URBAN AND LANDSCAPE PERSPECTIVES

Alessandro Balducci · Raine Mäntysalo (Eds.)

Urban Planning as a Trading Zone

Springer

Urban and Landscape Perspectives

Volume 13

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Alessandro Balducci • Raine Mäntysalo
Editors

Urban Planning as a Trading Zone

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Editors
Alessandro Balducci
Department of Architecture
and Urban Studies (DAStU)
Politecnico di Milano
Milan, Italy

Raine Mäntysalo
Department of Real Estate,
Planning and Geoinformatics/YTK
School of Engineering
Aalto University
Espoo, Finland

ISBN 978-94-007-5853-7 ISBN 978-94-007-5854-4 (eBook)
DOI 10.1007/978-94-007-5854-4
Springer Dordrecht Heidelberg New York London

Library of Congress Control Number: 2013931994

Cover illustration: Alessandro Balducci

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

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Contributors

Pia Bäcklund School of Management, University of Tampere, Tampere, Finland

Pia Bäcklund (1966) has worked on practical and theoretical issues of local democracy and participation for more than a decade, earlier as a senior researcher at the city of Helsinki, and since 2010 at the University of Tampere, Finland. She received her Master's (1997) and Doctoral (2007) degrees in human geography in the University of Helsinki. She is currently engaged in her Academy of Finland-financed postdoctoral work concerning issues of participation and territoriality in local democracy in city regions.

Alessandro Balducci Department of Architecture and Urban Studies (DAStU) Politecnico di Milano, Milan, Italy

Alessandro Balducci (1954), is an architect and has a PhD in Planning, is Vice-rector of the Politecnico di Milano and full professor of Planning and Urban Policies. Former Head of the Department of Architecture and Planning (2001–2008) and former director of the international PhD programme in Spatial planning and Urban Development (2009–2012) at the Politecnico di Milano, he has been the President of AESOP, the Association of the European Schools of Planning (2001–2004), and among the founding members of the European Urban Research Association (EURA) and is currently Chair of the Italian Society of Urbanists (SIU).

Claudio Calvaresi Urban and Territorial Policy Unit, Istituto per la Ricerca Sociale, Milan, Italy

Claudio Calvaresi (1964) holds a Degree in Urban Planning (1992) and a PhD in Urban Planning (1996). He is currently the director of the Urban Policies Research Unit at IRS and also a professor of Analysis of Urban and Territorial Policy at Faculty of Architecture, Politecnico di Milano. His main fields of interest are urban regeneration, strategic planning, community planning and evaluation of territorial policies. He has been in charge of relevant research project in the field of local development processes and involved in research projects funded by the European Commission.

Linda Cossa Urban and Territorial Policy Unit, Istituto per la Ricerca Sociale, Milan, Italy

Linda Cossa (1979) holds a degree in Urban Planning (2004) and is currently a PhD candidate in Territorial Design and Government at Faculty of Architecture, Politecnico di Milano. She has been a researcher of the Urban Policies Research Unit at IRS since 2005, and she is involved in urban public policy analysis and evaluation, urban planning and social housing programmes, with a particular attention towards regeneration of suburban areas.

Daniela De Leo Department of Design, Architecture, Technology and Environment, Faculty of Architecture, "La Sapienza" University, Rome, Italy

Daniela De Leo (1973) is a researcher and assistant professor of urban planning at the "Sapienza" University in Rome (Italy). She graduated in architecture and earned a PhD in urban planning at the "Federico II" University of Naples. She mainly works in the fields of planning theory and practices and local development planning in difficult conditions. Among her recent works are the following: "Insurgent public sphere in illegal settlements in Naples metro-region" (in M. Cremaschi and F. Edckardt (eds), Changing place, Technè press 2011) and Attualità dello sviluppo 2012 (with Fini V.), FrancoAngeli.

Valeria Fedeli Department of Architecture and Urban Studies (DAStU), Faculty of Architecture and Society, Politecnico di Milano, Milan, Italy

Valeria Fedeli (1972) is an architect (M.Sc. Architecture, 1997) and has a PhD in Planning and Public policies (Istituto Universitario di Architettura di Venezia, 2001). She is a researcher and assistant professor at Politecnico di Milano since 2007. She also holds an Advanced Master Degree in Planning at Politecnico di Milano (2002). She has been postdoc research fellow at Maison des Sciences de l'Homme, Paris, in 2003. She teaches Bachelor courses in "Urban Analysis", "Social and urban analysis" and "Planning tools". Her research activities focus on governance, metropolitan and territorial planning and strategic planning.

Peter Galison Department of the History of Science, Harvard University, Cambridge, MA, USA

Peter Galison is a physicist and historian of science at Harvard University, where his work explores the material and theoretical interaction among scientific cultures. His books include the following: How Experiments End, Image and Logic, Einstein's Clocks, Poincaré's Maps and, with Lorraine Daston, Objectivity. In 2012, his collaborative work with William Kentridge ("Refusal of Time") was at Documenta. He has made two documentary films: Ultimate Weapon: The H-bomb Dilemma and Secrecy (about national security secrecy and democracy), which premiered at the

Sundance Film Festival. At present, he is completing a book, Building Crashing Thinking (on technologies that re-form the self).

Maarit Kahila-Tani Department of Real Estate, Planning and Geoinformatics/YTK, Aalto University, Espoo, Finland

Maarit Kahila-Tani (1978) is a PhD student at Aalto University, YTK Land Use Planning and Urban Studies Group (Finland). She graduated in planning geography in Helsinki (2005). She works in the fields of participative urban planning, geographic information and planning support systems. In her PhD, she studies how SoftGIS method bridges the gap between urban planners and residents.

Jonna K. Kangasoja Department of Real Estate, Planning and Geoinformatics/YTK, Aalto University, Espoo, Finland

Jonna K. Kangasoja (1971) is a researcher and doctoral candidate (YTK Land Use Planning and Urban Studies) at Aalto University (Finland).

Kangasoja graduated in 2000 (MA in education) from the University of Helsinki, Department of Education. Kangasoja's research has focused on multiparty collaboration, boundary crossing and mediation in planning practices. Currently she is a visiting researcher at the Program on Negotiation at Harvard Law School. Her publications include Kangasoja, J. and Schulman, H. Eds. (2007) *Arabianranta – Rethinking Urban Living*, City of Helsinki Urban Facts; Kangasoja, J. et al., (2010) Architectural Education as Basis of Planning Work. The Pros and Cons of Professional Enculturation. *Journal for Education in the Built Environment*; and Peltonen et al. (2012) *Sovittelu osana maankäytön ristiriitojen hallintaa* (*Mediation as a tool for managing land use planning conflicts*) (in Finnish) 2/2012, Aalto University.

Vesa Kanninen Department of Real Estate, Planning and Geoinformatics/YTK, Aalto University, Espoo, Finland

Vesa Kanninen (1962) has worked at Aalto University, Finland, since receiving his Master's degree in planning geography (2002) in the University of Helsinki (Finland), concentrating on land use planning cooperation, land use and transportation planning integration as well as planning policy, governance and retail planning issues. He is currently engaged, e.g. in research concerning retail planning cooperation and city centre revitalization, and is working on his PhD on the applicability of the trading zone approach in aiding planning integration.

Helena Leino School of Management, University of Tampere, Tampere, Finland

Helena Leino is senior lecturer in environmental policy at the School of Management in University of Tampere (Finland). She received her PhD (2006) in environmental policy in Tampere. She teaches master level courses on environmental policy and urban planning. Her recent research has focused on practice-oriented policy analysis,

public participation and land-use planning conflicts as well as participatory knowledge production in urban planning. Among her recent works are as follows: "Do Matters of Concern Matter? Bringing Issues back to Participation" (in *Planning Theory*, 2012 together with M. Laine) and "Situated knowledge – situated legitimacy: consequences of citizen participation in local environmental governance" (in *Policy and Society* 2012 together with J. Peltomaa).

Laura Lieto Department of Architecture, "Federico II" University, Naples, Italy

Laura Lieto (1966) is an associate professor of urban planning at the "Federico II" University of Naples (Italy). She graduated in architecture in Naples (1990) and earned a PhD in urban planning at the "Sapienza" University in Rome (1997). She mainly works in the fields of planning theory and planning history, among her recent works are "Power, Knowledge and Ethics in Extra-ordinary times. Learning from the Naples waste crisis" (in F. Lo Piccolo and H. Thomas (eds), Ethics and Planning Research, Ashgate 2009) and Americans. Città e territorio ai tempi dell'impero (Cronopio 2012).

Raine Mäntysalo Department of Real Estate, Planning and Geoinformatics/YTK, Aalto University, Espoo, Finland

Raine Mäntysalo (1963) received his Master's (1994) and Doctoral (2001) degrees in architecture (urban planning) in University of Oulu (Finland) where he became an adjunct professor in 2005, specialized in planning theory and communicative planning. Since 2008, he has been full professor in strategic urban planning at Aalto University, Helsinki, Finland. Related to his professorship, his theoretical interests concentrate on pragmatist and dialectical planning theory and developmental planning research. He has recently published on the relationship between planning theory and democracy theory and agonism and power analytics in planning processes.

Chapter 0
Introduction

Alessandro Balducci and Raine Mäntysalo

The discovery of the work of Peter Galison on trading zone has been for us a singular process of inquiry.

When we met in Helsinki in 2009 during the sabbatical year of Alessandro Balducci, we discovered that we had been working in the field of planning using much of the same reference literature. In particular, we started to discuss the common background on Charles Lindblom's thought and the reason why we both were convinced that his seminal work could offer a way out from the limits in which the collaborative planning approach was entangled. We both had had experiences in research and in practice, and it was clear for us that the Habermasian idea of non-distorted communication as a means for reaching consensus on critical planning issues was incapable to explain a number of failures in participatory, inclusive, fair planning processes. We had been sympathetic with the collaborative (or communicative) planning approach in our research and practices, recognising its value in dealing with the incapacity of traditional planning to cope with the plurality of actors in planning. We had been working in the theoretical space defined by the positions of scholars like Melvin Webber, John Friedmann, John Forester, Donald Schön, Judith Innes, Patsy Healey, Tore Sager and others in our respective national academic environments. A space in which the role of the planner as the technical expert just supporting the political decision makers had been progressively substituted by the awareness of the wicked nature of planning problems (Rittel and Webber 1973), by the assumption of the intertwined technical and political function of planning

A. Balducci (✉)
Department of Architecture and Urban Studies (DAStU),
Politecnico di Milano, Via Bonardi 3, Milan 20133, Italy
e-mail: sandro.balducci@polimi.it

R. Mäntysalo
Department of Real Estate, Planning and Geoinformatics/YTK,
Aalto University, P.O. Box 12200, 00076 AALTO, Finland
e-mail: raine.mantysalo@aalto.fi

A. Balducci and R. Mäntysalo (eds.), *Urban Planning as a Trading Zone*,
Urban and Landscape Perspectives 13, DOI 10.1007/978-94-007-5854-4_0,

(Friedmann 1973) and by the role of the planner as attention shaper (Forester 1989), reflective expert (Schön 1983) and supporter of a complex deliberative process (Innes and Booher 2010; Sager 1994; Healey 2003).

To overcome the dilemmas of communicative planning, Raine Mäntysalo had been working on the theory of *agonistic democracy* proposed by Chantal Mouffe (2000), which had in common with the collaborative approach the idea of conflict as a constitutive aspect of social interaction but which considered the conflict itself irreducible. Exploring the implications for planning of this theory, Raine had found the interesting concept of *boundary object* proposed by Star and Griesemer (1989) as a heuristic instrument to understand the opportunity of creating projects and temporary agreements even between actors with conflicting value systems and interests.

In our discussion and attempts of application to real practice, the idea of *boundary object* seemed able to open a new interesting perspective: actors may disagree on values and objectives, may change their positions over time, may demonstrate to be interested in completely different aspects of what is at stake but may nonetheless reach agreements on the boundary of each one's strategy. Given the different representations of the planning process that each actor is producing when deciding to act and the difficult or even impossible enterprise to reconduct all these different constructions to a common representation in order to reach consensual choices, the idea of *boundary objects* seemed to us really capable of producing a new interpretation of what makes complex decisions happen.

From this promising standpoint, we moved in two different directions: the first has been to go back to the work of Charles Lindblom who in the critical debate, which took place between 1950s and 1960s, had already proposed how partisan mutual adjustment between conflicting positions would be the way in which decisions are taken, holding that rationality emerges from the interplay between a number of actors each defending one's problem definition, objectives and interests rather than from the central coordination of an actor who is supposed to act in the public interest and with superior knowledge and capacity. This has been the focus of discussion in our first chapter, which is published in Planning Theory and republished as the first chapter of this book.

The other direction has been to follow the debate about boundary objects and boundary strategies, which led us to the work of Peter Galison. We were introduced to Galison's work by Larry Susskind with whom we discussed the potential use of the boundary object concept and by Jonna Kangasoja who participated in our discussions and co-authored also our Planning Theory article.

Peter Galison is a scholar active in a field of study which has often crossed paths with planning issues, that of the history and sociology of science. He introduced the concept of *trading zone* as a useful instrument for understanding innovation processes in the field of science. In studying the way in which the processes of innovation and paradigm change occur, Galison noticed that it often occurs through interaction between groups belonging to different disciplinary fields which, although they have different objectives and viewpoints, use forms of exchange by building an intermediate language which allows them to communicate and create new artefacts. The basic idea is that innovation or paradigm change does not require all the

participants sharing the objectives of the action, but it may occur when a zone of partial exchange is built, termed a *trading zone*, which allows partial innovations ascribable to strategies which may even be conflicting. Full agreement is not therefore necessary. What allows the completion of a project is a limited agreement which may have different meanings for each party. The trading zone concept is therefore a more general way of interpreting how and why partial agreements are reached and what makes the convergence on boundary objects possible. The concept allowed us to reconcile our agonistic revision of Lindblom's partisan mutual adjustment, with an approach to conflict resolution which is still based upon communication and interaction, but not upon a full trust in the capacity to converge via open dialogue.

Studying Peter Galison's and some of his followers' work, we realised that the concept of boundary object is just a specific case in the formation of a trading zone. Thin description versus thick description, the formation of an intermediate language between conflicting actors as a way to produce change and the role of space – physical and conceptual – as the meeting place of different political and professional cultures, all these are components of a conceptual toolkit which is able to provide new lenses through which to look at the planning processes. Using these lenses, we started to see in a much more clear way the successes and the failures, the stalemates and the sudden changes opening towards a new definition of what is a strategic approach to difficult planning problems.

Our first exchanges with professor Galison at the end of 2009 encouraged us to probe the use of the concept in different planning contexts – in Europe, you can hardly find more different ones than Italy and Finland – using different case studies, and this gave birth to the project of the new book. We have tried to find case studies which are not only diverse for their regional background but also for scale, contents and type of planning problem which is addressed.

At the end of this exploration, we also had the opportunity to discuss in depth the result of our probing activity with Peter Galison in a seminar held in March 2012 in Milan when we presented all our papers and gathered his observations, critics and thoughtful suggestions.

We have organised the sequence of the chapters as a journey in our attempt to test the validity of the application of the trading zone concept.

In the opening chapter, Raine Mäntysalo, Alessandro Balducci and Jonna Kangasoja outline the trading zone approach and show its relevance in the planning debate introducing the need for case study research to bring the discussion from the theoretical level to actual planning practices, testing the empirical strength of the idea.

In Chap. 2, Alessandro Balducci presents a first attempt to use the trading zone approach to review a planning experience in which he has been directly involved in Milan; the aim is to show the practical implications of moving from the conviction of being right and fair in designing an open planning process to the commitment in searching for a zone of exchange.

In Chap. 3, Valeria Fedeli proposes an interpretation of recent planning competitions as the creation of a trading zone that enables the discussion on the development of complex urban systems.

In Chap. 4, Raine Mäntysalo and Vesa Kanninen discuss the distinction between the trading zone and the boundary object concepts through a case analysis of coordination between land use and transportation planning.

In Chap. 5, Maarit Kahila-Tani develops the discussion of the relationship between boundary object and trading zone using the case of GIS-based platform development as a toolkit to create a zone of exchange. She also applies the matrix proposed by Collins and others to interpret the different types of possible trades between competing positions.

The same matrix is used by Claudio Calvaresi and Linda Cossa in Chap. 6, to explain with a case study in Milan how the trading zone concept can illuminate difficulties and successes of the *integrated approach* typical of area-based initiatives.

Going back to Finland, Helena Leino in Chap. 7 discusses the role of participation in two planning cases in Tampere, where planning platforms have emerged in a self-organising manner, bypassing the formal participation procedures offered by the planning system. These platforms are studied by interrelating the trading zone concept with the research discourse on boundary organisations and boundary interaction.

In Chap. 8, Daniela De Leo shows the potentials of application of the trading zone approach to interpret and suggest successful ways to deal with extreme conditions like those dominated by the mafia in a Sicilian city.

Laura Lieto in Chap. 9 uses the trading zone concept to deal with spatial micro-practices of everyday life through a case analysis of parking arrangements in a poor historical neighbourhood in Naples. This allows to deal with the spatiality of the trading zone and at the same time raises the question of legitimacy in generating it in planning.

In Chap. 10, Vesa Kanninen, Pia Bäcklund and Raine Mäntysalo in Chap. 10 discuss the limitations of the trading zone approach in planning research in the face of political complexity.

In Chap. 11, Jonna K. Kangasoja reviews the relevance of the concept in the context of planning research by relating the concept to Herbert Blumer's idea of *sensitising concept.*

A concluding note precedes the comment of Peter Galison himself who reports his reflections on our attempt to put to work his theory in the planning field.

At the end of this journey, we are convinced that the use of the trading zone concept could really represent an advancement in planning debate, allowing the process of *translation* from other disciplinary fields that according to John Friedmann (2008) is a specific task of a theory which wants to be relevant for practice; a translation that may not be philological or completely faithful, but that allows the creation of a dialogue between disciplines which opens towards innovation.

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Chapter 1
Planning as Agonistic Communication in a Trading Zone: Re-examining Lindblom's Partisan Mutual Adjustment

Raine Mäntysalo, Alessandro Balducci, and Jonna K. Kangasoja

Abstract This chapter re-examines Charles E. Lindblom's theory of *partisan mutual adjustment* (PMA), by reflecting on the recent ideas on cross-cultural cooperation and communication, developed in sociological studies of science and technology. While the critical arguments of the so-called communicative (or collaborative) planning theorists on PMA are well known and well placed, they may have overlooked the complexities of planning communication. Especially Peter Galison's concept of *trading zone* offers a fresh outlook on these complexities. In this chapter, Lindblomian bargaining and compromise seeking are reinterpreted in terms of creating a local trading zone between the stakeholders representing different cultures of meaning and value. This approach challenges two assumptions that have become commonplace in the planning theoretical debate around PMA: *firstly*, that trading between interests would not necessitate mutual dialogue and generation of a realm of shared understandings and, *secondly*, that approaching planning communication as trading between interests would mean adopting the political ideology of (neo)liberalism.

Keywords Communicative planning theory • Incrementalism • Exchange language • Meaning system

Originally published in *Planning Theory* 10(3), pp. 257–272 (2011, doi:10.1177/1473095210397147), republished by permission from SAGE.

R. Mäntysalo (✉) • J.K. Kangasoja
Department of Real Estate, Planning and Geoinformatics/YTK,
Aalto University, P.O. Box 12200, 00076 AALTO, Finland
e-mail: raine.mantysalo@aalto.fi; jonna.kangasoja@aalto.fi

A. Balducci
Department of Architecture and Urban Studies (DAStU), Politecnico di Milano,
Via Bonardi 3, Milan 20133, Italy
e-mail: sandro.balducci@polimi.it;

A. Balducci and R. Mäntysalo (eds.), *Urban Planning as a Trading Zone*,
Urban and Landscape Perspectives 13, DOI 10.1007/978-94-007-5854-4_1,

1.1 Introduction

In this chapter, our aim is to re-examine Lindblom's (1965) theory of *partisan mutual adjustment* (PMA), by reflecting on the recent ideas on cross-cultural cooperation and communication, developed in sociological studies of science and technology, and discussing their relevance in the context of planning. While the critical arguments of the so-called communicative (or collaborative) planning theorists on PMA are well known and well placed, they may have overlooked the complexities of planning communication. In sociological studies of science and technology especially, Peter Galison's concept of *trading zone* (Galison 1997, 1999, 2010) offers a fresh outlook on these complexities, thus justifying the re-examination of PMA and the critical debate around it.

PMA is part of Lindblom's broader theory of incrementalism. In a later chapter, Lindblom has also relabelled PMA as *incremental politics*, making a distinction between two areas of concern in incrementalism: incremental analysis and incremental politics.[1] By discussing PMA in this chapter, we will hence concentrate on the political implications of Lindblom's incrementalism.[2] Whereas incremental analysis is a method for dealing with the professional problems of public management, PMA is a method for the political processes of public government. Incremental analysis serves political decision-making processes by formulating marginal policy alternatives on which to decide. In PMA, each new decision is adapted to the status quo of the former decisions (Lindblom 1965, pp. 10). But the analysis also necessitates politics, because incrementally derived knowledge cannot be given a value-free status. Such knowledge is based on partial information, and it necessarily prioritizes certain value considerations over others. Pluralistic politics between various interest groups is therefore needed to fill the knowledge gaps that still remain after the public administrator's analysis and to bring alternative values on the agenda. Lindblom conceives of the political process as a game where each interest group acts as a *watchdog* for its values. Each decision-maker is allowed to concentrate on a deliberately narrow problem definition—especially on questions that are important for the interest group one represents—because comprehensive knowledge is beyond one's reach anyway. Participation by many decision-makers is therefore needed to guarantee that the essential interests are given adequate attention (Lindblom 1965, pp. 146, 151, 156). As the values are conflicting and not all needs can be satisfied, the interest groups are assumed to be mutually antagonistic. It is left to the process of groups negotiating, bargaining and competing in the political arena to reach decisions between conflicting demands. An ideal solution, according to Lindblom, would be a *Pareto optimum*[3]: a solution which is to the advantage of some and a loss to none (Lindblom 1965, p. 210).

In PMA, decisions are arrived at according to the power relations between the interest groups (Friedmann 1987, pp. 331–32). Access to the decision-making process is not evenly distributed between the interested partisans, and the process opens up more readily to those who are organized and influential. As Lindblom's critics reveal, in the context of incrementalism, PMA has an inherent tendency towards *corporatism*.

Incrementalism is, by definition, conservative. It builds on the existing policy by adding only small increments onto it and by making small changes *at the margin*. This means that it also builds on the existing power relations. Therefore, incremental decisions tend to mirror the values of those already in power: the status quo (Etzioni 1967, p. 387; Cates 1979, p. 528; Sager 1994, p. 160; Möttönen 1997, p. 178). In PMA, the partisans are powerfully motivated by self-interest and also recognize this self-interest in each other. Therefore, according to Lindblom, they try to search for everyone's advantage or for no one's disadvantage (Lindblom 1965, p. 210). But who are *everyone* but those who are already included as partisans? Self-interest also means *no interest* in bringing in new partisans to the decision-making process (Mäntysalo 2000, p. 60).[4]

Lindblom's PMA has also been attacked for its communicative narrowness by the so-called communicative planning theorists. Lindblom's theory does not attempt a generation of a public realm, as the search for mutual understanding between the interest groups is not considered necessary or even possible. For Lindblom, it is not relevant whether or not you share, in general terms, the values of your counterpart, as long as you are able to strike a bargain with him/her on a concrete planning decision. What matters is whether your counterpart agrees with a concrete proposal, not *why* she/he agrees. From the perspective of Habermasian communicative rationality, this approach to planning communication is clearly unsatisfactory.

