism (for the future), and flow and happiness (in the present)". The experiential state in which a person is consciously in contact with the present can be called by different names. I refer to it as *psychological presence* (see Kahn, 1990; also Senge et al., 2004), though many others call it *mindfulness*. Both terms share the assumption that sense of presence is closely associated with health and wellness, as well as with the ability to cope with stress in everyday life.

Infrastructure of everyday life as substance theory of urban planning

Most urban planning theories deal with process. When it comes to substance, besides ecological, new urbanism and social justice theories, there are in fact few theories to draw upon (Taylor,1998; Gunnarsson-Östling, 2011). However, the feminist movement in housing and building has emphasized the importance of everyday life and its structures as significant for the substance of planning (Research group for the New Everyday Life, 1991; Jarvis, 2009).

Self-evidence characterizes the logic of everyday life. Everyday life refers to the subjective experience of the everyday in contrast to

[3] The Greek word ´kronos` means time as continuity, whereas ´kairos` refers to certain moments in time that are associated with meaningful events and their interrelationships.

the structures or systems made up of institutions, financial flows etc. Scientifically, everyday life can be approached as a process and practice in which people shape structural conditions into lived life in their homes, at work or in the living environment (Beck-Joergensen, 1987). Sustaining or even mastering everyday life means therefore, the enhancement and coordination of those multi-dimensional and multi-level processes and practices with which people shape the structural conditions.

The enhancement of these conditions can be done, among other things, through the co-creation and shaping of *a supportive infrastructure for everyday life* (Horelli & Vepsä, 1994; Horelli & Wallin, 2012). The latter refers to a concept and a model first developed by the Nordic New Everyday Life-research group and later by European colleagues in the EuroFEM-network of human settlements (Research group for the New Everyday Life, 1991; Gilroy & Booth, 1999).

The New Everyday Life-research consists of both a critique of the fragmentation of everyday life and a concrete utopia for a post-industrial, mosaic-like society. The latter comprises a variety of self-governing and even self-sufficient units responsible for the creation of a supportive infrastructure for everyday life. Its central elements are work, care and housing, which should not be separated but rather integrated in the living environment of local neighbourhoods. The expansion of the concept of work is crucial to this research. Both paid and unpaid work are seen as equal, meaning that the process of work should be shared and organised in new, different ways. The aim is to move away from the production-centred mode of thinking and acting towards one in which production serves the reproduction of human beings, nature and culture, ultimately leading to a sustainable and holistic economy (Hendersson, 1996; Salleh, 2009).

The action model for creating a supportive infrastructure is based on developing the *intermediary level* between the private households on the one hand, and the public and commercial sectors, on the other hand. The intermediary level refers to neighbourhood structures which, in this model, consist of environmentally friendly housing, services, employment and other activities, which support residents irrespective of age and gender (Horelli & Vepsä, 1994). Examples of well-functioning intermediary levels include different types of co-housing in Denmark, Sweden and Norway. However, existing neighbourhoods and villages can also provide an enabling infrastructure of everyday life, assuming that they fulfil the condition of offering physical, functional and participatory structures, which the residents of the neighbourhood, or stakeholders beyond, can

easily appropriate (Figure 4.1; Horelli, 2006a). The results of such appropriation can be seen in the emergence of networks of care and mediation, which can be supported further by mobility tools (Larsen et al., 2006).[4] The capital generated through such networks might give rise to supportive cultural and even symbolic structures that further contribute to both local and translocal social capital,[5] which in turn helps sustain everyday life.

It is possible to plan and even to implement the physical, functional and participatory structures of the model. However, communal culture or social capital is something that emerges only if residents and other stakeholders are willing to appropriate the intermediate cultural structures, and to network in ways that create trust (Lin, 2001). In practice, the resulting supportive infrastructure is not a neat schema but rather a rhizome embedded in a specific context (Horelli & Wallin, 2012).

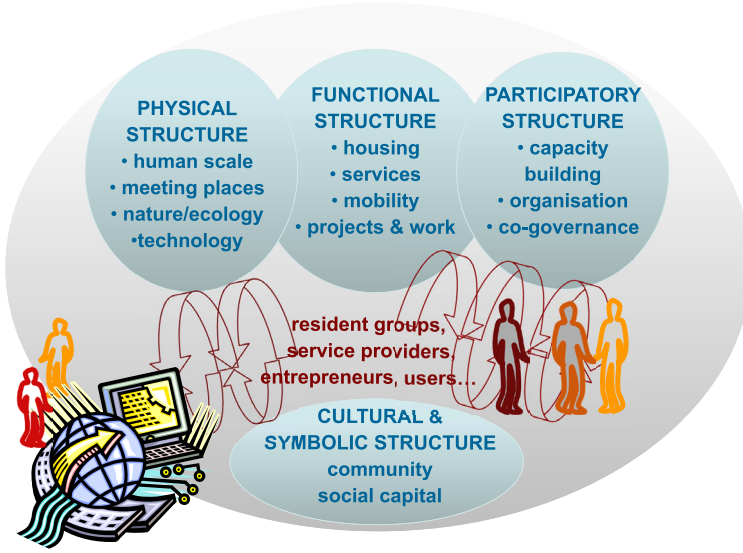


Figure 4.1. A heuristic model of the conditions for a supportive infrastructure of everyday life.

Learning-based network approach to participatory planning and action research

The learning-based network approach to participatory planning and action research (Lena) is based on communicative and post-structural

[4] Mobility tools refer to resources like public transport, mobile phones and the internet. They are part of network capital, because they enhance the accessibility of ties in a social network, increasing the value of social resources and the support they provide (Rettie, 2008).
[5] Social capital refers to the possibility to mobilize resources, embedded in social relations and networks, for some specific purpose (Lin, 2001).

planning theories (Booher & Innes, 2002), as well as on the theory of complex coevolving systems (Mitleton-Kelly, 2003). The latter implies tensions rooted in the parallel existence of order and chaos, the emergence of phenomena and processes, the self-organisation of different stakeholders and the co-creation of products, events and activity systems, as is described in the Introduction to this book and in Chapter 2.

Since Lena comprises a method and a set of tools to analyse, plan, implement, monitor and evaluate planning and community development, it enhances the sensitivity of participants both to the chronological and kairological times that are intertwined in the appropriation of the infrastructure of everyday life. Thus, the process of participation is integrated with the content of planning which enables the self-organisation of inhabitants around meaningful local issues (see Figure 4.1 and Figure 1.1).

The different conceptions of time, the supportive infrastructure of everyday life and Lena form an integrative framework that has been applied in the time planning experiment in Herttoniemi and in its meta-analysis which will be described in the next section.

Time planning in Helsinki's Herttoniemi neighbourhood

The Herttoniemi neighbourhood of Helsinki has been the site of experiments in time planning during the period from 2004 to 2012. As several publications have already been written about the experiment, I have conducted a practical meta-analysis of them (Horelli et al.,2012).[6] This does not mean a statistical analysis, nor does it refer to a systematic review in the traditional sense. It is rather an analysis of the published articles and reports that have been carried out as part of the action research, and which applies the same methodological rigor as used in the primary research (Wilson & Lipsey, 2001). A variety of methods, measures and samples was applied in the primary research in order to explicitly or implicitly study the characteristics and contributions of time planning in the Finnish context. The unit of analysis in the meta-analysis comprise the core themes that have been content analysed, in accordance with the constant comparative method and grounded theory (Strauss & Corbin, 1990).

Since the longitudinal action research on time planning in Herttoniemi consisted of three consecutive projects, I will structure the results chronologically. The first project was called "ARJA, the

[6] The list of articles and reports can be found in the References .

Management of Everyday Life", the second "Ubiquitous Helsinki", and the third, "Participatory Local Community as an Issue of Time Planning".

Time planning as networking and coordination of activities

The aim of the ARJA –project[7] (2004 – 2006), funded by the European Social Fund, was to construct and test models of time planning in the Finnish context. The main focus was on the ways that the socio-spatial and temporal coordination of housing, work, services and mobility might improve the conditions for reconciling work and family life, and better the consequent social temporalities of everyday life (Horelli & Wallin, 2006).

Action research and modelling

The design of the action research was based on the Learning-based network approach (Lena) which is described in the theoretical framework of this chapter. In practice, it meant conducting an analysis of the context, building scenarios and charting their consequences with residents and employers, co-constructing a vision around the supportive infrastructure of everyday life, and choosing implementation strategies, along with applying on-going monitoring and evaluation[8].

The analysis of the surveys, mapping and interviews disclosed that the residents in the area were quite satisfied with their living environment, especially with its proximity to natural areas and good public transport. Everyday life in the family context was structured through efforts to balance work and child care (see Figure 4.2). The proactive or reactive attitude and

[7] ARJA was the first Nordic experiment on time planning. It was funded by the European Social Funds during 2004-2006. Action research was coordinated by researchers from the Centre for Urban and Regional Studies of the Helsinki University of Technology (HUT). The partners came from the Central Union for Child Welfare (services), WSP LT-Consultants and Liidea Ltd (mobility management), Statistics Finland (time-use diaries) and the City of Helsinki (local governance).

[8] The methodological package comprised classical research methods. These included surveys (questionnaires to 1600 families distributed through day-care centres and elementary schools), 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 families, mainly from amongst upper- and lower-level employees, had children between the ages of 5 months and 17 years. Their employers ranged from one or two person micro-enterprises through medium-sized entities in both the private and public sectors, to the biggest employer, which was the City of Helsinki with 30 000 employees.

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); organisational (networking, consensus building, forums and work groups) and political (goal setting and prioritising, panels, lobbying).

organisational skills of the parents, as well as the division of domestic tasks within the family, were key to the coordination of social temporalities. In addition, the physical structure of the dwelling could affect the smooth running of daily schedules. Hot spots or problematic elements in dwellings included the entrance, which was usually too small, the shape of the kitchen, which might not accommodate an appropriate dining table, as well as the lack of space for storage. The families were satisfied with day-care services, but complained about the lack of afternoon care for school children (given that school ends around one or two in the afternoon). Also transport for children's hobbies was a problem in many families.

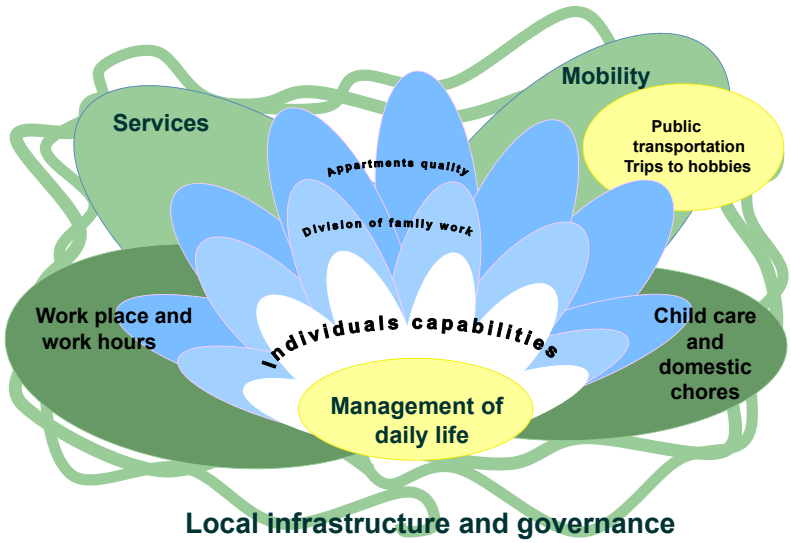


Figure 4.2. Factors affecting the control of everyday life (Horelli & Wallin, 2006).

The time use diaries[9] showed that women´s use of time was much more varied than that of men's. Women's free time was fragmented and it was shorter in duration than men's. The only activities in which men invested more time than women were playing with children and maintenance. Children did not seem to participate in domestic chores to a great extent.

Finnish legislation on working conditions adequately recognizes the need to balance work and private life. It was not surprising therefore, that the interviewees were quite pleased with the family-friendliness of their place of work. All of them could control, at least to some extent, their

[9] The time-use diaries were analysed with the Vardagen programme (Everyday life) developed, by Kajsa Ellegård (Ellegård & Nordell, 1977).

working hours. However, employers were not particularly interested in opportunities to enhance the reconciliation of work and family life.

The main result of the project was that a development process around the shaping of the infrastructure of everyday life was initiated, and this became embedded in the new organisation and modes of working within local co-governance (see Chapter 3). As the City of Helsinki is a centralized local authority, co-governance means the voluntary organisation and cooperation of all possible actors who have a stake in the neighbourhood: residents, users, civil servants, associations, entrepreneurs etc.

There were, at this stage, 11 small projects. Their outcomes were: 1) the improvement of the metro-station, which was not only in a dilapidated state but also experienced as a safety-risk for children and young girls in the evenings (parents had to come and meet their daughters who felt unsafe and therefore restricted in moving around in the area), 2) renewed coordination of family services (which were previously dispersed and poorly integrated with social and health care, 3) mobility management (better information on mobility services, a new buss-route, car pools, walking busses etc.), 4) development and piloting of a new service format, the helpdesk. The *helpdesk* refers to a one-stop-service, either a face-to-face desk, a contact number or a website from which a diversity of quality-assured public, private and third-sector services could be accessed.

A preliminary model of time planning and policy for Helsinki was generated, in which a helpdesk with an online service portal acted as the interface for mastering individual temporalities and the local service system. The latter comprised the coordination and production of public, private and third sector services in a specific neighbourhood or district. As part of the service the helpdesk was embedded in unofficial co-governance, but it was also linked to the City of Helsinki's welfare and economic policies. However, this model was never adopted, nor further experimented with by City administrators.

Nevertheless, the piloting of the helpdesk made it possible for service packages to be created for the project families. For example, family X wished to have someone to fetch three children from the child-care centre, procure a warm meal for the whole family, and to find somebody to build more space for storage in their dwelling. Family Y wanted to have baby-sitting services, as well as an option to use the City Car Club that rents cars at inexpensive prices. Family Z needed cleaning and hoped for improved safety at the Metro station, so that the mother would not have to fetch her daughter from the station, where she would otherwise wait for a connecting bus.

Mastering everyday life through psychological presence

An infrastructure that supports families with children, together with the explicitly spatio-temporal planning of activities such as those related to health and mobility, were instrumental in mastering everyday life. However, the mastering could also take place through psychological presence. The interviews revealed that the experience of psychological presence was familiar especially to women. They could easily express it and provide examples from several situations. Psychological presence turned out to be an indicator and even a means and precondition to sustain everyday life (Horelli, 2010):[10]

> *"Presence is the precondition for the better mastering of daily situations. If you keep thinking about what happens next, and you run ahead of things, it becomes stressful. I'd rather do one task at a time and when it ends, then start the next one."* (A mother of three children)

On the basis of the literature and the results of the action research, it was possible to build up a preliminary model of psychological presence as an experience, an interactive process and a mode of being and doing structured by transactions with the environment (Figure 4.3).

Psychologically the interactive process takes place at the intersection of intention, attention and attitude, as described by Shapiro et al. (2006). It can be embedded in either of the two different modes, being or doing (Segal et al., 2002). However, psychological presence in everyday life is also affected by the transactive processes that take place between the person and environmental affordances, understood as spatial, temporal and social opportunities that structure the informal practice of presence. Participatory time planning can, to a certain degree, shape the affordances, that is, the infrastructures (Figure 4.1), which in turn provide the conditions for sustaining daily life. For example, the mobility cards, co-created in the project, and the new bus route from a more distant part of Herttoniemi to the health centre, made the daily life of child families easier (Horelli, 2010). In addition, the rebuilding of the Metro station, will make the environment safer, which in turn will affect the time budget of families and young people.

[10] Six families (husbands and wives) were interviewed in depth in summer 2006. The practical goal of the interviews was to get information concerning the use of the new internet-version of the help-desk. The theoretical goal was to find out about the role of the informal practices of psychological presence in sustaining everyday life. The interviews lasted about two hours. They were transcribed and content analyzed, based on grounded theory and using the constant comparative method (Strauss & Corbin, 1990). The conclusions emerged from analytic induction, aided by Bromley's quasi-juridical method (1986,194-196). The argument emerged out of a network of empirical facts, relations and relevant concepts.

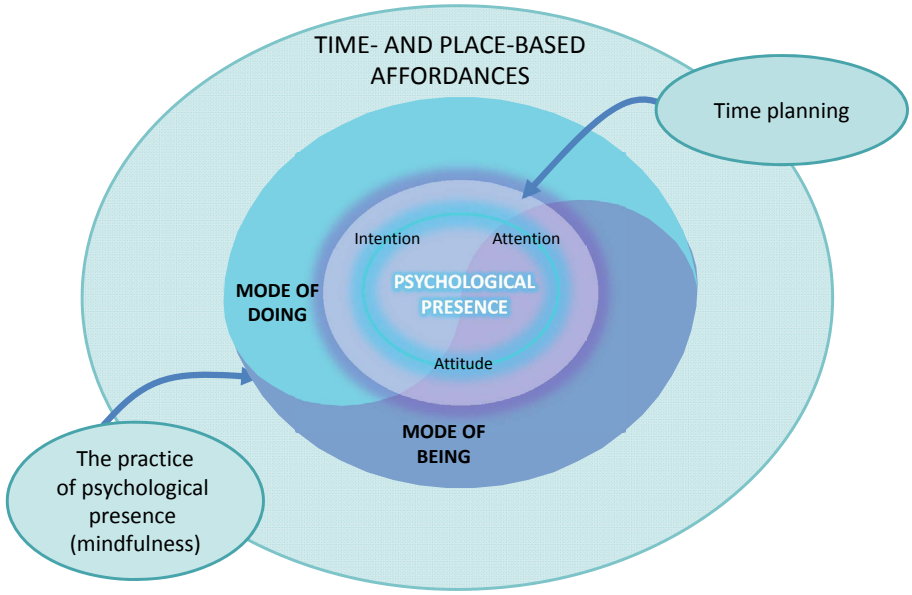


Figure 4.3. A schema of the psychological presence as an experience, an interactive process and a mode of being and doing, structured by transactions with the environment.

However, psychological presence is, ultimately, a question of personal self-regulation that increases the capacity for reperception of issues (Shapiro et al., 2006). This can be improved through meditation and therapeutic interventions to a degree.

Temporal prosperity can provide a wider range of opportunities for action and thus affect the mastering of everyday life. Nevertheless, an increase in time alone does not guarantee a qualitative improvement in the temporal experience, nor does it automatically provide psychological presence. Time planning can, however, enhance the experience of collective presence. For example, when members of the local committee in Herttoniemi painted with their left hand their visions of the community, to be later on displayed at the Metro station, the collective or co-presence could be concretely felt. Co-presence is well known in the literature on care relations (Muckenberger, 2012).

Summa summarum, time planning alone is not a sufficient condition for the emergence of presence, but it seems to be a necessary one. Respectively, when time planning and urban planning are poor, it can hinder the flow of everyday life.

Integrating time planning with e-planning

The experiment with time planning was continued in 2007–2008 as part of the Ubiquitous Helsinki-project.[11] Its aim was to plan and co-produce events and so-called ubiquitous services for everyday life in partnership with private, public and community stakeholders, in Herttoniemi. The implementation of the project meant constant iterations between the developers and users in order to create digital and internet-based tools that could be inserted in local websites for planning and communication purposes. The application of websites and other tools of community informatics[12] in urban planning, transformed the whole process into e-planning (see Chapter 7).

This phase brought forth new concepts and products, such as the *hybrid infrastructure of communication*, which refers to the set of chosen digital and non-digital tools suitable for the specific context of e- and time planning (Wallin et al., 2010). In Herttoniemi for example, it comprised a locally based service and partnership platform that could be accessed by mobile phone, home computer and digital display screens in public space. Some of these tools were applied in the participatory e- and time planning of the Roihuvuori community yard, where children, adolescents, adults and seniors took part at different stages of the planning, implementation and maintenance cycle (Saad-Sulonen & Horelli, 2010).

The integration of time planning with e-planning meant the use of technology to provide access to participation for larger groups of people – whether experts, users, entrepreneurs, professionals or politicians – who now had the opportunity to take part 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. In addition, it enabled the co-production of real-time environments through augmented reality technologies. An interesting temporal characteristic was disclosed through the application of the so-called Future making assessment-approach (FMA), which was part of the project's monitoring and evaluation system (Horelli & Wallin, 2010). As outcomes of evaluations usually have to be explained by a theory

[11] UBI-Helsinki was funded by TEKES, the Finnish Funding Agency for Technology and Innovation, the Innovation funds of Helsinki City and several private enterprises. It was coordinated by VTT, Technical Research Centre of Finland in collaboration with Helsinki University of Technology and HELKA (Helsinki Neighbourhoods Association).

[12] Community informatics (CI), which means the use of ICTs for the empowerment of communities (Gurstein, 2007) has been discussed in the Introduction to this book.

or a presumed mechanism of change, the project revealed a great variety of causalities of change.[13]

According to Aaltonen (2007), change can be explained by examining the interplay of three forces: sensitivity to initial conditions, the final cause and the circular cause. In complex contexts, such as in the UBI-project, the challenge was to identify and influence the system's initial conditions, as they emerged. *Sensitivity to initial conditions* was ensured through encouraging the stakeholders to conduct a contextual analysis. This led to strategic visioning of the future and an operational roadmap with concrete goals. Thus it set the scene for *the final cause*, i.e. the goals. It also meant the start of a collective process of script-writing that was enacted by the stakeholders during the project and even after it. However, *circular causality* works in loops and circles. Activities at the micro-level gave rise to effects that could be identified at the macro-level and vice versa. For example, the co-design of the Metro station by lay persons later fed into an international architectural competition, which in turn prolonged the reconstruction and postponed the remedying of safety issues. The emergence of these outcomes could also be explained by the great amount of small causes interacting all the time.

As connectivity and feedback loops influence the evolution of the time-consuming development process, a whole set of orchestration tools – spaces for deliberation and negotiation, networking and so-called knotworking (Engeström, 2008), capacity building and the interpreting of terminology – was applied in participatory time and e-planning, together with FMA. Also a self-critical and reflexive approach was adopted, in which sensitivity to gender, age and culture was central.

The recognition of multiple causality and the application of appropriate intervention and assessment methods, seem to be crucial for balancing the desired degree of chaos and control during the cycles of time planning and community development. In addition, it is important to support this kind of planning through an organisation that is able to provide rapid feedback between different levels. The interdependent issues at stake between policy making and the day-to-day activities require a short and quick path.

[13] As a genre of evaluation, the FMA is closely intertwined with the planning and development process. FMA is neither goal-bound nor goal-free, but characterized by a sensitivity to the diverse and evolving goals of the stakeholders. For example, in the Ubiquitous Helsinki-project the scope and level of goals extended from tools and platforms to a local website with the potential to become an instrument of urban planning.

Time planning as part of local co-governance and complexity management

Action research on time planning continued in Herttoniemi, in 2009–2012, through the Finnish Academy-funded "Participatory local community, as an issue of time planning"-project (Palco, 2009). Its aim was to study the different dimensions and methods of time planning as part of user-driven community development and co-governance.