Tore Sager has proposed a concept of *dialogical incrementalism* as a response to the criticisms of corporatism and narrowness of dialogue placed on PMA. Put simply, Sager's dialogical incrementalism replaces PMA with Habermasian communicatively rational dialogue—while retaining incrementalism in analysis, i.e. acknowledging boundedness of analysis and the necessity of step-by-step procedure in the face of uncertainty (Sager 1994, 1997).[5]

But have we truly acknowledged the challenges to mutual comprehension of planning issues when adopting the Habermasian ideal of planning communication? Is mutual understanding a realistic goal or should we instead direct our attention to concrete case-specific opportunities for a planning solution as a satisfactory bargain for each stakeholder involved?

The communicative planning theorists themselves have been hovering around this question. For example, Patsy Healey (1992) is doubtful of the possibility of achieving truly shared understanding in multicultural communicative planning. Participants may share a concern but arrive at it through different cultural, societal and personal experiences. According to Patsy Healey, they belong to different *systems* of meaning that will remain nearer or further from each other in relation to access to each other's languages. Planning communication should thus focus on reaching an achievable level of mutual understanding for the purposes at hand while retaining awareness of that which is *not* understood (Healey 1992, p. 154). What may unify people from diverse backgrounds is that they share a physical place in which they live and work and they often share a concern for the development of this place, despite having different *moral orders* (Healey 1997, p. 124). In more recent planning theoretical contributions, Lindblomian bargaining and compromising have been reintroduced among the *normatively acceptable* policy tools in planning, depending

on the difficulty of the planning problem. According to Jean Hillier (2002), bargaining *is* a legitimate way of resolving political conflicts that would otherwise remain unresolved (Hillier 2002, p. 255). But she adds, 'It should, however, be a strategy of last rather than first resort, not a principle of least effort' (Hillier 2002, p. 255). In Hillier's view, the planners should accept the possible inaccessibility of consensus and embrace the pluralism of negotiation approaches and tactics (Hillier 2002, p. 269). Judith E. Innes and David E. Booher also include bargaining as one possible form of planning communication in their theory of collaborative rationality in planning, which they formulate in their new book (Innes and Booher 2010, pp. 37, 116).

John Forester has argued that in most difficult conflict situations, we may indeed end up with searching mutually for planning agreement in the sense of PMA—and even transform this into a positive process by focusing on concrete planning solutions and their benefits (Forester 2006). Forester has dedicated his last book to dispute resolution, to the treatment of apparently irresolvable conflicts, stating that more and more planning is about managing contentious interdependence (Forester 2009). His in-depth analysis of the behaviours of expert mediators in managing contentious disputes assumes as a point of departure the interdependent and partisan nature of the positions of the various stakeholders. It is this awareness and the capacity to assess different positions that allow mediators to act strategically in order to construct agreeable decisions.

Tore Sager, in turn, has in his recent work been looking for a resolution between the ideals of communicative planning and the realities of neoliberalism, by identifying common denominators between the two, in terms of the ideology of New Public Service (Sager 2009).

Now, does this development indicate that we have lost the coherence of normative communicative planning theory and compromised its key principles? Is it now the political difficulty of the planning task at hand that becomes decisive, whether we should attempt a deliberative search for consensus and the public realm or (neo) liberalist bargaining and compromising between pre-politically defined interests? Can we settle with such a conclusion?

Galison's concept of *trading zone* (Galison 1997, 1999, 2010) offers new insights into this debate. While the concept has been well established in the field of sociological studies of science and technology, its applicability in the realms of environmental planning and policy-making has been gaining increasing interest (Gustafsson 2009; Gorman 2008, 2010). The trading zone concept challenges especially two assumptions that have become commonplace in the planning theoretical debate around PMA: *firstly*, that trading between interests would not necessitate mutual dialogue and generation of a realm of shared understandings and, *secondly*, that approaching planning communication as trading between interests would mean adopting the political ideology of (neo)liberalism. In the following, we will elaborate these assumptions and then review them critically with the help of the idea of a trading zone. In the concluding section, we will discuss the relevance of reintroducing PMA in the trading zone context for the development of planning theory—especially the emerging theory of agonistic planning. But let us begin with a brief introduction to Galison's concept of trading zone.

1.2 Trading Zone

Galison has studied interactions between different groups of scientists, especially theorists, experimentalists and instrumentalists in particle physics, conceiving each group as a subculture of its own. What had puzzled Galison was their ability to generate conditions for coordinated mutual interaction despite the limited ability of each group to comprehend each other's conceptions, methodologies and aims. In his study of practical research cooperation between theorists, experimentalists and instrumentalists in given contexts, he noticed that certain practico-linguistic settings had been generated to the exchange of knowledge and services between these different *meaning systems* of particle physics. Galison identified local infrastructures of shared concepts and instruments that had enabled such exchange. These infrastructures and concepts functioned as *exchange languages* for the mutual *out-talk* between members of different subcultures, where highly elaborate and complicated issues could be transformed into *thin descriptions* for the purposes of exchanging information. He called such settings *trading zones* (Galison 2010, forthcoming).

Galison stresses the *locality* of a trading zone. It is a specific site in a specific time—partly symbolic and partly spatial—in which local coordination between theory and action takes place (Galison 1999, p. 138). '[I]n the trading zone […] there are knots, local and dense sets of connections that can be identified with partially autonomous clusters of actions and beliefs' (Galison 1999, p. 146).

Galison looked for theoretical support from the anthropological linguists who had studied languages in border zones. He found extensive accounts of the historical and structural development of *exchange languages*—highly specific linguistic structures to facilitate inter-linguistic communication between two or more pre-existing linguistic cultures. In colonized societies, artificial *pidgin* languages have been generated between the very different parent languages of the immigrants and the indigenous people, as localized linguistic practices of trade—some of which may have later *naturalized* into full-blown languages, *creoles* (Galison 1997, pp. 673–674). Galison saw an analogy to the hybrid arenas of research collaboration which interconnect different realms of science—such as biochemistry that, from the first coordinative attempts to join biology to chemistry, has slowly evolved into a language that borrows from both but is subservient to neither (Galison 2010, forthcoming). Thereby, he conceived the trading zones of scientific-technological interaction as locally developed language practices for trading ideas and services—as a sort of Wittgensteinian contextual language games (Galison 2010, forthcoming).

In a very recent paper, Galison applies his concept to the realm of planning too—namely, multi-actor water management planning (Galison 2010, forthcoming). He draws an example from the work of Boyd Fuller who has studied water use disputes in California and Florida:

> Fuller began with conflict. The stakeholders in recent debates over the Everglades were more than diverse—federal and state regulators, tribal groups, environmentalists, and agricultural interests "exploded" in some of their early attempts to interact. Their values were irreconcilable, their desires cut skew to each other. Fuller goes on to show that these actors neither subscribed to a common world view about the meaning and significance of wetland

> water supplies nor threw up their hands in despair at the clash of values. Instead, he showed how, without abandoning their own deep-set values, the groups were able to establish terms of negotiation around a *delimited* set of water management recommendations (Galison 2010, forthcoming).

The connections to Lindblom's partisan mutual adjustment are quite evident. Galison's focus on local coordination in the face of *global differences* is very similar to Lindblom's focus on adjustments *on the margin* in the PMA process, not bringing overarching goals to the table. Disagreement on the latter could destroy opportunities for situated agreement on the next few incremental steps, concerning concrete and immediate planning problems. What if we reinterpreted Lindblomian partisan mutual adjustment in terms of creating a local trading zone between the stakeholders representing different cultures of meaning and value?

1.3 Narrow Trading Between Interests: A Hindrance to Dialogue or a Result of Dialogue?

In his theory of partisan mutual adjustment, Lindblom sees the partial, incomplete, partisan behaviour of individuals as the main source of rationality for the society as a whole: it is through the open process of bargaining and mutual adjustment that all the relevant facets of a problem are explored and negative consequences of incomplete analysis are dealt with.

For Sager, this conception presents a too narrow view of planning communication. It provides a method of settling disputes without having to attempt dialogue (which Sager, following Habermas, defines as *undominated communication*). Mutual agreement on planning decisions is not necessary; instead, PMA provides a method to guarantee that decisions are made *despite* the lack of agreement. It encourages bargaining and compromising between interests without, however, ensuring a fair fight between them (Sager 1994, pp. 7, 14, 20, 73). Sager's description of such a process is *collective opportunism* (Sager 1994, p. 180; see also Forester 1993, p. 87).

Lindblom's partisans do not bother to find out each other's motives and reasonings but only seek agreement on the disputed planning issue at hand. The partisans do not ask *why* their counterpart is ready to strike a bargain when mutual agreement is found (Lindblom 1965, pp. 207–208). Planning negotiation is approached from the perspective of economic trading: why someone *agrees on a political offer* is hardly more relevant than why someone buys a commodity on the market. What matters is what one may benefit from the transaction. By focusing on the possibilities of the concrete planning task, acknowledging the limits in sharing basic values and information between the stakeholders, PMA bears resemblance to the trading zone approach.

In a more recent work (Lindblom 1990), Lindblom illustrates the mechanism of PMA through the concept of *probing*. Each actor, pursuing his/her own preferences, facing a problem or an opportunity, probes, through the interaction, his/her way of defining the situation, the possible actions to cope with it and the acceptable solutions. And it is through the process of probing that partisan mutual adjustment happens.

Again, Lindblom's conception of a probing process is very close to Galison's description of what happens within a given trading zone. The problem of progress in society is to let the probing process develop as freely as possible, to avoid *impaired probing* which has become the result of the professionalization of social inquiry (Lindblom 1990, p. 59).

However, it seems that neither Lindblom, nor his critics, have been able to fully appreciate the practico-linguistic challenges involved in attempting to create local conditions for meaningful bargaining and compromising between the *subcultures* of interest groups—a trading zone of planning, where each party involved would have the capacity to sufficiently grasp the meaning of issues and solution proposals to be traded. Following Galison, the conditions of meaningful bargaining and compromising between the different *linguistic communities* of stakeholders are *already a result of a long-standing dialogue* between these communities to generate a local exchange language of planning between them in their strife. Are you really able to strike a bargain on a planning proposal before you have a sufficiently shared conception of what the planning proposal and its contents are about as objects of bargaining?

Lindblomian bargaining and compromising, in order to be successful, would entail the generation of the language of planning as a trading zone, where the different planning experts, politicians, developers, citizens and other stakeholders have sufficient means of comprehending what is at stake and what to agree or disagree about. Without a shared platform for exchanging knowledge, experiences, assertions and proposals on a planning issue, there is no sense in agreeing or disagreeing, since you could not be certain how your counterpart understands the meaning of the agreement/disagreement. You may agree with your counterpart, only to become amazed at the latter's violation of what you thought was agreed while the counterpart firmly denies any violation!

A planning proposal mediated through the trading zone would bear, at a *deeper* level, different meanings to culturally different stakeholders but also, at the *surface* level, sufficiently shared meanings between them, so that each would have sufficient certainty what commitments, division of tasks, sharing of risks, rules of implementation, changes to everyday living, etc. are being disagreed/agreed about.

According to Galison (2010), the concept of trading zone is closely related to the concept of *boundary object*. The term has been coined by Susan Leigh Star and James Griesemer to depict entities which allow the use and exchange of information between different communities despite the fact that these communities do not share the same systems of meaning, values or strategies:

> [B]oundary objects are objects which are both plastic enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. […] They have different meanings in different social worlds but their structure is common enough to more than one world to make them recognizable, a means of translation (Star and Griesemer 1989, p. 393).

In Galison's view, however, the concept of boundary object is more limited as it, instead of the trading zone concept, addresses the mere syntax, not the fullness of exchange languages (Galison 1999).[6] In this sense, we could say that a boundary object is a specific device which facilitates the exchange in a trading zone.

When bargaining and compromising in planning is approached as a trading zone, the narrowness of such planning communication receives a new meaning. Instead of being condemned for trivializing planning communication into a trade between interests, it becomes appreciated as a result of long-standing mutual communication and interaction between different groups in their effort to generate a mutual exchange language, an opportunity of translation, where interests in relation to concrete planning proposals can be expressed in a form that is *narrow enough* to enable meaningful trading between them. Narrow trading between interests would thus be viewed as a result of dialogue, rather than a hindrance to it.

Here, however, dialogue would receive a somewhat different meaning from the Habermasian *undominated communication* that Sager refers to. The approach to dialogue is actually broader. We draw on Bohm and Peat's definition of dialogue as 'the free flow of meaning between communicating parties' (Bohm and Peat 1992, p. 245). Bohm and Peat emphasize the creative nature of dialogue as a process of revealing and then melting together the rigid constructions of implicit cultural knowledge. They make a distinction between *dialogue* and *discussion* as the two basic forms of discourse (Bohm and Peat 1992, p. 245). Senge elaborates this distinction by claiming that in discussion different views are presented and defended, whereas in dialogue different views are presented as a means towards discovering a new view (Senge 1994, p. 247). He argues that discourses in the form of discussion may provide useful analyses of problem situations. In dialogue, complex issues are explored, but in a discussion decisions are made. Planning as communication in a trading zone would necessitate such mutual exploration, to create conditions of sufficient comprehension for each party and thus enable the forming of opinions and negotiating of decisions. Innes and Booher conceive creative planning dialogue as a situation-specific process of generating *shared heuristics* and a *boundary community* (Innes and Booher 2010, pp. 38–40, 116). Following Bohm and Peat, they consider dialogue as a process of transforming conflicting and confusing views into something rational and meaningful. But the achievement of shared heuristics and meanings through dialogue does not necessarily mean agreement (*ibid*., 119–121). *Dialogue* can be seen as necessary for arriving at *conditions of discussion* in the sense of meaningful bargaining. Habermasian communicative rationality, on the other hand, rather focuses on these *conditions of discussion* while bypassing the generative and creative aspects of dialogue needed in probing with complex planning problems (Mäntysalo 2002, p. 424; see also Innes and Booher 2010, pp. 111, 119).

1.4 The Political Ideology of Exchange

In game theory a *rational* actor is frequently defined as one who seeks to maximize his/her own utility without regard to the utilities of others. This definition is often combined with the general liberalist assumption that such rational actors together constitute an *invisible hand*. It is thus assumed that (in a perfect market system) the pursuit of self-interest by individual actors leads to optimal conditions for all (Pareto optimum).

In the broad liberalist tradition of political theories, it is commonplace to conceive politics as games between interests that have been *privatized* by interest groups that do not seek to share their understandings. Politics is seen as *foreign politics*, without a common foundation in the public realm (see Palonen 1989, 19). This conception coincides with the classical liberalist view of human beings, with the assumption that human individuals exist apart or independently of their social relationships (see Bernstein 1986, p. 269). A political game of this kind does not differ much from the economic game. Politics is treated as the continuation of market relations by other means (Friedmann 1987). According to Lindblom, political democracy has been unable to exist except when coupled with the liberal economy (Lindblom 1977, p. 116). They both share a common origin in liberalism, and western democracies were established to win and protect market liberties (Lindblom 1977, pp.162–64).[7]

The absence of the public realm can also be discerned in Lindblom's PMA, evidenced in the notion of interest groups as *watchdogs* for their values. Hannah Arendt's view of political action is drastically different from the liberalist position. This becomes evident when we compare Arendt's use of the concept of *interest* to the liberalist understanding of the term. Whereas the latter uses the concept to separate actors and groups from each other, Arendt finds that interests are there to join people together: 'These interests constitute, in the word's most literal significance, something which inter-est, which lies between people and therefore can relate and bind them together' (Arendt 1958, p. 182).

Arendt's political philosophy, along with Habermas' theory of communicative action,[8] forms a cornerstone of the deliberative theory of democracy, underlining the ancient Greek idea of the *polis* as shared political space, antithetical to the liberalist view of politics as games between preformed and privatized interests. Accordingly, the communicative planning theorists' critique on Lindblom's PMA reflects their rejection of the political ideology of (neo)liberalism and their shift to deliberative democracy, following Habermas.

Will the trading zone approach to PMA thus mean recourse to (neo)liberalism in planning theory? Not necessarily.

Again, through his readings on anthropological linguistics, Galison acknowledges the multiplicity of exchange relationships and meanings attached to them. Besides market relations and profit-making, the exchange of goods and money may bear symbolic meanings of fostering mutual respect, commitment and reciprocity, even holiness. For Galison, the trading zone means exchange in such a broader and open-ended sense, avoiding narrow definitions of exchange relationships in terms of market rationality and (neo)liberalist politics (Galison 2010, forthcoming):

> At root the relevant aspect of exchange is this: what an object means to me when I give it to you may very well not be what you, as the recipient, understand that object to connote. What matters is coordination—*not* a full-fledged agreement about signification. I hand you a crystal, you hand me a flute. All we need to know in that moment is that we agree to exchange—not the structure of the crystal or flute, not their origin, meaning, uses, or provenance. *Nothing* in this swap requires a reference explicitly or for that matter implicitly to money as a commensurable entity, to a universal instrument of value, or to a universal logic. It is the possibility of this relative superficiality—the possibility of a *thin description*

> that interests me in the trading zone. Thin—insofar we do not need to refer to some universal currency of rationality or value. And thin in a second sense—we can by-pass the presupposition that there is any agreement among the people exchanging things about the full signification (thick description) of the objects exchanged (Galison 2010, forthcoming).

As Galison resigns from (neo)liberal reductivism, he is not looking for deliberative consensus, either: '*Trade* focuses on coordinated, local actions, enabled by the *thinness* of interpretation rather than the thickness of consensus' (Galison 2010, forthcoming). What is needed is 'consensus in a restricted zone, a zone where coordination is good enough' (Galison 2010, forthcoming).

Galison's ideas resonate interestingly with the political theory of *agonism*, gaining interest among planning theorists too (Hillier 2002; Pløger 2004; Bäcklund and Mäntysalo 2009; Innes and Booher 2010). Agonism is introduced by Chantal Mouffe (2000) who argues that the tension between liberalist and deliberative logics is not a dilemma to be resolved in favour of either ideology. Instead she claims that this tension is indeed a basic characteristic of western democracy. There is continuous political strife between one logic relying on individual rights and the legal state and the other on equal citizenship in the public realm. This makes politics *paradoxical*, not rational activity. For Mouffe, there is no transcendental rationality beyond the realm of political struggles. Mouffe's agonistic model of democracy is about handling the tensions between the two alternative rationalities in practical political activity, acknowledging both of them as equally legitimate approaches to democratic conduct.

For Mouffe, agonism means willingness to generate, in a constructive fashion, democratic decisions which may be partly consensual but which, furthermore, respectfully acknowledge differences that remain unresolved. In agonistic democracy, the counterpart is seen as a legitimate adversary, whose views a given party may not find agreeable but whose right to present and defend those views it does not question either (Mouffe 2000, p. 102). According to Mouffe, embracing agonism would require active search for such vehicles of expressing opinions that would allow one to present passionate views without being construed as an enemy. Passionate political action is not to be dismissed in order to enable consensus but rather mobilized to serve democracy (Mouffe 2000, p. 103). This view of democracy paves the way to a culture of planning more tolerant to the coexistence of and conflicts between different meaning systems. In agonistic planning, the stakeholders may agree on certain issues and respectfully agree to disagree on others (Hillier 2002, pp. 254–255).

Would the trading zone approach provide a vehicle for accomplishing agonism in practice—with its dismissal of overarching rationalities of exchange and its focus on local coordination between different meaning systems? In a trading zone, locally coordinated interaction would be possible *despite* differences in ideologies and rationalities. In reference to Mouffe's agonism, the title of Galison's new paper is more than appropriate: 'Trading with the enemy' (Galison 2010, forthcoming).

When Hillier acknowledges the possible inaccessibility of consensus in planning and encourages the planners to embrace the pluralism of negotiation approaches and tactics, even Lindblom's PMA (Hillier 2002, p. 269), she has agonistic planning

in mind. The trading zone approach is a way to reintroduce PMA in the toolkit of planning communication in a theoretically coherent fashion—if we relax the ideological debate between (neo)liberalism and deliberative democracy and shift instead to agonistic democracy. Agonistic planning theory indeed embraces this debate, but, on the other hand, it needs practical tools for transforming the debate to locally coordinated interaction. In this, the trading zone approach may prove to be useful.

However, the question remains, how can we guarantee fair and legitimate decision-making in such *agonistic trading*? Who would have the legitimacy to decide in an unresolved conflict between interests that themselves are acknowledged as legitimate? As noted above, Lindblom's PMA does not ensure a fair fight between the stakeholders. Thomas L. Harper and Stanley M. Stein (2006) would resolve this problem by establishing overarching procedural norms for planning communication based on John Rawls' theory of political liberalism. This would complement nicely Lindblom's own liberalist ideas and his concern on the procedure, instead of content, as the source of agreement: 'We sometimes endorse the use of a process for reaching a decision without endorsing the resulting decision itself. On the other hand, for some choices we have no basis of criticism or endorsement other than that the choice is a product of an accepted process' (Lindblom 1965, p. 240).

The trading zone concept, however, encourages us to relax the search for transcendental principles and values as a basis for fair trading, and it resigns from prior commitments to political liberalism or any other political ideology. The principles of legitimate communication and decision-making would have to emerge in the trading zone itself. Rules of fair conduct, too, would emerge as trading zone tools in localized intercultural communication. The emerging linguistic practice would necessarily include its own ethics of fair interaction, as thematized by the zone of interaction. As Galison notes in his example above of water use disputes in California and Florida, '[W[ithout abandoning their own deep-set values, the groups were able to establish terms of negotiation around a *delimited* set of water management recommendations' (Galison 2010, forthcoming).

1.5 Conclusion: Reintroducing Partisan Mutual Adjustment to Planning Theory in the Context of Agonism and Trading Zones

In this chapter, we have examined the critical approach of communicative planning theorists to Lindblom's partisan mutual adjustment (PMA) and yet their more recent (at least partial) acknowledgement of PMA among the possible methods of planning negotiation, in the face of politically difficult and complex planning problems. The faltering revival of PMA coincides with the advent of agonistic planning theory. The theory resigns from any transcendental rationality as a royal road to consensus and, instead, focuses on the development of political capacities for addressing conflicting demands and adversaries respectfully. The trading zone approach may provide a crucial supplement to agonistic planning theory, in the latter's search for

practical applications. With its focus on the frameworks of exchange between different meaning systems, enabling locally coordinated interaction, the trading zone approach may offer new tools for the development of local planning practices—as *exchange languages* through which *thin descriptions* of planning ideas, proposals and opinions can be transmitted between groups. This is how Galison himself conceives the trading zone approach—as a set of tools rather than a full-fledged theory of its own (Galison 2010, forthcoming).

The *physical* object area of planning itself would be a crucial element of such a trading zone of planning—a place joining the various stakeholders as an object to which each holds a stake, as described by Healey (1997).[9] In such situated contexts, what becomes acknowledged and shaped as relevant and valuable knowledge is its embeddedness in the practical, local and case-specific issues at hand, not the *universality* of knowledge (Leino 2008; see also Nowotny et al. 2004, pp. 131–142). In Galison's words, physical space should be conceived as a laboratory where different *subcultures* must interact to develop shared conceptual and *physical* instruments in order to give shape to a project. Physical space is something in common to different social worlds and can be regarded as an objective basis for the construction of a trading zone.

Agonistic planning and the generation of a local trading zone of planning both require long-standing cooperation between different groups and stakeholders, in the effort to establish both the conditions of political tolerance and respect between the adversaries and the practical-conceptual tools and rules for their mutual *out-talk* on planning issues. There has to be both political will (agonism) and practical capacity (trading zone) for coordinating the uneasy coexistence of groups in a locality—and achieving this takes time. In this context, politically respectful and conceptually comprehensible bargaining and compromising would not appear as qualitatively poor communication but rather as an achievement of restless and creative dialogue, mutual sense-making and institutional capacity building. In this regard, agonistic trading would absorb many ideals presented in communicative planning theory. On the other hand, it would also apply Lindblom's realism—the idea of coordinating and reaching agreement between interests on concrete planning proposals without expecting mutuality of values and understandings.

The practical implications of adopting this position seem to us quite relevant. The participatory approach which has been inspired by communicative planning theory has shown many weaknesses linked in general to the difficulty of penetrating the formal decision-making processes. This is due to the fact that in looking for broad consensus on objectives and proposals, there is not enough attention to the creation of a trading zone where citizens, politicians, planners and other stakeholders can really reach partial agreements.

However, there are important questions yet unanswered in the trading zone approach when searching for practical implications to planning and policy-making. As Galison acknowledges, we need a more systematic understanding about *why* the resolution to some disputes can be aided through the formation of delimited trading zones, while other such attempts fail. This would require practice-orientated and developmental research (Galison 2010, forthcoming). The tendency towards

corporatism and uneven power relations is a challenge to planning as agonistic trading too. To meet this challenge, the exchange language of agonistic trading should be conceived as an organic, open-ended and continuously inclusive system of planning communication and interaction—and, moreover, as a system capable of developing self-reflexive boundary rules for judging mutually the legitimacy of the agreements and decisions made.

Endnotes

1. Lindblom himself has not made a clear distinction between the two and has sometimes even confused them—a remark which he regretfully makes in his retrospective article 'Still Muddling, not yet through' (Lindblom ,1979, 517). This article provides a systematic effort to clarify that distinction.
2. This means also that in our following discussion on the critiques of incrementalism, we will concentrate on the political and communicative aspects of incrementalism while leaving aside the critiques of incremental analysis, such as the critique of its incapacity to respond to abrupt and large-scale societal and environmental changes—to which it may inadvertently contribute (e.g. Etzioni 1967; Forrester 1969, 1993; Rittel and Webber 1973; Senge 1994; Lindblom 1979; Harper and Stein 2006).
3. 'A state of affairs A represents a Pareto optimum for a set of people if it is impossible to identify another state of affairs B such that change from A to B would benefit at least one person in the set and injure no one' (Lindblom 1965, 194).
4. Lindblom himself admits the problem of inequality and corporatism in his retrospective comments on his own theory:

   > Objections to partisan mutual adjustment, often voiced as objections to pluralism, often begin with the allegation that not all interests are represented by participants in it, nor are participants influential in proportion to the numbers of citizens for whom they act. Who can deny so obvious a point?
   > […] A second major objection to partisan mutual adjustment, again expressed ordinarily as an objection to pluralism, is that it is fraudulent. The various participants do not in fact represent the variety of interests and values of the population. Instead they share dominant interests and values, and their relations with each other give the lie of those who claim to find in pluralism a healthy competition of ideas. In the extreme form, critics allege that policy is set by a ruling class with trappings of pluralist diversity. I find it hard to deny a large core of truth in that criticism.
   > [Partisan mutual adjustment is] not without defects of inequality in participation and disturbing tendencies towards corporatism'. (Lindblom 1979, p. 523. See also Lindblom 1977, p. 228)

5. Thomas L. Harper and Stanley M. Stein have, in turn, developed a dialogical planning approach, which is similar to Sager's concept of dialogical incrementalism in its reliance on political consensus and incremental analysis (Harper and Stein 2006, p. 128). However, it differs in its approach to planning dialogue from the perspective of neo-pragmatism and in the attempt to integrate Habermasian communicative rationality with John Rawls' theory of political liberalism.
6. Michael E. Gorman (2008) has elaborated the conceptual difference between the *trading zone* and the *boundary object* by identifying three stages of trading zones, according to their level of collaboration. He associates boundary objects with Stage 2 trading zones that are based on relatively equal trades between groups and individuals around boundary objects. These, however, are not fully mature trading zones, according to Gorman, as there are gaps between the mental models of different participants, such as planners, politicians, developers and residents, that may break down the trading zone. The Stage 3 trading zone would require the generation of a shared

mental model zone, via the establishment of a simplified, yet evolving, exchange language, a creole (Gorman 2008, pp. 91–92). In Galison's words, '[b]oundary objects might be thought of as a kind of a time slice of a trading language where the lexical lists exist […]' (Galison 2010, forthcoming). In collaboration based on boundary objects, crucial elements of the shared syntax are already there, but the shared semantics are still poorly developed.

7. However, in an article entitled 'Market and Democracy, Obliquely', Lindblom explains his quest saying:

   I have been working a long time still with inadequate success—to try to think clearly about the market system and about democracy. One difficulty may be that we—meaning people all over the world—have actually tried the market in many of its possible forms, learning greatly from both its flaws and its merits; but we have not yet tried democracy, only distant approaches to it (Lindblom 1995, p. 684).

8. See Hillier's discussion on similarities and differences in Arendt's and Habermas' political theories (Hillier 2002, pp. 27–33).
9. Shared geographical boundaries are identified by Star and Griesemer (1989) as one type of *boundary object* between different *social worlds*.

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Chapter 2
"Trading Zone": A Useful Concept for Some Planning Dilemmas

Alessandro Balducci

Abstract In this chapter I use the concept of trading zone to reflect upon a planning experience of which I have been directly responsible: the strategic plan for the Milan's province. In the first part I briefly describe the process and the results of this very intense experience. It was conceived to be an inclusive planning process capable to involve and therefore convince all the relevant actors to converge on the vision proposed. In the second part, describing the many difficulties of the process and the few positive results, I hold that while the participatory approach risks to be quite neo-technocratic and is unable on the end to deal with radical conflicts, the trading zone concept encourages to look for the elaboration of an intermediate language that allows the production of partial agreements and the discovery of boundary strategies accepted by different parties. The suggestion of the chapter is that this change of perspective is not only important to deal with the problems of participatory planning but also for planning in general.

Keywords Participation effectiveness • Habitability • Inclusive approaches • Participatory arenas • Thin descriptions

2.1 Introduction

This chapter is the result of the reflections developed during a sabbatical year which I spent in 2009, firstly at the Aalto University of Helsinki and then at MIT in Cambridge (USA).

This chapter is the development of a reflection presented in an article published on CRIOS (Balducci 2011).

A. Balducci (✉)
Department of Architecture and Urban Studies (DAStU),
Politecnico di Milano, Via Bonardi 3, Milan 20133, Italy
e-mail: sandro.balducci@polimi.it;

A. Balducci and R. Mäntysalo (eds.), *Urban Planning as a Trading Zone*,
Urban and Landscape Perspectives 13, DOI 10.1007/978-94-007-5854-4_2,

Part of my work consisted of thinking on problems encountered in planning activities on which I had worked in recent years within the Department of Architecture and Planning of Politecnico di Milano.

I have affirmed elsewhere (Balducci and Bertolini 2007) that under determined conditions, work by academia on concrete planning activities is an essential form of input for scientific knowledge in our field. It allows us to work with that particular material of which planning practices are composed in a research context – linking reflection and action.

I feel that using the trading zone concept proposed by Peter Galison, I have arrived at some useful conclusions on recurring planning problems in contexts of strong interaction, which may perhaps furnish some useful ideas both on the more circumscribed discussion on participation (Laino 2010) and also, perhaps, on a more general discussion on the challenges which urban planning continues to face (Mäntysalo et al. 2011).

I would like to present these thoughts in the way in which they emerged in my work, and I must therefore describe, at least briefly, the planning experience which drove me to move in this direction, the Strategic Plan of the Province of Milan, a project in which a large group from my department was fully involved and which was suddenly shelved after the last elections due to a change in the government of the province (Balducci et al. 2011).

2.2 The Context of the City of Cities Project

The urban region of Milan, one of the most dynamic in Southern Europe, has been faced for some time with a serious problem of governance for development, which is linked to two different, but connected causes. The first is the lack of overriding powers able to impose limits on development driven by municipalities which are locked in a vicious circle: what drives them to accept and promote building development is their expectation to obtain the meagre additional resources that they require to pursue non-ordinary policies. However, with this behaviour they lay the foundations for their own crisis in terms of new demand for services, congestion and environmental problems on which they are unable to have any impact.

Between 1999 and 2004 – when we started to work on the plan – 690 ha of agricultural land were urbanised each year in the Province of Milan (Pileri 2007). Leaving full responsibility for decision-making in the hands of mayors and private developers led to an intensification of the urbanisation process which resulted, as a consequence, in the growth of conflict between resident and temporary populations in many central areas and the establishment of a development model that was unsustainable in the medium term. Naturally the question of sustainability is not the only issue. Any decision which produces impacts at local level is difficult to take in a situation in which there is no power to impose decisions by government bodies at a higher level than that of the municipalities: road infrastructures constitute a typical example, having remained particularly underdeveloped in recent decades, are today the number one concern of businesses and politicians.

Various attempts have been made in the past to establish intermediate levels of government with planning powers, but all have failed in some way (Balducci 2005).

At present the ordinary planning powers of provinces and regions are severely limited by the resistance of municipalities to comply with their policies.

The second problem is that the process of the expansion of the urban region precludes any chance of establishing a border for the metropolitan area in a simple manner. The very concept of a metropolitan area in this context seems misleading, since it is no longer possible to recognise a single centre surrounded by a large peripheral area. On the contrary, a thick network of towns exists, some of which form dense urban agglomerates which are relatively independent from the provincial and regional capital.

The idea of formulating a strategic plan for the province was conceived in this context. The objective of the provincial government was to work on a document containing development prospects for the urban region. This should have involved municipalities in a process of thinking and action with the aim of producing a cultural change that would have generated forms of self-control.

The need to work across the borders was recognised by the government leading, on the one hand, to identify intermediate aggregations between municipalities inside the province being also ready, on the other hand, to go beyond the provincial border, given the geographical size of the urban region (OECD 2006).

However, if some features of what should have belonged to a strategic plan were recognised – an informal document, a vision, containing medium term objectives and strategies – many differences of opinion existed. In some important sectors of the province concern over the impacts of continuous urbanisation and over the related environmental problems was less important than concern over the need to build new road infrastructures to facilitate mobility and increase the ability of the province to compete economically. As a consequence they saw the strategic plan as an instrument with which to achieve those results. This ambiguity in the conception of the strategic plan was used by the new councillor with responsibility for the strategic plan (Daniela Gasparini) and by us, her advisors, as a means to obtain consensus over the initiative despite the differences in viewpoints.

We therefore organised a process consisting of different courses of action basically designed to deepen the process of involvement and of seeking a shared vision of the problems and opportunities that presented in the specific situation. The objective, sought through a number of different actions, was that of allowing a new "policy discourse" to "travel" and establish itself in different arenas by achieving visibility, support and legitimation, as suggested by Patsy Healey (2007).

An initial strategic document performed the role of a "white paper" for the problems of the urban region, with the launch of the two key terms of the project: the "City of Cities" image, an interpretation of the urban region as a set of multi-municipality urban contexts with their own identities, and the theme of *habitability*, identified as the fundamental strategic problem to be addressed to overcome the limits to the future development of the area. The "message" of the "white paper" was that the most important objective for the progress of the urban region was the conquering of a better *habitability,* which could have been attained through various policies (related to affordable housing, sustainable mobility, new local welfare, the

diffusion of cultural policies, the investment in new public spaces, etc.) and favouring the cooperative work of multi-municipal aggregations which could have given structure to the urban region as a "City of Cities".

On the basis of this document we launched a competition for projects and best practices for the habitability of the urban region with the objective of collecting ideas, examples and proposals and of soliciting the involvement of a vast audience of actors.

A third course of action consisted of work within the provincial administration to prepare an "atlas" of policies and projects already introduced by the province in the sphere of habitability.

We therefore organised a large exhibition held at the Milan Triennale Museum on changes in the metropolis which was later transformed into a travelling exhibition, and finally we produced a planning document which attempted to set the guidelines for the building of longer-term policies on habitability.

2.3 Thoughts Based on Practices

I feel it is important to underline some of the limitations and some of the opportunities encountered in the process.

I have already said (Balducci 2008) that in situations of great complexity, when there is no clear decision-making centre – as in the case of an organisation or a single city – it is necessary to conceive of strategic planning as a field of different practices (Balducci 2010), as a process of "strategic navigation" as Jean Hillier affirms (Hillier 2011), rather than as a "road map".

If there is no authority to impose decisions on other actors in a situation of high fragmentation, the only potentially effective exercises to perform are those of argument, persuasion and inclusion (Majone 1989). Being aware of these particular context conditions, we were guided during the project by a few principal theoretical references as follows:

- Lindblom's conception of strategic planning which urges the use of the "intelligence of society" (Lindblom 1965, 1975), in a mix between technical analysis and interaction.
- Patsy Healey's conception, which describes strategic planning as an activity which is able to select single processes of social innovation, favouring firstly the transformation of the processes into institutionalised practices in order possibly to attempt to then modify governance culture (Healey 2007).
- Albrechts and Van den Broeck's conception (Albrechts and Van den Broeck 2004) of four basic lines of strategic planning around which to organise different actions: the construction of a vision, the introduction of immediate actions, the involvement of stakeholders and reaching public opinion.

These to some extent converging references directed us, giving us a sense of exploration (Balducci 2011) and enabling us to identify possible subsequent paths at each stage of the process.

After the abrupt interruption of the process following the local elections, it seems important to reflect on the results achieved and on the further interpretations that we can give to the events which characterised it.

There have been, as always, negative and positive results.

The first included the following:

- *Scarce success in co-ordinating other local government departments.* Even though the strategic plan was supposed to become a co-ordination instrument and mechanisms were put in place to regulate the involvement of all the main departments, with much energy expended, the participation of other departments depended much on the possibility of being able to achieve their own objectives through it and this produced modest results. This issue of inter-sectoral co-ordination is a problem typical of all planning activities, but it must nevertheless be remarked that the great effort made for involvement, right from the initial stages, was unable to create true participation in the project, despite the verbal declarations that were always made. Each councillor responsible for a department constantly focused on their own activities and only became actively involved in the strategic plan when this could play a role in support of their own policies.
- *Visibility in the media was fairly low.* Newspapers are not generally interested in planning activities, and in this case the lack of attention was even greater, because it was an informal instrument and did not require "approvals" which might at least have constituted a "news item". We were always convinced that the contents of our project – the issue of habitability and the interpretation of the urban region as a "City of Cities" – and its participatory instruments such as the competition for projects and best practices, which aroused great interest, would have attracted the attention of the media because of the arguments and the very great involvement in the project. The most important Milan newspapers are generally attentive to quality of life issues, but the connection was not made.
- *The president of the province did not support the project adequately.* The scarce attention on the part of the media was partly linked to the limited involvement of the president and its powerful press office. The project was given a non-priority status in the communication policies right from the beginning. Here, too, we were convinced that this project could have given the province in general and the president in particular a significant political advantage in local debate. The province was the only level of government occupied by the centre-left in a regional context dominated by the centre-right and its neo-liberal policies, fairly insensitive to environmental issues. City of Cities was a project which made it possible to define environmental policies in a non-partisan political way and to connect government action with public consensus feeling, which clearly suffered from the poor quality of living in the urban region. Despite our convictions, the president had decided to play a different political card. He wanted to demonstrate that he was a leader able to create infrastructures, mainly road, in great demand in business environments. He also worked politically during his period of office to create a new level of government in the metropolitan area to replace the province and which would have greater power with regard to the Municipality of Milan.

It was a position which seemed technically weak to us, considering the many failed attempts in the past. Support for the project was therefore always very lukewarm and linked to the fact that it did not interfere with his objectives and that at each stage it obtained a success with the public (administrators, local organisations, citizens) towards which politicians are always sensitive.

A series of positive results were also observed (Balducci et al. 2011):

- *The idea of habitability has "travelled".* It was a fairly academic, unconventional concept, and we succeeded in using it even with its untypical content in political language. At a certain point in the project, the title of the councillor Daniela Gasparini was changed to "councillor for the strategic plan and the habitability", a sign also of the degree of absorption in the institution of a definition designed to underline the multidimensional nature of the very taken-for-granted issues of the quality of life. Slowly the councillors in charge of other departments started to use it, and it spread into use in political language. Also the subsequent proposal to present Milan as a candidate for the 2015 Universal Exposition by the province was made in the context of the emergence of a city with a more welcoming and *habitable* image.
- *The response of many actors in the community to the competition initiative was very positive.* Wide participation in all editions of the competition demonstrated great interest on the part of local society in playing a more active part in policymaking. That same idea of a competition which is not designed to award prizes but for use as a planning device, able to generate innovative actions and proposals, was not only repeated but also imitated by other local government departments. Nevertheless despite the success of the formula, the provincial government was unable to modify its practices to make full use of the potential that might result from the construction of a true and genuine "policy community" to support the project.
- *There was a significant involvement of actors normally distant from or in conflict with the province: the Municipality of Milan, the Region of Lombardy, the Chamber of Commerce and the Fondazione Cariplo, the main banking foundation.* These important actors saw a potentially interesting ground for co-operation in the City of Cities project because it was relatively neutral as a ground not already organised like that of conventional urban and regional planning, which traditionally sets the city of Milan, the province and the region against each other. Here, too, it must be said that the potential was not fully exploited. For example, the exhibition at the Triennale was jointly financed and the initiatives in the "theatre of the City of Cities", inserted as part of the exhibition, saw the participation of all those financing it with the presentation of their policies to improve habitability, but in the end the hoped for outcome, that of the creation of a permanent organisation for communication between institutions (the so-called Metrocenter), was not to happen.
- *Some initiatives which originated during the project did actually take-off,* because they succeeded in attracting the interest of some actors who took them on. This happened with the Metrobosco project, the University Portal and the integration of the Northern Green Dorsal with the new Pedemontana motorway, to which we will return later.

I feel there is a thread, which runs through the considerations that we can make on the successes and failures of the City of Cities initiative. We thought from the beginning that the various actors involved would have progressively and naturally supported the City of Cities proposal due, on the one hand, to the open and participatory character of the programme which we had planned and, on the other hand, to the strength and the validity of the arguments which we made. We were obliged to recognise with difficulty during the process that the other actors had different perceptions and objectives:

- As already said, the president of the province had set his sights on the creation of road infrastructures and his election interests.
- Other councillors and heads of department were interested above all in their own projects.
- Even our own councillor whom we were advising was guided by an understanding of the effectiveness of planning action that was different from ours.
- The municipalities that participated with conviction in the planning process were seeking funding for their policies, knowledge of urban and regional dynamics that would help them with policymaking and the construction of intergovernment relations that might be useful for them.
- The citizens' groups and associations which took part in the competition sought the chance to obtain recognition as credible partners in the construction of public policies.
- We ourselves sought the chance to demonstrate that our theories of the urban region and strategic planning in contexts of great complexity actually worked in practice.

Even in this very short account, one important point and a limit on participatory approaches is extremely tangible here. The initiation of processes and accurate and non-distorted communication does not guarantee convergence. In fact, on the contrary, this conviction may result in a neo-technocratic attitude in the belief that the actors who do not become involved in a project are simply bearing "private" interests which conflict with the public interest declared by the process of involvement and public debate. In reality the world of practices demonstrates that many conflicts are irresolvable not because there is no possibility for open communication and dialogue, but for two different reasons. On the one hand, it is difficult to reconcile opposing interests (opposing definitions of the public interest with regard to investment priorities). On the other hand, because the interactions occur within a diversity of arenas without the constant participation of all the actors, only those responsible of the planning process attempts with difficulty to hold it together by defining a viewpoint which is only recognised as central by a limited number of actors.

2.4 "Trading Zone" and "Boundary Objects"

It was by seeking an answer to these questions that, thanks to discussion with Finnish colleagues, I ran into Peter Galison's "trading zone" theory.

Since he wrote his best known book in 1997 "Image and Logic: A Material Culture of Microphysics", Galison has defined "trading zones" as those infrastructures and those concepts which function as "exchangers" for dialogues between different subcultures. He shows through empirical observation of how innovations in science occurred historically – ranging from physics to nanotechnologies – and how these give rise to concrete spaces or conceptual spaces where scientists belonging to different disciplinary fields are obliged to find simplified and intermediate languages to be able to work together. It is from this essential communication, which requires partial agreements, that innovations are born.

A trading zone is a platform where highly elaborate and complex questions can be transformed into "thin descriptions" (as opposed to "thick descriptions"), with the objective of exchanging information in a specific local context.

What had attracted Galison right from the start of his research into scientific innovation was the capacity to build co-ordinated forms of mutual interaction, despite a limited capacity on the part of each group to understand the conceptions, the methodologies and the objectives of the others. He makes reference to the pidgin language of immigrants to explain the concept. It is a simplified language which allows communication and which in colonisation contexts may evolve into a more complex creole language.

> In colonised societies, artificial *pidgin* languages have been generated between the very different parent languages of the immigrants and the indigenous people, as localised linguistic practices of trade – some of which may have later "naturalised" into full-blown languages, *creoles* (Galison 1999, pp. 673–674).

Another concept which forms part of the same universe of meaning is that of "boundary objects" formulated by Star and Griesemer to explain the positive results of interaction between groups either in conflict or with opposing objectives (Star and Griesemer 1989). The hypotheses put forward is that in order to succeed in carrying out projects of any nature in complex contexts, it is necessary for these to belong to or intercept different strategies without requiring them to converge.

> Boundary objects are objects which are both plastic enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. […] They have different meanings in different social worlds but their structure is common enough to more than one world to make them recognisable, a means of translation (Star and Griesemer 1989, p. 393).

Star and Griesemer claim that the creation and management of *boundary objects* is a crucial process in the development and maintenance of coherence between different worlds which intersect.

It is not the capacity to make the right choices, from the viewpoint of the contents and the working method, which leads to the successful involvement of other actors. In this context it is the ability to propose an action that is a boundary object between the different strategies of the actors involved: the municipalities, different councillors, associations, citizen groups, other institutional actors, media, etc.

From this viewpoint, to complain about those who do not agree with our "messages" is merely a sign of weakness or of misunderstanding of the situation. In this sense,

it seems to me that these are theoretical contributions which go beyond a nevertheless useful indication of what should be done, but which help to interpret the difficulties of planning practices and perhaps indicate possible interesting solutions to various dilemmatic situations.

2.5 To Plan Is to Build "Trading Zones"

What I found promising in the concepts of "boundary objects" and of "trading zone" is their applicability not only in situations of participatory planning but also for interpreting planning successes and failures in general.

For some time now urban planning has run into the problem of implementing plans, projects and programmes.

The policy approach was important precisely because it underlined the fallacy of a conception of urban planning as merely planning by experts and politicians or one might say planning by a single actor, the urban planner, who, receiving a clear political directive, thinks she/he can co-ordinate the action of all the others on the basis of objective reasoning. If the plan of a city is to be implemented, it interferes with the action of public and private actors and therefore it must co-ordinate them. The plan is therefore intrinsically good, rational and legitimate, and the problem of implementation is one of conformance. And here we have the "*nomo-dependent*" (dependent upon laws) attitude of planning, as Pierluigi Crosta defined it, the continuous demand for laws which grant greater overriding powers to planning activities and to planners (Crosta 1995).

The other side of this same attitude lies in the fact that for many years the urban planning debate was focused on plan making rather than on the results of the plans. The problems of effectiveness were to be solved by the demand for greater powers, while the technical issues turned on how to make plans (the successive "generations", the different "schools", etc.) without any effective assessment of the problems of effectiveness.

The policy approach laid bare the power relations and underlined the fact that the urban planner is just one of the actors who can deploy resources of authority and expert knowledge, while many other actors involved in urban change processes can also deploy their own resources.

If planning is to be effective, it must come to terms with a number of different actors, with conflicts, the role of ordinary knowledge, etc.

Charles Lindblom is used within this framework to explain the processes of interaction but also (by some) to justify the usefulness of participation.

Participatory or inclusive approaches assume that the urban planner is a third party. By realising that each actor is a bearer of specific information and a specific philosophy, intelligent urban planners open up the process to involve all the actors, they build arenas for negotiation and the exchange of information in which probing can develop (Lindblom 1990) and they use the intelligence of democracy to construct a shared plan.

What happened to processes designed through participatory approaches, even the most pragmatic and open and those which actually reduced the role of the urban planner to that of a facilitator?

Often they have also failed, on the one hand, because the participatory arenas always form only part of a more complex process; on the other hand, because the presumed third-party nature of the "facilitator" is never one of true neutrality; and finally because many compromises give away the high ground: they lower the quality of the results.