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 was the co-development of semi- and informal institutions of co-governance together with different civil society organisations, city officials and the community worker from the Department of Social Services. Karoliina Jarenko describes local co-governance in Herttoniemi as a deliberative system in Chapter 3. The unofficial co-governance is structured around four key elements: a) the *Local Committee* that meets every second month, b) the *Neighbourhood Assembly* that meets twice each year, c) *self-organising groups and activities*, such as neighbourhood associations and the cooperative Hertsikan Pumppu that seeks to improve local services, and d) the *hybrid infrastructure of communication.* The latter comprises an assemblage of tools and instruments, such as local websites, mobile and internet applications and digital display screens for disseminating information just-in-time, retrospectively or in an anticipatory way.

Interpreting the Herttoniemi co-governance through Carolyn Hendriks' model of integrated deliberation enables to see, how the Local Committee and Neighbourhood Assembly are in the semi-formal mixed discursive sphere and the self-organising groups and activities operate in the informal, macro discursive sphere (see Hendriks, 2006; Figure 3.2 in Chapter 3). However, the links to the formal, micro discursive sphere, in the form of City councils, is weak, almost non-existent. This makes it difficult for the local co-governance to balance the interplay between the formal, semi-formal and informal phenomena – activities, networks, partnerships etc.

However, it was not until this phase of action research that it was possible to realise, how the relationships of different types of time are intertwined with urban planning issues. It is especially the flexible communication infrastructure that enhances the emergence of new collective rhythms, as the information about the self-organisation of citizens around a variety of events, projects and urban activities, is circulated. The coordinated timing

of both linear processes (e.g. negotiations of public transport time-tables) and the supporting of shared meaningful events, such as the opening of some local happening, enhances the unofficial co-governance.

Time planning also seems to be at the core of complexity management in terms of understanding the trickiness of problems (see Table 4.1 and Chapter 2).

Table 4.1. Types of times and their relationship with urban planning issues.

Type of times	Explanation	Relationship with urban planning
Chronological/	Linear, measurable time	Mobility and functional planning
Kairological	Experiential, meaningful time of events & practices	Quality of routes, places, landscapes & services
Individual/	Individual timetables & temporal tactics	Supportive infrastructure of everyday life
Collective	Shared rhytms and timetables of the city	Chronotypes, co-planning of services & public spaces
Past	Temporal archeology of the city	Recognition of the socio-cultural layers of the city, rhytms of social interactions; spaces of presence; Anticipation of future processes; understanding of complexities
Present	Present state and on-line city	
Future	Vision of the city Mixture of life paths, short and long temporal horizons	

Table 4.1 allows to see some of the temporal facets and their connections with urban planning issues. The relationships are not, however, straight forward but highly intertwined and context dependent. Jenni Kuoppa has shown in Chapter 5 (Table 5.1), how the shaping of places and their meanings emerge in the different timescales of activities at the intersection of the temporal horizon and the subjective/collective meanings of place. People know, how to use temporal tactics, such as rhythmic variation, the synchronisation, application of ties, memories, wishes and the categorization or sedimentation of meanings. Nevertheless, the often idealistic planning goals, such as place identity, sense of place and community, are not only products but part of a dynamic, multidimensional process, intertwined with experiences of self, other people and their routines in the environmental situation. In addition, the on-going activities at the micro level give rise to effects that have an impact on the macro level, as indicated above in the section on circular causality. Therefore, time planning is at the core of urban complexity management.

However, Shove et al. (2012) underline that any activity, including time planning, has to be embedded in social practice, consisting of the intertwining elements of materials, competences and meanings, in order to have an impact.

Conclusions and discussion

This chapter has offered a theoretical framework that has been applied in the practical meta-analysis of the eight-year long action research on time planning in the Herttoniemi neighbourhood of Helsinki. It is now time to answer the research questions concerning the characteristics of ´Finnish time planning` and its contribution to the mastering of everyday life. I will also compare the Finnish example with international experiences.

Some subtle contributions of Finnish time planning

Time policies and time planning are one example of the new policy instruments with which the wicked problems of our times are being addressed. This policy instrument may be used on several arenas, at many levels, and in partnership with different individuals, communities, cities and regions. However, in Finland time planning is not yet considered a real policy instrument.

A key characteristic of the Finnish experiment is *the nuanced and evolving nature of time planning,* due to the changing social, temporal and economic context (new funders, goals and target groups). The experimenting started off in the continental style (Boulin, 2006; Zedda, 2008), seeking to coordinate different neighbourhood activities that were especially important to families with children. Supported by the Learning-based network approach to participatory planning and action research (Lena), the first phase was quite successful. Lena enabled the development of certain social, temporal and spatial structures that enhanced stakeholders' networking around daily issues. Lena also comprised a method and a set of tools for increasing the sensitivity of participants both to the chronological and the kairological modes of time intertwined with the infrastructure of everyday life (Figure 4.1). As the process of participation became integrated with the content of planning, the self-organising of the inhabitants around meaningful local issues increased. There is enough evidence to conclude that due to the experiment, the infrastructure of everyday life was improved especially for families with children. And yet, time planning as a policy was not adopted by the Helsinki administration.

In the second phase of the experiment, the focus shifted onto the integration of time with e-planning. This meant expanding the temporal scope, as well as the number of users who could now participate without restrictions of time and place. The contribution was now the hybrid infrastructure of communication – a carefully chosen set of digital and non-digital tools that citizens can take advantage of to shape their surroundings and to have more say in local issues. In addition, the communication structure made the co-production of real-time environments possible.

The third phase showed that the integrated time and e-planning could be a support to unofficial local co-governance in Herttoniemi. It became, according to Karoliina Jarenko (Chapter 3), a deliberative system, in which the coordination of different events, projects, times and spaces took place in a decentralised fashion, seeking to balance the interplay with the formal, semi-formal and informal phenomena.

The integration of technology and time helped to establish arenas of deliberation that could be turned into public spheres (Frazer, 1990; 2007), enhancing stakeholders' self-organisation. These public spheres had distinctive timescapes with divergent causalities. The recognition and handling of multiple causalities turned out to be important in co-governance. As the provision of rapid and longer term feed-back, as well as the necessary links to the different levels (city, region, nation), were missing in Herttoniemi, social interaction at the local level did not turn into a societal dialogue.

The application of the 'resilient everyday life model', mentioned in the introduction to this chapter, seems to require the recognition of a variety of times that are intertwined in planning issues and an ability to understand the nature of problems that range from simple to disorganised and organised complexity (see Table 4.1 and Chapter 2). However, resilience also seems to demand direct links to the networks of power (Booher & Innes, 2002).

Time planning and the mastering of everyday life

Most of the contributions of the time planning experiment in Herttoniemi have been and still are collective, dealing with the improvement of the infrastructure of everyday life. However, the mastering of everyday life also depends on the successful appropriation of the multi-dimensional and multi-level processes and practices through which people shape their daily conditions (Beck-Joergensen, 1987; Kuoppa in Chapter 5).

Unfortunately, the research design did not allow to distinguish the contribution of time planning at the individual level, as there were simultaneously so many other interventions in the area. However, the action research enabled the modelling of the dynamic relationships taking place in the daily context from the perspective of wellbeing.

The mastering of everyday life can be achieved not only through the supportive infrastructure and the spatio-temporal planning of certain activities, such as the health and mobility services, but also through the ability to obtain 'psychological presence'. The latter is an experience, an interactive process and a mode of being and doing associated with wellness, but in this case also with the management of daily life (Figure 4.3). Although time planning is not a sufficient condition for enhancing the experience of psychological presence, it seems to be a necessary one, as it can provide much needed temporal prosperity.

´Finnish time planning` in international comparison

The practices of international time policy and time planning are varied, extending from small neighbourhood projects to ones affecting urban structures and even to national and international legislation. However, one shared characteristic seems to be that many of the practices and interventions have been institutionalised through either legislation or some specific authority, such as a dedicated time office or through embedding in the political strategy of the city, like in Bergamo (Zambianchi & Gelmini, 2013).

The Finnish experiment has mainly focused on the neighbourhood level, but it also enjoyed a strong involvement of several authorities (the social and planning departments of Helsinki), in the first phase. However, the later phases were more or less self-organised around community development. Therefore, Finnish time planning distinguishes itself from the international examples by its unofficial nature and the lack of links to official decision-making, which seems to hinder the adoption of time planning as an official policy instrument. However, Finland seems to have a culture where it is common to conduct unofficial planning in parallel with official counterparts, a situation which may have favourable consequences (Wallin et al., 2012).

Unlike the international examples, Finnish time planning has been highly intertwined with the application of community informatics and participatory e-planning. The application of community informatics has

enabled transnational liaising with other communities of practice, which is a key asset in the glocal world (see Chapter 7).

Another distinctive feature is the emphasis on the psychological dimension of time planning. Collective and individual psychological presence as an indicator of the mastering of everyday life is a new phenomenon in time planning. Even the recognition of the different types of time as intertwining with the management of varying kinds of complex problems has not appeared in time planning litterature before.

It is evident from the international and Finnish experiences that time planning still needs further research and development as a policy instrument and a practical tool. More comparative studies should be conducted on the concepts of time and space and how they are applied in planning, community development and co-governance in various countries (see van Schaick, 2011). As time policies and planning are highly context-dependent instruments, how might they be implemented, for example in the Nordic welfare states, where there is still a strong belief that traditional means are enough to serve citizens' needs?

References

Aaltonen, M. (2007). The Return to Multi-Causality. *Journal of Futures Studies*, 12(1), 81–86.

Beck-Joergensen, B. (1988). Hvorför gör de ikke noget?(Why dont they do something?). In C. Bloch, L. Højgaard, B. Bech-Joergensen & B. Lindeskov Nautrap (eds.), *Hverdagsliv, kultur, og subjektivitet (Everyday life, culture and subjectivity).* København: Akademisk Förlag.

Boccia, T. (2013). Time Policies and City Time Plans for Women's Everyday Life: the Italian Experience. In Ines Sanchez de Madriaga & Marion Roberts (eds.), *'Fair Share' Cities: the impact of gender planning* (pp. 97–109). London: Ashgate.

Booher, D.E, & Innes, J.E. (2002). Network power in collaborative planning. *Journal of Planning Education and Research,* 21, 221–236.

Boulin, J.-Y. (2006). Local time policies in Europe. In D. Perrons, C. Fagan, L. McDowell, K. Ray & K. Ward (eds.), *Gender divisions and working time in the new economy: changing patterns of work, care and public policy in Europe and North America (*pp. 193–206). Cheltenham, UK: Edward Elgar.

Boulin, J.-Y. (2008). *Villes et politiques temporelles*. Paris: La Documentation Francaise.

Bromley, D.B. (1986). *The case-study method in psychology and related disciplines*. Chichester: John Wiley & Sons.

Bryson, V. (2007). *Gender and the Politics of Time. Feminist theory and contemporary debates.* Bristol: Policy Press.

Castells, M. (1996). *The Rise of the Network Society*. Cambridge (Mass): Blackwell.

Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. New York: Harper.

Dialogos (2004). *Reconciliation of work and private life. Policy and good practices in Finland, France, Italy, The Netherlands*. The Netherlands: The Daily Routine Project

Dowden, B. *(*2001/2011). Time. Internet Encyclopedia of Philosophy. Retrieved on 21.11.2012 at: http://www.iep.utm.edu/time/

Ellegård, K. & Nordell, K. (1997). *Att byta vanmakt mot egenmakt. Metodbok*. Borås : Johansson & Skyttmo förlag.

Engeström, Y. (2008). *From Teams to Knots. Activity-theoretical studies of collaboration and learning at work*. New York: Cambridge University Press.

Fraser, N. (1990). Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy. *Social Text,* 25/2, 56–80.

Fraser, N. (2007). Transnationalizing the Public Sphere On the Legitimacy and Efficacy of Public Opinion in a Post-Westphalian World. http://eipcp.net/transversal/0605/fraser/en

Gelmini, F. & Zambianchi, M. (2013). A History, Concepts and Practice of Time Policies and Time Planning: the Bergamo Case. In Ines Sanchez de Madriaga & Marion Roberts (eds.), *'Fair Share' Cities: the impact of gender planning* (pp. 385–398). London: Ashgate.

Gilroy, R. & Booth, C. (1999). Building infrastructure for everyday lives. *European Planning Studies,* 7(3), 307–324.

Gunnarsson-Östling, U. (2011). *Just Sustainable Futures. Gender and Environmental Justice Considerations in Planning*. Stockholm: KTH Architecture and the Built Environment.

Gurstein, M. (2007). *What is community informatics* (and why does it matter)? Milano: Polimetrica.

Hall, E. (1983). *The Dance of Life. The Other Dimension of Time*. New York: Doubleday.

Henderson, H. (1996). *Building a win-win world. Life beyond global economic warfare*. San Francisco: Berret-Koehler.

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 & Sons.

Horelli, L. (2006a). Environmental human-friendliness as a contextual determinant for quality of life. *Revue européenne de psychologie appliqué,* 56,15–22.

Horelli, L. (2006b). A Learning-based network approach to urban planning with young people. In C. Spencer & M. Blades (eds.), *Children and Their Environments: Learning, Using and Designing Spaces* (pp. 238–255). Cambridge: Cambridge University Press.

Horelli, L. (2010). Sustaining Everyday Life through Psychological Presence, Time, and Space. In K. Karlsson & K. Ellegård (eds.), *Proceedings of the Sustaining Everyday Life Conference*: April 22–24, 2009, Campus Norrköping. In Linköping Electronic Conference Proceedings, Issue 38, http://www.ep.liu.se/ecp_home/index.en.aspx?issue=038

Horelli, L., Saad-Sulonen, J. & Wallin, S. (2012). *Community Informatics in Participatory E-planning*. A presentation at the CIRN 2012 Community Informatics Conference, Prato, Italy, 7–9-November.

Horelli, L. & Vepsä, K. (1994). In Search of Supportive Structures for Everyday Life. In I. Altman & A. Churchman (eds.), *Women and the Environment. Human Behavior and Environment* (pp. 201–206). New York: Plenum.

Horelli, L. & Wallin, S. (eds.)(2006). *Arjen ajan hallintaa, kokemuksia suomalaisesta aikasuunnittelusta.* (Mastering everyday life, Experiences from time planning in Finland). Helsinki: Helsingin kaupungin tietokeskus.

Horelli, L. & Wallin, S. (2010). The Future-Making Assessment Approach as a Tool for E-Planning and Community Development – the Case of Ubiquitous Helsinki. In C.N.Silva (Ed.), *Handbook of Research on E-Planning: ICTs for Urban Development and Monitoring* (pp. 58–79). Hershey, PA: IGI Global.

Horelli, L. & Wallin, S. (2012). Gender-aware e-planning for sustaining everyday life. In M. Roberts & I. Sanchez de Madriaga (eds.), *'Fair Share' Cities: the impact of gender planning* London: Ashgate.

Hägerstrand, T. (1975). Space, Time and Human Condition. In A. Karlqvist (Ed.), *Dynamic allocation of urban space*, (pp. 3-14). Farnborough, Hants: Saxon House.

Irschik, E. & Kail, E. (2013). Vienna: Progress Towards a Fair Shared City. In Ines Sanchez de Madriaga & Marion Roberts (eds.), *'Fair Share' Cities: the impact of gender planning* (pp. 292–322). London: Ashgate.

Jarvis, H. with P. Kantor and J. Cloke (2009). *Cities and Gender*. London: Routledge.

Kabat-Zinn, J. (1994). *Wherever You Go, There You Are: Mindfulness Meditation in Everyday Life.* New York: Hyperion.

Kahn, W. A. (1990). Psychological Conditions of Personal Engagement and Disengagement at Work. *Academy of Management Journal,* 33,(4), 692–724.

Kuoppa, J. (2013). Beyond vague promises of liveability: an exploration of walking in everyday life. In D. Henckel, B. Könecke, S. Stabilini, S. Thomaier, R. Zedda (eds.), *Space Time Design of the Public City*. Berlin: Springer Publishers.

Larsen, J., Axhausen, K. & Urry, J. (2006). Geographies of Social Networks: Meetings, Travel and Communications. *Mobilities,* 1(2), 261–283.

Lin, N. (2001). *Social Capital, a Theory of Social Structure and Action*. Cambridge: Cambridge University Press.

Mareggi, M. (2002). Innovation in Urban Policy: The Experience of Italian Urban Time Policies. *Planning Theory & Practice*, 3(2), 173–194.

Mitleton-Kelly, E. (2003). Complexity Research – Approaches and Methods: The LSE Complexity Group Integrated Methodology. In A. Keskinen, M. Aaltonen & E. Mitleton-Kelly (eds.), *Organisational Complexity* (pp. 55–74). Turku: Finland Futures Research Centre, Turku School of Economics and Business Administration.

Muckenberger, U. (2013). Lebenskvalität durch Zeitpolitik. Wie Zeitkonflikte gelöst werden können. Berlin: Hans Böckler Stiftung.

Palco (2009). Osallistuva paikallisyhdyskunta aikasuunnittelun kohteena. (Participatory local community as an issue of time planning). Suomen Akatemian tutkimushanke. http://wiki.tkk.fi/display/Palco

Research group for the New Everyday Life (1991). *The New Everyday Life – Ways and Me*ans. Oslo: The Ministry of Foreign Affairs.

Rettie, R. (2008). Mobile Phones as Network Capital: Facilitating Connections. *Mobilities,* 3(2), 291–311.

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).

Salleh, A. (Ed.)(2009). *Eco-Sufficiency & Global Justice. Women write political ecology*. Melbourne: Pluto Press.

van Schaick, J. (2011). *TimeSpace Matters*. Delft: TU Delft.

Segal, Z., Teasdale J. & Williams M. (2002). *Mindfulness-based cognitive therapy for depression. A New Approach to Preventing Relapse*. New York: Guilford.

Seligman, M.E.P. & Csikszentmihalyi, M. (2000). Positive psychology. An Introduction. *American Psychologist,* 55, 5–14.

Senge, P., Scharmer, C.O., Jaworksi, J. & Flowers, B.S. (2004). *Presence, Human Response and the Field of the Future.* Cambridge (Mass.): SoL.

Shapiro, S.L., Carlson, L.E., Astin J.A. & Freedman B. (2006). Mechanisms of Mindfulness. *Journal of Clinical Psychology,* 62, 373–386.

Strauss, A. & Corbin, J. (1990). *Basics of qualitative research. Grounded theory procedures and techniques.* London: Sage.

Szerszynski, B. (2002). Wild times and domesticated times: the temporalities of environmental lifestyles and politics. *Landscape and Urban planning*, 61, 181–191.

Taylor, N. (1998*). Urban Planning Theory since 1945*. London: Sage Publications.

Tummers, L. (2013). Gendered Perspectives on Spatial Planning and Housing in the Netherlands. In Ines Sanchez de Madriaga & Marion Roberts (eds.), *'Fair Share' Cities: the impact of gender planning* (pp. 163–190). London: Ashgate.

Wallin, S. & Horelli, L. (2012). Playing with the glocal through participatory e-planning. *Journal of Community Informatics,* 8(3).

Wallin, S., Horelli, L. & Saad-Sulonen, J. (eds.)(2010). *Digital tools in participatory planning.* Espoo: Aalto University, Centre for Urban and Regional Studies. Series C27. http://lib.tkk.fi/Reports/2010/isbn9789526032603.pdf

Wallin, S.; Amati, M.; Saad-Sulonen, J. & Horelli, L. (2012). Urban and community informatics transforming participation in urban planning: lessons from Helsinki and Sydney. *International Journal of E-Planning Research,* 1(3), 17–39. http://www.igi-global.com/article/exploring-planning-practices-different-contexts/70080

Wilson, D. B., & Lipsey, M. W. (2001). *Practical meta-analysis*. Thousand Oaks: Sage.

Wotha, B. (2013). Urban Governance and Gender-aware Planning. In Ines Sanchez de Madriaga & Marion Roberts (eds.), *'Fair Share' Cities: the impact of gender planning* (pp. 137–157). London: Ashgate.

Zambianchi, M & Gelmini, F. (2013). A History, Concepts and Practice of Time Policy and Time Planning: the Bergamo Case. In I. Sanchez de Madriaga & M. Roberts (eds.), '*Fair Share' Cities: the impact of gender planning* London: Ashgate.

Zedda, R. (2008). *Tempi della citta. Metodi per l´analisi urbana*. Milano: FrancoAngeli.

5 Sensing, Learning and Transforming a Neighbourhood by Walking

Jenni Kuoppa

Introduction

Place meanings and people's bonds and attachments to place can motivate efforts to improve their neighbourhood and participate in local planning processes (Manzo & Perkins, 2006). Further, urban space is transformed not only through the interventions of planning and public policy, but also directly in the everyday practices of inhabitants. Neighbourhoods are shaped by residents who express their identity, their wishes and needs through their use of space (e.g. Manzo & Perkins, 2006; Gottdiener, 1994, 17). However, the planning literature, which emphasizes participation and empowerment, has largely overlooked these dimensions of everyday life and experience (Manzo & Perkins, 2006).

This chapter analyzes the ways in which *inhabitants' everyday practices of walking* shape and construct the neighbourhood of Herttoniemi and its meanings. In order to show that meaning-making is not restricted to an internal process (taking place only in the minds of individuals), the chapter will consider how people actively produce their environment

through temporal tactics, socio-material practices and the uses of social categories. The analysis draws on interviews with the inhabitants of Helsinki's Herttoniemi neighbourhood examining the questions:

1. What kind of experiences and meanings of place relate to the interviewees' practices of walking in Herttoniemi?
2. How are those meanings constructed at different timescales?
3. How do the practices of walking relate to shaping the local environment?

I will conclude by considering, in line with Manzo and Perkins' (2006) discussion, the challenges and potentials of these experiences and meanings, and what they imply for the formation of participatory practices and self-organisation at the neighbourhood level. Herttoniemi offers an example of an area where participatory practices and local co-governance are well developed. There are informal networks, projects, working groups and self-organised residential groups, such as a food circle that operates in the neighborhood (see Chapters 2, 3, 4 and 6 by Horelli, Wallin, Jarenko and Saad-Sulonen).

My interest in walking in cities derives from the scholarly literature where walking is understood as a practice that produces particular relationships with the environment (cf. Ingold, 2000, 2011; Solnit, 2000). As Pinder (2011) summarizes it, walking is often discussed as a practice of sensing and learning about spaces, discovering and transforming the city, mutually constituting bodies and landscapes and constructing meanings in human-environment relationships (see also Middleton, 2010). In the fields of urban planning and design, it has been argued that walking and the walkability of a city enliven urban public space, increase social interactions; they are also said to enhance communities as well as help sustain the pleasures of living in cities (see e.g. Gehl, 2010; Forsyth et al., 2009). Walking has a rather constitutive role in our lives – it is an everyday practice shared by many. However, despite its prevalent nature, looking at the environment through walking highlights particular aspects of place. The picture would be different if the focus of research were, for example, the practice of driving a car or the image of Herttoniemi as constructed in the newspapers or in popular music.

In this chapter, I will take a perspective that focuses on the processes of shaping the environment and people in their *interactions.* Thus, I am interested in a walker's active engagements with the environment and with other people, engagements that construct place meanings and also

influence the environment directly. People are adapting their activities to the physical and socio-cultural context and at the same time they are shaping the conditions and context for their action by material and discursive acts (cf. Gottdiener, 1994). This approach is influenced by the vast literature in different academic fields that shares the premise that environments and places, including their individual and collective meanings, are actively constructed in the concrete practices of everyday life.