However, the aspect which persuaded me most to explore other interpretations based on the City of Cities experience was that in particularly complex situations, where content and process objectives are intertwined – objectives linked to a specific result and objectives linked to the role in the process that the actor wants to see recognised independently of the result (Fareri 2009) – and when we ourselves have contents to establish, it is not sufficient to open up the process to the participation of the actors involved, because there is no single arena in which the issues are addressed. There are many arenas, the actors participate intermittently and the "travelling" of visions and strategies runs into an infinity of obstacles and changes of plan.

In these situations it is naive to think that all the process can be kept within a single universe of relationships in which authentic communication can occur.

Participatory approaches frequently fail in their objectives for a number of basic reasons:

- Because urban planners themselves, as is only right, are the bearers of content and process objectives.
- Because there are important actors who are not interested in being involved in the planning process and they too have content and process objectives.
- Because the participation of some actors (e.g. grass roots organisations) must inevitably be occasional.
- Because the definition of what the process is and where it must take place is a construct and not a fact.

In what sense then do boundary objects and trading zone offer promising prospects for this type of problem? Initially the idea of boundary objects seemed interesting to me because it says: the problem of planning and its implementation is not that of finding a strategy on which all may agree and that is shared because all have been involved in it and they are convinced of the effectiveness of the solution. Or to put it better, this is only possible for relatively simple problems, where a recognised arena can exist as the principal decision-making place and where open probing mechanisms can operate leading to an agreed upon solution, also thanks to the influence described by Jon Elster as the "*civilising force of hypocrisy*" (Elster 1993).

To assume that this is possible in all other situations leads us to judge all the actors who do not support our model as having "counter-interests", as "enemies" (Galison 2010).

The concepts of trading zone and boundary object suggest us that instead of seeking to create a general agreement we must try to seek those solutions which

can belong to different lifeworlds and to the different strategic viewpoints of the actors involved, while at the same time assuming that these actors are and remain in conflict.

In some respects this is the opposite of the agreement on principles recommended by the negotiation approaches: we do not discuss solutions, we build an agreement on the principles and then from this an agreement on the solution will naturally arise (Fisher and Ury 1981). It seems to me that the trading zone and boundary object viewpoints suggest the exact reverse: we should try to create a trading zone in which to find boundary objects which may belong to different objectives and principles, and this will allow us to implement initiatives and projects, even if we disagree.

The example on which this viewpoint seemed to throw light was our relationship in the City of Cities Project with the president of the Province, who, as has been said, was playing a different game with no interest in supporting our viewpoint, however brilliant it may have been, because he was mainly interested in building road infrastructures. In particular he wanted to demonstrate that he was able to realise a new motorway, the so-called Pedemontana, that all the public actors had attempted to realise for decades but that had been blocked by many conflicts and inefficiencies. Having this in mind as the most strategic choice of the province, the president did not support our plan. In our project at the same time we were proposing a greenway, the Northern Green Dorsal, crossing the northern part of the urban region because we thought that this would have been a much more relevant infrastructure for the habitability. Working in the same administration we realised that the two projects were not necessarily alternative. Road engineers started to talk with us, urban planners and landscape architects. Through this dialogue we realised that we could have created the greenway together with the Pedemontana motorway by using the environmental compensations from the infrastructure plan and that the two projects would have benefited each other: they had found a way to render the infrastructure more acceptable to the communities, and we had found the economic resources to build the green infrastructure. Without convincing each other we had developed an interlanguage and had identified a boundary object which allowed us and him each to pursue our different strategies with a common project. And the implementation of both the projects then began. If we had taken this approach, instead of complaining about the lack of (his) consensus, we could have and should have discovered this opportunity earlier for this and for many other possible actions.

This is only an example that demonstrates the change of attitude that can explain failure and partial successes in our planning process.

What does the trading zone viewpoint add therefore to the planning debate? I believe it tells that the problem of innovation in general is a problem of creating intermediate languages which permit communication between actors belonging to different lifeworlds.

The problem of planning is therefore that of constructing a "pidgin" language for urban change, a simplified intermediate language which would permit understanding between different actors with different strategies and objectives but who manage to communicate and construct partial agreements. If this communication is reiterated, the *pidgin* can evolve into a *creole* language, and this is probably dependent on the

starting points as well as the general conventions which hold together a society. It is easier in Helsinki than in Milan for the different amount of social capital available in the two cities (Donolo 2011).

This type of conceptualisation seems promising for dealing with the problems of participation in urban planning, because, to go back to Lindblom, it enables us to say that agreements can be built even between parties in conflict, and it therefore drives us to look not at the establishment of a single arena for free and non-distorted communication, but to the construction of a discourse that is able to intercept the interests of different actors who operate in different arenas (see Chap. 1).

However, the most interesting aspect is the capacity of this framework to also address the more general problems of urban planning. Are not the constantly frustrated quest for co-ordination, the question of public-private sector relations, or the mere failure to implement plans, all signs that the only way urban planning can succeed is through the creation of a trading zone?

I believe it is an interesting perspective that would deserve an in-depth reflection. In order to probe its effectiveness, we need to work with these conceptual tools and with different case studies.

Starting from my own experience I am convinced that the use of the contribution of Peter Galison in our field could generate a better understanding of what is problematic in managing planning processes, opening at the same time towards interesting normative implications. It is in line with a long-lasting critical reflection in planning theory but with the special character of bringing the theory very close to the world of practice, which is what we really need to interpret and go beyond many of our dilemmas.

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Chapter 3
Idea Competitions: Contemporary Urban Planning in Urban Regions and the Concept of Trading Zones

Valeria Fedeli

Abstract This chapter presents some thinking about two recent European idea competitions. Both cases, which date to the first decade of the twenty-first century, allow us to reflect upon the way in which contemporary urban planning is experimenting new ways of facing problems of communication and coordination in large urban regions, thus moving beyond the limits and boundaries of statutory planning and the administrative limits and the traditional definition of the city. Reading these cases through the lens of the trading zone approach seems to reveal some interesting elements for interpretation which will be summarised in the fifth paragraph dedicated to general conclusions. In fact, in an attempt to discuss and probe Galison's *trading zone* approach within the field of spatial planning, the chapter explores the role that idea competitions play in contemporary planning processes. The hypothesis is that, given the disputed nature of planning in a complex, multicultural, uncertain and fragmented urban condition, idea competitions can act today, implicitly or explicitly, as innovative planning devices that can face new problems such as those of communication and coordination, in particular in challenging contexts, like those of large urban regions. A second hypothesis complements this first one: idea competitions can be analysed as challenging places for both the production of knowledge as well as public decision-making. In this sense, the trading zone approach offers positive support to our understanding of the complex function that the production and exchange of knowledge (expert and tacit) plays in spatial decision-making processes, given today's general crisis in the legitimacy and efficiency of traditional models of public action.

Keywords Public decision-making • 'Transactive' planning • 'Political' planning • Planning tools • Role of spatial representation • Transcale question

V. Fedeli (✉)
Department of Architecture and Urban Studies (DAStU), Faculty of Architecture and Society, Politecnico di Milano, Via Bonardi 3, Milan 20133, Italy
e-mail: valeria.fedeli@polimi.it

A. Balducci and R. Mäntysalo (eds.), *Urban Planning as a Trading Zone*, Urban and Landscape Perspectives 13, DOI 10.1007/978-94-007-5854-4_3,

3.1 Introduction

Idea competitions have a long tradition in the field of spatial planning: architectural, urban planning and design competitions have been promoted at different times by local and nonlocal governments – as well as by private subjects – in order to produce and circulate hypotheses, visions and perspectives concerning the future of a specific area or an entire city. In truth, the role and nature of competitions have deeply changed over the centuries almost as much as urban planning has, both in terms of practices and theories. Nonetheless, they have always maintained an important position and function. This chapter presents some thinking about two recent European idea competitions. In an attempt to discuss and probe Galison's *trading zones* approach (Galison 1997, 2010) within the field of spatial planning, it explores the role that such a tool plays in contemporary planning processes. The hypothesis is that, given the disputed nature of planning in a complex, multicultural, uncertain and fragmented urban condition, idea competitions can act today, implicitly or explicitly, as innovative planning devices that can face new problems such as those of communication and coordination (Galison 1997, 2010), in particular in challenging contexts, like those of large urban regions. A second hypothesis complements the first one: idea competitions can be analysed as challenging places for both the production of knowledge as well as public decision-making. In this sense, the trading zone approach can support our understanding of the complex function that the production and exchange of knowledge (expert and tacit) plays in spatial decision-making processes, given today's general crisis in the legitimacy and efficiency of traditional models of public action.

The first section in this chapter will present a framework for reflection, proposing a general reading of the contested and uncertain conditions of contemporary planning in light of the tz approach. The second will provide a brief reconstruction of the role that idea competitions have played in planning history with a specific focus on the last two centuries. The third and the fourth section will present two selected cases: the first, the 'Grand Pari(s) de l'agglomeration parisienne' consultation in Paris and the second, the 'Bando Città di Città' in Milan, Italy. Both cases, which date to the first decade of the twenty-first century, allow us to reflect upon the way in which planning is experimenting new ways of facing problems of communication and coordination in large urban regions, thus moving beyond the limits and boundaries of statutory planning, as well as facing problems of scale having to do with the complex process of change in the contemporary city that has moved beyond administrative limits and the traditional definition of the city. Reading these cases through the lens of the trading zone approach seems to reveal some interesting elements for interpretation which will be summarised in the fifth section dedicated to general conclusions.

3.2 Planning as *Trading Zones?*

Addressing the complex nature of urban planning, John Friedmann, in his well-known 1993 article, 'Toward a Non-Euclidean Mode of Planning', focused on the specific nature of such activity, essentially based on a close and complex relationship between

knowledge and action. 'Normative', 'innovative', 'political' and 'transactive' planning based on a social learning approach is what Friedmann proposed at the time as an answer to the problems and the crisis in traditional planning approaches (Friedmann 1993, p. 483). On the one hand, this kind of planning works on principles whose political nature is undeniable. On the other hand, *transactive* planning is designed to consider the relationship between 'expert knowledge and everyday local knowledge' (ibidem, p. 483) in the belief that problems can only be understood and addressed through social learning processes in which different forms of knowledge can meet and be exchanged. Finally, there is planning in which the local dimension – situated in time and space – is increasingly important, despite global processes, since all planning activity occurs in a specific and context-relevant condition.

In what sense can these founding arguments be read in the trading zone perspective proposed by Galison (and discussed by others, see in particular Collins et al. 2007) and explored in this chapter? In our interpretation, we can find some major and closely connected points in which trading zone approach can interact with some of the core issues raised by Friedmann and others after him.

The first is linked to the 'political nature' of planning (see Kanninen, Bäcklund and Mäntysalo in this book). Planning, in fact, cannot be conceived merely as a traditional technical field of expert knowledge since planning decisions are tied to a 'political' dimension (Mouffe 2000), not only because power is always exchanged in planning processes but more generally, and interestingly, because planning always has to do with the 'problems of the public' (Dewey 1927) and how the 'public' is continuously formed[1] and reformed through what is locally and eventually – in time and space – considered to be 'in common' (see Arendt 1994; Cefai and Trom 2001; Thevenot 2006; Crosta 2003; Tagliagambe 2008).

Can the trading zones approach help us face the political nature which is increasingly problematic in our contemporary, fragmented and plural society, reinterpreting the idea of 'working on principles' proposed by Friedmann? Although the trading zone approach was developed in the field of the social studies of science (where, in any case, the exchange of power plays a considerable role), we believe that it can provide some interesting insights into the field of planning as well. *Trading zones, in fact, as described by Galison,* as spaces of coordination and communication between different subcultures, are particularly inspiring concepts for developing an innovative understanding and treatment of the 'political' nature of planning. In particular, the trading zones approach explores the processes of the 'constitution' of 'in-between' spaces (material and immaterial) to which people enter with different languages, cultures, interests and goals to discuss (materially and immaterially) *problems in common* which require some form of 'communication and coordination'. When, in fact, Galison states that '*trade* focuses on coordinated, *local* actions, enabled by the *thinness* of interpretation rather than the thickness of consensus' (Galison 2010, p. 36), he offers planning practitioners and theorists some useful perspectives for moving beyond some of the debated limits of participatory theories (Sager 1994, 1997, 2009) to experiment innovative ways of facing the difficult nature and constitution of public arenas[2] around public problems,[3] which we consider to be one of the major issues of contemporary planning. In fact, it proposes a different perspective on 'working with principles' and being 'political'.

The second is linked to the 'transactional' nature of planning, dealing with the exchange between different forms of knowledge. Transactional, in our interpretation, subsumes at least three different dimensions:

1. All planning processes refer to several technical dimensions which require the interaction of different disciplinary fields. If we go back to the foundation of spatial planning as an expert field of knowledge in a national context (all quite recent), we find differentiated attempts at conferring scientific status upon planning along with a statute based on different assumptions regarding the nature of this field. Even from different perspectives and with differentiated roles (coordination, synthesis, etc.), in most cases the planning field has been regarded as a place of interaction and transaction between different disciplinary fields.
2. Planning, by definition, lives in the interaction between expert knowledge and everyday local knowledge. As planning theory has shown, planning processes must take into consideration the knowledge shared and produced by actors that are not necessarily experts and not necessarily only technical or professional experts Atkinson et al. (2010).
3. Planning processes are spaces for the transaction of different agents, which 'constitute' Cefaï and Trom (2001) into actors in the planning process throughout the interaction regarding a problem or interest they have in common; their values, ideas and perspectives contribute to the construction of the common problem and cannot be identified as stable and pre-existing in nature. Also 'usable' knowledge is therefore not pre-existing (Lindblom and Cohen 1979) but is produced by the interaction of actors (or according to Dewey and Bentley 1974, by transaction, thus also stressing the transformation taking place throughout the exchange) around a problem to be solved (Crosta 1998).

In all such cases, the trading zone perspective could be helpful in two different senses. The first regards the exploration of how this exchange comes about and what (and if) it is able to produce ('jargon', 'pidgin', 'creole', in terms of 'interlanguage exchange' or 'inter-operational capacities' as well as 'boundary objects', Galison 1997, 2010). The trading zone approach could contribute to understanding the space of 'intersection' between forms of knowledge that are central and strategic in terms of producing legitimacy and efficiency in planning processes. The second regards the necessity of dealing with the instable nature of the agency. In fact, in thinking about some of the critiques made to his approach, Galison made it clear that the 'pure nature of cultures involved in trading zones is far from being acknowledged' ('I chose the idea of intersection quite deliberately', Galison 2010, p. 32): 'there is no stable entity of who (and what) comes into (and out from) the trading zone. No predefinition in fact can be taken for granted, both of cultures and individuals, agents, which are relevant only insofar as they enter in the trading zone'.

The third and final point is related to the 'local' nature of planning. The local dimension, in fact, has remained a central issue and challenge in planning despite globalisation, as anticipated by Friedmann more than 15 years ago (see Sfez 1977; Crosta 2003; Magnaghi 2000). At the same time, the contemporary urban question has been identified as a transcale question (Brenner 2000), in which it is increasingly complex to define the

form and boundaries of the contemporary city (Soja 2011) and as a result the territory of planning and the meaning of 'local'. In this perspective, when Galison looks at the locality of trading zones (Galison 1999, p. 138) and, as proposed by Mäntysalo et al. (2011, p. 261), to 'local infrastructures of shared concepts and instruments that had enabled such an exchange' (Galison 2010, as well as Collins et al. 2007, p. 658, which define trading zone as 'locations in which communities with a deep problem of communication manage to communicate'), he provides some interesting argumentations regarding the persisting importance of the local dimension as a central, as well as challenging, question within the planning debate (Cefaï and Trom 2001).

As a conclusion to this brief and partial introduction, we might advance an important hypothesis: not only can planning theory draw some interesting suggestions from trading zone theory, but, more in general, we might argue that contemporary spatial planning could be regarded and discussed as a process of continuous production of 'trading zones' if not as a 'trading zone' itself. Insofar as it always has to do with coping with problems of coordination and communication (Collins et al. 2007) between plural and fragmented communities and cultures, planning is, in fact, increasingly exposed to the necessity of producing in-between spaces for 'trading' among different points of view, languages, ideas, forms of agency, forms of knowledge and finally among different forms of understanding of the local dimension.

In this sense, idea competitions, as we will argue in the next paragraphs, might be interpreted as devices designed and promoted in order to produce new 'zones for trading' around 'problems of the public' in conditions in which traditional planning tools and devices have shown their limits and aporia.

3.3 Idea Competitions: History and Role in the Planning Field

A simple and quite clear definition of design competitions can be found in 'Towards an Urban Renaissance', the final report of the Urban Task force, chaired by Lord Richard Rogers of Riverside and promoted by the UK government (Urban Task Force 1999, 2002, 77–78). The paragraph dedicated to design competitions presents well-established arguments and hypotheses relating to their role in contemporary planning. The first concerns their capacity to select quality ideas that can improve regeneration or development processes. The second concerns the idea that they can promote inclusive and participatory processes involving different experts and stakeholders. The third is related to the idea that, over all, they can be efficient tools for producing urban change, since high-quality expertise and broader public involvement are seen as vehicles for fostering efficient urban regeneration.

Aside from this well-established and shared description, the report proposes a list of different forms of design competitions: 'competitive interviews' in which experts are asked to provide their points of view on a certain project; 'two- or three-stage design competitions' in which invited experts are asked to produce projects and ideas, with the final selection of one idea; and finally 'open anonymous

competitions' in which participation is completely open and a jury chooses among the best ideas provided by the candidate experts. In all cases, however, experts are asked to provide their professional visions, and architects are the specific experts normally involved, along with urban planners.

This definition is almost always at the base of the many urban and architectural design competitions currently promoted by cities. Of course, this is the result of both a long historical tradition and of more recent factors. In their different forms, design competitions have been promoted in the past by local administrations for different reasons: for the renewal of a specific site as well as for the foundation of a new city or in order to think about its process of growth or restructuring in a specific critical moment. Despite the fact that the role of the participation of archi-stars as a way to attract public attention has been recently become even more evident than in the past, architects have always been the central actors in these events. Nevertheless, design competitions have often tried to produce a broader public debate about cities in historical moments; even if they have been mainly limited to intellectuals, politicians and experts (see the Canberra competition in 1911, but also Milan's for the reconstruction of the city in 1945 after the damage caused by WWII), they have had the role of taking advantage of a larger consultation in which different perspectives and ideas can come together and produce learning and sometimes innovation. Of course, different examples and interpretations of idea competitions based on this quite traditional model can still be found – with different degrees of innovation. While, for example, Chinese design competitions for new cities are still quite traditional in the interpretation of their role, others, like the one launched by Canberra under the name CAPITethical (promoted as a celebration for the 100-year anniversary of the capital, inviting experts to rethink the founding moment of the city and think back what difference it would make today to plan the city in relation to today challenges)[4] or by Helsinki with the name of 'Greater Helsinki Vision 2050' (launched in 2007 in order 'to find new and open-minded residential, land use and transport solutions for developing the region'), deal more with the idea of using expert knowledge to produce broad public debate about the future of the city in the face of significant processes of change.

More innovative forms of design competitions can be found with some in-depth research.[5] Several experiences in fact could be cited that show how idea competitions are taking on a different role. They may be open to different experts or non-experts, in particular local residents. They can ask about physical transformation, but they might require simple ideas rather than complex technical products and can be developed not only by public administrations and cities in particular but by social foundations – NGOs, for example, as well as by private subjects. They might promise very small monetary prizes but nevertheless aim at promoting high public visibility. They might foster public imagination or social activation and empowerment, or they might think about a specific site, but more interestingly, they might question a broader context. In this respect, we are now experiencing the emergence of a new role for urban design competitions, transforming the more common requests for qualifications into open idea competitions, which has to do with some of the planning problems that we cited in the first section (see, in this regard, the history of IBA, International Building

Exhibitions in Germany, which turned from architectural exhibitions to broader occasions of reinventing the city).[6]

In the next paragraph, we will present two cases selected among others[7] in order to better highlight the nature of this shift in the role and meaning of competitions: they will be analysed in a trading zone perspective in order to highlight the elements relevant to a general conclusion about planning in light of the trading zone approach.

3.4 Cases

3.4.1 'Grand Pari(s) de l'agglomeration parisienne'

3.4.1.1 The Process and the Context

In June 2007, celebrating the opening of the new air terminal in the Charles de Gaulle Airport, the President of the French Republic Nicolas Sarkozy reminded the public that 'Paris est la seule agglomération de France a ne pas avoir de communauté urbaine' (Paris is the only French urban agglomeration that does not have one "communautè urbaine). At the same time, Roger Karoutchi, state secretary, 'chargé des relations avec le parlement', announced the preparation of a law concerning the 'organisation of the Paris region' opening a dedicated website. Just a few months later in the same year, Sarkozy launched a 'nouveau projet d'aménagement global de Grand Paris' through an *international consultation* dedicated to the future of Paris. A two-phase invited competition was then organised, and multidisciplinary architect-coordinated teams were invited to reflect upon two topics: the future of the city and the upcoming challenges in light of the Kyoto protocol. On the basis of the slogan, 'the project first and then governance', the competition's declared aim was to leave space to free imagination, leaving in the background the operative dimension and government and governance problems which had for a long time the city in facing problems and thinking about its future. In fact, no mention was made in the call about the problems of territorial governance of the Paris area. Despite the fact that the title itself contains the issue – 'Grand Pari(s) de l'agglomeration parisienne' – the call asked participants to concentrate essentially on the city's future in a sustainable development perspective.

Ten teams were asked to draw up further projects which were presented to the public in an exhibit held in March 2009 in the renewed *Citè de l'Architecture*. The event, followed by a lively debate, was a great public success both among citizens and experts. After this first phase, the new agenda called for a second one with teams working together within the common framework of the 'Atelier International Du Grand Paris' to design projects regarding different specific themes and selected sites. On the one hand, they were asked to produce new ideas; on the other hand, this second phase was to be dedicated to discuss these ideas in a public arena with a governance perspective, thus returning to the original intention of facing operative

problems and public debate after the results of the consultation. At the same time, this new phase would proffer some new hypotheses regarding the role of planning: (1) 'planning by objectives, rather than regulation'; (2) on the social role of architecture and its centrality in urban planning; and finally (3) an 'appropriate government solution' (see official documents).

This, in brief, is the history of a process that is still under way[8] and that has also generated different results among which is not only a large public debate on the future of the city but legislative reform regarding local government in France approved in June 2010 together with a special law for Paris focusing on a regional-scale infrastructure project that was quite controversial. The Atelier International was established and on October 2011, a new event was held to celebrate 4 years of the initiative.

In keeping with our hypothesis, this process can be read not only as an apparently traditional launch of an expert consultation (see the reports in several architectural journals) but also, more interestingly as the construction of a trading zone, as an opportunity to face problems of communication and coordination in a complex urban region that, for quite some time, had been seeking a new system of governance and a planning framework and in which the 'central state' was losing its role in favour of the 'local state'.

In fact, the history of this competition could be better interpreted if read together with a second history, also recent, but somewhat longer, that is, the history of the governance process and debate launched at the beginning of this same decade by the Paris city mayor, Delanoe, and by his councillor for inter-municipal cooperation, Pierre Mansat. In fact, since 2000 the municipality of Paris experimented and promoted the reinterpretation of the contemporary city, producing a sizeable and interesting set of ideas and projects which provided new urban images and interpretations. They portray a city that has grown beyond its walls Gilli and Offner (2009) and that is attempting to leave behind a policy, and a governance approach, relating to traditional *intra-moenia* sovereignty and territoriality – an attempt to promote forms of public action that can intersect a new 'territoriality', defined by everyday social practices in relation to which administrative boundaries and institutions have lost their meaning as well as their efficacy and legitimacy. This process, animated by different tools and operations (exhibits, debates, projects, institutional acts), had already produced several results at the time of the launch of the Grand Pari(s) consultation, in particular that of the constitution of a sort of a common framework for debate and action on the metropolitan scale, at that time less institutionalised than it is today, called 'Paris Metropole', a voluntary form of alliance and discussion between Paris and its surrounding municipalities. If viewed in the light of centuries of contraposition and institutional failure, this could be viewed as true innovation built on an incremental project-by-project approach.