Meaning-making is understood as part of the inseparable processes of acting in and perceiving an environment (Ingold 2000). For Ingold, perceiving the environment is fundamentally about movement (Ingold, 2011, 11). He has derived this understanding from the ecological psychology that James Gibson (1979) developed as a reaction against the cognitivism and Cartesian premises of mainstream psychology (Ingold, 2000, 2011). The elementary assumption of Gibson's approach is that it is the whole organism – not only a mind in a body – that perceives as it moves about in its environment. What it perceives are 'affordances' – possibilities for the pursuance of its current activity. Meanings of the environment and actions are drawn from these productive engagements. Ingold argues that it is not enough to set the perceiver and the point of observation in motion; we also need a different understanding of movement and time as constitutives of the environment. Perception is "not a casting about the hard surfaces of a world in which everything is already laid out, but an issuing along with things in the very processes of their generation; not the *trans-port* (carrying across) of completed being, but the *pro-duction* (bringing forth) of perpetual becoming (Ingold, 2011, 12)". Places and their meanings are developed and shaped in the course of time. In this vein, Ingold (2011) stresses that people and their activities not only shape the environment and its meanings, but are also embedded in a constant process of movement involving common processes of change.

The research material presented here consists of interviews with suburban neighbourhood residents of Herttoniemi and Roihuvuori. Seven interviews were taken with eight subjects (one interview was conducted with a couple) in winter 2010. The Roihuvuori neighbourhood is officially part of the Herttoniemi neighbourhood area, but it also has its own character and a small local centre with neighbourhood services. Five of the research participants lived in Herttoniemi and three in Roihuvuori. They were of different ages but only two of them were of working age (a man approximately 20 years old, and a woman about 50 years old). One

interviewee was 15 years old and the remainder (five) of them of retirement age. None of the interviewees regularly drove a car.

The walking- or 'go-along' interview method (Jokinen et al., 2010; Kusenbach, 2003) was used for data gathering.[1] This method is based on semi-structured interviews which are conducted while walking together with the interviewees, who guide the walk through their daily routes. In addition, interviewers accompanied one excursion of a 'walking club', a self-organised group of elderly people in Herttoniemi. Three interviewees participated in the walking club regularly.

Sensing the environment and encountering other people in the routines of walking

> *I'm continuously looking for the natural space in the city. That I would be in nature whenever I can* (Seija, woman, about 50 years, Roihuvuori)
>
> The interviewer: *What is the thing that brings you here?*
>
> *Nature. Nature, trees and animals. Although I'm a totally urban person... But also when I was living in Eira (neighbourhood), nature was close there too. And one thing is clean air.* (Sinikka, woman, about 70 years, Herttoniemenranta)

Walking affords a rich array of encounters with the social, material and natural environments where the meanings of place are constructed. A relationship with nature plays an important part in the interviewees' descriptions of their walking habits. Participants speak about the experiences that the constantly changing environment offers to the senses particularly given the turning of seasons. They pay attention to the growing and fading vegetation, the colours of the leaves in the trees, and whether there are flowers, berries or mushrooms in their usual places. They sometimes plan their routes specifically so as to be able to check such changes in the environment or to avoid difficult paths due to inclement weather.

> *Here, I always use this path. As long as there is no water here ... Now, I don't know what we'll find ... Yes... This [ice] should carry us. As I recall, in certain seasons the water rises here and the path is unusable. I often stop at these open spots in the landscape. I examine the landscape once again. I like these reeds, especially now (frosted over) when they look so decorative.* (Seija, woman, about 50 years, Roihuvuori)

[1] The interviews were conducted by myself with the help of Aleksi Karhula, whom I would like to thank for his contribution to this study.

The narratives highlight the knowledge people have of their place – knowledge which can only be achieved by continuous interaction with the environment. Manzo (2005) highlights the role of repeated use of places in the process of developing meaning. She found that it enabled her research participants to engage in a variety of experiences and to develop layers of meanings and multi-faceted relationships with specific places. The concept of *dwelling* emphasizes the fact that a person can orientate her/himself in an environment, identify with it and experience the environment as meaningful. Dwelling is a process of continuous attentive engagement with the environment, where the world is progressively revealed and the environment becomes known, familiar and meaningful (Ingold, 2000). Knowing a place through everyday use, making it a mundane and routine part of everyday life, can also intensify (rather than dilute) the wealth of surprises and discoveries that the natural environment affords the walker. This is because knowing a place means that one has an ability to distinguish the unexpected and extraordinary from the routine.

> *I can always find something new and exciting there. (...) I love surprises. I just go out of the door and then decide on a route (...) and I can find tadpoles or something (...) It's the joy of discoveries (...) once I found a wild honeysuckle by noticing the scent first.* (Woman, about 75 years, Roihuvuori)

Encounters that happen while walking are, of course, also social by nature. Sociability and seeking social contacts, sometimes relatively anonymously, play an important role in the walks of the interviewees. Helvi (woman, about 75, Roihuvuori) appreciates the possibilities to accidentally meet people on her walks. For her, (seemingly) accidental social encounters have developed into acquaintances through repetition, as she had regularly been walking the same routes to the senior citizens' day center and to local services.

> *I have made friends since moving here (...) I didn't have so many before. Of course I got along with people but anyway. Maybe I was ready for that myself too. And I began to feel at home here and I believe I'd miss everything if I had to move away (...) I think I'm a bit of a loner, I enjoy being alone too, but, anyway, it's lovely, that you can stop and start a chat, or at least say hello and ask how life is and wish people a good day.* (Helvi, woman, about 75 years, Roihuvuori)

These encounters and their repetitions are sometimes tactically planned or managed. The purposeful tactics of seeking or avoiding social encounters is also based on a familiarity with the environment, that is, on knowing the (social) rhythms of a place. According to Kärrholm, "[t]he urban landscape is a place of heterogeneous temporalities and rhythms set by clock time,

working hours, seasons, timetables, bodily functions, etc." (Kärrholm, 2009, 423.) Collective rhythms can be understood as a periodic synchronization of the activities of different people (Szerszynski, 2002), in other words, the simultaneous participation of many people in timetabled routines (Edensor, 2010, 10). In a multi-rhythmic environment, certain encounters may become frequent and stabilize through synchronization and regularity. Synchronization produces shape and rhythmic regularity when people following the same rhythms meet in occasional encounters on their walks. Individuals can also intentionally create this kind of synchrony. An interviewee in Herttoniemi says:

> *Yes, I often run into one particular person. And then they always say,"you are an early bird this morning!" and I answer, "so are you". But if I go for a walk in the morning I seldom meet anyone. I am more likely to bump into people if I time my shopping for the afternoon.* (Sinikka, Woman, about 70 years, Herttoniemenranta)

An older couple describes their encounters:

> *It depends a little... if we go for a walk before noon, we seldom meet anyone. The same passers-by. We have begun to say hello to some people we encounter regularly.* (Kerttu and Matti, a couple, about 70 years, Herttoniemenranta)

One interviewee, Pauli (a 20-year-old man, recently moved out of Western Herttoniemi), describes the young people's habit of hanging-about in Herttoniemi. They know the rhythms of this collective activity and know how to bump up into each other without making appointments. They use synchronization and walking to produce encounters, which are simultaneously accidental and purposeful.

In their routinized walking habits, interviewees synchronize their time and activities with the collective rhythms of the city and, in doing so, they negotiate the times-pace in terms of what kinds of encounters and social interactions they see as favorable or those to be avoided and with whom they want to share the place in their walks. Some appreciate experiences of privacy, anonymity and solitude – appropriation of the timespace or lifeworld of walking for themselves, while others enjoy the sociability of walking. This depends, among other things, on the life-stage and situation of the interviewee – whether everyday life is filled with social contacts and responsibilities or is quiet. When we synchronize our routines with others, we also shape our encounters and relationships with other people and we produce collectively shared places or places appropriated for ourselves (Edensor 2010, 10; Szerszynski, 2002).

The meanings associated with walking and the environment are individual, because they are strongly connected to the situational activities and individual intentions of walkers. Still, people who live in a shared environment and whose activities are part of same cultural practices, also share meanings. The interviewees described how they encounter other people on their walks and how they walk with others. They also reflected on themselves as walkers and their experiences of the environment in relation to other individuals and groups. Thus, walking is a social practice and the meanings constructed in walking practices are largely inter-subjective. According to Stokowski (2002, 372), creating a sense of place can be understood as a social task, not merely an individual one. As she states: "While any individual can use their imagination to create a personal sense of place, much of what a person knows about places, or feels about places, or does in places, is initially mediated by others" (Stokowski, 2002, 372).

Constructing the meanings of place on the path of life

The previous section showed how an environment becomes known and meaningful in the everyday practices of walking. Through examining routines and their timescales, it became apparent that the variations in the rhythms of natural and social environments are significant in the experiences of walkers. Walkers also use and manage these time-spaces to produce particular experiences. In this section I will proceed to the longer time horizon of walking practices. This will highlight how experiences of an environment and its temporal variations intermingle with memories of other places and with future expectations, and how they help organise the timescale of an individual's life course or, to draw on the walking metaphor used in Finnish, the life path.

In the interviews, the events and descriptions of walking are often contextualized in biographical stories. For instance Pauli, a 20-year old boy, who grew up in Western Herttoniemi and recently moved elsewhere, describes his childhood and youth activities, which were largely about moving around on foot – playing, adventuring and hanging about. His interview forms a narrative of attachment to place in a nostalgic description of the uniqueness of the place and the strong influence it has had on his life. His daily routines of living in that place of childhood are fading and weakening now as he is at the threshold of adulthood. However, the meanings of place and his ties to it still exist.

And we still call up to ask friends, if they want to go for a walk, for example to sleep better. Or something. Usually in the evenings. We meet with friends and go for a walk. And it is also...because we know that Hertsika [neighbouhood] is so much better than those other suburban neighbourhoods. It is not only that we were born here and are proud of it, but also we are aware of how great a place Herttoniemi is, and that brings us here for those walks.

The interviewer*: Did you see Herttoniemi as such a nice place already then, when you were younger?*

Yes, yes, we've always been aware of it. That is why I call this place (Western Herttoniemi), "Utopia" nowadays. (...) Yes, we did know that there was something very special about this place... very special... (Pauli, man, 22 years, Western Herttoniemi)

Belonging to a place(s) may be a lifelong process and the meanings of different places are also layered in a person's memory and on a life path. This layering is shown in the ways that walking in the present living environment also awakens memories of and longings for the past places. Sinikka, for example, describes her favorite path in Herttoniemi, where its narrowness and its bushes and roses remind her of the place where she lived at a young age in Eira (neighbourhood), which was built at the turn of the 20th century. For Helvi (woman, about 75, Roihuvuori), memories of other places are awakened by certain weather conditions and seasons. Seija (woman, about 50 years) describes the experience of suddenly feeling the presence of another significant place while walking in Roihuvuori:

[I walk] more in the summer... And then in those limpid (bright, a bit chilly) autumn days I always long for my home in the countryside, I remember how we went to pick lingonberries. (Helvi, woman, about 75 years, Roihuvuori)

think about it (the forest she inherited from her mother) sometimes when I walk here too. That landscape there, the countryside, comes to mind. I don't necessarily want to be there at such moments but.... I think it comes to my mind because this, for a second, in some way resembles it (my mother's forest) (Seija, woman, about 50 year, Roihuvuori)

Rauha compares her current neighbourhood with her past living environment. This comparison expresses the feelings about place that she did not otherwise bring out:

Well, I can't say that I enjoy being here [a quite busy street on a way to shopping centre outside Herttoniemi] but I don't want to criticize... This is what it is.But of course it is always different to be in a real city.I have lived in city centre quite a long time (...) so, well... this is a bit (of a) fake... artificial city... yes. (Rauha, Woman, 65 years, Roihuvuori)

Belonging to a place is not just a nostalgic feeling that has evolved in a person's long history with a place This emerged in those interviews in which walking was contextualized in narratives about settling down in the neighbourhood, and establishing daily practices. Descriptions about belonging to a place are also future-oriented wishes; the interviewees had considered future possibilities for walking when choosing where to live. Some interviewees had actively tried to familiarize themselves with their, new neighbourhood

> *I have learned about the East (eastern Helsinki). Because this was all Greek (totally unfamiliar) to me.* (Kerttu, woman, about 70 years, Herttoniemenranta)

Interviewees sometimes recounted walking experiences in relation to putting down roots, that is, making a home in a specific place. The interviews suggest that actively moving around in the environment is seen as a way to affect one's own future. It relates to expectations and wishes of being fit and active at old age and of belonging to a place as a result of lively interactions with it. The motivation of the elderly to continue walking relates to a connection with the social and natural environment, particularly the sense of dwelling that walking supports. On the other hand, this connection constructs a meaningful and supportive framework for the practice of walking. A retired interviewee explains that she recently decided to move to Roihuvuori, because she was still fit and well enough to get to know the place on foot:

> *I don't have a family and of course I'm motivated to become attached to this place, to find my own places and to create bonds. I'm quite fit and healthy now, I'm sixty-five and I'm able to walk. So I can still learn the routes and... It's my goal that I should get out of the house when I'm old as well. Now there is still some flexibility... I don't want to end up living inside these four walls, as if that were my whole world (...) First it felt difficult even to get used to the local shop here. But now I like to go there. Actually the point at which this place started to be nice to my mind, was when the saleswoman said hello to me on the bus. That's when I thought, yes, I can put down roots here.* (Rauha, Woman, 65 years, Roihuvuori)

Transforming the place

Shaping place physically and temporally

The interviews point out that walking in everyday life is not a passive consumption of possibilities created by urban and transport planners (cf. de Certeau, 1984). The previous sections of this chapter have described, how the

meanings, shared rhythms and uses of places are constructed in walking practices and experiences that occur during the timescales of everyday routine and the life-path or life-course. Walkers not only shape their physical environment and the meanings of place, but they also produce their own temporalities and characteristics of time (Szerszynski, 2002). We use and manage time tactically for our own purposes, to open possibilities for different activities and experiences. As a result, walking has many indirect implications for neighbourhood life and the local environment.

Inhabitants' sensitivity to their living environment – its variations, changes, problems and potentials – may increase when the environment becomes familiar and meaningful through the routine practice of walking. The reciprocal relationship between a walker and their environment can be achieved through routine repetitive practices such as walking and may, again, lead to motivation and self-organised efforts to take care of and improve the environment. For example, the interviewees in Herttoniemi refer to the loss of nature and recreation areas due to planning interventions, and to the loss of local services. Rauha, an interviewee, was worried when she noticed a malodorous ditch draining close to a swimming beach on her walking route. Some interviewees also engaged in activities that concretely transformed their neighbourhoods and communities. Seija did this in a very concrete way; she related a habit of her so-called 'Litterwalks' in which she picked-up litter. She had started them after becoming annoyed by litter along her walking routes.

An example of the self-organisation of residents, which shapes the everyday social infrastructure and community of the elderly, is the local 'walking club'. Three of the interviewees participated in the meetings of this walking club, a group of elderly people who meet once a week to go on walks together, which help them maintain a regular walking habit. It creates a routine providing social support for walking and getting outdoors. Further, the company of other people creates a feeling of safety. The members gained satisfaction from the safe, social walks; they also experienced the gatherings as meaningful because the walks encouraged less physically fit members to get outdoors and be active.

Motivation to participate and finding (fragments of) common ground

Neighbourhood places are transformed in planning and governance processes in which individuals can participate on a variety of levels. The

perceived qualities and meanings of a specific environment can play a critical role in the process. Manzo & Perkins (2006) argue that our thoughts, feelings and beliefs about our local community and our behaviours toward specific places, influence whether and how we might participate in local planning efforts. Pauli's narrative of belonging, including his understanding of his identity and sense of place in Herttoniemi, is a very good example of how such factors influence participation. He describes the qualities of Herttoniemi and how living there has affected his personal growth, values, ways of life and motivation to participate in political action.

> (Near the outdoor recreation area) The interviewer: *What does this kind of natural environment mean to you?*
>
> *Pretty much everything. (...) hmm... Nature is...I notice it in myself that... it has been such a big part of my life. So, in situations when I need to calm down, or to collect myself, or to cheer up... then Hertsika offers that kind of experience, and especially because there is this kind of natural environment in Herttoniemi. It was for this that I went to the demo in Copenhagen (during the Copenhagen Climate Change Conference in 2009) recently.*
>
> The interviewer: *What do you mean by saying that ... how do you mean that this place has motivated you to take part in that kind of action?*
>
> *Yes, well, I mean valuing nature and communality, the aspects that I see as very important in society, they originate from here. I have lived in the middle of those things and therefore I would like to spread it to others too... I have seen that it works.*
>
> The interviewer: *Have you followed the things that happen here in the neighbourhood, planning issues and such?*
>
> *Yes, recently in the residents' association, and before that, I followed the planning of natural areas here, very close (to) where we are now. They have been threatened... because the nature here is so amazing. And some kind of state apparatus would like to utilize it and allocate it for private use... So there have always been many counter-movements, when the city wants to sell them to build some grand apartments... Those I have been involved in.* (Pauli, man, 20 years, grew up in Western Herttoniemi)

In his case, motivation to take care of the environment spills over geographical boundaries. This is in accordance with the concept of place based on interactions and movement introduced by Ingold (2011).

What then could planners learn about the way place identity in Herttoniemi is formed and about how people are motivated to take care of their environment there? What kind of sense of place should planners here acknowledge and how could their efforts enhance it? The interviews indicated that for many people the experience of living close to nature and

having a sense of community are the most distinctive and characteristic features of the neighbourhood. The interviews clearly demonstrated qualities that Jackson (1994, 158) associates with a sense of place; a lively awareness of a familiar environment, fleeting experiences of well-being and a change-of-mood on the one hand, and repetition and continuity on the other. As Jackson argues, the basis for a sense of place is not only a beautiful natural setting or well-designed architecture: "sense of place, a sense of being at home in a town or city, grows as we become accustomed to it and learn to know its peculiarities. (...) (A sense of place) is something that we ourselves create in the course of time. It is the result of habit or custom" (Jackson, 1994, 151).

People imbue a place with its distinctive character and meanings in relation to and through interaction with other communities and places. People make comparisons between places (Kuusisto-Arponen, 2003, 53–54), as does Pauli in his discussion concerning walking and hanging about in the area:

> *This is, again, such a pleasing environment to walk.*
>
> The interviewer: *How about the areas of Herttoniemenranta and Roihuvuori, did you go there too?*
>
> *Yes, we did, but in contrast to Western Herttoniemi, we referred to Herttoniemenranta as concrete hell because it wasn't so interesting and (...) many of my friends lived there but usually they came to western Herttoniemi (...) All the best places to hang about were here [in older parts of Herttoniemi] Young people want to hang about in places where they might possibly meet each other, but without calling each other... they just got together... When I was young, the usual place to go was the railway station [in the city centre], but we didn't need to go there because we had our own, much nicer, places here. And those kind of places did not exist in Herttoniemenranta* (Pauli, man,20 years, grew up in Western Herttoniemi)

Not all the interviewees, of course, shared the experience of Herttoniemenranta as a mere concrete hell. On the contrary, the interviewees' descriptions of the same places varied. The neighbourhood is not one, solid place but composed of a multitude of unique and personal experiences and meanings. Different parts of Herttoniemi (Herttoniemenranta, Western Herttoniemi, Roihuvuori) have their own histories and physical and social characteristics and the interviewees also recognized the differences between these places.

Gustafson found that his respondents' attributed meaning to places by distinction. This implies that a meaningful place is an identifiable, distinguishable territorial unit achieved by drawing boundaries,

categorizing and ascribing similarities and differences (Gustafson, 2000). The interviews conducted for this study illustrate how identifying and categorizing places with a distinctive characteristics often means also defining and categorizing their inhabitants and users ('"others"'). Pauli seems to identify himself as part of a unified community of Herttoniemi. In contrast, Seija, Sinikka and Kerttu, in the citations below, reflect on how inhabitants can see the place and community as socially diverse. Identifying and constructing socio-spatial divisions is akin to drawing boundaries that separate those who belong to a place and a community from those who do not belong (cf. Kuusisto-Arponen, 2003, 53).

> *"We have all the social classes in Roihuvuori (...) [the neighbouring areas of] Tammisalo and Marjaniemi, they are, well... quite bourgeois. And because I do not have that kind of background, I don't really enjoy the atmosphere there. (...) And it [old, western Herttoniemi] pretends to be nice but then, there is some mystical reason why it is not. I don't feel safe there. That place is lacking soul or spirit... weird.* (Seija, woman, about 50 years, Roihuvuori)

> *[about the industrial area in Herttoniemi]But we don't walk much there and there (are) quite many homeless people and alcoholics. But those people seldom come here.* (Sinikka, woman, about 70 years, Herttoniemenranta)

> *It is that messy street... the houses are social housing... and there are rubbish bins on the street and they are always full.* (Kerttu, woman, about 70 years, Herttoniemenranta)

An elderly couple, Kerttu and Matti, actively controlled the boundary between the inhabitants and strangers entering their private space. They tried to restrict the passage of passers-by and teenagers hanging about in their yard. They explained that some of the older residents of the house were frightened of going out when the teenagers were gathered there.

> *Because it [the athmosphere in the yard] is quite restless then. We eat and play cards and have parties and barbecue in the yard, and it is not nice if someone walks through it. But we admit that it looks like a street or path.* (Kerttu, woman, about 70 years, Herttoniemenranta)

According to Kuusisto-Arponen (2003, 54) a sense of belonging to a specific socio-spatial unit also serves to increase security, similarity and ownership. The interviews demonstrate that meanings of place are produced subjectively within social groups and encounters, including conflicts. (Kuusisto-Arponen, 2003; Gustafson, 2001) Gustafson adds that the uniqueness of a place may even arise from conflicts and controversies. Pauli states that in Western Herttoniemi:

Those rocks there [near the metro station of western Herttoniemi], they were called 'drugwood'... and well... inhabitants experienced it as a scary place. But inhabitants and the city cleared the place up together and now that it's more open, those problems aren't so bad any more

The interviewer: *did you experience it as a scary place yourself?*

No. As a matter of fact, young people felt some kind of sense of it being our place... because we felt kind of cool having that kind of problematic drug area nearby but where, so far at least nothing scary has happened to us. (Pauli, man, 20 years, Western Herttoniemi)

A positive sense of place and community can be based on the sharing of neighborhood environments such as the streets and paths of everyday life's routine activities, for example walking (cf. Jackson 1994). As Lewis Mumford professed: "Now, the great function of city is.... to permit, indeed to encourage and incite the greatest possible number of meetings, encounters, challenges between all persons, classes and groups". (cited in Goldberger 2009, 233).

Conclusions

What kind of experiences and meanings of place relate to and emerge out of the interviewees' practices of walking in Herttoniemi? How are those meanings constructed at different timescales? And how do the practices of walking relate to the shaping of the local environment? To contribute to the discussion on these issues, I will conclude by considering the potentials and challenges of the results of my research, as they relate to forming neighbourhood-level participatory practices and self-organisation.

Experiences and meanings produced in interactions

The interviews demonstrated that sensing the environment and encountering other people are a significant part of the interviewees' walking routines. The analysis increased understanding about how walkers interact with their local environment and other people and shape their socio-material environment. Further, they show that the interviewees are self-reflective, and aware of how their lives are influenced and shaped by their walking practices. Their activities and experiences occur in different timescales, ranging from a fleeting moment to a daily routine and an entire life path. Figure 5.1. illustrates the actors and timescales of the practices of walking, and shows how they construct reciprocal relationships between people and their environment.

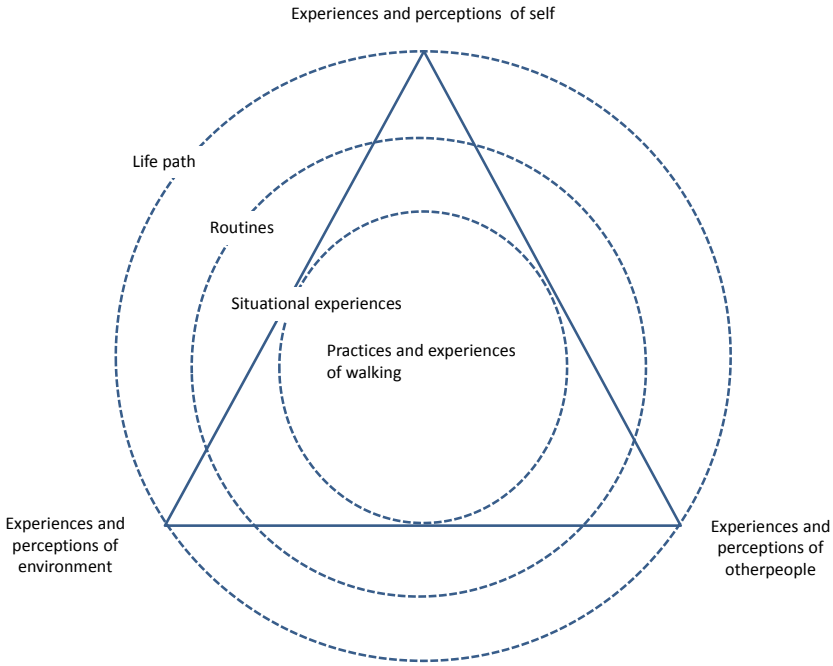


Figure 5.1. Shaping the understandings and construction of the environment, self and others in walking practices (cf. similar conceptualisation by Gustafson 2001, 10[2].)

This chapter followed the lines of this triangle examining the connections between the three actors (represented at the corners) from the perspective of the walker. This chapter has only begun to explore the complex possibilities that these relationships may entail, but the framework formulated and presented in Figure 5.1 offers a frame to guide future exploration. All aspects of the triangle must be understood and interpreted in relation to the others. For example, experiences of self and self-reflection in the context of walking in relation to other people, and in relation to the lived-in environment, offer one interesting focus for analysis. Further consideration will help formulate relevant research questions concerning the processes, dynamics and temporalities of meaning-making in the environment.

[2] Gustafson (2001) found the same broad themes (self, the environment, other people) useful for classifying the various meanings of place. He classifies the place meanings as being related to self, others or the environment and also noticed that they are often situated in relationships between those elements. The analysis in this chapter concentrated mainly on the relationships between the three actors and added the various timescales in the picture.

The timescales of fleeting experiences, routines and life paths

Gustafson's (2001) interviewees tried to 'feel at home' and make places 'their own' by forging social relations, by acquiring knowledge about a place and physically shaping it. In this study, interviews additionally demonstrated how this relationship building takes place at different timescales (for more detail, see Figure 5.2). Figure 5.2 describes how the environment becomes known and meaningful in multiple, intermingling and overlapping timescales. Fleeting, meaningful moments turn into familiarity with the lived-in environment. This can only be achieved by continuous, repetitious activities and interactions. The variations and daily rhythms of the both non-human and social environment are experienced at the timescale of routines. Knowing the environment and its rhythms also allows walkers to actively manage or plan their situational encounters and experiences. Learning to know one's environment also connects the experiences of walking to the timescale of an individual's life path.

	Individual subjective experiences and meanings	**Collective and inter-subjective constructions of meanings of place**
Short-time horizon		
Moments	Fleeting and situational experiences Experiencing rhythmical variation in the environment	Encounters, sharing places,
Repetition, routines	Familiarity with the lived-in environment, knowing its cyclical variation and conditions, its rhythms of activities and social interactions	Synchronization of rhythms Categorizations of places and their inhabitants
Life path, biographies	Creating ties to the living environment Memories and wishes (of places) Sense of belonging	Inter-subjectively produced and shared knowledge of the environment Layered meanings, sense of place
Long-time horizon		

Figure 5.2. Construction of experiences and meanings of place in different timescales

Concerning the exploration of the interaction between a person and her/his material and social environment through their routine practice of

walking, this study supports Ingold's fascinating ideas. With reference to Doreen Massey's work (2005), Ingold writes: "Both of us [Ingold and Massey] imagine a world of incessant movement and becoming, one that is never complete but continually under construction, woven from the countless lifelines of its manifold human and non-human constituents as they thread their ways through the tangle of relationships in which they are comprehensively enmeshed" (Ingold, 2011, 141). Importantly, the shaping of the environment is reciprocal – our activities and meaning-making are embedded in the rhythms and variations of the environment. The construction of meaning is not only a mental process, taking place in the minds of individuals, but also a process essentially intermingling with the environment's variations and with a walker's social interactions. Within the same processes, interactions between the walker, other people and the environment physically and temporally shape the places and the conditions of everyday life. The interviews thus highlight that routine walking is not a passive consumption of possibilities created by urban and transport planners (cf. de Certeau, 1984).

Walking in the neighbourhood and its implications for participatory practices and self-organisation

If we now change viewpoint to consider the implications of these findings for urban planning and participatory practices, it seems crucial to highlight three points. Firstly, the challenge to urban design and planning is to create places that allow and invite active interaction with the environment, reflection on the environment and learning about its diversity and variation; this applies both to the non-human and the social environment.

Secondly, when sense of place and place identity are taken as starting points for planning interventions in well established neighbourhoods, this should be understood as appreciating what the inhabitants have learned through their everyday practices. Local people themselves inter-subjectively create a sense of place in shared places according to practices and rhythms. It is not something that architects and planners can find, let alone, create by themselves only (cf. Jackson 1994, 151).

My third point concerns the challenges of finding the common ground where the question what the neighbourhood might mean to different people can be negotiated as part of the planning process. The interviews indicate that a neighbourhood cannot be thought of as solid but more accurately as multi-faceted and diverse. However, despite the challenge of this diversity,

or in fact because of this diversity, it is crucial to find common ground, taking into account the needs and experiences also of those people who do not actively engage in the participatory processes, in order for the future of a given place to be fruitfully debated and well planned. Discussions in which people are able to share, communicate and negotiate meanings of places can usefully be based on the shared practices of everyday life. Consensus-building efforts and attempts to create mutual understandings between inhabitants and planners, or between different interest groups, should not be limited to negotiations and meetings that are unconnected from the everyday practices and environments of a neighbourhood. They should literally be taken into the streets. As emphasized in other chapters in this book (Saad-Sulonen, Horelli), planning can also entail acting together on a concrete task. In addition, the information used in planning could also be produced together. Residents, planners, architects and other stakeholders could produce knowledge of the environment, which is targeted by planning interventions, together. This could happen, for instance, through walking together in the neighbourhood. It is the everyday practices such as walking, and not just surveys, statistical data or even formal meetings among stakeholders, that are most likely to function as a common, shared method of learning about a place. People know their own environment, its variations and rhythms. This knowledge-base and potential should not be overlooked.

References

de Certeau, M. (1984). The practice of everyday life. Berkeley: University of California Press.Edensor, T. (Ed.) (2010). Geographies of rhythm: Nature, place, mobilities and bodies. Farnham: Ashgate.

Forsyth, A.; Krizek, K. J.; Rodriguez, D. A. (2009). Non-motorised travel research and contemporary planning initiatives (Hot, congested, crowded and diverse: Emerging research agendas in planning). *Progress in Planning 71,* 153–205.

Gehl, J. (2010). Cities for people. Covelo, CA, USA: Island Press. Gibson, J. J. (1979). The Ecological Approach to Visual Perception. Boston: Houghton Mifflin.

Goldberger, P. (2009). Why architecture matters. New Haven & London: Yale University press.

Gottdiener, M. (1994). The Social Production of Urban Space. Austin, TX: University of Texas Press.

Gustafson, P. (2001). Meanings of place: Everyday experience and theoretical conceptualizations. *Journal of environmental psychology* 21, 5–16.

Ingold, T. (2000). The perception of the environment: essays on livelihood, dwelling and skill. London: Routledge.

Ingold, T. (2011). Being alive. Essays on movement, knowledge and description. London: Routledge.

Jackson, J. B. (1994). A sense of place, a sense of time. New haven and London: Yale University Press.

Jokinen, A., Asikainen, E. & Mäkinen, K. (2010). Kävelyhaastattelu tapaustutkimuksen menetelmänä (Walking interview method in case study re-search). *Sosiologia*, 47 (4), 255–269.

Kusenbach, M. (2003). Street phenomenology. The go-along as ethnographic research tool. *Ethnography* 4(3), 455–485.

Kuusisto-Arponen, A. (2003). *Our places – Their spaces. Urban territoriality in the Northern Irish conflict.* Academic dissertation. Tampere: University of Tampere

Kärrholm, M. (2009). To the rhythm of shopping – on synchronization in urban landscapes of consumption. *Social & Cultural Geography,* 10(4), 421–439.

Manzo, L. C. (2005). For better or worse: Exploring multiple dimensions of place meaning. *Journal of environmental psychology*, 25 , 67–86.

Manzo, L. C. & Perkins, D. D. (2006). Finding Common Ground: The Importance of Place Attachment to Community Participation and Planning. *Journal of Planning Literature,* 20, 335–350.

Massey, D. (2005). For Space. London: SAGE.

Middleton, J. (2010). Sense and the city: exploring the embodied geographies of urban walking. *Social & Cultural Geography,* 11(6), 575–596.

Pinder, D. (2011). Errant paths: the poetics and politics of walking. *Environment and Planning D: Society and Space,* 29, 672–692.

Solnit, R. (2000). Wanderlust: A history of walking. New York: Penguin.Stokowski, P. A. (2002). Languages of place and discourses of power: Constructing new senses of place. *Journal of leisure research,* **34(4),368–382.**

Szerszynski, B. (2002). Wild times and domesticated times: The temporalities of environmental lifestyles and politic. *Landscape and Urban Planning,* 61, 181–191

PART IV
MEETING THE DIGITAL AGE

6 Multiple Participations

Joanna Saad-Sulonen

Introduction

The development of Information and Communication Technologies (ICTs) is seen as providing a window of opportunity for citizen participation in urban planning. Much of the discussion and reflection on this phenomenon is currently taking place in the area of e-planning. These debates are influenced by research and practice in the fields related to e-participation and e-government as well as Public Participation Geographic Information Systems (PPGIS). However, in most cases, for example those reported in the Handbook of Research on E-planning, urban planning is still addressed in a traditional way, which is planner and process-centred. Furthermore, participation is also understood as it conventionally has been in the context of urban planning, as *"staged participation"* in the form of consultation or collaborative activities (Saad-Sulonen, forthcoming). In consultation, citizens are asked for feedback on particular issues, whether in public hearings or via online consultations. The feedback is then taken into consideration – or not – by municipal authorities and planners. In the case of collaborative activities, various stakeholders are brought together in a communicative exchange, using different tools and techniques orchestrated by the planner (Horelli, 2002). The main aim of such staged participation has been to produce plans that reflect a common understanding and a resolution of disagreements, with the planner acting as key facilitator (Healey, 1997).

Boonstra & Boelens (2011) refer to staged participation as being initiated from the inside-out, meaning from inside governmental institutions. As a counterpart, they propose the concept of *self-organisation* to refer to participation from the outside-in, where citizen-led initiatives that take place outside the formal processes of urban planning are recognized. They borrow the concept from complexity theory, where self-organisation is seen as an emergent property of complex adaptive systems, and adapt it to urban planning in the following manner: self-organisation refers to "initiatives that originate in civil society from autonomous community "based networks of citizens, who are part of the urban system but independent of government procedures." (Boonstra & Boelens, 2011, p. 113). The Palco research group has been a forerunner in positioning citizen and community-driven activities as part of the general discussion and reflection on participation in urban planning, thus making connections between traditional staged participation and participation as self-organisation (Wallin & Horelli, 2010; Chapters 2 and 3 in this book). This has resulted in an expanded understanding of urban planning that includes community development and local governance (Wallin & Horelli, 2010). Moreover, by acknowledging self-organisation as a type of participation in urban planning, it has been possible to step beyond the currently typical focus of the e-planning debate on the use of official and professional tools, such as online questionnaires and polls, or Web-based GIS, and to include the mundane, everyday technology that is within the reach of individuals and communities (Saad-Sulonen & Horelli, 2010, Wallin, 2013). Lately, the boom in social media and Web 2.0 applications – many of which enabling locative media production and sharing – has further expanded the array of tools available for everyday use by non-experts.

In this chapter I want to go one step further and draw attention to the role of *participation in the design of digital technology*, which is an aspect of participation that has mostly been neglected in the e-planning and urban planning discourses (Saad-Sulonen, forthcoming). The aim of the chapter is to expand the book's argument for new approaches to urban planning, so that it also addresses some of the challenges of the emerging digital age. Aspects of participation that deal with the design of digital technology are already slowly filtering in our everyday lives. For example, Web 2.0 and social media technologies offer a certain amount of flexibility – albeit often far from enough – for users to adapt them to their own needs and to create connections between them. However, in order to fully operate with 'the digital' and be in control of digital technology, it is necessary to understand

participation in the design of digital technology and the potentials it represents for e-planning and urban planning. Moreover, a review of the different meanings of participation in the design of digital technology provides anchor points that help situate research undertaken in the fields of Information Technology (IT) and Human Computer Interaction (HCI) in relation to the discourse on participation in e-planning. There is a growing repertoire of IT/HCI research that deals with digitally mediated participation in the urban context, but it has not yet been integrated into the discussions and reflections on participation in the fields of e-planning and urban planning[1].

The research questions I ask are:

1. What are the different types of participation in the design of digital technology?
2. How do they relate to types of participation in urban planning?
3. In what ways do the different types of participation and the relationships between them inform the definition of participatory e-planning?

I will first look at different approaches within the fields of IT and HCI design to participation in the design of digital technology, as well as at more recent concepts associated with participation in the digital age. This will allow me to identify the different types of participation in the design of digital technology, and place them in relationship to the types of participation in urban planning. Then, based on the types of participation identified, I will analyse examples of research from the e-planning and IT/HCI literature that deals with participation, urban planning and the design of digital technology. I will then use a *matrix of multiple participations* to map out the analysed literature. I will conclude with a discussion of the mapping analysis, which shows that there are different combinations of types of participation in digital technology design and urban planning currently in use. I will also highlight some of the concepts associated with the types of participation identified as they provide stepping-stones towards a shared vocabulary and a more holistic understanding of participation in the digital age.

[1] A concrete example of this disciplinary division can be seen with the almost simultaneous publication of the Handbook of Research on E-planning (Silva, 2010) on the one hand, and on the other, the Handbook of Research on Urban Informatics (Foth, 2009) and another compilation of articles entitled "From social butterfly to engaged citizen" (Foth et al., 2011).

Participation in the design of digital technologies

The way participation has been incorporated in the design of digital technology reflects changes that have occurred from when the first computers were introduced into the workplace up to the current 'digital age' of ubiquitous computing. The object of design itself has also changed. What one might consider as the "modelling clay" of information technology has – for a long time – been limited to software code, whilst programming and developing has been done by computer engineers and enthusiasts who master this language. However, information technology related activities soon began to include the design of user interfaces and interaction, as well as the design of the whole experience related to interacting with technology.

The main view within mainstream commercial information technology development has been that technology is designed by programmers and developers; in other words by experts. It is then introduced into the site of use as a 'ready-to-use' package, or at least this is the intention. There is thus a clear separation between development and use, both in terms of where these two activities happen and who the actors involved in each stage are. The success of the personal computer (PC) and its evolution into a commodity and mass-market technology in the 1980s eventually encouraged this division. Shrink-wrapped software and the subsequent need for an easy-to-grasp graphical user interface (GUI) that hid away the complexity of the code strengthened the division even further. By interacting with computers through a visual interface and not via the code itself, interaction became easier but casual users became further and further estranged from the way computers work. This reduced these users' control over the technology they were using.

However, there have always been movements that have explicitly voiced the need for user participation in the design of technology. COBOL (Common Business-Oriented Language), first specified in 1959, was designed with an English-like syntax in order to permit non-specialists to program computers (Schneiderman, 1985). This vision was finally realized with the emergence of spreadsheets, starting from VisiCalc on the Apple II twenty years later, through Lotus 1-2-3 to today's ubiquitous Microsoft Excel. The 1970s and 80s also witnessed some interest in end-user programming and gave rise to the view that users could further adapt information technology if they were provided with easier programming languages (Martin, 1982). Finally, it is also important to mention the free and

open source software (F/OSS) movement, which emerged from the hacker culture of the 1970's, and in particular Richard Stallman's GNU manifesto of 1985 (Stallman, 1993), where he envisioned a world where the division between users and programmers disappears as users modify the code they are using and contribute it back to the community.

Alongside these developments, research on participation was also carried out. And, as with participation in urban planning, participation in the design of technology has been integrated in activities *staged* by designers. The aim of staged activities is to inform the design of the technology. However, there are movements that have also viewed staged participation as a means to inform use and change in the context of use. Thus, participation can also refer to *design-in-use,* where users take part in design activities during use.

Staged participation

Going back to the 1970s, developments taking place in the fields of Information Technology (IT) and Information Systems (IS) design in Scandinavia attempted to find ways to bring future users into the early design and specification phases of projects. Their goal was a political and democratic one. IS projects in Norway, then Sweden and Denmark, were embedded within processes of change related to workplace democracy in industry and the introduction of new technologies (for a detailed historical overview (see Ehn & Kyng, 1987; Sundblad, 2009). These projects were collaborations between academics and trade unions. The Collective Resource (CR) approach that emerged was aimed at strengthening the resources of the trade unions for understanding and operating information systems, as contrasted with the pursuit of the management-friendly approaches to technology introduction that were prevalent at the time (Ehn & Kyng, 1987; Bjerknes & Bratteteig, 1995). The CR approach first gave birth to the Cooperative Design (Greenbaum & Kyng, 1991) approach. Later, as it moved beyond Scandinavia, it became the more pragmatic Participatory Design (PD; Schuler & Namioka; 1993).

A range of methods has since been devised as part of the key PD activities to engage the future users of a technology in its design. There has been a strong emphasis on enabling cooperation between designers and non-designers, with various artefacts or props being used for that purpose. Case-based prototypes, cardboard mock-ups, future workshops and scenario development are some examples of the methods and tools

devised for *staging* participatory activities (Sanders et al. 2010). In the early days of PD, the aim of the tools and methods of staged participation went beyond informing the design of the technology. It also included opening up possibilities for participants to discuss organisational issues in the workplace (Ehn & Kyng, 1987), participants being "those whose (working) lives will change as a consequence of the introduction of a computer application" (Törpel et al., 2009,14). Thus, the original goal of PD was primarily socio-political, and called for the development of greater workplace democracy by way of involving workers in the design of their future IT systems (Greenbaum & Kyng, 1991; Bjerknes & Bratteteig, 1995). Participation, in that sense, thus informs development, use and eventual change in the context of use.

Such a broad understanding of the role of participation is not necessarily present in more recent participatory approaches, such as the User Centred Design (UCD) approach (Botero, 2013). Whereas this latter approach shares participation tools and methods with PD, here the aim of engaging users in participatory activities, mostly before any development activities *per se* take place, is the limited one of informing the production of better, more efficient, or even more enjoyable systems, interfaces, interactions and experiences (e.g. Norman & Draper, 1986, 1997; Moggridge, 2007). The influence of usability studies is also strong in this area. The importance given to usability studies grew quickly as it answered the needs that emerged from the move from one-off systems tailored for one organisation to mass-market "off the shelf" ones with the emergence of the PC (Löwgren & Stolterman, 2007). Later, around the mid 1990s, HCI's "turn to design" expanded the participation of users from usability testing to engaging them in the design process itself (Kuutti, 2009). This involved various user-centred approaches including contextual design – which was inspired by ethnography (Beyer & Holtzblatt, 1997) – as well as PD). The role of participation in UCD has come to inform the design and development of a product so that it relates to user needs and preferences at the point of use. UCD is "non-political", contrary to the original Scandinavian PD approach. It has been particularly successful in adopting and adapting a range of participatory tools and methods to fit the needs of industry.

Participation as design-in-use

Approaches such as PD and UCD have been criticized, among other things, for limiting participation to the initial stages of design and focussing too

much on the role of the designer, while ignoring the whole system's lifecycle and the appropriations and development work that take place through use (Hartswood et al., 2000; Dittrich et al., 2002; Botero, 2013). However, already in the 1990s, there were voices within PD that addressed the question of what kind of design users engage in after the artefact reaches them, and how the initial design activities should support further adaptation through use (Henderson & Kyng, 1991). Henderson & Kyng's concept of "design in use" effectively expands design into the realm of situated use. It later became central to the discussion and reflection on design that happens *during* use and the implication this has on understanding participation beyond the technology design project narrowly conceived (Dittrich et al., 2002).

Participation through design-in-use is also the foundation of the end-user development (EUD) approach to system design. In fact, the end-user programming ideas of the 70s and 80s resurfaced as EUD during the first decade of the 2000s (Syrjänen & Kuutti, 2011). The aim of EUD is to "empower[...] end users to develop and adapt systems themselves", thus moving the focus from making systems "easy to use" to making them "easy to develop" (Lieberman et al., 2006, 1-2). With that goal in mind, EUD reintroduced the old idea of designing information technology that could be further developed by users with no background in programming. Much of the effort in EUD has so far been focussed on making programming more accessible, for example through visual programming, programming in natural languages or programming by example (Lieberman et al., 2006).

One specific criticism of EUD, and indeed HCI in general, has been that they focus on a single piece of software. This focus limits the understanding of use and design-in-use to the relationship between one or multiple users and one single technology. And yet the contemporary technological landscape, whether of a single person (Jung et al., 2008), an organisation (Suchman, 1994), communities (Wenger et al., 2009), or indeed the everyday environment in general (Greenfield, 2006), consists of a multitude of digital devices, systems and applications, which are often connected to one another via the actions of the user. Technology is no longer 'the single' technology that is thought of as 'the' solution or 'killer app', but rather becomes "hybrid systems composed of heterogeneous devices" (Suchman, 1994, 34) that come together in the form of information ecologies, where they are connected to people, practices and values (Nardi and O'Day, 2000). Rigid and highly structured infrastructures rarely support the formation of these ecologies. It is through local tailoring and adjustments by in-situ

actors that truly supporting infrastructures develop over time (Star & Ruhleder, 1996; Karasti & Syrjänen, 2004).