As a matter of fact, this entire second process in itself could be read as the constitution of a trading zone. In fact, Pierre Mansat's action could be seen as a set of operations that could produce a 'space of exchange' between different actors – those composing the fragmented institutional landscape of the Paris urban region, sharing a new space of interchange, despite different visions, images and ideas about their roles and how to cope with problems of coordination and communication. All this

came about despite years of the city's isolation policies and opposition from the surrounding municipalities. The production of studies and maps, exhibitions, launched or envisaged projects and low-profile institutional form could all be seen as a series of 'boundary objects', devices that could help make the construction of the 'Paris Metropole' trading zone work.

How did the Sarkozy competition fit into this process? It created a new trading zone, constituted by similar but also different 'boundary objects' from those available in the one promoted by the city of Paris; they were similar insofar as they sought the sharing of the same space of action and language, but different because of the style and goals of the trading zone created by the idea competitions. We could anticipate in fact, in conclusion, that what might seem to be quite a traditional design competition – old style if compared to the innovation which could be read in the city of Paris' trading zone created by the councillor in charge (and as treated by many observers) – in the end behaved exactly like a device that could put the central state in a position to redefine its role and position and come back into the process in which it had lost relevance and function, in terms of communication and coordination of action. In this sense, it provides a typical example of an attempt to introduce a new space for exchange between different ideas, visions, cultures and forms of power.

3.4.1.2 The Idea Competition as a New, or Reframing, Trading Zone and the Production of 'Boundary Objects'

The 'Grand Pari(s)' consultation was the object of broad public debate based on different languages and forms of knowledge and action; it opened a space which can be regarded as an interesting and 'designed' trading zone.

Beyond the more superficial interpretations of the architectural images produced, from a first point of view, in fact, the initiative can be read as a somehow remarkable elaboration regarding the 'city' itself (see Fedeli 2010). What is at stake, both in the name of the idea competitions and in its contents, is a definition of the city, a definition of Paris: Grand Paris is, in fact, a way to rename Paris and provide a renewed space of action through this rewording and retitling. In this sense, what it is more interesting is that the trading zone created by Sarkozy by Grand Paris (as well as the one created in other ways, through other 'boundary objects', by Mansat with Paris Metropole) is a tool to cope with a major challenge in contemporary planning: how to describe and treat a new urban fact, which seems to be increasingly difficult to grasp, understand and govern, thus derives the necessity and the efforts to produce new knowledge and understanding of it, shown by the large disciplinary production as well as by widespread plan production.

From a second point of view, it must be mentioned that the initiative was deeply contested by many local actors, insofar as it proposed an interpretation of traditional expert knowledge on the abilities of a specific disciplinary field and expert knowledge between planning and architecture to produce a vision for the contemporary city, providing technical solutions to be implemented or, in the best case scenarios, acting as a framework for further political and social thought and action. This was actually

in the premises of the consultation which seemed to reproduce a traditional relationship between politician and expert based on the availability of technical solutions for the contemporary 'urban question' (Secchi), placing faith in expert knowledge which not only appears rather traditional but also tricky in its rhetorical and functional use. Nevertheless, what is quite interesting in the materials produced is the important contribution made to collective imagination and debate. Gilli and Offner commented that this kind of expert consultation seemed to react to a situation in which 'actors needed a transactional object to talk with each other, to gather around a table' (Gilli and Offner 2009, p. 95). Whether or not these were the presidency's initial intentions, the result obtained is that the consultation produced a large set of 'boundary objects' (in which the role of maps and project drawings was central) in order to allow exchange between different actors and the return of the state into the context. On the other hand, it produced an exchange of ideas about the city which goes well beyond the original intentions.

Following this line of reasoning, the consultation launched by Sarkozy can be regarded as a case of the deliberate production of a trading zone in order to foster communication and coordination in a large urban region where territoriality, sovereignty and agency are at stake. Whether the judgement is positive or not (and this is another story that also faces problems of power that we are not able to address in this chapter), at the end of the day, the use of this space and its animation through several 'boundary objects' (the title and topic of the consultation, the maps and images produced by the teams, the public exhibition, etc.) allowed the state to reenter the arena and propose a language of exchange and trade. It is a fact that each institutional actor (city, region…) consequently decided to publish its own book, selecting what it considered relevant and useful from the competition, thus trying to become part of the exchange despite being hostile or sceptical towards the process; at the same time the central state introduced (in a nonneutral way, it must be noted for the final conclusions) two new elements through this designed trading zone. They are the reform of legislation concerning local autonomies and an infrastructure project for the Paris area which probably could not have been introduced without the trading zone deriving from the competition. It was an imposition rather than an outcome of a true debate, but the role of the Grand Paris competition in trying to foster these two main goals of the presidency was central and debated quite animatedly on the local level.

3.4.2 'Città di Città Strategic Project' and 'Ideas and Projects Competition'

3.4.2.1 The Process and the Context

Between 2005 and 2009, in collaboration with Politecnico di Milano Department of Architecture and Planning and Milano Metropoli (the public local development agency), the Province of Milan promoted a *strategic planning* process (see Balducci's

contribution in this book). With the title '*Progetto Strategico Città di Città*' ('Strategic Project Cities of Cities' (Provincia di Milano and Politecnico di Milano – DiAP 2007, 2009), this process was designed and developed as an important occasion to interpret and discuss ongoing processes of territorial transformation and to experiment possible innovations in the field of public policy, territorial governance and local development[9] in Milan. In this sense, the underlying challenges of this second example can be compared to those of the first: a changing urban region with significant problems of coordination in which traditional planning seemed unable to produce substantial results.

In particular, the *Strategic Project* focused upon three main families of activities and related research hypotheses:

- Producing and offering new interpretative frameworks for social, economic and territorial processes of change in the city and the *urban region*, regarded as a composite territorial context whose complexity requires new ways of describing, interpreting, planning and governing contemporary cities that go well beyond the current models of governance and planning (like that of the 'metropolitan area' and the provincial territorial plan, both regarded for a long time as necessary answers, but in the end never implemented. The first, the institutional framework for the *città metropolitana,* was never instituted or never considered important despite an existing law; the second, the territorial plan, is far from being able to deal with the complexity of an urban region despite having been drafted at different times since the 1960s).
- Enhancing the rich, plural and differentiated resources of local societies, trying to treat the problem of the fragmentation of decision-making typical of contemporary metropolitan contexts as a resource for the project, based on the hypothesis that the 'intelligence' of society (Lindblom 1965) can contribute to renewing forms, modes, contents of public action and, more in particular, planning. In fact, the local debate recognises that, over the last decades, Milan has been characterised by increased and widespread construction and activation of social capital, by-and-large more innovative than the available institutional capacities – in other words, the ability of local public institutions to innovate policies and ways of acting.
- Creating and discussing a vision based on new strategies that can couple the imperatives of competition with those of the quality of life and social/territorial cohesion, promoting, selecting and fostering projects to improve the *habitability*[10] of the urban region. The central idea was based on the perception of the need to restructure local policy agenda in order to face the persisting and unresolved problems that have afflicted the urban region for many decades and which do not seem to have obtained any real attention by public subjects.

The 4-year process based on these hypotheses can be viewed as the construction of a sort of *multiple trading zone*. In fact, it was essentially based on the idea that the general context was mature for change in terms of both interpretative and operative frameworks, that the resources for producing change were available and finally that what was necessary was a space for common thought and action different from those already available. The focus of the entire process, in fact, in a possible *ex-post*

reading, can be seen essentially in the construction of this space and devices that can activate coordination and communication between actors, interests and cultures in innovative ways.

In effect, the process was cultivated through the use of several devices and tools: *white papers* (proposing interpretative images of the context published to be discussed with a broad and differentiated public on the local level); *processes of interaction* (through different idea competitions aiming at intercepting new projects and ideas for the *livability* of the urban region, as we will see, but also accompanied by forms of more traditional encounters with different actors); *screening of the province's ongoing activities* to create a more livable urban context and the *selection and construction/promotion of pilot projects* to foster policy innovation in a more operative dimension (with the idea of intersecting the province's spaces of competent action with the emerging design capacities of social actors); and finally *occasions for public discussion* (fostered by debate promoted within the framework of a public exhibition illustrating the main issues of the planning process and questions regarding both research and action).

Two concepts were placed alongside these devices at the heart of the process, animating it:

- The issue of *habitability* as the main urban challenge for the public agenda: it was assumed that the Milan urban region had a deficit in terms of livability understood as a multifaceted qualitative concept concerning all dimensions of inhabiting a place and that any planning process or project should focus on this deficit going beyond the well-established rhetoric of simple competitiveness and attractiveness.
- The idea that Milan cannot be seen and governed as a city within its administrative boundaries since it is part of a large *urban region* – a more extensive conurbation in the northern Italian region and a field of interaction of different territorial and social configurations (*cities of cities*) in which proximity and mobility, belonging and rooting are always at play in a continuous process of construction, deconstruction and reconstruction of territories that also redefine and challenge the condition of citizenship. In this sense, the 'city of cities' is the city of multiple resources, practices and problems; at the same time it alludes to an idea of governance that goes beyond the traditional idea of metropolitan government widespread throughout Italy.

These two concepts – at the same time dense but thin in their expressions ('habitability' and 'city of cities', complex but at the same time quite comprehensible to non-experts and catchy as slogans) – were kinds of 'boundary objects', insofar as, in the multiple meaning they contain and allude to, they created a space of simplified exchange among the subjects who participated in the process. Not only did they *de facto* remain the two major keywords (maps and data were used to illustrate them in order to render them visible and usable for communication and coordination among actors who used them in different ways and with different goals) around which a space of exchange, communication and coordination was built and implemented, but they also were central to one of the plan's core operations that obtained great public success and that can be described, in our perspective, as a sort of 'trading zone'.

3.4.2.2 The Città di Città Competition of Ideas as a Key Trading Zone

The 'idea competition', conceived by plan promoters (both consultants and the province), was based on some important assumptions: traditional ways of facing problems of communication and coordination in the Milan context had created poor conditions of habitability. Plans, as issued by institutions or sets of experts in a traditional approach to coordination, were not able to change the situation nor could simple government reform. Therefore, it was necessary to find new ways of planning; in particular it was considered important to promote more widespread active participation in planning activities, activating society's recognised capabilities to produce innovation. In this sense, the fragmentation of actors could become a resource to bypass problems of how to produce a participative process in an urban/regional context.

Placing an idea competition at the centre of the strategic planning process was fundamental from this viewpoint, reinforcing the idea that a competition for projects and ideas might constitute an opportunity to create new dialogue between society and institutions, involving society at large both in the debate on the future of the urban region and on the formulation of policies to improve habitability. Rather than organising a traditional participation process, coming from the academic world, the consultant tried to create a dialogue based on projects and ideas that could trigger action and help the key word habitability 'travel' through society (Healey 2003) at the same time.

The competition was organised and designed as a two-phase open competition. It challenged every kind of subject, singly or organised with others, to propose original ideas to be further developed (first typology) or ongoing projects (second typology) to be publicised and reproduced in order to enhance the habitability of the entire urban/regional context. The prize was small in monetary terms and was to be devoted to producing a feasibility study for the implementation of the idea or for the communication and diffusion of the projects already under way. However, it was accompanied by the province's promise and commitment to recognise valid proposals with a sort of 'brand' and to collect them in a list of best practices to be acknowledged or supported by the province and other actors in the immediate future. After a first response to the call, all participants in the second phase were sustained by a support group composed of members of the university department (DIAP) and the MM local development agency to further develop the initial idea and to join other subjects who were advancing proposals in the same field.

Essentially, the first phase was conceived only as a very simple selection, while the idea of an accompanied second phase was central because it was used essentially as a space for the co-production of projects and ideas among candidates.

Despite the small amount of prize money, a large number of proposals was received and participated in the second phase. The success of the competition was unexpected (in quantitative and qualitative terms) and can be explained in different ways. In general it bears witness to the interest of society in taking part in a new design dialogue for the region's future. The topic to be addressed was in fact that of 'habitability'. After the first phase of individual participation, the projects were required to be developed in cooperation between actors, in keeping with the 'City of Cities' concept. Both concepts paved the way for the constitution of a fertile trading

zone in which different cultures and ideas could find, in these simple but meaningful concepts, the space for their different expectations, resources, abilities and interest in cooperation. In fact, by proposing their projects in the competition, candidates were asked to show in simple words and images how they might contribute to the challenges implicit in the expression contained in the plan's various official documents but also as they understood and interpreted the challenge in terms of material and immaterial design ideas.

Essentially, each project proposed an operative interpretation of these ideas. There was no theoretical discussion about these different interpretations, and this fact was central to the initiative's success. A document was also produced along with a database in which all ideas and projects could be consulted and could continue showing their evolution and interest in maintaining communications or promoting coordination with the others. All ideas and projects were presented, along with the entire process, in a public exhibition in one of Milan's most important cultural institutions. Actors participating in the competition were also offered the possibility to organise and manage workshops and presentations of their projects in a special space (the so-called theatre) hosted within the exhibition venue for its entire duration. This way of using the results of the process was designed by the promoters at the very beginning of the operation. In fact, the competition was considered by the designers as a 'governance episode' (Healey 2007, pp. 21–22) but also a cornerstone for a new culture of governance. Broad participation in the competition and in the 'theatre' reinforced the initial working hypotheses and led to further use of competitions by other province departments and by the strategic planning department which launched two more editions, recognising them as models for promoting forms of involvement of society in the production of public policy and in innovating governance culture. In this sense, the idea competition introduced a very different approach to public action in terms of facing problems of communication and coordination in planning urban regions.

By using the competition as an opportunity for dialogue, we, as consultants, tried to consider what Lindblom (1975, 1979) proposed in his writings which we have cited several times in our reconstruction of the process regarding the idea competition as a way of producing knowledge through interaction which, according to Lindblom, is the only constructive way to produce usable knowledge in planning processes. Drawing from his lesson, we also assumed that democratic discussion is not given and processed as a cooperative search for solutions on the basis of pre-shared values but on the basis of the interaction of those participating in the process with their different partisan positions.

Thus, it is possible to define the entire competition as another designed trading zone in which some strategic 'boundary objects' were used to foster it. Moreover, it could also be affirmed that the design competition was the core trading zone for the entire project, since it was the space for experts, as we were, to provide interpretations and hypotheses and to explore them in an open way. For the province, it was a way of facing the need to find operative spaces for action as well as a new role. For the public, it was an occasion to play a role in resolving the problems of a large urban region with its own resources, culture, language and ideas. Working on the 'thinness'

of interpretation rather on the thickness of consensus, the 'Città di Città' idea competition promoted a local space of exchange and interaction that could promote innovation in planning.

3.5 Conclusions

If we try to reach some general conclusions about the two cases, we can highlight some common points that are relevant to discussing how a trading zone perspective can be useful in terms of understanding and interpreting, as well as designing, planning processes.

As we have seen, both cases dealt with enormous problems of coordination, in particular with long-term unresolved problems of cooperation and communication in what are traditionally defined as metropolitan contexts. In fact both the 'Grand Paris case' and the 'Città di Città' case can be read within the general difficulties that the two cities have in adopting a logic of cooperation in order to think, plan and govern in the face of important metropolitan issues. Both the city-regions of Paris and Milan have been, and are, suffering the lack of either a metropolitan government or a metropolitan governance perspective; at the same time, they are quite evidently urban situations that go well beyond the traditional definition of cities. In this sense, both idea competitions were designed to play innovative roles in producing communications and coordination within these new plural and fragmented urban realities in which traditional planning tools and government arrangements were no longer effective (Ghorra-Gobin 2008). As a matter of fact, in both cases, the cooperation problem was not presented as the first focus but it did lay in the background. And no dense attempt had been made to manage the governance dimension in a traditional way. In this sense, we might argue that the role of trading zone played by the idea competitions was that of facing problems of communication and coordination through 'thin' descriptions rather than consensus. In this view, they were both innovative ways of exploring the political dimension of planning insofar as the creation of public arenas regarding common problems in both competitions produced a public arena concerning the problem of interpreting the nature of the contemporary city and addressing the complex problems that such large urban regions must face.

Of course, it must be stated that the way in which the two idea competitions were launched varied significantly, as did their nature and outcomes. In fact, the Paris competition was launched by the President de la Republique, while Milan was launched by the Provincial Administration. In the first case, the competition was for experts while in the second it was open to any subject. In the first case, widespread public debate was underscored by the competition. In the second, local society was mainly involved but media coverage was limited. In the first case, the topics to be addressed were officially the future of Paris in the light of Kyoto protocol which is quite a technical topic, while in the second, the main issues concerned the need to improve the habitability of the Milan urban region, which is more of an everyday topic. In the first case, experts were asked to envisage possible futures and projects

and only later was public debate held; in the second, 'everyday makers' (Bang 2005), as well as organised and institutional subjects, were asked to propose ideas and projects for a better city and to join forces in order to do that. These different targets generated different kinds of visibility for the two competitions and different outcomes. However, we understand that the two competitions were based on different perspectives regarding the transactional nature of planning and the role of expert knowledge and local knowledge. Nevertheless, both idea competitions played a significant role in creating innovative spaces for the exchange and production of knowledge, based, of course, on different political and theoretical assumptions and positions. In both cases, the need for planning to innovate according to the nature of the planning processes is also evident.

In both cases, the production of forms of exchange in terms of language and 'boundary objects' were central in facing problems of coordination and communication. As we recalled, according to some scholars, the competition launched by Sarkozy produced an important outcome as an alternative to the expected one: increasing public debate about the metropolitan government which had, during that same period, been quite developed within institutions, perhaps with even more innovative approaches by the municipality of Paris. The role of the competition and the controversy it raised made the issues at stake more visible to everyday citizens. In this sense, scholars say that the architectural renderings and maps produced in the competition provided exceptional material for discussion among different agents in a context in which there had been no real established interchange language (Mongin 2009). The role of spatial representation (from maps to diagrams to architectural design) was, in this sense, particularly interesting and again raises the question of the role of the expert knowledge of planners in planning processes. This can also be stated for the 'City of Cities' competition and process. The success of some of the images and concepts used in the project bears testimony to the role that this kind of expert knowledge plays in stimulating the trading zone. At the same time, as a conclusion, if the languages of 'thin' descriptions were made available in both cases allowing the trading zone to be created, these 'thin descriptions' were nevertheless the outcome of 'thick' intentional processes of cultural elaboration. Can this help us in thinking about a methodological point of view regarding the role that we, as planners and therefore experts, can play in the construction of trading zones (see in this sense the reflections proposed by Mazza 2009; Healey 2008; Throgmorton 1996)?

As a final general conclusion, we might state that in both cases planning was in question, although in different ways. In the first case, the final goal of the competition launched by the president was also to produce innovation in the field of urban planning. In the second, the competition was conceived within a process of strategic planning, questioning traditional approaches and innovating them radically. Moreover, in both cases, one thing is clear that due to its political and transactional nature, planning is seeking new and innovative ways to address the contemporary 'urban question'. In this perspective, the use of the trading zone approach to read and interpret these cases reveals significant added value. At the same time, it can help produce further innovation in the contemporary planning field, suggesting that, even more in general, planning is by definition a 'trading zone' and has to deal with the design and production of trading zones.

Endnotes

1. See Cefai and Throm (2001), p. 49, 'Dans la lignée pragmatiste de J. Dewey, le problème public est plus que le produit d'un « étiquetage collectif», c'est une « activité collective » en train de se faire'.
2. See Cefai and Throm (2001), p. 58, 'L'arène publique ne pré-existe pas telle quelle à la construction du problème public. Elle se constitue transversalement a différents champs d'institutions, se joue sur diverses scènes publiques, relève de multiples « sphères d'action publique », où des acteurs spécialisés usent de stratégies, "font des coups", recourent à des savoir-faire et à des savoir-dire, appliquent des règles et des réglementations, jouissent de compétences et de prérogatives, se meuvent dans des registres de discours et d'action distincts'.
3. See Cefai and Throm (2001), p. 51–52, 'Les « problèmes publics » n'existent et ne s'imposent comme tels, qu'en tant qu'ils sont des enjeux de définition et de maîtrise de situations problématiques et donc des enjeux de controverses et d'affrontements entre acteurs collectifs dans des arènes publiques'.
4. See the website opening page www.capithetical.com.au.
5. New York City, for example, has been the stage for some interesting initiatives. The most recent was promoted by IfUD, the Institute for Urban Design, which asked residents how to improve the city's public realm. The 550 ideas received were collected in an open call and turned over to experts ('practicing and student landscape architects, architects, planners, urban designers and artists from the city and everywhere', source: website) who were asked to 'respond to the challenge and present some design proposals (…). Designers are asked to 'define a site' based on any idea from a New Yorker and then create a brief proposal (…). IfUD writes in the brief that the proposal was not be 'too technical – the goal is to find great ideas that can capture the public imagination and start conversations, so even a single rendering qualifies; have fun with it!' All submissions were to be published in an 'Atlas of Possibility for the Future of New York'… 'which will provide a record of the vision the world's designers see for the city'. The expert jury selected the ten best ideas to receive a small prize of $500, which were included in an exhibition hosted during the first Urban Design Week festival held in New York City during September 2011.
6. See the website http://www.iba-hamburg.de/en/03_ausstellung/6_erleben/ausstellung_iba_at_work.php
7. For other interesting cases, see the following websites: www.metropoolregioamsterdam.nl;www.alternativefuturees.bc.ca; www.thekakartapost.com/news/2008/7/14/public-participation-key-vibrant-city.html; http://web.mit.edu/CIS/jerusalem2050/just_jerusaem/winners.html#tab_2
8. See the website: www.legrandparis.net/ and www.mon-grandparis.fr and www.ateliergranparis.com.
9. The author has been involved in this experience, together with Prof. Alessandro Balducci, as member of the DIAP group, responsible for the process. See in particular Balducci et al.(2011) for complete description of this experience. The direct involvement of the author in this experience makes it possible to produce a specific account of the process, insofar as it also provides an insight regarding facts, events, etc., that is, of course, not neutral.
10. The concept of *habitability* (in Italian the word sounds *Abitabilità)* was firstly developed, inside our research group, by Arturo Lanzani, one of the components. Among other scholars (Bernardo Secchi, Patrizia Gabellini in particular), he has mainly contributed in introducing this concept in the Italian debate (see Lanzani et al. 2006, *Esperienze e paesaggi dell'abitare*; Lanzani and Pasqui 2007). The word 'habitability' is adopted in order to translate the Italian term, preferring it to the term 'livability', in order to mark some difference from it: 'the term habitability is used to refer to a complex and multidimensional, qualitative and functional property of a geographical context. The concept of habitability originates from a different and more elaborate idea than that usually referred to in ordinary language (where the word "to live/inhabit" means basically to "reside"). It is not a static but a process idea which includes many

forms of social and spatial interaction, different ways of 'using', occupying and organising the environment by citizens and enterprises, residents and non residents' [translation from '*City of cities. A strategic plan for the Milan urban region*', Provincia di Milano- DIAP 2006, p. 41]. See for this Balducci et al. (2011).

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Chapter 4
Trading Between Land Use and Transportation Planning: The Kuopio Model

Raine Mäntysalo and Vesa Kanninen

Abstract During the last 20 years the city planner of Kuopio, Finland, architect Leo Kosonen, has been developing a new approach to urban planning, where land use and transportation planning considerations merge. A conceptual-figurative model has resulted, where the urban structure is understood as consisting of three different types of urban structure based on the mode of mobility each promotes: Walking City, Transit City and Car City. This tripartite city typecasting has become quite successful as an instrument in coordinating different planning, urban design and development approaches and political decision-making in Kuopio. It has also gained a lot of attention in other cities and at the national level, and the model has been applied and developed further in other locales with the aid of research. In this chapter, the case of Kuopio is analysed by applying the trading zone concept of Peter Galison. The general applicability of the concept in the realm of planning is further discussed with implications to power relations and context-specific mutual adjustment.