In sum, the concept of design-in-use *expands further to mean various activities related to handling the multitude of tools at hand:* configurations, customizations, adaptations, maintenance, reuse, even sometimes redesign through "artful integrations" and bricolage-type[2] activities (Buscher et al., 2001, Botero et al., 2010). With recent developments in new media, which lie where information technology, networked communication and media converge (Flew, 2008; Leinonen, 2010, 73), design-in-use has resurfaced in the context of everyday life. It now takes place in diverse activities, such as community activism and education (Wenger et al., 2009; Kalliala & Toikkanen, 2009). A growing array of Web 2.0 technologies is available online and accessible from within 'the cloud',[3] where it is possible to choose, configure, adapt and connect various different digital tools. Many of these second generation design-in-use, bricolage-type of activities – especially those related to connecting the various tools at hand – take place through media sharing and technical compatibility (Jung et al., 2008). Moreover, open Application Programming Interfaces (APIs) have made possible the creation of Web mash-ups, by providing the necessary connections to bring together media and data from different sources into one interface (Floyd et al., 2007). The design-in-use concept helps address the rapid changes related to operating with digital media and technology, and with them, the emergent "participatory culture" of the digital age (Jenkins, 2006; Fischer, 2011).

Finally, from the early concerns about end user programming, to the current web-based participatory culture, empowerment has been a key issue. Those with programming skills, such as hackers and free software activists, have stood up for free software code and the right to tinker with it. Additionally, other communities are aiming at empowering those without programming skills. The community informatics (CI) approach even addresses the concerns of those on the other side of the digital divide, with less easy access to digital technology altogether both at the

[2] The term bricolage, which is a French word that means tinkering, is associated in IS with the work of Claudio Ciborra. According to Ciborra (1992), IS design should not be a top down process, but rather, to reach innovation, it is important to tap into the grassroots hacking and tinkering activities of end-users in organisations. In its more general academic use, the term bricolage is strongly associated with French structuralist anthropologist Claude Levi-Strauss (1966).

[3] The cluster of networked computers that power the multitude of online services currently available (from Google's various services to YouTube) is referred to as 'the cloud'.

global level and within local communities[4] (Gurnstein, 2007). CI is driven by a democratic vision of technology for community development and aims at developing technologies that can be controlled by the communities who use them (Day, 2010). The commercial aspects of the current landscape of Web 2.0 and social media, as well as the uncertainties associated with the control of shared digital media have also brought these issues to surface again (Gurumurthy, 2012).

The matrix of multiple participations

The overview of participation in the design of digital technology given in the last section makes it possible to identify *four different types of participation in the design of digital technology*. Each type mediates a different kind of relationship between the *design/development* of technology and its *use*. In the first or the mainstream view of information technology design, no place is given for participation, and design and development are separate from use. In the second type, that is, in the case of staged participation in user-centred design, designers set up activities in which users are invited to participate. The aim of these staged participation activities is to inform the design and development of products so that they best fit the users' needs and preferences. In the third type, staged participation is a form of collaboration that informs future use and potential changes in the context of use, as well as informing design and development as such. The Scandinavian Participatory Design approach, especially in its initial 1970s flavour, offers a good example of the creation and use of participatory methods and techniques that were aimed at engaging future users (in that case, skilled workers) in the design of new workplace technology while at the same time addressing the issues of democracy at work. The fourth type, participation as design-in-use, involves engagement in the design of the technology at the time of and in the context of its use, and it thus blurs the boundaries between design and use. Recently the end-user development paradigm in IT and HCI design has brought back to the surface many of the aspirations of the end-user programming movements of the 1970s and 80s; these include the search for adaptable technology that could be designed to act as a toolkit for users rather than simply as commodity. However, the current technological landscape also allows for other ways

[4] CI has traditionally addressed rural and remote communities, but has lately opened up to explorations situated in urban contexts as well (Gurstein 2007), and triggered the development of new fields of practice and study, such as urban informatics (Foth, 2009).

of understanding design-in-use, which go beyond the focus on an isolated piece of software and acknowledge the reality of operating within an ecology of artefacts and tools. Thus, design-in-use includes bricolage-type of activities where choosing, configuring and adapting different technologies becomes important.

Table 6.1. Types of participation in the design of digital technology and their characteristics.

	Non-participation	***Staged participation: testing and feedback***	***Staged participation: collaboration***	***Participation as design-in-use***
Characteristics:				
Relationship: participation /design/use	*No participation, design ≠ use*	*Participation informs design*	*Participation informs design, use and context of use*	*Participation = design during use, in the context of use*
Roles	*Expert activity only*	*Experts (designers) invite users to test, give feedback, give ideas for product development*	*Experts and users collaborate at the specifications level*	*Users design (program, develop, choose, configure, connect) / Experts meta-design*
Theoretical or practical reference	*Main view on technology design*	*Usability, UCD*	*Scandinavian PD*	*EUD, current digital practices*

The different types of participation in the design of digital technology bear striking resemblances to the types of participation in urban planning outlined in the introduction. Non-participation reflects the so-called rational view of urban planning, which reserves the exercise of urban planning to professionals in the field: citizens are not invited to take part in any urban-planning-related activities, rather the planner acts on behalf of citizens as a mediating and neutral professional. Then, as with participation in the design of digital technology, participation in urban planning can also be staged. The staged activities can aim at a lower level of participation (consultation), or a higher one (collaboration and partnership). Finally, whereas staged participation is initiated by planners or officials, the last type of participation, self-organisation, recognizes activities that come from the "outside in", or that are initiated by citizens or communities of practice.

Table 6.2. Types of participation in urban planning and their characteristics.

	Non-participation	***Staged participation: consultation***	***Staged participation: collaboration and partnership***	***Participation as self-organisation***
Characteristics:				
Relationship: participation /urban planning	*Urban planning informs decision-making and implementation*	*Participation informs planners on issues determined by formal planning*	*Participation informs planners and drafting of plans*	*Participation = self-organization*
Roles	*Expert activity only*	*Experts (officials or planners) invite citizens to provide feedback*	*Experts (planners) facilitate collaborative activities*	*Networked communities of citizens initiated activities*
Theoretical or practical reference	*Rational urban planning*	*Traditional participation in urban planning and governance*	*Collaborative and participatory urban planning*	*The concept of self-organization in urban planning*

An analysis of examples from literature

I will now report the results of an analysis of a series of examples from the research literature that deals with participation, urban planning and digital technology as they are conceived in the area of e-planning and IT/HCI design research. The analysis draws on the characteristics of each type of participation identified in Tables 4.1 and 4.2 (see Saad-Sulonen, forthcoming, for the detailed analysis). The research literature examples chosen from the area of e-planning cover Geographic Information Systems (GIS) and e-participation. Those from the area of IT/HCI design cover participatory design, end-user development and research on the theme of communities and technology, such as community informatics and urban informatics. (Saad-Sulonen, forthcoming.)

The analysis shows that different combinations are possible that bring together participation in the design of technology and urban planning. These combinations are laid out in the *matrix of multiple participations* (Figure 6.1). The matrix shows on its horizontal axis the types of participation identified in the design of digital technology, and on its vertical axis those recognized in urban planning.

An initial observation is that the literature on participation in e-planning completely neglects research on participation in the design of digital technology. Examples from the Handbook of Research on E-planning (e.g. Kubicek, 2010; Klessman, 2010; Repetti & Bolay, 2010; Conroy &

Evans-Cowley, 2010; Bourdakis & Deffner, 2010; Granberg & Åström, 2010[5]) as well as from published cases of the use of WebGIS and PPGIS (e.g. Yigitcanlar, 2010; Kahila & Kyttä, 2009) are confined to the "non participation" column of the matrix.

There are nevertheless some exceptions in the e-planning literature, where participation in the design of digital technology is acknowledged to some degree. These examples are mapped in Figure 6.1 by using the # sign in front of the example's designated number. Wessels et al. (2012; #1) identify collaborative urban planning as a context where the participatory design of technology and e-services could take place. Saad-Sulonen (2012, #2) also examines participation in the design of digital technology – which, she claims also includes participation in the production and sharing of digital media – as activities that take place in conjunction with those of participation in urban planning. Some other examples of e-planning literature have acknowledged, although not very explicitly, participation as design-in-use as well as participation a self-organisation. Wallin & Horelli (2010; #3), for example, link their experiences of local community development in Helsinki to the wider discourse on participation in urban planning. They also recognize the necessity for community tools that can be configured and connected to one another as well as to other sources of urban data. Similarly, Staffans et al. (2010; #4) explore the possibility to link institutional urban planning with participation as self-organisation. They also recognize the need for what I interpret as design-in-use activities: operating with a variety of official and non-official digital tools and creating connections between them. Elsewhere, Devisch and Veestraeten (2010; #5) call for urban planning to recognize citizen science-type of activities as a form of participation. By citizen science, they mean the collection and interpretation of environmental data, using for example mobile phones and sensors of all kinds. Evans-Cowley (2010; #6) further pinpoints the potentials of using mundane technologies, such as social media and Web 2.0, for participation in urban planning. She emphasises the need to make young people involved in participatory urban planning projects the Facebook page administrators of the created Facebook pages. Even though she does not explicitly refer to participation in the design of digital technology, nor uses the concept of design-in-use, an administrator's role contains aspects of participation in the design of technology. Finally, Anttiroiko (2010, #7) also reflects on the role of social media and Web 2.0

[5] These examples are found in the *Citizen participation in e-planning* section of the Handbook of Research on E-planning (Silva, 2010, 168–339)

tools in changing the way urban planning operates. He does not however address participation in the design of digital technology nor views the technologies he lists as containing features that enable such participation. Nevertheless, the concept of participation as design-in-use could be easily used to take his focus on the use of social media and Web 2.0 tools one step further and embrace one of their most important characteristics: the provision of building blocks for operating with the digital.

Moving to IT/HCI research, it is clear that it spreads across staged participation and participation as design-in-use when it comes to the design digital technology[6], and across staged participation and participation as self-organisation for urban planning (Figure 6.1). Looking closer at the individual literature examples, these can be divided into two main groups.

The first group is IT/HCI research that situates participation in the design of digital technology in the context of participation in urban planning. (e.g. Pipek et al., 2000; Nuojua et al., 2008; Nuojua & Kuutti, 2008; Foth et al., 2009; Bratteteig & Wagner, 2012; Saad-Sulonen & Horelli, 2010; Saad-Sulonen et al., 2012). In this research, participation in the design of digital technology is seen as affecting participation in urban planning. However, such research is mainly disseminated in the IT/HCI design-related spheres and has so far been weakly acknowledged in e-planning. Moreover, this type of research, with the exception of (Saad-Sulonen et al.; 2012), has only focused on staged participation in urban planning.

The second group focuses on the relationship between communities and technologies in the urban context (e.g. Redhead & Brereton, 2008; Borchorst et al., 2009; DiCindio et al., 2009; Paulos et al., 2009; Botero & Saad-Sulonen, 2010; Foth, 2010; Saad-Sulonen & Horelli, 2010; DiSalvo et al., 2013). Such research examines the design and use of mundane technologies (e.g. urban screens, mobile technologies, community portals, social networking platforms) and the way they support community action in an urban context. Many of the issues dealt with in this type of research, such as the use and management of shared public space, litter in urban space, time planning, or air quality and pollution, are either urban planning issues in themselves or inform urban planning. However, no connections have yet been explicitly made with urban planning. To make it possible for the matrix to accommodate such research, and thus generate a link to the discussion on participation in urban planning, something like Boonstra & Boelens' (2011) concept of

[6] I have not come across examples of the other type of staged participation (usability and testing) in the context of urban planning and e-planning, except for two hints in Staffans et al. (2010, 90 & 98).

self-organisation is needed. A shared conceptual vocabulary that would include the concept of self-organisation could provide good grounds for bringing research on communities and technologies, and research on e-planning into conversation.

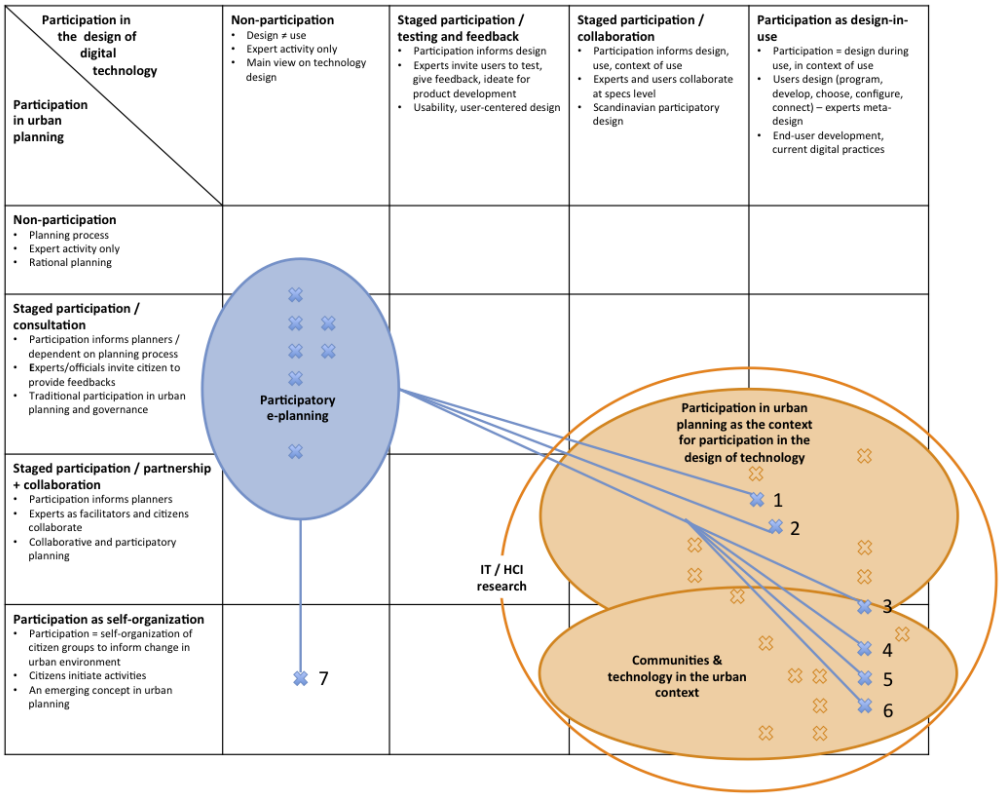


Figure 6.1. Different research areas positioned on the matrix of multiple participations (adapted from Saad-Sulonen,forthcoming).

The mapping of examples from IT/HCI design and e-planning literature on the matrix of multiple participations confirms that there is a need for a shared vocabulary and conceptual framework that can bring together the two main areas of research concerned with participation, urban planning and digital technology. The matrix presented here is one step towards building such a vocabulary and conceptual framework.

Conclusions

In this chapter I have described the different types of participation in the design of digital technology. I have placed them in relationship with the main recognized types of participation in urban planning, in order to produce the matrix of multiple participations. The matrix acts a shared conceptual framework that makes it possible to make connections between research from the field of e-planning, which is more urban planning and governance-centred, and research from fields associated with IT/HCI design.

Whereas most current research on participation in e-planning focuses on traditional staged participation and neglects participation in the design of digital technology, attempts to operate within a wider and more holistic view of participatory e-planning do exist. Some urban planning and e-planning articles report on examples where the role of participation in the design of digital technology is recognized. The concept of design-in-use makes it possible to expand the notion of use to that of design, especially in the current context of adaptable and connectable Web 2.0 tools.

Research in the fields of IT/HCI design has already introduced staged participatory urban planning as a context for participation in the design of digital technology. Additionally, the concept of self-organisation, adapted to urban planning by Boonstra & Boelens (2010), makes it possible to position research on communities and technology in the context of participatory e-planning. The importance of this concept should be recognized and it should be put to use in both urban planning and IT/HCI research and practice.

By shifting the focus of research into participatory e-planning away from staged participation in urban planning and opening it up to the whole area covered by the matrix, the definition of participatory e-planning can be expanded as follows: *Participatory e-planning comprises different types of participation that take place in urban planning, as well as in the design of digital technology. The different types of participation can occur simultaneously in different combinations and they can affect one another*. This new, expanded, definition opens doors to future trans-disciplinary collaboration. This is crucial in the current social context where digital technologies are developing rapidly and affecting political, social, cultural, economic and historical conditions (Dourish, 2010) and where operating with the digital is nothing less than a means for survival.

References

Anttiroiko, A-V. (2012). Urban Planning 2.0. *International Journal of e-Planning Research,* 1(1), 16–30.

Beyer, H., & Holtzblatt, K. (1997). *Contextual Design: Defining Customer-Centered Systems (1st ed.).* New York: Morgan Kaufmann.

Bjerknes, G. & Bratteteig, T. (1995). User participation and democracy: a discussion of Scandinavian research on system development. *Journal of Information Systems,* 7 (1), 73–98.

Boonstra, B. & Boelens, L. (2011). Self-organization in urban development: towards a new perspective on spatial planning. *Urban Research and Practice*, 4 (2), 99–122.

Borchorst, N. G., Bødker, S. and Zander, P. (2009). The boundaries of participatory citizenship. In *ECSCW 2009.* (pp. 1–20). London: Springler.

Botero A. & Saad-Sulonen J. (2010). Enhancing citizenship: the role of in-between infrastructures. In Bødker, K., Bratteteig, T., Loi, D., & Robertson, T. (eds), *Proceedings of the 11th Biennial Participatory Design Conference* (pp. 81–90). New York: ACM.

Botero, A., Kommonen, K., & Marttila, S. (2010). Expanding Design Space: Design-In-Use Activities and Strategies. In *Proceedings of the Design Research Society Conference: Design & Complexity*. DRS. Montreal, Canada.

Botero, A. (2013). *Expanding design space(s) – Design in communal endeavors* (Doctoral Dissertation). Helsinki: Aalto University, School of Arts, Design and Architecture.

Bourdakis, V. & Deffner, A. (2010). Can Urban Planning, Participation and ICT Co-Exist? Developing a Curriculum and an Interactive Virtual Reality Tool For Agia Varvara, Athens, Greece. In C. N. Silva (Ed.), *Handbook of Research on E-planning*. ICTs for urban development and monitoring (pp. 268–285). Hershey, PA: IGI Global.

Bratteteig, & Wagner I. (2012). Spaces for participatory creativity. *CoDesign*, 8(2–3), 105–126.

Büscher, M., Gill, S., Mogensen, P., & Shapiro, D. (2001). Landscapes of Practice: Bricolage as a Method for Situated Design. *Computer Supported Cooperative Work*, 10(1), 1–28.

Ciborra, C. (1992). From thinking to tinkering: The grassroots of strategic information systems. *The Information Society: An International Journal*, (8) 4, 297–309.

Conroy. M M. & Evans-Cowley, J. (2010). The e-citizen in planning: U.S. municipalities' views of who participate online. In C. N. Silva (Ed.), *Handbook of Research on E-planning. ICTs for urban development and monitoring* (pp. 218–236). Hershey, PA: IGI Global.

Day, P. (2010). A brief introduction to the history of community informatics. *AI & Society*, 25, 259–263

Devisch, O. & Veestraeten, D. (2010, July). *From citizen science to experimental citizen science*. Paper presented at the 24th AESOP Annual conference, Espoo, Finland.

DiCindio, F., DiLoreto, I. & Peraboni, C. (2009). Moments and modes for triggering civic participation at the urban level. In M. Foth (Ed.) (2009). *Handbook of Research on Urban Informatics: The Practice and Promise of the Real-Time City* (pp. 97–114) Hershey, PA: IGI Global.

DiSalvo, C.,Clement, A. & Pipek, V. (2013). Communities. Participatory design for, with and by communities. In J.Simonsen & T. Robertson (eds.), *International Handbook of Participatory Design* (pp. 182–209). New York: Routledge.

Dittrich, Y., Eriksén, S. & Hansson, C. (2002). PD in the Wild: Evolving Practices of Design in Use. In *Proceedings of the PDC 02* (pp.124–134). Palo Alto: CPSR.

Dourish, P. (2010) HCI and Environmental Sustainability: the politics of design and the design of politics. In *Proceedings of DIS10 Designing Interactive Systems* (pp. 1–10). USA: ACM.

Ehn, P., & Kyng, M. (1991). Cardboard computers: mocking-it-up or hands-on the future. In J. Greenbaum and M. Kyng (Eds), *Design at Work: Cooperative Design of Computer Systems* (pp. 169–196). Hillsdale, New Jersey: L. Erlbaum Associates Inc.

Evans-Cowley, J. (2010). Planning in the age of Facebook: the role of social networking in planning processes. *GeoJournal,* (75), 407–420.

Fischer, G. (2011). Understanding, fostering, and supporting cultures of participation. *Interactions*, 18(3), 42–53.

Flew, T. (2008). *New media: an introduction*. Oxford: Oxford University Press.

Floyd, I. R., Jones, M. C., Rathi, D. & Twidale, M. B. (2007). Web Mash-ups and Patchwork Prototyping: User-driven technological innovation with Web 2.0 and Open Source Software. *Proceedings of HICSS 2007*, 86– . USA: IEEE Computer Society.

Foth, M. (Ed.) (2009). *Handbook of Research on Urban Informatics: The Practice and Promise of the Real-Time City*. Hershey, PA: IGI Global.

Foth, M., Forlano, L., Satchell, C., & Gibbs, M. (eds.) (2011). *From Social Butterfly to Engaged Citizen: Urban Informatics, Social Media, Ubiquitous Computing, and Mobile Technology to Support Citizen Engagement*. Cambridge, MA: MIT Press.

Granberg, M. & Åström, J. (2010). Planners support of e-participation in the field of urban planning. In C. N. Silva (Ed.), *Handbook of Research on E-planning. ICTs for urban development and monitoring* (pp. 237–251). Hershey, PA: IGI Global.

Greenbaum, J. & Kyng, M. (Eds.)(1991). *Design at work: cooperative design of computer systems*. Hillsdale, New Jersey: Lawrence Erlbaum.

Greenfield, A. (2006) *Everyware: The Dawning Age of Ubiquitous Computing*. Berkley: Peachpit Press.

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.

Hartswood, M., Procter, R., Rouncefield, M.& Sharpe, M. (2000). Being There and Doing IT: A Case Study of a Co-Development Approach in Healthcare. In T. Cherkasky, J. Greenbaum & P. Mambery (eds.), *Proceedings of the Participatory Design Conference* (pp. 96–105). New York: CPSR.

Healey, P. (1997). *Collaborative planning. Shaping Places in Fragmented Societies*. London: McMillan.

Henderson A. & Kyng M. (1991). There is no place like home – continuing design in use. In J. Greenbaum & M. Kyng (Eds.). *Design at Work: Cooperative Design of Computer Systems* (pp. 219–240). Hillsdale, New Jersey: Lawrence Erlbaum.

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.

Jenkins, H. (2006). *Fans, Bloggers, and Gamers: Exploring Participatory Culture,* New York: NYU Press.

Jung, H., Stolterman, E., Ryan, W., Thompson, T. & Siegel, M. (2008). Toward a framework for ecologies of artifacts: how are digital artifacts interconnected within a personal life? In *Proceedings of the 5th Nordic conference on Human-computer interaction: building bridges (NordiCHI '08), (*pp.201–210). New York: ACM.

Kahila, M. & Kyttä, M. (2009). SoftGIS as a bridge-builder in collaborative urban planning. In Geetman, S. & Stillwell, J. (Eds.) *Planning Support Systems Best practice and New Methods. GeoJournal Library* (pp. 389–311). The Netherlands: Springer.

Kalliala, E. & Toikkanen, T. (2009). *Sosiaalinen media opetuksessa*. Helsinki: Oy Finn Lectura Ab

Karasti, H. & Syrjänen, A-L. (2004). Artful infrastructuring in two cases of community PD. In *PDC 2004: Proceedings of the Eight Participatory Design Conference,* (pp.20–30). USA: ACM.

Klessman, J. (2010). Portals as a tool for public participation in urban planning. In C. N. Silva (Ed.), *Handbook of Research on E-planning. ICTs for urban development and monitoring* (pp. 252–267). Hershey, PA: IGI Global.

Kubicek, H. (2010). The potential of e-participation in urban planning: a European perspective. In C. N. Silva (Ed.), *Handbook of Research on E-planning. ICTs for urban development and monitoring* (pp. 168–194). Hershey, PA: IGI Global.

Kuutti, K. (2009). HCI and design: uncomfortable bedfellows? In Binder, T., Löwgren, J., & Malmborg, L. (eds.), *(Re)Searching the Digital Bauhaus* (pp. 43–59). London: Springer.

Leinonen, T. (2010). *Designing Learning Tools. Methodological Insights* (Doctoral thesis). Helsinki: Aalto University, School of Art and Design.

Levi-Strauss, C. (1966). *The Savage Mind*. London: Weidenfeld and Nicolson Ltd.

Lieberman, H., Paterno, F. & Wulf, V. (eds.) (2006). *End-user development*. The Netherlands: Springer

Löwgren J. & Stolterman, E. (2007). *Thoughtful interaction design. A design perspective on information technology*. Cambridge: The MIT Press.

Martin, J. (1982). *Application development without programmers*. New Jersey: Prentice-Hall Inc.

Moggridge, B. (2007). *Designing Interactions*. Cambridge: The MIT press.

Nardi, B. & O'Day, V. (1999). Information Ecologies. Using Technology with Heart. USA: Massachusetts Institute of Technology.

Norman, D. A., & Draper, S. W. (Eds.) (1986). *User centered system design: New perspectives on human-computer interaction*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Nuojua, J., Juustila, A., Räisänen, T., Kuutti, K., & Soudunsaari, L. (2008) Exploring Web-based Participation Methods for Urban Planning. In *Proc. of the 10th Participatory Design Conference* (pp. 247–277). New York: ACM.

Nuojua, J. & Kuutti, K. (2008). Communication based web mapping: a new approach for acquisition of local knowledge for urban planning. In F. Mäyrä, K. Lietsala, H. Franssila & A. Lugmayr (eds.), *Proceedings of the 12th international conference on Entertainment and media in the ubiquitous era, Mindtrek 2008*. Tampere: ACM.

Paulos, E., Honicky RJ. & Hooker, B. (2009). Citizen Science: Enabling Participatory Urbanism. In Foth, M. (Ed) *Handbook of research on urban informatics: the practice and promise of the real-time city*, (pp. 414–436). Hershey, PA: IGI Global.

Pipek, V., Märker, O., Rinner, K. & Schmidt-Belz, B. (2000). Discussions and Decisions: Enabling participation in design in geographical communities. In M. Gurstein (Ed.), *From Community Informatics: Enabling Communities with Information and Communication Technologies* (pp. 539–560). Idea Group Publishing.

Redhead, F. & Brereton, M. (2008). Getting the nub of neighbourhood intraction, In *Proc. of the 10th Participatory Design Conference* (pp. 270–273). New York: ACM.

Repetti, A. & Bolay, J-C. (2010). ICTs and participation in developing cities. In C. N. Silva (Ed.), *Handbook of Research on E-planning. ICTs for urban development and monitoring* (pp. 306–323). New York: Hershey.

Saad-Sulonen, J. (2012). The role of the creation and sharing of digital media content in participatory e-planning. *International Journal of e-Planning Research* (IJEPR) 1(2), 1–22

Saad-Sulonen, J. & Horelli, L. (2010). The value of Community Informatics to participatory urban planning and design: a case-study in Helsinki. *The Journal of Community Informatics*. 6(2). Retrieved March 20, 2011 from http://ci-journal.net/index.php/ciej/article/view/579/603

Saad-Sulonen, J., Botero, A. & Kuutti, K. (2012). A long-term strategy for designing (in) the wild: lessons from the Urban Mediator and traffic planning in Helsinki. In *Proceedings of DIS'12 Designing Interactive Systems* (pp.166–175). New York: ACM.

Saad-Sulonen, J. (forthcoming). *Combining participations. Shifting the locus of participatory e-planning*. (Doctoral Dissertation). Helsinki: Aalto University, School of Arts, Design and Architecture.

Sanders, E. B.-N., Brandt, E., & Binder, T. (2010). A framework for organizing the tools and techniques of participatory design. In *Proceedings of the 11th Biennial Participatory Design Conference* (pp. 195–198). New York, NY, USA: ACM.

Schuler, D. & Namioka, A. (eds.)(1993*). Participatory Design: Principles and Practices*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Scheiderman, B. (1985). The Relationship Between COBOL and Computer Science. *Annals of the History of Computing* (7) 4.

Silva, N.C. (Ed.) (2010). *Handbook of Research on E-planning*. Hershey, PA: IGI Global.

Staffans, A., Rantanen, H. & Nummi, P. (2010). Local Internet forums: interactive land use planning and urban development in neighborhoods. In C. N. Silva (Ed.), *Handbook of Research on E-planning. ICTs for urban development and monitoring* (pp. 80–102). Hershey, PA: IGI Global.

Stallman, R. (1993). *The GNU Manifesto*. Retrieved April 12, 2013, from http://www.gnu.org/gnu/manifesto.html

Star, S. L. & Ruhleder, K. (1996). Steps Toward an Ecology of Infrastructure: Design and Access for Large Information Spaces. *Information Systems Research,* 7(1), 111–134.

Suchman, L. (1994). Working Relations of Technology and Use. *Computer Supported Cooperative Work (CSCW)*, 2(1), 21–39.

Sundblad, Y. (2009). From Utopia 1981 to Utopia 2008. In Binder, T., Löwgren, J., & Malmborg, L. (eds.), (Re)Searching the Digital Bauhaus (pp. 13–41). London: Springer.

Syrjänen, A-L. & Kuutti, K. (2011). From System Development towards Work Improvement: Developmental Work Research as a Potential Partner Method for EUD. In Costabile, M F., Dittrich, Y., Fischer, G., & Piccinno, A. (Eds*.). Proceedings of the Third international conference on End-user development (IS-EUD'11)*. Berlin: Springer-Verlag, pp.123–138.

Törpel, B., Voss, A., Hartswood, M., & Procter, R. (2009). Participatory Design: Issues and Approaches in Dynamic Constellations of Use, Design, and Research. In M. Buscher, R. Slack, M. Rouncefield, R. Procter, M. Hartswood and A. Voss (Eds). *Configuring User-Designer Relations: Interdisciplinary Perspectives*. London, England: Springer- Verlag London.

Wallin S. (2013). Urban complexity Challening Urban Planning. In: L. Horelli (Ed.), *New Approaches to Urban Planning: Insight from Participatory Communities*. Helsinki: Aalto University.

Wallin S. & Horelli L. (2010). The methodology of user-sensitive service design within urban planning. *Environment and Planning B: Planning and Design*, 37(5), 775–791.

Wenger, E., White, N. and Smith, J. (2009). Digital Habitats: stewarding technology for communities. Portland : CPSquare.

Wessels, B., Dittrich, Y., Ekelin, A & Eriksen, S. (2012). Creating synergies between participatory design of e-services and collaborative planning. *International Journal of E-planning Research (IJEPR)*, 1(3), 1–16.

Yigitcanlar, T. (2010). Planning online: a community-based interactive decision-making model. In C. N. Silva (Ed.), *Handbook of Research on E-planning. ICTs for urban development and monitoring* (pp. 15–35). Hershey, PA: IGI Global.

7 Participatory E-Planning Meets the Glocal

Liisa Horelli

Everyday life has become increasingly glocal,[1] with both positive and negative consequences. This means that global issues, such as climate change and economic recession, are reflected on localities. Local people may also have new opportunities to influence global affairs due to the availability of information and communication technologies (ICTs). In fact, the so called mobility tools, such as cars, bicycles, public transport, the internet, mobile phones etc., as well as reductions in both travel and communication costs, have enlarged the geographies of social networks and the consequent activity space of people, i.e. the geography of locations known to a person (Larsen, Axhausen & Urry, 2006).[2]

Over several years, while the rapidly changing contexts of everyday life have rendered conventional methods of urban planning outmoded, the Palco-research team responsible for this book has been seeking new approaches to planning through applying digital tools (Wallin et al., 2010).

[1] ´Glocal` is the phenomenon and ´glocalization` refers to the interdependent processes shaping the local and global, often enhanced by ICTs. The term was originally coined by Japanese business people in the 1980s, to refer to the global localisation of export goods. The term was first introduced in the Oxford Dictionary of New Words, compiled by Sara Tulloch (1991, cited in Khondker, 2004).

[2] The relational mobility tools are part of network capital, because they enhance the accessibility of ties in a social network, increasing the value of social resources and the support they provide (Rettie, 2008).

The increasing availability of ICTs and social media, especially community informatics,[3] may allow users to understand the larger impacts of their everyday decisions. People may become able to appropriate not only the particularities of their local conditions, but also to make connections between cities and engage with broader global networks (Schuler & Day, 2004; Williams et al., 2009).

Khondker (2004) claims that understanding the glocal helps to deal with the macro-micro relationships, which comprise macro-localisation (expansion from the local towards the global) and micro-globalization (the incorporation of global ideas to the local level). Although the glocal is mainly an analytic concept, it can also be used in a strategic way, for example in participatory e-planning, which is in the focus of this chapter.

According to Pacione (2005), the development of particular places is the outcome of both global and local forces. Yet the local and the global are not polarities but categories representing multi-layered space that may be shaped, to a certain degree, through ICTs. One can usefully conceptualize daily life as taking place increasingly at several different spatial layers: working, shopping and even friendships happening in different locations and places.

This rapidly evolving context of everyday life has also changed the meaning of community. Our research started by defining the community as territorial and local or as a community of interest that is partly virtual. Currently, the community is regarded not only as territorial and local, but also as glocal. It is intertwined with multiple trans-sectoral networks and relationships that may be regional, national and/or international, just as they may be public, private or belonging to civil society (see Majoor & Salet, 2008).

The challenges and potentials of ICTs in urban planning are also methodological. The digital terminology, including e-planning, is still fuzzy and under construction (Medaglia, 2007). The term e-planning can refer, among other things, to: 1. the provision and delivery of planning services (building permits, demographic and statistical analysis etc.); 2. offline planning with e-tools; 3. the co-production and application of e-tools and platforms in community development; 4. co-creating virtual objects and spaces with e-tools (for example in Second Life). Participatory e-planning in this article mostly refers to the second and third types.

[3] Community informatics (CI), which can be broadly defined as the use of ICTs for the empowerment of communities (Gurstein, 2007), is a fragmented field of research and practice in the process of establishing itself. Discussions about what issues and concepts should be included or excluded are ongoing.

Participatory e-planning can be described as the tendency to embed urban planning in community development and governance, with consequences for diverse experiences of learning citizenship skills (Saad-Sulonen & Horelli, 2010). Participatory e-planning also tends to involve multiple channels for gathering and diffusing information, a process where both traditional and ICT-tools can be used in complementary ways.

So, what is the position of participatory e-planning within urban planning? On what preconditions can participatory e-planning that mainly serves the community also help local stakeholders ´play` or deal with the global? I claim that participatory e-planning enhances playing with the glocal, if certain technical, organisational and institutional capacities, as well as supportive structures exist. This does not only concern developing countries but also the developed, democratic ones (see Gurumurthy, 2012). The scaling-up of activities by civil society actors in different localities and countries may then take place, with the help of community informatics.

This chapter aims to present and discuss the results of a meta-analysis of participatory e-planning meeting the glocal, based on international literature and Finnish experiences. The chapter begins by describing the transformation that has taken place in urban planning towards participatory processes, including applications of e-planning. It then proceeds to the lessons learnt from the international literature on local efforts to deal with the global, and then zooms into an analysis of Finnish experiences. It will close by drawing some conclusions for urban planning.

From urban planning to participatory e-planning

The history of urban planning from the late nineteenth century shows a systematic trend towards more participatory approaches, as well as towards new concepts and tools.

From modernism to agonism in urban planning

At the turn of the twentieth century urban planning was presented as the remedy to heal the ills of industrialized cities in the Western world. The modernist paradigm, based on science and technical reason, dominated until the 1970s. However, the underlying comprehensive-rationalistic planning theory that presumed a controllability in societal development and believed in the efficacy of top-down procedures, still continues to be

applied in parallel with other approaches in many countries, including Finland (Bäcklund & Mäntysalo, 2010).

Although an alternative, "incrementalist" approach (Lindblom, 1959), introduced the practice of involving new critical participants in the planning process already in the 1960s, it was not until the communicative turn from the 1970s on (Healey, 1997) that the dominant paradigm in planning was transformed so that it came to comprise a great variety of stakeholders now habitually involved. This planning drew largely on Habermas' theory of communicative action (Habermas, 1984). Currently, theories of urban planning are mostly post-positivist and pragmatist, and they tend to emphasize the importance of participation, collaboration and deliberation (Silva, 2010). Lately, the critique raised by Chantal Mouffe (2000), that Habermasian consensus seeking processes neglect power relations, has inspired a new approach, called agonistic planning (Hillier & Healey, 2008). The latter acknowledges the limits to achieving consensus and accepts the differences that remain unresolved, and thus sees planning as openly political.

However, these post-positivist planning theories are mostly procedural, neglecting the content or substance of planning (Gunnarsson-Östling, 2011). The few exceptions are examples of neighbourhood planning which include a variety of New Urbanism examples (Rohe, 2009) and prescriptive postmodern planning, such as the Just city-approach (Fainstein, 2010). Mainstream planning literature still lacks substantial discussion on participatory e-planning. However, relevant publications have recently begun to emerge, for example the International Journal of E-planning Research.

Participatory e-planning as a new paradigm?

The participatory paradigm in urban planning, together with the rise of interactive ICTs, has pushed citizen participation up the planning agenda, and challenged planners and developers to adopt new methods and technologies (Foth, 2009; Silva, 2010). However, it was not until the beginning of the 2010s that the methods of participatory e-planning, with mash-ups of ICTs derived especially from the social media, became available (Foth et al. 2009; Saad-Sulonen, 2012).

Participatory planning turns into e-planning when the participatory activities are expanded beyond face-to-face interaction to include ICT-mediated activities that are less dependent on spatial and temporal

constraints. According to Silva (2010), participatory e-planning is a new paradigm within the framework of a post-positivist planning theory. However, collaborative approach requires new concepts, methods and tools that enhance the involvement of different stakeholders.

Participatory e-planning can be defined as "a socio-cultural, ethical and political practice which takes place offline and online in the overlapping phases of the planning and decision–making cycle, by using digital and non-digital tools." (Horelli & Wallin, 2010, 60). It also includes, as Joanna Saad-Sulonen points out in Chapter 6, participation in the design and use of digital tools and media content.

In addition to face-to-face mediation tools (Susskind et al., 1999), participatory e-planning can take advantage of the wide palette of ubiquitous technology that can be accessed and distributed via many channels and e-devices, depending on context. These tools include sensory networks, radio-frequency identification tags, interactive screens in public spaces, cellular phones and the internet. It is not the technical devices, but their intentional choice and co-ordination, that is likely to transform the environment into real-time digital space[4] (Mitchell et al., 2003; Townsend, 2009). So far examples have come from special cases around the world, such as South Korea's new towns, but as the tools become cheaper, they could be used for the empowerment of whole communities. Then, the new focus and medium of e-planning, community development and co-governance, could become the digital space.

Although there is a great deal of hype around ubiquitous technology, the real-time city is partly here already (Foth, 2009). Mobility tools are increasingly changing social behaviour. However, following Bruno Latour's model (1987), technology is not a stable and independent entity, but part of the organisation of the implementation and use-process. Technology may then be approached as a network of human and non-human elements, which are constituted and shaped in a network of relations. Change is generated in the interaction of humans with technology, which is intertwined with the co-production process of technology and its context. This means that the transfer of technologies from one place to another requires the rebuilding of the whole hybrid, namely the technology and its network (see also Arnold, 2007).

[4] If the tools are appropriately co-ordinated, they will eventually provide a hybrid infrastructure of communication, which is one of the key elements of local co-governance (see Chapter 3).

Participatory e-planning in the enhancement of glocal everyday life

Manuel Castells (2008; 2010) claims that globalisation constitutes social systems with a capacity to work as a unit on the planetary scale in real time. The core capacities of the system at this stage of social development are technological, institutional and organisational. Participatory e-planning can be one approach to constitute systems with capacities on the local level.

Finnish experiences with the new approaches to urban planning (see Lena[5] in the Introduction to this book) suggest this is so, but they also reveal that certain conditions are needed in order for the necessary capacities to be enhanced.

First of all, citizen groups should be able to see participatory planning and community development as a form of empowerment. Booher and Innes (2002) point out that only the network approach to planning provides an authentic situation for participation. Although networks are difficult to control, they can be steered in the right direction by applying some core principles or strategies of implementation and embedding. The latter refers to the collective capacity building, learning and coordination process of the stakeholders and key actors, supported by a variety of tools (see Siemens, 2006).

Secondly, gender, age and culture-sensitive coordination are essential characteristics of successful participatory planning: it is not about enforcement, but about constant negotiation and interaction with different partners. This requires paying special attention to the balancing of power relations, for instance by supporting potential partnerships and mediating and managing conflicts (see Susskind & al., 1999; Innes & Booher, 2010). Also the variety of temporalities (Bryson, 2007), as well as the necessities and contingencies of everyday life need to be recognized, for example by applying urban time policies[6] (see Chapter 4).

[5] The Learning-based network approach to planning and action research (Lena) is a method and a set of tools for analysing, planning, implementing, monitoring and evaluating planning and community development. It was originally shaped within participatory projects with young people and women, and later applied in the context of time policy and time planning (Horelli, 2006; Horelli, 2010).

[6] Urban time policies are public policies and planning interventions that affect the time schedules and spatio-temporal organisation that regulate human relationships at the local, regional and even national or European level (Mareggi, 2002). In practice, time policy is implemented through time planning which deals with the coordination of several interventions that take place at different scales and varying sectors of administration. The measures consist of diverse activities, such as working, care of children, use of services, mobility management, as well as the shaping of the dwelling and the neighbourhood.

Thirdly, the content of planning should be taken seriously. Unlike other process theories of planning, the Lena-approach in e-planning is intertwined with a theory of planning that privileges content by relying on the concept of ´supportive infrastructure of everyday life` (Figure 4.1 in Chapter 4). This is a concept that has been applied in participatory planning and community development with children, women and elderly people in many parts of Europe (Gilroy & Booth, 1999). Content-related concepts are especially useful in the visioning phase of the planning cycle.

The following section will survey the lessons learnt from the international literature about the conditions in which ICTs have been applied for the improvement of glocal communities.

Local efforts to deal with the global

Accounts of several cities, such as Amsterdam, Barcelona, Copenhagen, London and many outside Europe, demonstrate that communities can no longer be understood as territorial containers but rather as relational spaces and places that are intertwined with regional, national, international, as well as public, private third-sector links and hubs (Majoor & Salet, 2008). These trans-scalar and dynamic processes of urban transformation require new and experimental planning strategies that are linked more directly than at present, with attempts to deal with the complex territorial and functional relationships of different stakeholders operating at varying scales. The point is to find a geographical and conceptual intermediate level that would connect bottom-up demands from neighbourhoods and locales with the top-down directives originating at city or regional levels. This would make it possible to connect the self-managed interventions and local experiments of self-regulated civic society actors with broader macro-objectives of economic, social and urban change.

Some of the experimental planning cases have provided evidence of local power increasing with the help of active trans-scalar policies. For example, the enhancement of social integration through the creation of supportive social, cultural and environmental infrastructures, has turned out to have positive impacts, due to their symbolic and emotional value (see also Wallin & Horelli, 2010). However, according to Majoor and Salet (2008), civic groups have not yet been consciously involved in the new trans-scalar strategies around urban planning.

On the other hand, dealing with the glocal is deeply embedded in endeavours to increase democratic processes, although there are no formal

governance instruments at either the neighbourhood or the global level. This is the entry point where ICTs could be used to empower communities. According to Saskia Sassen (2004), the multi-scalar politics of local actors comprises at least three types of local-global conflicts, in which cyberspace becomes a place, and where non-formal and non-cosmopolitan political actors can be part of the political scene:

- the direct local-global transactions in which the scale of struggle remains the locality, and the object is to engage local actors in other places around the world who are engaged in similar localized struggles with similar local actors, for instance the Arab spring revolts or the 'softer' examples of the international knitting movement (Farinosi & Fortunati, 2012);
- multi-scalar interaction in which localized struggles aim at engaging global actors, such as the WTO or multinational firms and banks, either at the global scale or in multiple localities, such as in the Occupy Wall Street Movement; and
- local political practice which transforms a single event into a global media event, which in turn serves to mobilise individuals and organisations around the world in support of that action, such as the Zapatista movement in Mexico.

However, the lessons learnt from the "post-Arab spring" events indicate that there is a difference between the short-term appearance in the political limelight, for example on the Tahir Square of Kairo, enhanced by the social media, and the long term democratic consequences which require resolute building of supportive institutions (Gurumurthy, 2012).

Also the analysis in the special issue of the Journal of Community Informatics on the "Local meeting the Global" (Horelli & Schuler, 2012) reveals a more complex dynamic between local and global concerns than that depicted by Sassen. It seems that any typology that attempts to characterize local, glocal and global phenomena would need to account for several elements, including the principals or stakeholders that are engaged, their transactions, their network configuration and their patterns of transactions and interactions in trans-scalar networks.

The conditions for meaningful and effective application of ICTs for glocal purposes, comprise the acquisition and maintenance of the necessary technological, organisational, social and cognitive capacity and competencies. The community's ability to bond and bridge, using deliberation and other skills, is decisive in the process of becoming a glocal player (Horelli & Schuler, 2012).

For example, the civic-cyber organisations, movements and counter-publics in Hong Kong and Taipei that use community informatics and operate at polycentric scales, co-evolve into what David Sadoway (2012) describes as 'info-sociations'. They are multimodal (employing an array of ICTs including social media), multiplexed (blending virtual and physical practices) and multi-scalar (varied in geography, ranging from the local to the global). The participatory transformations point towards the reconfiguration of the public (cyber)sphere via online forums, news and blogs, interactive map mash-ups, and forms of multi-mediation with audio, video and text. They also tend to construct cyberspaces of hope by creating counter-spaces through catalysing ideas and ideals. However, the question remains whether civic associations are able to shape the uses and applications of CI towards a just and liveable city for all.

In sum, glocal cross-border networking around participatory structures and environmental improvements by actors in different countries has meant an expansion of the concept of e-planning. In addition, it has also implied an enlargement of community informatics, as the local communities have begun to shape the global ones, even if they have not yet adopted consciously trans-scalar strategies. The lessons learnt from the international experiences suggest that it is increasingly important to manage glocal transactions at the local level. This means that e-planning measures have to be targeted at the design and implementation of online deliberative environments and tools that enhance the integration of both local and non-local perspectives (de Cindio & Schuler, 2012).