Keywords Boundary object • Pidgin • Creole • Local boundedness • Urban sprawl • Car dependence

R. Mäntysalo (✉) • V. Kanninen
Department of Real Estate, Planning and Geoinformatics/YTK,
Aalto University, P.O. Box 12200, 00076 AALTO, Finland
e-mail: vesa.kanninen@aalto.fi; raine.mantysalo@aalto.fi

A. Balducci and R. Mäntysalo (eds.), *Urban Planning as a Trading Zone*,
Urban and Landscape Perspectives 13, DOI 10.1007/978-94-007-5854-4_4,

4.1 Introduction

Overcoming the sectoral boundaries between land use and transport planning has been approached during the last two decades with increasing interest (Straatemeier and Bertolini 2008; Waddell et al. 2007; Hull 2005; Cervero 1998). As planners attempt to better grasp the complexities and challenges of urban development, the need for new theoretical conceptualisations and models that aid the integration of the two disciplines has also grown. Numerous planning support systems (PSS) have been developed to aid this task (te Brömmelstroet 2010; te Brömmelstroet and Bertolini 2009; Geertman and Stillwell 2003, 2004; Kammeier 1999). However, the integration of PSSs into planning procedures and their acceptance by planners in their everyday practice have been and continue to be problematic (te Brömmelstroet and Schrijnen 2010; te Brömmelstroet and Bertolini 2009; Vonk and Geertman 2008). The PSS developers have interpreted these issues mainly as 'implementation problems'.

In sociological studies of science (STS), there is a branch of research interested in the circumstances of boundary crossing between different fields of research and, further, between researchers, practitioners, policymakers and the public. The focus has been on the conceptual-material settings – concepts, instruments, artefacts, institutional arrangements, local conditions and sociocultural relations – and how these have been orchestrated to facilitate successful exchange of information and coordination of activities between different groups representing different epistemological cultures and walks of life.

A groundbreaking study was Susan Leigh Star's and James Griesemer's analysis of coordinated interaction between zoologists, administrators, philanthropists, trappers and amateur naturalists connected to the Museum of Vertebrate Zoology at the University of California, Berkeley, during its early years (1907–1939). In this study, published in *Social Studies of Science* in 1989, they introduced the concept '*boundary object'* (Star and Griesemer 1989). With the concept they refer to conceptual and/or material entities, such as standardised forms, ideal types (maps, diagrams, etc.), coincident geographical boundaries and standardised filing systems, that can be arranged to provide an infrastructure or platform for the coordinated interaction of actors and groups representing different 'social worlds' (Star and Griesemer 1989, pp. 410–411). They claim that the director of the Museum, Joseph Grinnell – himself an ambitious researcher studying the role of the environment in Darwinian evolution – orchestrated such a platform of shared boundary objects enabling each party to benefit from the activities of the other parties (in his research, too) despite differences in motivations and difficulties in sharing understandings:

> [Boundary object] is an analytic concept of those scientific objects which both inhabit several intersecting social worlds *and* satisfy the informational requirements of each of them. Boundary objects are objects which are both plastic enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. […] They have different meanings in different social worlds but their structure is common enough to more than one world to make them recognizable, a means of translation. The creation and management of boundary objects is a key process in developing and maintaining coherence across intersecting social worlds (Star and Griesemer 1989, p. 393).

The concept of boundary object has later been applied in varying realms, in explaining the emergence of boundary-crossing capacities between researchers, politicians, practitioners and other participants in different institutional settings. Some recent studies have applied the concept in planning-related fields, too. For example, Spee and Jarzabkowski have analysed how strategy tools, such as SWOT analysis, may perform as boundary objects between different sectors and levels in an organisation's strategy work (Spee and Jarzabkowski 2009). Harvey and Chrisman have studied the possibilities of GIS technology to provide boundary object tools for the negotiations between different groups by illustrating this through the use of GIS data standards and the definition of wetlands (Harvey and Chrisman 1998). More specifically, Ahlqvist has analysed the development of the FAO (United Nations, Food and Agriculture Organization) Land Cover Classification System as a boundary object between different classification systems of geographic data (Ahlqvist 2008).

The boundary object concept seems applicable also in the context of developing models and instruments for the integration of land use and transportation planning approaches and related research and practice. However, before exploring this avenue further, the limitations of the boundary object concept are worth reviewing (Star 2010; Galison 2010). Boundary objects, such as those of the Berkeley Museum of Vertebrate Zoology, are objects that can be compiled, collected and used by different groups. The amateur naturalists, for example, collected the fauna and filled the standardised forms with notes on the environmental and geographical aspects of the animals' habitats for the zoologists' use, but the amateur naturalists did not represent a contributory subculture in their own right, in relation to the zoologists. The zoologists were the dominant group in the formation of the boundary objects, which were then used by both groups. The relationship between the two groups was thus *unbalanced* regarding their abilities to contribute to the formation of boundary objects.

In turn, when studying interaction between land use and transportation planners, we are dealing with two autonomous disciplines in a relatively balanced relationship. They are autonomous with their own elaborate 'worlds' of conceptualising, analysing and modelling their planning object, yet mutually dependent in their need to exchange information and contribute mutually to the production of feasible urban and regional plans.

Moreover, the adjoining framework of repositories, forms, maps, etc. that the boundary objects provide is *static*, whereas in boundary-crossing planning interaction, we are dealing with dynamic processes where concepts, instruments and models evolve. According to Galison, the boundary objects 'stand alone' without being part of the evolving boundary interaction (Galison 2010, p. 46). Hence, in order to comprehend the necessary characteristics of a coordinative platform for the land use and transportation planners' dynamic and symmetric interaction, we need to look beyond the boundary object concept for another conceptual tool more appropriate in such contexts.

Galison himself has suggested the concept of '*trading zone*', conceived originally for analysing and interpreting the exchange of knowledge and services between different 'subcultural' groups of researchers, such as theorists, empiricists and

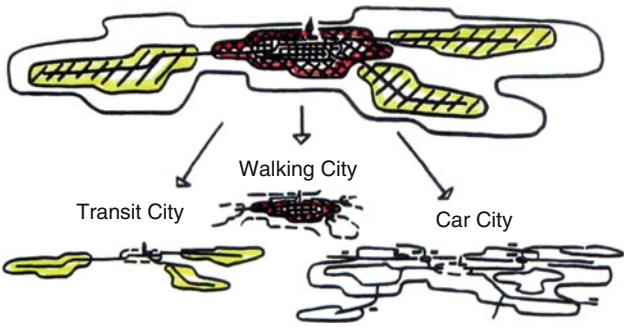

Fig. 4.1 Leo Kosonen's Kuopio three urban fabrics model: Walking City, Transit City and Car City (Illustration: Leo Kosonen)

instrumentalists in microphysics or biologists and chemists in biochemistry (Galison 1997). In short, trading zones are locally generated 'language games' for the exchange of information and services between scientists and professionals of different fields, who depend on mutual cooperation but do not share 'deeper' values and conceptual understandings. The reference to Wittgenstein's (1958) concept of '*language game'* is crucial, in order to understand Galison's approach to language as embedded in social and material practices (Galison 2010).[1]

Language games are context-specific practices of using language, tied to our forms of life. Trading zones, as 'exchange language games' between the scientists and professionals, are also full-blown language games, where meanings are exchanged and which evolve. As such they differ crucially from boundary objects, which, in Galison's view, 'might be thought of as a kind of a time slice of a trading language where the lexical lists exist, but our attention is not, in the first instance, on the syntax' (Galison 2010, p. 46).

In this chapter, the explanatory and interpretive potential of the trading zone concept is examined by applying the concept in a case, where land use and transportation planning approaches are merged. We will study the so-called *Kuopio Three Urban Fabrics Model* (later Kuopio model) that has been developed by Leo Kosonen, the city planner of the city of Kuopio (97.000 inhabitants in 2010), in eastern Finland, for the last 20 years, with the help of his colleagues. At the core of the Kuopio model is a radically simplified conception of the urban system, fusing together land use and transportation planning perspectives. In the model, the urban system has a threefold structure, consisting of three different types of the urban fabric, based on the mode of mobility each promotes: *Walking City*, *Transit City* and *Car City* (Fig. 4.1). This tripartite city typecasting has become successful as a shared instrument in coordinating different planning, urban design and development approaches and political decision-making in Kuopio. It has also gained a lot of attention in other cities and at the national level, and the model has been applied and developed further in other locales with the aid of research.

We will study the development of the Kuopio model, its applications in Kuopio city planning and the expansion of the Model in research and development projects,

as well as planning projects in other cities and urban regions. As key material for our case study, we will use Kosonen's own book (2007) describing the model, its theoretical and methodological principles and applications in the planning and development of Kuopio. Another key source is the findings of the research and development project *Car-dependent urban structure and its alternatives*, 2006–2010 (Kanninen et al. 2010; Mäntysalo 2010; Sairinen 2009). In the project, new GIS databases were added to the Kuopio model, and quantitative and qualitative research results of everyday mobility and accessibility were related to it. The Kuopio model was enriched and applied in new urban environments by the planning researchers of the Aalto University Centre for Urban and Regional Studies (YTK) and the Finnish Environment Institute (SYKE) and the planning practitioners of eight towns and cities and three regions, including Kosonen and the city of Kuopio, too. Additional interview data has been collected in the research project called Paras-ARTTU (Mäntysalo et al. 2010; Hytönen et al. 2011). Key planners and politicians of the city of Kuopio were interviewed in spring 2009, concerning their views on strategic planning and inter-municipal cooperation in the Kuopio urban region. These interviews enabled us to review how the characteristic vocabulary of the Kuopio model had been absorbed in the local planning and political discourses.

Does the Kuopio model, and developments and applications around it, possess signifying characteristics of a trading zone? In order to possess these characteristics, already identified above, the Kuopio model should (1) have *interpretive thinness,* (2) provide a platform for *mutuality of practico-linguistic contributions* between subcultures, (3) *evolve* and (4) be *locally bound* in the sense of a context-specific, socio-spatial and verbal-material language game. If the trading zone concept can thus be found applicable in the planning context, what can it offer to empirical and normative planning research in more general terms?

In the next section, we will give an overall presentation of the Kuopio model, and in the sections that follow, we will discuss the four trading zone characteristics separately, each in conjunction with observations of the Kuopio model. In the concluding section, we will bring the discussion on the applicability of the trading zone concept in planning to a more general level. The case study calls for reflections on power relations and context-specific mutual adjustment when multi-actor planning processes are studied as trading zones.

4.2 The Kuopio Model

The development of the Kuopio model was motivated by the need to manage the urban growth of Kuopio in a way that would respond better to perceived problems, such as urban sprawl and increasing automobile-based mobility. This development had brought congestion to the city centre and led to the generation of outer low-density suburbs, where the residents had no choice but to rely on the private car in their daily life. The modernist city planning of the 1960s–1980s had generated an urban structure favourable for the private car. In the 1980s, with the increase of economic

welfare and car ownership, the underlying potential of the modernised urban structure for a car-dominated urban order was being rapidly realised, thus having a negative effect on the pedestrians' and bicyclists' mobility in the downtown area, as well as hindering the planning of feasible public transport routes to suburban areas (Kosonen 2007).

This development is familiar in other Finnish cities, too. The increasing pace of urban sprawl in Finland (e.g. Ristimäki et al. 2003; Ristimäki 2009) with urban densities closer to those found in the Australian and North American contexts, than the European ones (Newman and Kenworthy 1998; Kosonen 2007, p. 81) has led to the coining of the term 'fennosprawl' (Ylä-Anttila 2007; Maijala 2009). However, in Kuopio the urban structure had remained somewhat denser than its Finnish medium-sized counterparts, with associated relatively low rates in car ownership and high rates, respectively, in the use of public transportation. This had more to do with topographic features (surrounding lakes and hills) than with determined urban planning – but even the limitations posed by topography were now being surpassed by the growing daily commuting distances, enabled by the private car.

Until the turn of the 1990s, urban planning in Kuopio had followed the principles of functionalist separation of housing and working areas, and transportation modes connecting them, and the hierarchical ordering of suburban areas around the old downtown area. With functionalist zoning of urban areas, modernist planning was losing hold of the dynamics of urban development. Faced with these challenges, and having found the existing principles of modernist urban planning insufficient, the city planner Leo Kosonen set out to develop a new conceptualisation of the urban system for better managing urban change in Kuopio. He came up with a conceptual-figurative model of a threefold urban system consisting of three 'cities' – *Walking City*, *Transit City* and *Car City* (Kosonen 2007, p. 9). Each 'city' would have its own logic in shaping urban patterns. It would be crucial for the urban planner to identify, where the 'zones' of each 'city' are in the existing urban environment and comprehend the different logics of each city type, in order to achieve future goals.

Corresponding with the three city types, Kosonen developed a system of five types of zones in Kuopio. His aim was to supersede the dominance of the prevailing functionalist zoning vocabulary with a new set of 'zones' that, instead of dissecting it into function parcels, would provide more appropriate urban mobility-based reductions of the urban system. This 'zoning' has been utilised in urban planning since 1995. The Walking City is seen to consist of two zones. Zone 1 covers the grid plan area of the city centre and its surroundings with the radius of approx. 1 km. Zone 2 consists of the old adjoining downtown districts, surrounding Zone 1 as a belt with a width of approx. 1 km. Together, these zones define the Kuopio 'inner city' where daily mobility can be, and historically has been, managed by foot or with a bicycle. The 'outer city' consists also of two zones. Zone 3 corresponds with the Transit City, including the more dense suburbs with apartment blocks and the bus route channels connecting them to each other and the city centre. Zone 4 corresponds with the Car City, consisting of urban areas that rely on the use of private car, exceeding to 5–15 km distance from the city centre. Those areas of Zone 4 that are close to Zones 2 or 3 may enable the residents' mobility by foot, bicycle or bus,

but the more remote areas would require the use of the private car. Zone 5 consists of the urban region surrounding the inner and outer city of Kuopio in the 50 km radius, including rural and forest-dominated areas. This zone is virtually car based (Kosonen 2007, pp. 50–51).

4.3 Interpretive Thinness

Galison (2010) identifies interpretive thinness as a key characteristic of trading zones. Does the Kuopio model have interpretive thinness? Is the simplified model that Kosonen has conceived of the urban system (see Fig. 4.1) generic in the sense that different sectors of planning and administration in the city of Kuopio have been able to project their own plans, surveys and calculations onto it? Does it provide a platform for mutual translation between these sectors, so that survey and analysis results and planning and design ideas produced within one sector can be transmitted with it to other sectors in forms that are conceivable and manageable for them?

The five urban zones of the Kuopio model have been taken as a framework for other sectors of administration, too, besides land use and transportation planning. It has been adopted in different policy and planning measures, such as Kuopio Architectural Policy Programme, and the development of 'healthy urban planning' principles and practices (Kosonen 2007, p. 52). The statistical data, gathered by the city administration and made increasingly available with geographical metadata or 'geotagging', has been arranged and analysed in different sectors according to the zone delineations. Concerning mobility, statistical survey and interview data on the citizens' daily modes of mobility in different zones have been utilised in planning. New conceptualisations and groupings to differentiate between the residents' modes of mobility have been introduced (Kosonen 2007, 48).

The Kuopio model seems to provide a shared 'thin description' of the urban system for the mutual coordination of planning between the different sectors of public administration. Concerning retail location planning, especially the locations of new large-scale convenience and comparison shopping units, the model has been used as a platform for the planners' negotiations with the private sector developers. The planners' aim has been to locate the large shopping units to the car-city zone, remotely enough not to drain the provision of the small-scale commercial services in the public transit zone residential areas. This strategy has met limited success, having to adapt to changing macroeconomic circumstances and competition-based agglomeration and dispersion logics of the largest retail chains.

According to Kosonen's own account, the idea of the urban system, as conveyed by the Kuopio model, resonates with the citizens' everyday experience of the functioning of mobility practices in the city. Therefore, also the local politicians can easily understand the planning principles – fostering balance between the different city types – that the model portrays (Kosonen 2007, p. 48). In interviewing the local planners and politicians, we noticed this, too. The essential terms indicating the new conception of the city – car dependency, bus zone, finger model, Walking City – appeared in their speech.

The built ‘landmarks’, or artefacts, embodying the ideas of the model, are essential in clarifying the model as a thin description. Such a landmark element is the District of Islands, a new southern growth finger for the Public Transit City. It is connected to the centre by a lake-crossing scenic route ‘The Archipelago Street’ that provides the new district excellent transit opportunities and offers cyclists and pedestrians specific attractions such as resting places, a barbeque site and an ice cream parlour. Before the Archipelago Street was realised, travel distances between the District of Islands and the city centre would have been well over 10 km at best, making dense urban structures totally impossible to conceive. However, with the new connection, the distance to the centre was cut to less than 5 km at one end, and to less than 10 km throughout the district. The creation of the new connection also necessitated carving a channel for the Finnish Lake District’s commercial passenger vessels and leisure yachting. The ‘crossroads’ of the channel and the arterial street provided yet another focal point that was utilised within the integrated concept as a transit-oriented high-density residential and commercial node, with landmark high-rise apartment buildings overlooking the channel.

Another such landmark is the Särkisilta Bridge – 4 km south of the centre, making a shortcut between two banks of a bay – that shortens the travel times to the city centre substantially, opened in 2001, for buses, bicyclists and pedestrians only. The bridge is a major contributing factor in enabling the realisation of a new, mostly high-rise suburb along the far shore of the bay as a transit-oriented district. Bus patronage reached levels equivalent to the established bus zone suburbs very fast, enabling the intensification of the bus services also further out along the same residential corridor. A 1970s suburb on the near shore also benefits from the bridge via improved bus connections. Especially during rush hours, buses now enjoy a clear time advantage over the private cars in trips to the centre and the important university area. The surrounding landscape and the bridge design itself, with benches for resting, make the bridge an inviting place for contemplating and admiring the views, too. As such, it is a sort of multi-use object, proclaiming the Kuopio model’s support for other modes of mobility with its denial of private cars (Fig. 4.2).

In the city centre, there are other artefactual landmark elements embodying the transformation of the centre into a Walking City. The market square underground car park has enabled the reclaiming of the market square to the pedestrians from its previous state of being blocked by heavy traffic on the surrounding streets. The introduction of the pedestrian street grid, by the rehabilitation of the nineteenth century fire protection alleys with street furniture, paving and planting, serves as another artefactual element (Fig. 4.3).

Within the individual sectors of land use and transportation planning, the Kuopio model unfolds into differentiated and elaborate conceptual systems. In land use planning, the model reaches from the regional level zoning divisions into detailed urban design solutions. In the Transit City, an individual residential area is conceived as a ‘pearl’ along the bus line ‘string’. This pearl is composed of residential blocks grouped around a small square with centrally located bus stops and possibly other services. By bringing the bus service to the heart of the densely built residential area, the square provides a yet another artefactual element of the Kuopio model

Fig. 4.2 The Särkisilta Bridge (Photo: Leo Kosonen)

trading zone. The shaping of blocks, the square and the street indicate lower driving speed, despite the street's arterial character. The residential blocks, in turn, are composed of 25–50 apartments, grouped in a U-shape, opening to the surrounding public green areas (Kosonen 2007, p. 66).

Accordingly, in transportation planning the scale of the planning issues varies from planning the regional bus route network to the issues of detailed street design. The Kuopio model, however, provides a shared, yet flexible mental model for the mutual coordination of planning and design solutions developed within each individual planning sector. The string of pearls principle of ordering residential areas and their connections, for example, denotes a dramatic change to former transportation planning principles, which, by ordering the suburbs as branches of a tree-shaped road network, had followed the logic of private car accessibility.

In the research project *Car-dependent urban structure and its alternatives*, the interpretive thinness of the Kuopio model was further tried in new realms, when planning researchers with different epistemic approaches joined in to develop the model. The model maintained its binding role in the discussion forums arranged in the project between the researchers and the planners (from Kuopio and other localities). It provided a shared, heuristic platform for the researchers' mutual interaction, too, some of them focusing on the development of zone-based GIS mapping tools, some on the citizens' means and experiences of everyday mobility in the different

Fig. 4.3 Kuopio city centre pedestrian street grid reconstruction (Photo: Leo Kosonen)

zones, combining qualitative and statistical methods, and some on enterprises' conceptions of preferred location and accessibility. For a dialogue between the planners from different localities, the model provided means for discussing the differences in the outcomes of model application in different localities, enabling not only comparisons of the urban structures and the zones themselves but also profound exchanges on many underlying factors affecting the model outcomes: policies, administrative advances and setbacks, inhabitants' attitudes and, for example, state interventions.

4.4 Mutuality of Practico-Linguistic Contributions

As noted above, Galison makes a distinction between trading zones and boundary objects regarding the level of integration between the different actors and their epistemic understandings. Galison has used the trading zone concept in reference to interfaces between different subcultures that, through their interaction, mutually contribute to the establishment of a shared platform of exchange. In turn, for Star and Griesemer the boundary objects connect also 'passive' 'social worlds'. Boundary objects are used across the different social worlds, but not all of them have a contributory role in the creation of the boundary objects. From this viewpoint, it is unclear whether the Kuopio model should be taken as a trading zone or a boundary object. The model has been initiated by a city planner with a conscious intention to

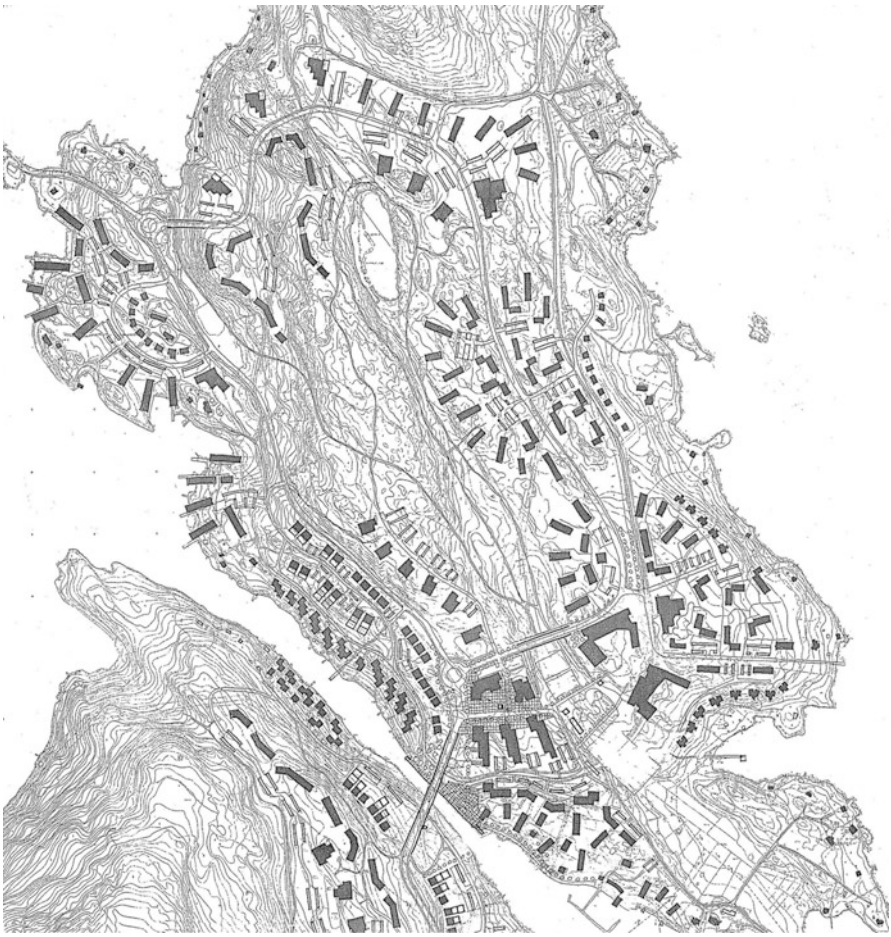

Fig. 4.4 A sketch for the residential "pearls" along the bus "string" in the Transit City

bring together the disciplines of land use and transportation planning. For these two disciplines, the model appears as rather symmetrically shared, thus implying trading zone quality. At the other end, there are local politicians making decisions on planning proposals and residents participating in public planning meetings and filling questionnaires as background data for the model. For them the model is offered as a given means of communication, not expecting them to contribute in its development. There is asymmetry between the planners and the lay participants, and in this respect the Kuopio model resembles a boundary object. So the model seems to be somewhere in between.