Analysis of participatory e-planning in the Finnish context

This section will zoom in on research conducted on participatory e-planning in the Finnish context and on its impact on urban planning. Finland is a Nordic welfare democracy, a technology-savvy country where technological innovations are appreciated. Since the late 1980s, the state has implemented a systematic technology policy that has not only significantly increased investments in research and development, but has also supported the building of communications infrastructure, including broadband, in the whole country.

The Finnish urban planning system resembles the continental system of planning more than the Anglo-American one (Nadin, & Stead, 2008). Municipal councils are the main authorities of formal urban planning, and

the main developer of urban space is often the city administration. This position provides the local planning authority with exceptional powers to regulate the planning process, including its degree of citizen participation. It also decides on the substance of planning. This centralized and top-down culture is one of the reasons for the relatively slow uptake of ICTs in the official planning processes.

From local websites and tools to glocal practices of e-planning

Digital planning tools, for visualization and spatial analysis, have been widely used in planning since the beginning of the 1990s in Finland. However, the term "e-planning" (sähköinen suunnittelu in Finnish) has not been applied by the authorities or by citizens. The situation has recently changed, and examples can be found of various web-based planning tools being used to support citizen participation both inside and outside the formal planning processes.

A collection of case studies on the purpose and implementation of participatory e-planning in the Finnish context was recently published as Digital tools in participatory planning (Wallin & al., 2010). It shows a shift from the application of traditional, single-channel mapping instruments and websites, such as internet forums and GIS-based tools (Staffans & al., 2010; Kahila & Kyttä, 2010), to the appropriation of multi-channel toolkits, including ones where e-planning is embedded in social media.

For example, in the co-planning project involving different age groups of the Roihuvuori neighbourhood yard in Helsinki (see figure 7.1; Saad-Sulonen & Horelli, 2010),[7] the application of ICTs meant that tools such as the local website and Urban Mediator[8] were used as platforms and means for co-creating, sharing and distributing information. This approach also enabled the participants, especially the adolescents who took part in media production activities, to think and act as masters of technology instead of being passive users and mere consumers.

[7] During the planning and design stage, an array of participatory methods, both face-to-face and mediated by ICTs, enabled stakeholders to take part in both the design of the yard and in the adaptation of various tools to interact with the larger community (see Chapter 6). The yard was constructed according to the plans of the participants in the summer of 2011, after which the users continued to fine-tune the place, by gardening and decorating it with knitting.

[8] The platform tool Urban Mediator was used as part of a Pan-European development project. It is similar to social media applications, such as Floobs and Bambuser, in enabling glocal information sharing and planning. However, the main contribution of Urban Mediator in Finland is that it is the first web 2.0 and mobile phone device, which integrates community informatics (CI) as part of participatory e-planning.

Figure 7.1. Empowering stakeholders in the Roihuvuori neighbourhood yard, using ICTs and face-to-face methods to co-create urban space. (Photograph from Wallin & Horelli, 2012)

An other example of a glocal project was CADDIES (Creating Attractive, Developed and Dynamic Societies together with Inhabitants). It was coordinated by the Helsinki Neighbourhoods Association (Helka), which is an intermediary agent and an umbrella organisation for 77 local voluntary associations in Helsinki. Run in Helsinki (Finland), Norrköping (Sweden) and Riga (Latvia), CADDIES encouraged different residents' groups to take part in shaping their environments at the neighbourhood level with generic yet user-driven ICT applications. A variety of community engagement methods and communication platforms were developed and tested in practice. They enabled glocal visioning and strategy-making that enhanced the co-production and sharing of knowledge, as well as the implementation of new ideas. For example, the Swedish inhabitants were encouraged to arrange events to support sustainable living. In Helsinki, local committees and other informal governance structures for local democracy were organised on the basis of the visioning. Efforts to build up civil society in Latvia after the collapse of the Soviet Regime, were initiated and supported. Thus, the CADDIES-project helped neighbourhood activists from different countries to share their experiences and to learn from each other (Kanervo, 2010).

Impacts of participatory e-planning on urban planning and co-governance

The number of ICT-applications for planning are increasing. They indicate an evolution towards a more participatory mode of e-planning that also recognizes the glocal dimension. Wallin & Horelli (2012) claim that, ICTs provide new forms of participation, according to the preference and skills of the users. Participation does not only take place in official workshops, but in everyday life situations that enable the transmission of personal ideas and proposals through the PC and mobile phone. According to Saad-Sulonen (2013), there is even a new category of involvement: participation as self-organisation that is enhanced by the design-in-use of ICTs.

Empirical studies (Wallin & Horelli 2012; Wallin & al., 2012; Saad-Sulonen & Horelli, 2010) indicate that participatory e-planning entails an increase in new:

- actors and participants
- technologies (multi-channel distribution)
- purposes (multi-dimensionality)
- contents of planning
- stages of planning
- scales of planning (local, translocal)
- embeddedness in co-governance.

The research cases demonstrate that ICTs and their use in urban issues have changed. The traditional forms of the participation, e.g. neighbourhood meetings and local rallies have been complemented by digital tools and social media applications that involve people who do not live in the place but feel connected to it, or other active groups who wish to be involved in the planning. The new participants have access to specific planning cases through a number of websites. They can comment and share information in various locations and situations, supported by mobile phone applications and urban screens. In the case of the Roihuvuori Neighbourhood Yard, the context-aware design and implementation of the participatory e-planning tools also led to success in gathering adolescents and people who would have been too busy to participate otherwise (Wallin et al., 2010).

In addition to introducing new participants and technologies, participatory e-planning has brought new stages of participation into the planning cycle. Several examples indicate that participation could have started earlier than is the norm in traditional planning. When social media-based applications were used, as in the Roihuvuori yard, a new

dimension of urban planning emerged. The participants were encouraged to develop their own visions and to process them through other community development activities. Thus, when interested people put their mark, urban planning was provided with a new context, new purposes and new contents. The implementation of the projects involved local co-governance in which deliberation took place on different platforms and public spheres (see Chapter 3).

Also, the CADDIES and Roihuvuori yard projects were first steps, however fragile, in crossing scales or trans-scalarity (Majoor & Salet, 2008). As understood according to Sassen's typology described above, these projects represented direct local-global transactions, where the scale remains the locality and where the object is to engage local actors in other places around the world, who are engaged in similar localised endeavours. An example is the way the international knitting movement (Farinosi & Fortunati, 2012) influenced the outcome in the Roihuvuori yard (see figure 7.2).

In the Finnish experiences of participatory e-planning so far, the idea of ´playing with the glocal` remains a metaphorical term, as the cases come from a relatively marginal location and the ´glocal players` are representatives of only a few countries. However, the examples can be regarded as weak signals that indicate a future course.

Figure 7.2. Potato cultivation and knitting graffiti in the Roihuvuori yard.

Discussion

Based on a meta-analysis of international literature and Finnish experiences, this chapter has dealt with how participatory e-planning meets the glocal. I posed the question: what is the position of participatory e-planning within urban planning? I also asked: what are the preconditions for participatory e-planning to help local stakeholders ´play`or deal with the global?

Participatory e-planning as a catalyst for better urban planning

The nature of urban planning and community development is, in general, dependent on the societal and cultural context, and specifically on the level of democracy and type of administration (Bäcklund & Mäntysalo, 2010). Across a variety of practices and legislative initiatives in the Western industrialised countries, there is currently a conspicuous evolution in urban planning towards more participatory approaches. However, participatory e-planning has not yet been recognized within the planning literature, nor has it entered the mainstream (Wallin et al., 2012).

Nevertheless, the international and Finnish examples from the fringes of urban planning and community development, allow us to see that a dramatic change has taken place through participatory e-planning towards more interactive and empowering approaches. The Finnish experiences show that participatory e-planning brings a variety of changes to urban planning. In fact, it is about multiple participations, as Joanna Saad-Sulonen describes in Chapter 6. The purpose of participation has changed, as it is no longer the contestation of the planners' ideas but an endeavour to co-create shared visions and solutions, often initiated well before the official planning process has begun. The NIMBY-attitude (Not in my back yard) characteristic of traditional participation in urban planning has changed into a YIMBY-attitude (Yes in my back yard). Thus, talking heads have become working hands, and participants have turned into developers of their own neighbourhood, as well as of the digital tools, as was the case with the Roihuvuori yard.

The meta-analysis reveals that participatory e-planning is a catalyst in many ways. First of all, it assists in embedding the urban planning process in community development and local governance. Secondly, it enables the integration of the planning process with the substance of planning,

i.e. in the structures of everyday life. The applied community and urban informatics deal not only with location-based data, but with context-related and personalised information about environmental visions and other themes, which brings a new dimension to the content of urban planning and consequently to community life.

Thirdly, participatory e-planning enables both visioning and negotiating the future of the community at the different phases of planning. Thus, the role of e-planning is significant in both the horisontal and vertical expansion of urban planning.

Capacities and structures as preconditions for ´playing with the glocal`

I claimed in the beginning of this chapter that participatory e-planning can enhance people's ability to deal with or play with the glocal, assuming that certain technical, organisational and institutional capacities, as well as supportive structures, are in place. The scaling-up of civil society actions in different localities and countries may then take place, with the help of community informatics. And, as I pointed out at the beginning, this does not only concern developing countries but also the developed, democratic ones (see Gurumurthy, 2012).

Both the international literature and the Finnish experiences indicate that what I have called 'playing with the glocal' is a complex, multi-dimensional process that takes a long time to develop. 'Playing' here refers to the effort of coping with issues relating to environmental improvement locally and beyond. For example, the precondition for the Helsinki Neighbourhood Association Helka becoming a glocal player was the systematic development of skills as a civil society actor. The acquisition of its technical, organisational and institutional capacities allowed Helka to transcend the local, and to operate at the regional and eventually also transnational levels. Helka also had the social and cultural know-how to apply a collective bottom-up perspective that had glocal consequences (Borja & Castells, 1997; Nielsen & Simonsen, 2003). On the other hand, Helka was also an intermediary agent that provided technical and social structures for citizens to participate in glocal activities. The important role of intermediary agents in the e-inclusion processes has recently been recognized in the European Commission (see MIREIA, 2012).

The glocal context requires new approaches to urban planning

The lessons learnt from international comparisons (Wallin et al., 2012; Silva, 2012), indicate that the practice of participatory e-planning is still quite scarce and highly constrained by national planning systems, and administrative cultures, in addition to the availability of technological infrastructure. In addition, the lack of technological, organisational, social and cognitive capacities seems to restrict the management of glocal transactions, for example in environmental improvement (Wallin & Horelli, 2012; Horelli & Schuler, 2012).

The adoption of conscious trans-scalar policies and strategies that enhance the co-creation of supportive enabling structures, including relevant communication instruments, seems necessary (Majoor & Salet, 2008). Otherwise local communities are at risk of losing their identity and, and they may start building gated communities and theme parks, as has happened in The Netherlands. The power to underpin the flow of everyday life in glocal communities also requires comprehension of the nature of complexities involved in the endeavour and the limitations of rational urban planning (see Chapter 2 by Wallin). Nevertheless, it is evident that the task of creating new approaches to urban planning is so demanding that it requires the involvement of all public, private and third sector partners.

Participatory e-planning in the glocal context is still a novel phenomenon. Therefore, it is important to conduct research where the issue is not only analysed and interpreted, as in traditional urban studies, but where it is also dealt with as a motor of change. There are signs that participating in urban planning with new digital tools, especially via social media, will eventually transform not just urban planning but the systems of planning and co-governance (Evans-Cowley & Hollander, 2010). However, these change mechanisms involve processes at different scales and of different dimensions, which are hard to tap into through occasional research projects.

Many questions still remain unanswered. For example: what will be the relationship between the different types of supportive infrastructures and the willingness and ability of stakeholders to manage complex glocal networks and activities? How can new activities and stakeholders in e-planning best be connected to the decision-making of the city (Antiroikko, 2011)? How can representative democracy be combined with the increasingly direct influence that the new methods and tools introduce into urban planning and governance?

References

Anttiroikko, A-V. (2012). Urban Planning 2.0. *International Journal of e-Planning Research*, 1(1), 16–30.

Arnold, M.V. (2007). The concept of community and the character of networks, *The Journal of Community Informatics*, 3(2). Retrieved May 11, 2009 from: http://ci-journal.net/index.php/ciej/issue/view/17

Booher, D.E, & Innes, J.E. (2002). Network Power in Collaborative Planning, *Journal of Planning Education and Research,* 21(3), 221–236.

Borja, J. & Castells, M. (1997). *Local & Global. Management of Cities in the Information Age.* London: Earthscan.

Bryson, V. (2007). *Gender and the Politics of Time. Feminist theory and contemporary debate,* Bristol: Policy Press.

Bäcklund, P. & Mäntysalo, R. (2010). Agonism and institutional ambiguity: Ideas on democracy and the role of participation in the development of planing theory and practice – the case of Finland. *Planning Theory*, 9 (4), 333–350.

CADDIES- project. Retrieved August 2, 2011, from http://www.caddiesproject.eu/

Castells, M. (2008). The New Public Sphere: Global Civil Society, Communication Networks, and Global Governance. *ANNALS of the American Academy of Political and Social Science*, 616, 78–93.

Castells, M. (2010). Globalization, Networking Urbanisation: Reflections on the Spatial Dynamics of the Information Age. *Urban Studies*, 47(13), 2737-2745.

de Cindio, F. & Schuler, D. (2012). Beyond Community Networks. *Journal of Community Informatics*, 8(3).

Evans-Cowley, J. & Hollander, J. (2010). The New Generation of public Participation: Internet-based participation Tools. Planning Practice and Research, 25(3),397-408.

Fainstein, S. (2010). *The Just City*. New York: Cornell University Press.

Farinosi, M. & Fortunati, L. (2012). The Role of the Internet and the International Knitting Movement. A presentation at the *CIRN Community Informatics Conference*, Prato, Italy, 9.11.2012.

Foth, M., Bajracharya,B., Brown, R., & Hearn, G. (2009). The second life of urban planning? Using NeoGeography tools for community engagement. *Journal of Location Based Services*. 3 (2), 97–117.

Foth, M. (Ed.).(2009). *Handbook of Research on Urban Informatics: The Practice and Promise of the Real-Time City*. Hershey, PA: IGI Global.

Gilroy, R. & Booth, C. (1999). Building Infrastructure for Everyday Lives. *European Planning Studies*, 7(3), 307–324.

Gunnarsson-Östling, U. (2011). *Just Sustainable Futures. Gender and Environmental Justice Considerations in Planning*. Stockholm: KTH Architecture and the Built Environment.

Gurumurthy, A. (2012). Public participation in the network age – A critical feminist perspective. Paper presented at the Asia Pacific Regional Consultation 'Women's Public and Political Life in Asia Pacific', 19.9. 2012, Dhulikhel, Kavre, Nepal. Public participation in the network age – A critical feminist perspective_AnitaG.pdf

Gurstein, M. (2007). *What is community informatics* (and why does it matter)? Milano: Polimetrica.

Habermas, J. (1984). *The Theory of Communicative action. Volume 1: Reason and the Rationalisation of Society.* Boston, MA: Beacon Press.

Healey, P. (1997). *Collaborative Planning: Shaping Places in Fragmented Societies*. London: Macmillan.

Helka (2009). *Presentation in power points*. Retrieved May 12, 2009 from www.Helka.net

Hillier, J. & Healey, P. (2008). *Critical essays in planning theory. 3, Contemporary movements in planning theory.* Aldershot: Ashgate.

Horelli, L. (2006). A Learning-based network approach to urban planning with young people. In C. Spencer & M. Blades (eds.), *Children and Their Environments: Learning, Using and Designing Spaces* (pp. 238–255). Cambridge: Cambridge University Press.

Horelli, L. (2010). Sustaining Everyday Life through Psychological Presence, Time, and Space. In K. Karlsson & K. Ellegård (eds.), *Proceedings of the Sustaining Everyday Life Conference*, Issue 38, Retrieved December 11, 2010 from http://www.ep.liu.se/ecp_home/index.en.aspx?issue=038

Horelli, L. & Schuler, D. (2012). Editorial for the special issue on "Linking the Local with the Global within Community Informatics". *Journal of Community Informatics*, 8(3).

Horelli, L. & Wallin, S. (2010). The Future-Making Assessment Approach as a Tool for E-Planning and Community Development – the Case of Ubiquitous Helsinki. In C.N. Silva (Ed.), *Handbook of Research on E-Planning: ICTs for Urban Development and Monitoring* (pp. 58–79). Hershey, PA: IGI Global.

Innes, J. E. & Booher, D.E. (2010). *Planning with complexity. An Introduction to Collaborative Rationality for Public Policy*. London: Routledge.

Kahila, M. & Kyttä, M. (2010). SoftGIS as a Bridge Builder in Collaborative Urban Planning. In S. Wallin, L. Horelli & J. Saad-Sulonen (eds.), *Digital tools in participatory planning* (pp. 13–36). Espoo: Aalto University, Centre for Urban and Regional Studies.

Kanervo, A. (2010). The Users as Co-producers on a Neighbourhood website – The Local perspective to ICT-tools and urban planning. In S. Wallin, L. Horelli & J. Saad-Sulonen (eds.), *Digital tools in participatory planning* (pp. 93–108). Espoo: Aalto University, Centre for Urban and Regional Studies.

Khondker, H.H. (2004). Glocalization as Globalization: Evolution of a Sociological Concept. *Bangladesh e-Journal of Sociology*, 1(2), 1–9.

Larsen, J., Axhausen, K. & Urry, J. (2006). Geographies of Social Networks: Meetings, Travel and Communications. *Mobilities,* 1(2), 261–283.

Latour, B. (1987). *Science in action: How to follow scientists and engineers through society,* Cambridge, MA: Harvard University Press.

Lindblom, C. (1959). The science of muddling through. *Public Administration Review*, 19(2), 79–88.

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

Mareggi, M. (2002). Innovation in Urban Policy: The Experience of Italian Urban Time Policies. *Planning Theory & Practice*, 3(2), 173–194.

Medaglia, R. (2007). The challenged identity of a field: The state of the art of eParticipation research. *Information Polity*,12 (3), 169–181

MIREIA-project (2012). Retrieved January 15, 2013 from http://is.jrc.es/pages/EAP/eInclusion/MIREIA.html

Mouffe, C. (2000). *The Democratic Paradox*. London: Verso.

Nadin, V., & Stead, D. (2008). European spatial planning systems, social models and learning. *disP, 172*(1), 35–47.

Nielsen, E.H. & Simonsen, S. (2003). Scaling from ´Below`: Practices, Strategies and Urban Spaces, *European Planning Studies*, 11(8), 911–927.

Pacione, M. (2005). *Urban Geography. A Global Perspective*. Oxford: Routledge.

Rettie, R. (2008). Mobile Phones as Network Capital: Facilitating Connections. *Mobilities*, 3(2), 291–311.

Rohe, W.M. (2009). From Local to Global: One Hundred Years of Neighborhood Planning. *Journal of the American Planning Association,* 75(2), 209–230.

Saad-Sulonen, J. (2012). The role of media content creation and sharing in participatory e-planning. *International Journal of E-Planning Research*, 1(2).

Saad-Sulonen, J. (forthcoming). *Combining participations. Shifting the locus of participatory e-planning.* (Doctoral Dissertation). Helsinki: Aalto University, School of Arts, Design an 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,* Vol. 6 (2).

Sadoway, D. (2012). From associations to info-sociations: The co-evolution of civic associations & ICTs in two Asian cities. *Journal of Community Informatics*, 8(3).

Sassen, S. (2004). Local Actors in Global Politics. *Current Sociology*, 52(4): 649–670.

Sassen, S. (Ed.)(2007). *Deciphering the Global: its scales, spaces and subjects*. New York: Routledge.

Schuler, D. & Day, P. (eds.)(2004). *Shaping the Network Society: The New Role of Civil Society in Cyberspace.* Cambridge MA: MIT Press.

Siemens, G. (2006). *Knowing knowledge*. Retrieved June 1, 2008 from www.knowingknowledge.com

Silva, C.N. (2010). The E-Planning paradigm – Theory, Methods and Tools: An Overview. In C.N. Silva (Ed.), *Handbook of Research on E-Planning: ICTs for Urban Development and Monitoring* (pp.1-14). Hershey, PA: IGI Global.

Silva, C.N. (2012). Editorial Preface: E-Planning Cultures: In Search of a Model for Comparative Research. *International Journal of E-Planning Research*, 1(2): i–iv.

Staffans, A., Rantanen, H. & Nummi, P. (2010). Online environments shake up urban planning – developing local internet forums. In S. Wallin, L. Horelli & J. Saad-Sulonen (eds.), *Digital tools in participatory planning* (pp.37-58). Espoo: Aalto University, Centre for Urban and Regional Studies.

Susskind, L., McKearnan, S. & Thomas-Larmer, J. (1999). *The Consensus Building Handbook. A Comprehensive Guide to Reaching Agreement*. London: Sage.

Townsend, A. (2009). Foreword. In Marcus Foth (Ed.), *Handbook of Research on Urban Informatics: The Practice and Promise of the Real-Time City* (pp. xxii–xxvi). Hershey, PA: IGI Global.

Tulloch, S. (compiled) (1991). *The Oxford dictionary of new words: a popular guide to words in the news.* Oxford: Oxford University Press.

Wallin, S. (2013). Urban Complexity Challenging Urban Planning. In L. Horelli (Ed.), *New Approaches to Urban Planning, Insights from Participatory Communities.* Helsinki: Aalto University.

Wallin S. & Horelli L. (2010). The methodology of user-sensitive service design within urban planning, *Environment and Planning B: Planning and Design,* 37(5), 775–791.

Wallin, S. & Horelli, L. (2012). Playing with the glocal through participatory e-planning. *Journal of Community Informatics,* 8(3).

Wallin, S., Horelli, L. & Saad-Sulonen, J. (eds.)(2010). *Digital tools in participatory planning.* Espoo: Aalto University, Centre for Urban and Regional Studies.

Wallin, S., Saad-Sulonen, J., Amati, M. & Horelli, L. (2012). Exploring E-Planning Practices in Different Contexts: Similarities and Differences Between Helsinki and Sydney. *International Journal of E-Planning Research*,1(3), 17–39.

Williams, A., Robles, E., & Dourish, P. (2009). Urbaning the City: Examining and refining the assumptions behind urban informatics. In M. Foth (Ed.), *Handbook of Research on Urban Informatics: The Practice and Promise of the Real-Time City* (pp. 1–20). Hershey, PA: IGI Global.

PART V
CONCLUSIONS

8 Towards an Architecture of Opportunities

Liisa Horelli and Sirkku Wallin

This book has evolved from the concern that current approaches to urban planning are not responding to citizens' demands or to the challenges of urban complexity because they fail to acknowledge the self-organising nature of the urban environment and its inhabitants. This concern is not new, it has just become more obvious. In this book we have started from the point of view of urban inhabitants and presented new approaches to urban planning with tools provided by ICTs and the models of action that they enable. These might bring about a new architecture of opportunities. This means the building of a supportive infrastructure of everyday life that encourages citizens to participate not only in formal decision-making, but actually in the co-design and co-production of their own local environment, on the basis of daily and future activities, at different scales. This will bring about what we call ´participatory communities`.

Our conclusions can be crystallised into three points: an expanded meaning of participation in urban planning, an understanding of planning as part of a self-organising and self-steering urban reality, and a view of the city as undergoing transformation at different scales.

The expanded participatory basis of the new approaches

The legitimation of citizen participation in urban planning has traditionally leant on the argument that participatory planning is the corner-stone of an open, democratic and transparent society, and on the idea that it also increases better fit between the actors and their settings. In this book, the argument is taken even further in order to meet the realities of the digital age with its new culture of participation (see Boonstra & Boelens, 2012).

We seek to integrate the dispersed planning processes within the wider perspective of sustainable urban development. The expanded notion of participation, ranging from simple urban planning cases to community development and even to local co-governance, will co-produce the supportive infrastructure of everyday life that might support citizens from all walks of life (Wallin & Horelli, 2010).

The dynamics of social segregation reveal that the well-off can move away from a neighbourhood if necessary, but that many others are unable to move out and to improve their lives. They can only rely on their own possibilities to shape their environment. Participation is the mechanism for making, using and distributing resources in the long run. This is what brings about the architecture of opportunities (Hamdi, 2010). The responsible involvement of authorities and politicians will not be diminished, as it is in the new liberal doctrines, since the complexity of problems will compel them to join forces with citizens and enterprises in order to find better solutions.

Our examples show that the new approaches, such as participatory e-planning as we define it in Chapters 6 and 7, have already begun to transform urban planning processes, purpose, content, scale and participants. Even the meaning of participation has started to change, as the new category, ´participation as self-organisation` is rapidly spreading[1]. The new approaches to urban planning that have been described in this book have sought to enhance sustainable urban development by increasing the steering effect and success of planning, but also by creating real opportunities for people to manage their everyday lives. In addition to the three principles characterizing the new approaches in the Introduction to this book, we can now go deeper into the methodology of the new approaches, by acknowledging the following:

1 Boonstra & Boelens (2011) separate participation and self-organisation. They see participation as "staged" by formal bodies and reserve the concept of self-organisation to the community-based initiatives.

- Firstly, the digital and social media-based instruments that are increasingly embedded in the practices of everyday life, assist in the collecting of socio-spatial and temporal data beyond the traditional statistical data-gathering that urban planning has been based on. The same tools enable public participation in planning. *Social media applications, if used judiciously, become indispensable urban and community informatics tools*

- Secondly, not only are the new data and tools essential, but so is their innovative use, such as that described for time planning. Urban space is no longer understood as a static state, but as part of the changing mosaic of different social practices depending on the rhytms and times of the day and year, as well as on the level of activities ranging from individuals to larger collectives in specific contexts. The new tools (see first bullet-point) also enhance *the envisioning and anticipation of spatio-temporal patterns* and consequent planning for them.

- Thirdly, urban development, at least in Finland, is not currently steered by urban planning, but by developers and construction companies that do not acknowledge the local infrastructure of everyday life. They do business by building houses, and ignore the urban space, which in turn is mostly developed by inhabitants and other urban dwellers at the neighbourhood level. Therefore, it is necessary to *integrate community development into urban planning*. This requires new approaches to urban planning. In this book we described one such approach, the Learning-based network approach (Lena). This has been tested and applied in action research for nearly a decade. In practice, it was not sufficiently connected to the actual everyday life, however, but it did serve as a research vehicle to introduce community development initiatives and to create structures of co-governance.

- Last but not least, the novel approaches create opportunities for self-reflection. The new data and possibilities to model current urban space and actions provide *potentials to prepare (plan) for the future, to see the origins of wicked problems and other urban complexities, and even to solve some of them.* However, the focus of this book has so far been on the development of the approaches, although the importance of on-going monitoring and evaluation, as well as the co-visioning of the future have been stressed (Horelli & Wallin, 2010; Horelli & Wallin, 2013).

Focus on the interplay of the formal, semi-formal and informal

The new approaches imply a shift from techno-rational urban development to identifying and supporting the self-organisation of activities at different levels and on various arenas. *Planning* is not, however, regarded as governance for participants to become involved in, but rather as *an endeavour that takes place from the formal, to the semi-formal and informal whether in terms of activities, networks, partnerships, structures or discursive spheres*. This way of seeing planning supersedes the traditional approach in which the focus is on the formal aspects.

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. For example, research on and evaluation of urban development has mostly been conducted from the perspective of formal institutions. This book foregrounds the contributions and patterns of action that shape the living environment and which are carried out by various actors in the local community. Although the number of actors increases, by taking them into account it is possible to understand, describe and steer multi-actor planning even better than in the traditional administration-centred process.

Karoliina Jarenko, in Chapter 3, suggests that co-governance means linking the formal, semi-formal and informal networks and public spheres to form a deliberative system, as was the case in the Herttoniemi neighbourhood. Since co-governance makes the local neighbourhood more responsive and sustainable for further development, the formal, semi-formal and informal structures should be nourished by administration and political decision-making (see also Hamdi, 2010).

Jenni Kuoppa, in Chapter 5, focuses on the informal aspects, as she describes the meaning of everyday life and walking in the shaping of the environment and in planning. In addition, she shows how motivation lies in the practices of everyday life through which the residents can influence their environment. The approaches and tools applied between the formal and informal are described by Joanna Saad-Sulonen. In Chapter 6 she depicts how participatory design in the semi-formal networks stretches out to the formal platforms. Liisa Horelli´s Chapters 4 and 7 on time and e-planning respectively provide examples of how the new approaches to planning cover the whole interplay between the formal and the informal. Last but not least, Sirkku Wallin uncovers the complex urban context, by

demonstrating the challenges and solutions that take place in the planning of activities in and through the interplay of the formal-informal.

Self-organisation, which is contingent and stretches across many levels, is part of the informal and semi-formal (see Boonstra & Boelens, 2011). Self-organisation cannot be commanded but only nourished through networks and the infrastructure of everyday life. In fact, the book chapters show the significance of the supportive infrastructure of everyday life both to the individuals and the community, as well as to glocal policies by its enhancement of agency at multiple levels.

Dealing with the glocal through trans-scalar policies

The new approaches to urban planning described in the book have produced outcomes that reveal new participations, stakeholders, meanings, times, levels and complex problems. On the other hand, seeing urban planning in terms of complexity management liberates planning from the straitjacket of having to plan at all the levels, holistically and in detail. However, local communities are increasingly glocal. The power to underpin the flow of everyday life in glocal communities requires the mobilisation of the whole set of formal, semi-formal and informal processes, networks and structures.

Glocalisation is reflected in urban planning in efforts to make trans-scalar policies and strategies (see Chapter 7 by Horelli). Communities can no longer be understood as territorial containers but rather as relational spaces and participatory places that are intertwined with regional, national, international, as well as with formal, semi-formal and informal networks, links, hubs and discursive spheres. These trans-scalar and dynamic processes of urban transformation require attempts to deal with the complex territorial and functional relationships of different stakeholders operating at varying scales.

According to Majoor and Salet (2008; see also the EU MIREIA-project, 2012), *the point is to find a geographical and conceptual intermediate level* that can connect bottom-up demands from neighbourhoods and locales with the top-down directives originating at city or regional levels. This would make it possible to connect the self-managed, informal interventions and local experiments of self-regulated civic society actors with broader (formal) macro-objectives of economic, social and urban change. However,

the authors (Ibid) complain that civic groups have not yet been consciously involved in the new trans-scalar strategies around urban planning.

On the other hand, increasing evidence exists of ways in which glocalisation has been dealt with through self-organised democratic processes, even where there are no official governance devices at the neighbourhood or at the global level. The multi-scalar politics not only comprise globally conspicuous citizen movements, on the ´global street` (Sassen, 2009), such as the Arab spring or Occupy Wall Street, but also environmental activists in many parts of the world. David Sadoway (2012) describes how the civic-cyber organisations, movements and counter-publics in Hong Kong and Taipei use community informatics and operate at polycentric scales. These organisations are multimodal (employing an array of ICTs including social media), multiplexed (blending virtual and physical practices) and multi-scalar (varied in geography, ranging from the local to the global). The participatory transformations point towards the reconfiguration of the public (cyber)sphere via online forums, news and blogs, interactive map mash-ups, and forms of multi-mediation as audio, video and text. They also tend to construct cyberspaces of hope by creating counter-spaces that catalyse ideas and ideals.

Nevertheless, we claim that participatory e-planning can enhance people's ability to deal with the glocal in the long run, only if certain technical, organisational and institutional capacities, as well as supportive structures, are in place. This concerns especially developing countries but developed, democratic states as well (see Chapter 7; Gurumurthy, 2012; Horelli & Wallin, 2013).

Glocal cross-border networking around participatory structures and environmental improvements by actors in different countries has meant an expansion of the concept of e-planning. In addition, it has also implied an enlargement of community informatics, as the local communities have begun to shape the global ones, even if they have not yet adopted consciously trans-scalar strategies. The lessons learnt from the international experiences suggest that it is increasingly important to manage glocal transactions at the local level. This means that e-planning measures have to be targeted at the design and implementation of online deliberative environments and tools that enhance the integration of both local and non-local perspectives (de Cindio & Schuler, 2012).

Therefore, trans-scalar policy-making and planning are reflexive processes of social learning and network building (see Smith et al. 2005). They deal with the reconfiguration of interdependent, multi-actor and

multi-level systems that are dynamic and complex. Their goals are shifting towards moving targets and their effects are unpredictable. According to Shove et al. (2012), there are no reliable means of steering or governing transitions. Systemic forms of policy intervention only have an effect when they are taken up in practice. The role of intermediary agents is certainly important, but the size, location and type of intermediaries are still an open question.

From the perspective of urban planning, trans-scalarity induces urban complexity. In the light of the Finnish experiences of action research, described in Chapter 2, simple problems can be planned for but even then, a better fit will be achieved if participations are multiple and citizens involved. Complex problems require that planning is turned upside down or inside out (Boonstra & Boelens, 2011) in the sense that various thematic issues can be discussed and tried out in living labs as such, or cross-fertilised at different levels in the public spheres: mixed, wild macro and formal micro ones (see Chapter 3). This does not mean that the work of professional planners will be diminished but it certainly will be transformed.

But, what is the common ground for glocal transactions? Perhaps the common ground will never be found, but the co-creation of glocal visioning through the arsenal of social media as a shared everyday practice (see for example Horelli & Wallin, 2013), may strengthen the readiness to anticipate, and prepare citizens for the reperception of and more appropriate responses to the ´global meeting the local` and vice versa.

It goes without saying that further research is needed, especially comparative studies that focus on the glocal aspects of urban planning and on the role and type of intermediaries between the local and the global. An interesting issue is also the role that the social media plays in the management of glocal issues, but also in the meeting of challenges brought about. Will civil society organisations be able to shape the uses and applications of community informatics towards a just and liveable city for all? Last but not least, what will the future trans-scalar policies and strategies affecting urban planning be like?

References

Boonstra, B. & Boelens, L. (2011). Self-organization in urban development: towards a new perspective on spatial planning. *Urban Research & Practice*, 4(2), 99–122. http://dx.doi.org/10.1080/

de Cindio, F. & Schuler, D. (2012). Beyond Community Networks. *Journal of Community Informatics*, 8(3).

Gurumurthy, A. (2012). Public participation in the network age – A critical feminist perspective. Paper presented at the Asia Pacific Regional Consultation 'Women's Public and Political Life in Asia Pacific', 19.9. 2012, Dhulikhel, Kavre, Nepal. Public participation in the network age – A critical feminist perspective_AnitaG.pdf

Hamdi, N. (2010). *The Placemakers Guide to Building Community*. London: Earthscan Ltd.

Horelli, L. & Wallin, S. (2010). The Future-Making Assessment Approach as a Tool for E-Planning and Community Development – the Case of Ubiquitous Helsinki. In C.N.Silva (Ed.), *Handbook of Research on E-Planning: ICTs for Urban Development and Monitoring* (pp. 58–79). Hershey, PA: IGI Global.

Horelli, L. & Wallin, S. (2013). Gender-sensitive e-planning for sustaining everyday life. In Ines Sanchez de Madriaga & Marion Roberts (eds.), *Fair Share' Cities: the impact of gender planning* (pp. 330–353). London: Ashgate.

Jacobs, J. (1961). *The Death and Life of Great American Cities.* New York: Vintage books.

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.

Sadoway, D. (2012). From associations to info-sociations: The co-evolution of civic associations & ICTs in two Asian cities. *Journal of Community Informatics,* 8(3).

Sassen, S. (2009). Reading the city in a global digital age. In S. McQuire, M. Martin and S. Niederer (eds.), *Urban Screens Reader* (pp. 29–44). Amsterdam, the Netherlands: Institute of Network Cultures.

Shove, E., Pantzar, M. & Watson, M. (2012). *The Dynamics of Social Practice. Everyday Life and How It Changes.* London: Sage.

Smith, A., Stirling, A. & Berkhout, F. (2005). The governance of sustainable socio-technical transitions. *Research Policy,* 34(10), 1 491–1 510.

Wallin, S. (2013). Urban Complexity Challenging Urban Planning. In L. Horelli (Ed.), *New Approaches to Urban Planning, Insights from Participatory Communities.* Helsinki: Aalto University.

Wallin S. & Horelli L. (2010). The methodology of user-sensitive service design within urban planning, *Environment and Planning B: Planning and Design,* 37(5), 775–791.

Glossary

Community informatics (CI) can be broadly defined as the use of ICTs for the empowerment of communities (Gurstein, 2007).

Glocalisation refers to the interdependent processes shaping the local and the global, often enhanced by ICTs. ´Glocal` is the result of glocalisation.

Governance can be understood as a wider set of institutions and inter-relationships 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 between networked modes of governance, elected representations and the governmental institutions of local authorities is simultaneously an opportunity and a threat (Parkinson & Boddy, 2004).

Infrastructure of everyday life refers to the physical, functional and participatory structures that the local citizens can appropriate and transform into a supportive culture that provides place identity and sense of community (Horelli & Vepsä;1994; Gilroy & Booth, 1999).

Learning-based network approach to planning and community development (Lena) is a participatory method and a set of tools for analysing, planning, implementing, monitoring and evaluating planning and community development, often integrated with action research (Horelli, 2006; Wallin, S., Horelli, L. & Saad-Sulonen, 2010).

Local co-governance as a form of deliberative democracy implies a democracy model that emphasizes wide participation and public discussions in political decision making. Deliberation refers in this context to the co-governance of structures and resources that support everyday life. The focus of co-governance should be the interplay of formal, semi-formal and informal actors in local decision-making.

Participatory e-planning can be defined as "a socio-cultural, ethical and political practice which takes place offline and online in the overlapping phases of the planning and decision–making cycle, by using digital and non-digital tools". It also includes participation in the design and use of digital tools and media content (Horelli & Wallin, 2010; Saad-Sulonen, 2013).

Public or discursive sphere is the arena or arenas in which citizens engage in deliberation of political affairs (Fraser, 2007).

Self-organisation is an emergent property of adaptive complex systems, something in which government does not predominate. Self-organisation needs to be perceived as structurational for present-day society (Boonstra & Boelens, 2011; Fuchs, 2006). Self-organisation refers in this book to the active citizens and their endeavours at the neighbourhood level actions, such as building a community house, local web sites and guerilla gardening.

Time policies and planning refer to those public policies and planning interventions that affect the time schedules and the spatio-temporal organisation regulating people's activities and relationships at the local, regional, national and even European level (Mareggi, 2002).

Urban complexity refers to systemic problems *(i.e. wicked urban problems)* related to urban structures and functions that are inseparable from the evolving nature of the city itself (Baynes, 2009; Urry, 2003). Urban complexity can be divided into a. simple complexity that can be solved b.to disorganised complexity that can be recognized and forecasted and c. to organised complexity that cannot be solved by planning.

Urban informatics is the study, design, and practice of urban life across different urban contexts that are created by new opportunities of real-time, ubiquitous technology and the augmentation that mediates the physical and digital layers of people, networks and urban infrastructures (Foth, Choi, & Satchell, 2011).

Wicked urban problems include a wide spectrum of problems unfolding in urban space or caused by urban lifestyle that are difficult to solve. The increasing volume of traffic, consumption, pollution, inadequate services and the dispersed urban structure are examples of wicked urban problems.

References

Baynes, T. (2009). Complexity in Urban Development and Management Historical Overview and Opportunities. *Journal of Industrial Ecology*, 13, (2), 214–227.

Boonstra, B. & Boelens, L. (2011). Self-organization in urban development: towards a new perspective on spatial planning. *Urban Research & Practice*, 4(2), 99–122. http://dx.doi.org/10.1080/

Foth, M., Choi, J. H., & 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. http://eipcp.net/transversal/0605/fraser/en

Fuchs, C. (2006). The Self-Organization of Social Movements. *Systemic Practice and Action Research,* 19(1), 101–137.

Gilroy, R. & Booth, C. (1999). Building infrastructure for everyday lives. *European Planning Studies,* 7(3), 307–324.

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 Regional Consultation 'Women's Public and Political Life in Asia Pacific',19.9. 2012, Dhulikhel, Kavre, Nepal. Public participation in the network age – A critical feminist perspective_AnitaG.pdf

Horelli, L. (2006). A Learning-based network approach to urban planning with young people. In C. Spencer & M. Blades (eds.), *Children and Their Environments: Learning, Using and Designing Spaces* (pp. 238–255). Cambridge: Cambridge University Press.

Horelli, L. & Vepsä, K. (1994). In Search of Supportive Structures for Everyday Life. In I. Altman & A. Churchman (eds.), *Women and the Environment. Human Behavior and Environment* (pp. 201–206). New York: Plenum.

Horelli, L. & Wallin, S. (2010). The Future-Making Assessment Approach as a Tool for E-Planning and Community Development – the Case of Ubiquitous Helsinki. In C.N.Silva (Ed.), *Handbook of Research on E-Planning: ICTs for Urban Development and Monitoring* (pp. 58–79). Hershey, PA: IGI Global.

Mareggi, M. (2002). Innovation in Urban Policy: The Experience of Italian Urban Time Policies. *Planning Theory & Practice*, 3(2), 173–194.

Parkinson, M. & Boddy, M. (2004). *City Matters: Competitiveness, Cohesion and Urban Governance*. Bristol: Policy Press.

Saad-Sulonen, J. (2013). Multiple participations. In L. Horelli (Ed.), *New Approaches to Urban Planning, Insights from Participatory Communities*. Helsinki: Aalto University.

Urry (2003). *Global Complexity*. Cambridge: Polity Pres.

Wallin, S., Horelli, L. & Saad-Sulonen, J. (eds.)(2010). *Digital tools in participatory planning.* Espoo: Aalto University, Centre for Urban and Regional Studies.

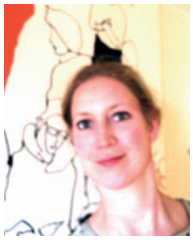
Contributors

Liisa Horelli, PhD. is adjunct professor at Aalto University, Helsinki. As an environmental psychologist, she has conducted action research with children, young people and women on participatory urban planning and community development for decades. Currently, she is doing research on the new approaches to urban planning, including time- and e-planning. Her evaluation work comprises EU projects, programmes and policies. She is former President of the Finnish Evaluation Society and a current Board Member of the European Evaluation Society.

Karoliina Jarenko (M.Sc.) is a researcher and doctoral candidate at the Aalto University, YTK – Land Use Planning and Urban Studies Group. She studies collaborative planning drawing from political philosophy and democracy theory. Her doctoral thesis focuses on the concept of public interest, searching for the justification for public planning in complex and plural contemporary societies.

Jenni Kuoppa (M. Sc.) is a doctoral candidate and researcher at the Department of Surveying and Planning, YTK – Land Use Planning and Urban Studies, Aalto University. Her research focuses on everyday life practices and experiences in urban environments, especially on the diverse practices and meanings of walking. Her background is in Environmental policy and she is writing her PhD dissertation on the ideals of walking in cities and their actualization in urban planning.

Joanna Saad-Sulonen (MA, B.Arch) is a doctoral candidate at Aalto University's School of Arts, Design and Architecture. She has a background in architecture and new media and digital design. Her research focuses on the limitations of the current approach to participatory e-planning, where the relationship between technology and citizen participation in urban planning is often based on the application of "ready-to-use" technology in the context of formal participation and urban planning processes. By situating her work at the intersection of digital design and urban planning, she proposes a new conceptualization of participatory e-planning, which concurrently enables the collaborative development of both technologies and participation.



Sirkku Wallin, (M. Sc.) is a researcher at the Department of Surveying and Planning, YTK – Land Use Planning and Urban Studies, Aalto University. She is also a doctoral candidate at the Department of Geosciences and Geography, University of Helsinki. She has been involved in the projects of community development and participatory urban planning since 2001. Her doctoral thesis focuses on participatory planning, urban development and the management of urban complexity.

Carlos Nunes Silva, PhD, is Professor Auxiliar at the Institute of Geography and Spatial Planning, University of Lisbon, Portugal. His research interests are mainly focused on local government policies, history and theory of urban planning, urban and metropolitan governance, urban planning ethics, urban planning in Africa, research methods, e-government and urban e-planning. His recent publications include the 'Handbook of Research on E-Planning: ICT for Urban Development and Monitoring' (2010), 'Online Research Methods in Urban and Planning Studies: Design and Outcomes' (2012), 'Citizen e-Participation in Urban Governance: Crowdsourcing and Collaborative Creativity' (2013) and the special issue of 'Cities – The International Journal of Urban Policy and Planning' on 'Urban Planning in Africa' (2012). He is the Editor-in-Chief of the 'International Journal of E-Planning Research' (IJEPR). He is member of the Steering Committee of the International Geographical Union Commission on Geography of Governance.

Urban planning is facing challenges related to the self-organising character of urban reality and the massive spread of technology. The new approaches, such as participatory e-planning and time planning, comprise methods that allow us to analyse, develop, implement and monitor physical, functional and participatory structures at the neighbourhood level and beyond. They enable models of planning that may bring about an architecture of opportunities. This means the building of a supportive infrastructure of everyday life that encourages citizens to participate not only in formal decision-making, but actually in the co-design and co-production of their own local environment, on the basis of daily and future activities, at different scales.

"By recognizing the crucial link between the nature and roles assigned to citizen participation and the outcomes of the planning process, the book 'New Approaches to Urban Planning' is an important addition to the ongoing debate in the field of citizen participation in urban planning and in the field of planning theory. Although written from a Finish standpoint it is not intended and is not only relevant for a Finnish readership but it will certainly prove helpful to other European and non-European researchers, students, planners and to networks of self-organized citizens."

Carlos Nunes Silva

9 789526 051901

ISBN 978-952-60-5190-1
ISBN 978-952-60-5191-8 (pdf)
ISSN-L 1799-4896
ISSN 1799-4896
ISSN 1799-490X (pdf)

Aalto University
School of Engineering
Department of Real Estate, Planning and Geoinformatics
YTK – Land Use Planning and Urban Studies Group
www.aalto.fi

BUSINESS + ECONOMY

ART + DESIGN + ARCHITECTURE

SCIENCE + TECHNOLOGY

CROSSOVER

DOCTORAL DISSERTATIONS