This asymmetry of involvement in the trading zone of planning raises critical questions of power relations and planning democracy, to which we will return in the final section.

4.5 Evolution

Galison's trading zones are specific languages, and thus they evolve. They may be artificially generated pidgins to provide communicative means of exchange between different groups, yet they change and develop over time. As pidgins they may have a certain lifespan, meeting the needs of a specific period of groups interacting, or they may evolve to 'naturalised' creoles, perhaps finally maturing into new interlanguages of hybrid disciplines with institutionalised structures, such as nanotechnology and biochemistry. As new disciplines they would thus cease to perform as trading zones between disciplines (Collins et al. 2007, 662).[2]

As a certain mode of planning communication and interaction, the Kuopio model is an artificial language game that has developed during the past 20 years. During its evolution it has added new elements and actor groups into itself, and it has developed new more sophisticated tools of planning and analysis. The implementation of the model in the built environment with major infrastructure investments (e.g. the District of Islands) has fostered the plausibility of the model, and it has extended the language game from the 'drawing desk' interaction to experimenting and learning with 'real-world' implementations.

In the project *Car-dependent urban structure and its alternatives*, the planning researchers have further contributed to the development of the Kuopio model. For its part, the project also served in spreading the model to other Finnish cities and urban regions. This brings us to the final signifying characteristic of trading zones: local boundedness.

4.6 Local Boundedness

When studying the trading zones of intercultural scientific work, Galison has noticed the importance of the local context for their emergence. The 'exchange language game' draws on the shared local conditions, shared research equipment and facilities, spatial proximity of research departments and laboratories, places to meet, etc. These shared conditions offer themselves as common physical denominators for different conceptual systems as they seek tools for meaningful interaction. They enable the emergence of a specific *socio-spatial practice of trading*. According to Galison, a trading zone is a site – partly symbolic, partly spatial – in which local coordination between the groups takes place: '[I]n the trading zone […] there are knots, local and dense sets of connections that can be identified with partially autonomous clusters of actions and beliefs' (Galison 1999, p. 149).

When studying interaction in local urban planning processes as trading zones, the role of locality receives further dimensions. Besides the shared site of planning interaction itself, there is the shared site provided by the shared geographical object of planning. What then has been the role of locality in the development of the Kuopio model? This is a trickier question than what one might expect.

The theory and key concepts behind the Kuopio model are not entirely local, as they seldom would be. Kosonen mentions the work of Peter Newman and Jeffrey Kenworthy as his main theoretical influence. The different city types were also adapted from them (Kosonen 2007, p. 9, p. 48). Kosonen refers also to the Dutch ABC system (Kosonen 2007, p. 41). In fact, similar 'zone models' have been applied for a relatively long time in various urban regions in Europe (e.g. van Wee and van der Hoorn 1996). From the Nordic countries we can mention, for example, the models developed in the Norwegian Miljøbyen project and the public transportation zone study in Malmö, Sweden (Kanninen et al. 2010). On the other hand, in Finland the application of the Kuopio model has expanded to other cities and urban regions, aided by the project *Car-dependent urban structure and its alternatives.* The research partner in the project, the Finnish Environment Institute (SYKE), has applied the Model in its GIS-based analyses of over 30 towns and cities in Finland. With Tampere University of Technology, it has developed an application adding CO2 emission calculi to different zones of mobility to be used as an analytical aid in the preparation of the Uusimaa regional plan for the Helsinki metropolitan region and its surroundings (Uudenmaan… 2010). In making the structural model for the Jyväskylä urban region, another application of the Kuopio model has been developed by a group of planning consultants, combining land use, transportation and ecological planning expertise (Jyväskylän seudun… 2010). Further examples can be found. At the national level, the Kuopio model has also been studied by the MaaLi Forum – a discussion and preparatory forum established jointly by the Ministry of Environment and the Ministry of Transportation and Communications to ponder national measures and legislation reforms for the improved integration of land use and transportation planning perspectives.

So, how local is the Kuopio model?

A distinct planning practice has emerged in Kuopio, and the topographical conditions (framing lakes and hills) of the city of Kuopio itself have played a crucial role in enabling the feasibility of the planning principles conveyed by the model. Such 'topographical support' for densification of urban structure along the public transit zones is not common in Finland. Furthermore, the resulting built environment in Kuopio with its landmarks 'feeds back' to planning practice, offering additional 'anchor elements' for shared reference in interdisciplinary planning cooperation. Here the shared geographical site as an object of planning and implementation contributes to the site of shared planning practice. As a trading zone, the Kuopio model is locally distinguishable, but it seems not to be as locally distinct as Galison's examples from the science world.

4.7 Conclusions and Discussion

The Kuopio model can be approached as a trading zone. Hence, the trading zone concept, originally developed as an analytical tool to explain capacity building in cross-cultural collaboration in the realms of science and technology, can be transferred

to the realm of cross-cultural collaboration in planning, too. What, then, can the concept offer to us? How does it improve our understanding of the multi-actor planning processes? Can the trading zone concept facilitate our attempts to develop means for improved coordination between different professionals and stakeholders in planning?

The signifying characteristics of *interpretive thinness* and *evolution* can be found in the Kuopio model. Concerning the characteristics of *mutuality of practico-linguistic contributions* and *locality*, we found certain 'deviations'. These deviations raise further crucial questions.

Regarding mutuality of practico-linguistic contributions, the trading zone concept implies somewhat balanced interaction between subcultures, such as land use and transportation planning as distinct fields or subcultures in the realm of planning. What about the other stakeholders that cannot contribute to information exchange and platform development with a similar epistemic creativity and strength? Does the trading zone concept lead us to foster expert coordination and hence expert power at the expense of the so-called lay stakeholders? Or does it, on the contrary, help us reveal the existing power imbalances and thus offer tools for emancipatory criticism?

It is important to acknowledge that as an analytical tool the trading zone concept does not carry normative content. Trading zones may emerge in fully voluntary conditions, but also in quite coerced conditions, where certain parties dominate and the other parties are more or less forced to collaborate in information exchange (Galison 2010; Collins et al. 2007). Galison, however, *does* suggest that through our understanding of why certain trading zones have turned out successful and productive, we might be able to use the concept normatively in developing shared platforms for local coordinated interaction and dispute resolution (Galison 2010). This extension is essential to planning research.

Can the trading zone concept, then, be extended in the context of planning to transcend the problem – from the normative viewpoint of emancipation – of asymmetry between the planning disciplines and the lay stakeholders?

Here we can be reminded of Stein Bråten's concept of '*model power*'.[3] Model power is based on knowledge of causal relationships and analytic techniques. When dealing with participatory planning, the general assumption is that such knowledge is unevenly distributed among the stakeholders. A usual citizen participation procedure is to give all parties equal access to knowledge sources and to provide for open communication between the planners and the local public. But the concept of model power aims to show that the planning process is not necessarily democratised by this, if the initial possibilities to use the planners' professional knowledge are severely biased. The influence gap may even be increased. When the planners possess model power, any communication act by the lay stakeholders can be processed and used by the planners, while the lay stakeholders can utilise the planners' communication acts only to the extent they fit their coarse and partial models. In other words, planning communication is held in reference to the planners' own (inter) language, which sets such terms for communication that the other stakeholders are naturally less able to meet. Even when the lay stakeholders' communication abilities gradually improve during the process of participatory planning, the planners may increase their influence. The reason is that, at any one time, the planners'

capacities to communicate and develop the context are better, if the lay stakeholders agree to adopt the planners' techniques of conceptualising and representing reality (Sager 1994, pp. 76–77; Mäntysalo 2000, pp. 250–251).

Are the trading zones in planning hence doomed for unavoidable power asymmetry in favour of the planning professionals?

Bråten offers four pieces of advice for counteracting model power, which we may embrace also when reflecting on the inclusiveness of the trading zones that are developed for multidisciplinary planning work:

1. Gain awareness of the planners' (and other experts') inclination to prefer consistent and unequivocal reasoning limited in perspective and area of validity to fit the prevailing analytic techniques, therefore generating only *some* models among several acceptable alternatives.
2. Change the borderline of the problem area so that no experts possess models, which adequately cover it all.
3. Consult independent model sources.
4. Break off the communication temporarily and give the model-weak party time to develop models on its own terms (In Sager 1994, p. 77).

Clearly, in other terms, these points can be read as instructions on how to extend the trading zones of planning to enable a more balanced involvement of non-professionals.

Regarding the Kuopio model, we might reformulate Lee's (1973) famous critique of model complexity – that in order to satisfy both transportation and land use planning demands, rather complicated models are needed in order to gain sufficient technical knowledge, but for aiding policy articulation, decision-making and emancipatory purposes, simple models are much more effective (c.f. te Brömmelstroet 2010). In this respect, the Kuopio model is well tested for policy- and decision-making prowess, yet rather less trialled for emancipatory use. However, the simplicity of the model, its correspondence with everyday urban living and mobility, and dialogue-evoking capabilities regarding them – and its indifference to statistical or other administrative territorial divisions – make it a potential vehicle for increased power symmetry in urban planning practices.

Finally a word on local boundedness in the context of planning. According to Galison, '[…] the trading partners can hammer out a *local* coordination, despite vast *global* differences' (Galison 1999, p. 138). For Galison, the local context represents a resource for finding 'mutual ground' for the scientists' interaction without assuming their agreement on paradigmatic understandings. The approach has implications to agonistic planning theory that relaxes on the Habermasian necessity of consensus. It bears resemblance also to Charles E. Lindblom's theory of partisan mutual adjustment that aims at context-specific adjustments 'on the margin' in the planning process, leaving the grand value differences aside.[4] As we found with the Kuopio model, locality has even richer connotations in the realm of planning, as locality refers not only to the locality of planning interaction but to the shared local object of planning, too. Thus, in planning, locality can perhaps offer an even richer resource for the emergence of successful trading zones, compared to the realms of science and technology.

Endnotes

1. An important concept for Susan Leigh Star, too, in her work on the boundary object concept (see Star 2010).
2. In their article, Collins et al. (2007) suggest possible evolutionary stages for trading zones.
3. Taken from Sager (1994, 76). The original source is Bråten (1973). Model Monopoly and Communications: Systems Theoretical Notes on Democratization. *Acta Sociologica*, 2 (16) 98–107.
4. For a more thorough discussion, see Mäntysalo et al. (2011) republished in this book.

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Chapter 5
SoftGIS Development Process as a Trading Zone: Challenges in Implementing a Participatory Planning Support System

Maarit Kahila-Tani

Abstract This chapter studies and evaluates the development processes of the SoftGIS methods through four different case studies during 2005–2011 where nine SoftGIS applications were developed in nine different cities in Finland. The Internet-based SoftGIS applications aim to gather residents' locality-based experiences of their living environment. SoftGIS aims to achieve new and innovative methods to support research and participative urban planning practices as planning support systems (PSS).

Often the tools as planning support systems (PSS) that aim to foster the collaboration between planners and citizens are developed separately by researchers and industry who also have limited knowledge of the users', such as urban planners and residents, actual needs. This creates the problem of an implementation gap, which refers to the mismatch of the supply and demand of planning support tools.

To narrow down the implementation gap and to embed these tools more effectively into practice, a more user-sensitive and iterative development process is needed. To open up these multi-actor development processes, the engagements and roles of different actors are studied through the concept of a trading zone that allows describing different forms of cooperation during the development process. The research and development processes of different SoftGIS applications are considered as trading zones where information is shared among the stakeholders.

The findings of this study aim to narrow down the implementation gap of PSSs by indicating the importance of the development phase. The development phase and process of the planning support systems should receive more attention to realise a

M. Kahila-Tani (✉)
Department of Real Estate, Planning and Geoinformatics/YTK,
Aalto University, P.O. Box 12200, 00076 AALTO, Finland
e-mail: maarit.kahila-tani@aalto.fi

A. Balducci and R. Mäntysalo (eds.), *Urban Planning as a Trading Zone*,
Urban and Landscape Perspectives 13, DOI 10.1007/978-94-007-5854-4_5,

functional system for all stakeholders. To reach this goal, the main focus should be on the social process instead of technical development work, and on a more continuous learning process, which is needed throughout from the development phase to implementation to reduce the implementation gap.

Keywords SoftGIS • Urban planning • Development process • Implementation gap • Planning support systems

5.1 Introduction: Behind the Implementation Gap

Information and communication technology (ICT) and geographic information system (GIS) supported applications are designed to complete the existing toolbox of participatory planning. Despite the well-intentioned meaning of the already existing tools, the actual supporting factor and assimilation into the planning systems has been weak. Often the tools as planning support systems (PSS) that aim to foster the collaboration between planners and citizens are developed separately by researchers and industry who also have limited knowledge of the users', such as urban planners and residents, actual needs. This creates the problem of an implementation gap, which refers to the mismatch of the supply and demand of planning support tools (Vonk 2006). To narrow down the implementation gap and to embed these tools more effectively into practice, a more user-sensitive and iterative development process is needed. The accomplishment of a more user-friendly development process necessitates systematic studies of the development phases of different planning support systems. In the literature this first step in the long process that aims at implementation of a new planning support system is seldom highlighted. The academic evaluation studies of PSSs address more the actual use of the systems instead of the development process.

This chapter studies and evaluates the development processes of the SoftGIS methods through four different case studies during 2005–2011 where nine SoftGIS applications were developed in a multidisciplinary team that included researchers, IT specialists, urban planners, GIS experts, graphic designers, usability experts and residents. The Internet-based SoftGIS applications can be divided into survey tools and continuously open service interfaces that aim to gather residents' locality-based experiences of their living environment. Residents are considered to be experts of their everyday living environment, having the first hand information of the strengths and weaknesses of the qualities of the environment. SoftGIS aims to achieve new and innovative methods to support research and participative urban planning practices as planning support systems (PSS). The analysis of the development processes of SoftGIS methods became important as urban planners and researchers wanted to develop methods further from temporarily open surveys to continuously open services.

Compared to the development processes of other PSSs, from the beginning a multi-actor group has been involved into the development of SoftGIS methods. The involvement has had different forms according to the different aims of the actors. Researchers from the field of environmental psychology, geography and

urban planning have been interested in studying the intriguing relationships between the inhabitants' perceptions and the physical environment characteristics. The planners shared the interest to deepen the understanding of the citizens' view of the environment as well as to get georeferenced data to be used in planning projects as background information. On the other hand, planners have wanted to develop a new platform for collaboration and particularly to refine the collaboration in the early stages of the planning process. IT specialists or programmers have been interested in developing more transparent technologies, for example, by utilising more open source coding. The residents have also been present in the development work through the feedback system utilised in the methods.

To open up these multi-actor development processes, the engagements and roles of different actors are studied through the concept of a trading zone that allows describing different forms of cooperation during the development process. Trading zones can be considered as intersections of discursive and material practice (Galison 2010) between different actors in the development process. The research and development processes of different SoftGIS applications are considered as trading zones where information is shared among the stakeholders. The utilisation of the trading zone concept is useful in pointing out pitfalls during the development processes that ultimately affect to the assimilation of SoftGIS methods into participatory planning practices. This chapter goes through four case studies where a total of nine SoftGIS methods were developed. Every development process forms a separate trading zone. The dynamics of these trading zones open up the different stages of the process and reveal how the trading zones evolve and what kinds of trading zone types can be identified.

Ultimately, the question is about the possibility to commit and create trust among local actor groups. Trust needs to be created in the development phase of totally new and still evolving methods in a situation where there is no guarantee of the effectiveness or functionality a new planning support system such as SoftGIS can offer for the planning process. The findings of this study aim to narrow down the implementation gap (Vonk 2006) of PSSs by indicating the importance of the development phase. On the other hand, the question is how open should the development phase be for different partners. An open development process might lead to a more creative process where the end result could have a totally different form. But is this the situation that would then support the participative urban planning process more profoundly? The development phase and process of the planning support systems should receive more attention to realise a functional system for all stakeholders. To reach this goal, the main focus should be on the social process instead of technical development work, and on a more continuous learning process, which is needed throughout from the development phase to implementation to reduce the implementation gap.

5.2 ICT and GIS Supported Urban Planning Practices

The ongoing urban planning theory debate highlights the development of existing urban planning processes towards more participatory practices. According to the communicative planning theory, participatory planning aims to involve the differing

voices of the plural society by supporting mutually active discourse (Healey 1997). This aim still remains at an overly idealistic level without affecting the participatory planning practices concretely enough. In Finland, the involvement of lay people into the planning process has been steered by the existing Land Use and Building Act (1999). The Act emphasises the role of participation, collaboration and transparency in planning practices. It ensures the involvement and interaction of all relevant participants in the preparation of plans. This supposedly guarantees the quality of the planning outcome. In practice, the implementation of the Act varies a lot between Finnish cities (Bäcklund and Mäntysalo 2010).

The present participatory practices do not go far enough in supporting the collaboration between various stakeholders, including residents. Because the existing methods do not reach the variety of inhabitants, a special group of participants has emerged, the so-called super residents (Staffans 2004). These exceptionally resourceful individuals are aware of the possibilities of the system and have time, expertise, networking skills and the political will to communicate their opinions and views (Staffans 2004; Coburn 2003). Therefore, the existing planning processes can be considered as too elitist. Another pitfall relates to the timing of participation in the planning process, which occurs too late. This does not enable the development of true partnership between the different stakeholders. Two focal questions need to be unravelled: (1) what kind of knowledge should the participation process produce to be properly utilised in planning, and (2) with what kind of tools should the process support.

Information and communication technology (ICT) and especially the Internet have offered new tools for participatory planning. Internet-supported participatory geographical information systems (PGIS) have proved to offer a lot of potential to connect different stakeholders together. The Internet-based systems have motivated the non-experts to access GIS and provide methods for non-experts to produce volunteered geographical information (VGI) (Coleman et al. 2009; Goodchild 2007). Different kinds of collaborative geospatial/geovisual decision support systems (C-GDSS) and public participation geographic information systems (PPGIS) generally aim to foster collaborative decision-making using geovisual/geospatial methods in participatory democracies (Bailey and Grossardt 2010). Therefore, GIS technology provides boundary object tools for the negotiations between different groups (Harvey and Chrisman 1998). Planning support systems (PSS), on the other hand, aim to facilitate different phases of the planning process and consist of a rich variety of computer-aided techniques designed for experts to support their decision-making and more efficient planning practices (Brömmelstroet and Schrijnen 2010). PSSs are not highly structured; they are rather more loosely coupled assemblages of mainly computer-based techniques (Brömmelstroet and Schrijnen 2010). To describe, PSSs as an infrastructure that systematically introduces relevant and new spatial information for the process (Kahila and Kyttä 2009; Brömmelstroet and Schrijnen 2010; Klosterman 1997) also support the definition of SoftGIS.

These innovative experiments have rarely grown to be a pertinent part of participatory planning practices that would have been permanently anchored into everyday routines of both laypersons and experts. The problems concerning the

establishment of new methods into planning practices have been studied widely in the field of PSSs (Kahila and Kyttä 2009; Kyttä et al. 2011; Geertman and Stillwell 2004; Brömmelstroet and Schrijnen 2010). These studies focus mainly on the problems faced during the use of PSSs. The identified problems have been studied profoundly elsewhere but include notions such as the lack of developers' know-how of the complex institutional settings where it is hoped that the systems will be embedded (Vonk and Geertman 2008). The development of the systems demands outside and temporary experts like researchers, which complicates the embedding phase, and often the local actors do not have the required tools, skills or understanding to introduce the designed tools.

In addition to the identification of these problems, a thorough analysis of the different phases of the process and the nature of collaboration of the stakeholders is needed. As Vonk (2006) argues, to enhance the instrumental quality, acceptance and diffusion of PSS, an interactive learning process among the relevant actors of the innovation network is needed. The focus should shift away from solving technical challenges towards improving the social processes when developing the PSS (Kahila and Kyttä 2009; Brömmelstroet and Schrijnen 2010). This demands new ways to study and open up the social process where the concept of trading zones becomes fruitful. The development of practice instead of a technical tool necessitates from the quality of collaboration just a thin description of the objective instead of thick consensus – but it highlights the willingness to create a common language to support the collaboration.

5.3 Dynamic Trading Zones

The development processes of the SoftGIS methods, both surveys and service, will be analysed, with the help of the trading zone concept, to understand and identify the pitfalls in the communication and collaboration between different stakeholders. The trading zone concept helps to open up the different forms and stages of collaboration in multidisciplinary teamwork. In a trading zone, trading partners confront each other in order to trade information to create something new and innovative in multidisciplinary collaboration. According to Galison (2010), trading zones have a dynamic character, where concepts, ideas and instruments evolve through different stages of the process. He describes trading zones as intersections of discursive and material practice, which are partially but not completely shared.

Following Mäntysalo and Kanninen (Chap. 5 in this book) and Galison (2010), trading zones can be identified by the following characteristics: trading zones should have interpretive thinness, provide a possibility for a platform where relatively balanced, or symmetric exchange of information between disciplines or professional cultures can occur and evolve and be locally bound in the sense of a context-specific, socio-spatial and verbal-material language game. Hence, the trading zone describes the process where ideally the trading partners, in positions of mutual symmetry, aim to develop something in collaboration without knowing or even sharing, at the beginning stage, the consensus of the outcome.

Before the collaboration of the partners, the traders who are involved in the trade need to be identified. Galison (2010) does not highlight the selection process of the different traders for the process, which in the field of urban planning in particular raises interesting questions, such as are the residents considered to be experts or not. After the selection of the traders has been made, the agreement to share information between the different actors is more important than what is actually shared in the trading zone. Galison (2010) describes this sharing of information as incomplete coordination. This allows for the traders the possibility of the thin description instead of thick consensus. To reach good coordination, the traders should be aware of the need of thin description that necessitates the nature of understanding of the consensus in the trading zone.

In urban planning, locality and the local language used by urban planners and decision makers significantly affect the form and functionality of the planning organisation and system. Galison (2010) has been keen to show the locality of practice in the trading zone and how to talk about language as a practice. This notion brings out the differing ways of communication that could be handled by the regularisation of the symbolic systems. As Galison (2010) mentions, humans seem to be quite good at this: 'It is possible to share a local understanding of an entity without sharing the full apparatus of meanings, symbols and values in which each of us might embed it' (Galison 2010, p. 44). According to Johnson (1993), moral imagination begins with the recognition that these realities, these truths that people have, are actually views. Every trader needs to firstly recognise that they themselves have a view. Only after this are they able to listen to others' views without immediately dismissing them. Through this reflection, the traders have some potential to learn from each other. Deep communication cannot emerge in a situation where one believes he or she has an understanding of the reality and that the others just have views. Following (Gorman and Spohrer 2010, pp. 79–80): 'Moral imagination would require the service scientist in a trading zone to set aside their own firm notions of what the client needs and be able to listen to alternate views'.

Trading zones are not static but more dynamic in that they shift shape and frame collaboration over time. Trading zones can vary from very homogenous to heterogeneous ones while 'they are sometimes nothing but a few terms held in common, a bare scientific jargon' (Galison 2010, p. 42). In addition, the level of cooperation can vary from coercion to collaboration. From scientific jargon it is possible to reach an interlanguage, a shared way of communication that each trader understands at different stages of the process. The evolution of interlanguage is characterised by change over time and locality. In the trading zone literature, interlanguage is quite often seen as a final step in trading zone types (Fig. 5.1). Arguably, other kinds of trading zone types would equally function as a desired stage and form of collaboration in some situations.

Figure 5.1 visualises the forms of different trading zone types. This model originates from the fourfold model by Collins et al. (2010). The circles have been added to clarify the type of trading zone in each corner. The space between different trading zones is defined through two axes. The ends of the horizontal axes are homogeneity and heterogeneity and the vertical axes, coercion and collaboration. The variation between these defines four basic types of trading zones that include enforced, fractionated,

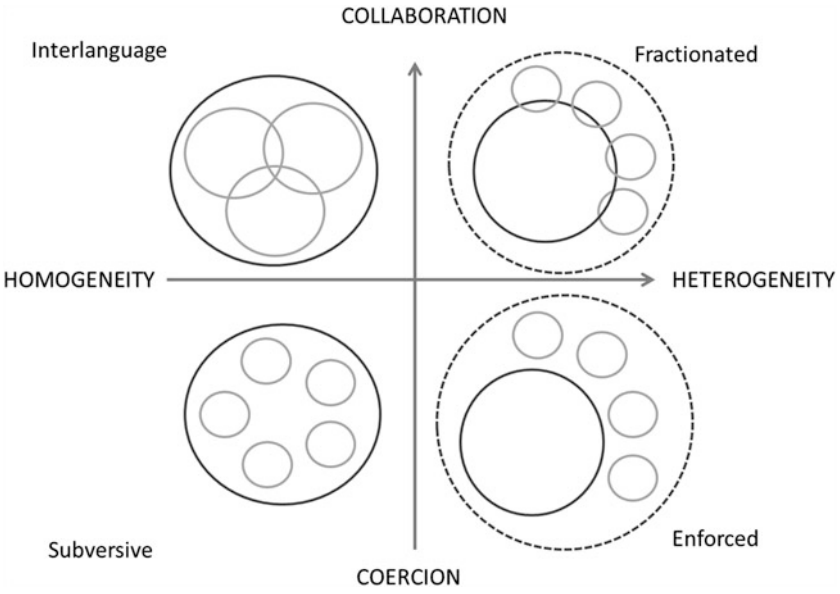

Fig. 5.1 The different types of trading zones (model reshaped after Collins et al. 2010). *Black circles* with a *solid line* identify the existing trading zones and the *dashed line* the future zones. *Grey circles* identify the traders in the trading zone

interlanguage and subversive. These trading zone types function as main categories which might also include some other trading zones as subcategories.

The subversive trading zone is highly coercive but still very homogenous. In this kind of trading zone, the actors are forced to utilise one available system even though they would like to use something else. An example would be the use of Microsoft Office programs. The enforced trading zone occurs when there are high levels of coercion and heterogeneity. In the collaboration, some of the traders utilise their power over the others to carry on their interests. Even though traders share the same aim of the achieved outcome, they are not collaborating equally. The fractionated trading zone is highly collaborative but still heterogeneous. In this trading zone two subcategories are identified (Collins et al. 2010), namely, boundary object trading zones and interactional expertise trading zones. In boundary object trading zones, there exists the operative medium that may hold different meanings to the parties involved in the trade. The medium is a physical item rather than a linguistic exchange of information, whereas interactional expertise trading zones lack the physical item and focus more on the exchanged language. In both of these fractionated trading zones, traders collaborate through some common denominator without fully communicating with each other. Interlanguage trading zones are again highly collaborative but also highly homogenous. In this type of trading zone, for example, two different scientific fields can join to generate new fields such as biochemistry and nanoscience. When something totally new is being developed, the traders need to put a lot of effort into the actual communication process.

Fig. 5.2 Different SoftGIS applications

5.4 SoftGIS Surveys and Service: Research Method and Data

This chapter evaluates four different case studies where a total of nine SoftGIS methods were developed between 2005 and 2011 at Aalto University in YTK (Land Use Planning and Urban Studies Group within the Department of Real Estate, Planning and Geoinformatics). YTK has had a leading role in all these projects and has been in charge of the cooperation with urban planners and the IT sector. Since 2005, Internet-based SoftGIS methods have been designed and developed in cooperation with urban planners, researchers and IT specialists. The four case studies studied in this chapter are listed below in chronological order:

1. 2005–2007 SoftGIS questionnaires designed and developed in four small cities (Mäntsälä, Kerava, Järvenpää and Nurmijärvi) in Finland.
2. 2007–2008 SoftGIS questionnaire for children developed with the City of Turku in Finland.
3. 2009–2010 SoftGIS questionnaires implemented in Helsinki and Espoo, Finland.
4. 2010–2011 Continuously open SoftGIS service for the cities of Vaasa and Järvenpää, Finland.

SoftGIS, a Finnish innovation, refers to a collection of Internet-based surveys and services which allow the location-based study of human experiences and everyday behaviour (Fig. 5.2). The treatment of this perceived knowledge is grounded in the theories of humanistic geography and environmental psychology (Kahila and Kyttä 2009; Kyttä et al. 2011; Kyttä 2011). The surveys have allowed for the study of different types of experiences and behavioural patterns that can be attached to the physical environment. The studies cover themes like inhabitants' experienced safety, child-friendly environments, residents' mobility and overall evaluation of the quality of the living environment. The collection of geocoded information constitutes an essential element of these methods. The utilisation of the Internet as well as the geographical information system has actually galvanised the interest of different actors as urban planners towards these methods. Starting from the preliminary stage, urban planners have seen a lot of potential for the SoftGIS methods to be used to support urban planning practices.

In SoftGIS surveys, the main focus is on the collection of large datasets for the use of urban planners and other professionals interested in the development of more user-friendly physical settings. These datasets enable the combination of 'soft'

subjective data with 'hard' objective GIS data. The SoftGIS service, on the other hand, functions more as a platform that includes several tools to support urban planning practices. This includes tools to collect experiential knowledge, online visualisation and analysis tools for both residents and planners and finally planning project pages that consist of tools to support the participatory process and allow the comparison of gathered information from the residents with planning proposals. In the surveys the support of planning practices has been secondary as the collection of valid and reliable research data has been prioritised. The SoftGIS service focuses on the research and development work of the planning support system.

During the four projects mentioned above, researchers have collected data from the development processes by observing the collaboration between different actors that have mainly been stored in the written minutes of each meeting. The email and phone conversations during these processes have been stored, as well as the reports and power point presentations. In addition to this data, several interviews and surveys have been carried out for partners involved in these projects. The researchers' objectivity and neutrality in the evaluation of the development processes can be considered problematic, as they have had a strong role in the development projects. Nevertheless, no outsider could have done the evaluation because of the difficulty of transferring all the data gathered during these years to external evaluators.

5.5 Between the SoftGIS Surveys and Service: Evolving Trading Zones

The aim to study the evolution chain and the types of different trading zones of the SoftGIS methods' development work became evident after the need to develop a continuously open SoftGIS service alongside the already existing surveys. Previously, the utilisation of the SoftGIS surveys as a participative planning support system has been present in the research and development but as a secondary research question. The need to focus on the possibility to develop SoftGIS towards a more solid planning support system as a primary research and development question emphasises studying the process as a whole and has raised new questions. The development process consists of three stages: (1) the development phase of the methods, (2) the actual use and testing of the methods and (3) the ex post-evaluation of the methods after they have been utilised for a while in planning projects.

The focus in this chapter is on the development phase of the methods where the cooperation of actors in development work is crucial while it has a strong effect on the actual outcome and on the first version of the product or service. As Gorman and Spohrer (2010, p. 75) state: 'A good working definition of service is the co-creation of value via client-provider interactions'. This emphasises the collaboration while the service systems are sociotechnological networks where human beings, technologies and organisations are closely coupled (Elzen and Enserink 1996). Jenkins (2010) has noted that if the development work of a new product is made without fully integrating all the required partners, the end result is not going to achieve high

quality. Evidently, these notions are important in the field of service science but can be challenged in processes where tools are developed and designed for scientific purposes. Even though SoftGIS surveys share the secondary aim to support participative urban planning practices, the primary focus has been to gather high-quality research data.

Below, the different case studies, where SoftGIS methods, both surveys and services, were developed, will be analysed and categorised into different kinds of trading zone types. Even though these trading zones have emerged and are analysed as separate entities, there has been continuity between the projects. Nevertheless, the evolution will be discussed because, despite differences in research goals in SoftGIS development, they also share some similarities.

5.5.1 Enforced Trading Zones: From Prototypes to Functioning Surveys

In the earliest projects, the aim was to develop several SoftGIS surveys to study perceived environmental quality of inhabitants' locality-based data (Kyttä et al. 2011). The study was realised in the cities of Järvenpää, Kerava, Mäntsälä and Nurmijärvi, which form part of what is known as the chain of Kuuma towns in Southern Finland. Although the development and implementation phase was realised earlier in the city of Järvenpää, all these development processes have experienced the problems of the prototypes and preliminary versions. When developing prototypes, the traders might share the aim and understanding of the need to share information but lack the shared language or material medium. This challenges the communication and collaboration between the traders and leaves the trading zone in a very heterogeneous stage where the traders and the aim of trading can be identified but still the traders are not able to work jointly and coordination is incomplete (Fig. 5.3).

The interest and commitment of the traders in these early cases also affected the will to collaborate. One reason behind this is the selection process of the traders. Partners for these research and development projects were chosen in an unstructured and haphazard way. On the other hand, the partners who decided to accompany the project were different to those who acted as contact persons and traders during the development process. This development work is identified as an enforced trading zone, while the traders have reached an agreement to share information and the overall goal. Collaboration has not been reached completely due to the selection process of the traders who felt that they were under pressure to collaborate. At this point, researchers, city officials, IT specialists and residents, as trading partners, remained heterogeneous rather than homogenous and were being encouraged (through the projects) to collaborate. Neither group, especially IT specialists that were still students and lower-level city officials, felt a significant need for collaboration.

In the case of Turku, where a special and first SoftGIS method for children was developed, the same issues can be identified. In Turku all the other traders were the same but from the city considerably more local actors, city authorities and schools

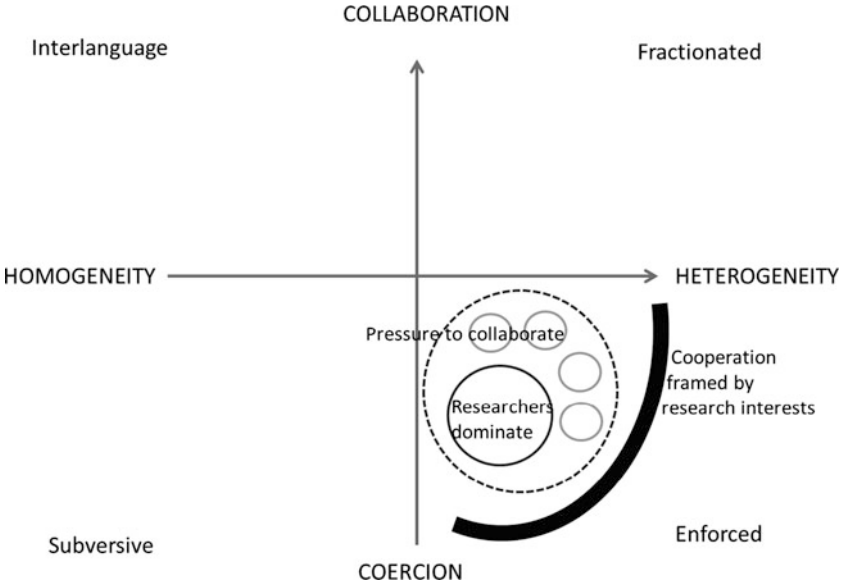

Fig. 5.3 Traders (*small circles*) have the pressure to collaborate and coordination between different traders is incomplete. Researchers dominate the enforced trading zone, while collaboration in the development process is firmly framed by the research interest

were very active during the method development and eager to receive the results. Planners and designers were essential, but not only the potential utilisers of the knowledge gathered from the children. The SoftGIS data can potentially help to find empirical evidence of the themes that interest these actors. Compared to the earlier case, the traders were more interested and willing to collaborate at the early stages and were not coerced by administrative facts like the selection process. Because of this, collaboration was more homogenous while more trading partners were involved who shared the same aim of the outcome (Fig. 5.3).

Still, coercion existed since the researchers had set the research questions. In this type of enforced trading zone, the role of researchers in both cases can be analysed through the institutional power when the identified expertise of an established discipline has the authority to decree whether or not certain knowledge can be included within the discipline or group (Collins et al. 2007). In both cases, researchers dominated and held the power to decide what information was going to be relevant and what was to be left outside. Researchers functioned as an elite participant by dominating the zone.

The researchers' interest firmly framed and affected (Fig. 5.3) the collaboration in the trading zone while the methods needed to be scientifically relevant. In empirical research, information collected through surveys or other tools has to meet certain criteria. Among others, the validity and reliability issues are essential, as is the exploitation of already existing measurement tools which have been proven to work.

It is essential in a research and development project to achieve a balance between the researcher's ambitions and those of the other traders. In some ways the scientific quality of information needs to be guaranteed as well as the innovative development process of the new product or service.

5.5.2 Fractionated Trading Zone: Surveys as Boundary Object

In the research project where SoftGIS surveys were developed for the cities of Helsinki and Espoo, a few changes can be identified in the basic composition of the trading partners. New IT specialists were hired and they formed a more permanent part of the research team. The change in the role of the IT specialists from an outsider group to actual members of the research team affected the development work of the methods. On the other hand, the transition from an enforced trading zone towards a fractionated one happened when researchers wanted to allow more space for urban planners to influence the contents of the produced SoftGIS application, even in the early stages. This was possible because they had clear aims for the application due to the ongoing planning project where they wanted to utilise the data.

Urban planners and researchers shared the will and were also keener to discuss and develop the method to be utilised further as a part of the participatory processes, while both had a clearer understanding of the other's aims. Because in the earlier projects several SoftGIS surveys were already developed, the traders in this new situation utilised the existing versions of the method as a material medium and as a boundary object. This enabled the means to exchange ideas between groups which are indicative of a boundary object trading zone (Fig. 5.4). The boundary object is usable in terms of functioning as a more static, shared space, where the object already exists, but it still derives from action between different actors (Star and Griesemer 1989). As noted, in the boundary object trading zones in both the Helsinki and Espoo cases, the collaboration occurred almost without linguistic interchange by utilising the existing surveys as a material medium (Fig. 5.4). The collaboration was framed strongly by the parallel aims of the traders, which did not merge. In these development processes, it became apparent what Jenkins (2010, p. 165) has noticed: 'Often the participants in this type of trading zone interpret the meaning and significance of the object differently, perhaps even obscuring the role of other parties. However, products that the exchange yields are valuable enough to keep the parties engaged in the trade'.

5.5.3 Fractionated Trading Zone: Interactional Expertise

When the development process began with the City of Vaasa and later with the City of Järvenpää, neither the subject nor the content of the surveys changed that much, compared to the earlier projects with the cities of Helsinki and Espoo, where the

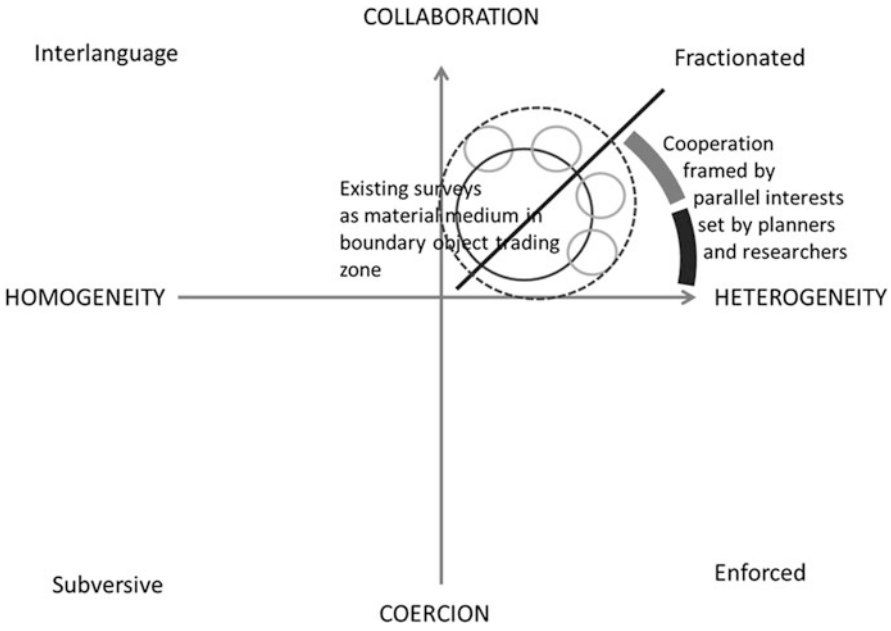

Fig. 5.4 The boundary object trading zone where existing SoftGIS surveys operated as a material medium. The collaboration in this trading zone is framed by parallel interests of the urban planners and researchers

surveys were developed. New issues arose due to the need to develop the first continuously open service to be utilised all the time in the cities and especially in the forthcoming urban planning projects as a participatory tool. This change in the objective of the research and development led to the transition from a boundary object trading zone to a boundary organisation (Fig. 5.5). The change of the objectives compared to the boundary object trading zone could no longer adequately serve the new goal of the development of service. For this reason, a new boundary organisation trading zone diverged from the boundary object trading zone.

This change in the objective of the trading zone, from developing the Internet-based survey towards a continuously open service, affected the dynamics between the traders. It became evident that more information was needed with regard to the existing structure of the planning organisation and the different kinds of planning processes as well as technical possibilities to adapt this new service to the existing ones. This also meant a lot of work for IT specialists who needed to think through the whole technical structure and platform of the SoftGIS again.

Traders in this new situation were more equal compared to the earlier situations, but on the other hand more understanding was needed of the other traders' views. In the development work of SoftGIS services, it soon became clear that when the transition from one trading zone to another is a result of a change in circumstances, interactional expertise is needed in order to develop new linguistic ability (Jenkins 2010).

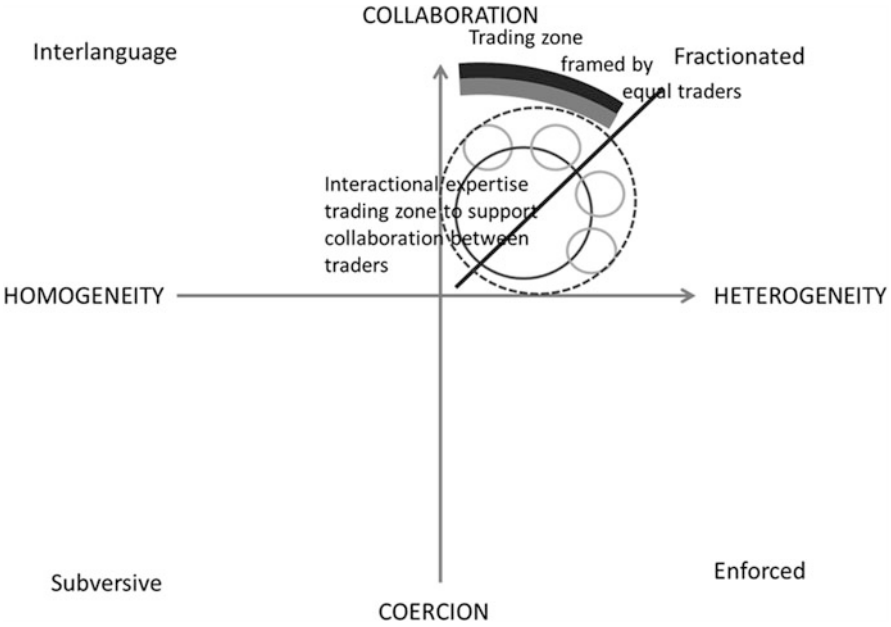

Fig. 5.5 To design and develop a SoftGIS service, the collaboration was realised as an interactional trading zone. The trading zone is framed by more equal traders who are willing to share understanding and views with the other traders

Collins and Evans (2002) place interactional expertise on a continuum between having no expertise in a domain and having contributory expertise. Starting from no expertise, it is possible to reach contributory expertise after a while. Even though the expert would not be able to have exactly the same skills, he/she would be able to discuss the substance professionally. An interactional trading zone can be identified (Fig. 5.5), though traders have faced a lot of problems throughout the process about their openness and willingness to understand the views of the other traders. Contributory expertise has been partly achieved while, for example, the researchers have started to utilise tools that are familiar to IT specialists in the technical development, and the IT specialists have tried to gain an understanding of the field of urban planning.

5.6 Discussion: Lifting the Collaboration to Another Level

In the collaboration, during the development work of SoftGIS surveys and services, three main themes were identified. Firstly, power relations were studied between the aims of researchers and institutional organisations as well as individual actors within them. Secondly, the equality and symmetry of trading partners was problematised. Thirdly, the ways of communication were identified and the possibilities and the need to develop a full-scale interlanguage were discussed.

5.6.1 Power Relations and Organisational Transparency

In the research projects, research questions dominated the actual process, the content and also the outcome. If research objectives and development work coexist in the project, some notable concerns can easily occur. One reason behind this is that in research, there is not a strong tradition to develop research methodology together with the respondents as there is in service development. In the research and development projects of the SoftGIS methods, this issue had been present quite often. The aim of the projects was to gather valid and reliable research data and to design services and tools to support participative urban planning practices. These two aims were too large to handle equally in the same projects, and a balance was needed to be reached in collaboration between these differing aims. The extremely strong research interest that was not symmetrical with the interest of other trading partners led to a power situation where even coercion occurred. From the point of view of receiving a high-quality research outcome of the project, this was considered as a positive situation while someone had a clear target and aim in mind. In the situation where the aim was to design and develop a new service, this was not the desired operation model. Instead a more iterative and open process would have left more space for the traders in the trading zone to decide the goal of the project together and to contribute to the creation of a new way of communication.

The planning organisations' institutional point of view became concrete through the discussion of organisations' will, possibilities and openness to adapt new PSS into planning practices. The urban planners and key end users should utilise the developed survey or service and the gathered data in their practices at the end of the development process. During the development work of different SoftGIS methods, a strong variation was noticed in the cultures of planning organisations to use fully the ongoing development work that ensued from the power relations inside the organisations. Even if a city had decided to cooperate and be part of the development project, the decision was made at another level in the organisation's hierarchy than the actual experts who were going to utilise the developed system or data in their practices. This reflected the need and difficulty to find the right people as traders from within the organisation who would be active in the development process, who would have the position to decide on the use of the 'product' in the future and would be able to circulate the know-how of the development process in the organisation.

5.6.2 The Equality and Collaboration of the Trading Partners

Typically, developers of planning support systems that utilise ICT come from different disciplines. Planning support systems are developed and managed by researchers and industry from different disciplines like geography, urban planning, ICT and city officials. At the moment, one educational system that could prepare and educate experts directly for these tasks does not exist. Due to this, closer collaboration between

different actors is needed, namely, multiple expertise communities (Gorman and Spohrer 2010). This sets requirements for the experts of interactional expertise.

In SoftGIS development work, where IT experts, urban planners and researchers collaborated, the level of interactional expertise has varied. After the IT development work took up more space in the research team, the IT specialists were willing and able to learn some of the basics of the substance, like urban planning and geographical information. On the other hand, the substance researchers had to gain a basic understanding of the ICT field. Evidently, the IT specialists and researchers should have had more time to reach a better understanding of each other's fields. In addition, the urban planners were left quite outside and needed a better understanding of the development work of new planning support systems. Because the requirement and understanding of interactional expertise had not been clearly identified at the beginning of the projects, clashes emerged during the development processes. In an ideal situation, every trader would have been able and more willing to reach some level of contributory expertise during the process.

The experts who were involved in trade were defined through the profession they presented. In the urban planning field, the role of the residents raised a question of expertise as they represent a group which is not usually regarded as experts. Can residents be considered as experts and should they be involved in the development process of new participatory planning support systems? Would that represent truly collaborative urban planning? Urban planning processes can be seen as manufacturing processes where the aim is to produce a new environment or some parts of the environment for people. Still, the existing environment is rarely discussed as an end result or product of this process. From this perspective, residents should be considered as end users of this product and as experts, who have the capability to state how the end product functions and what kinds of qualities it has.

In the development work of SoftGIS services that aimed to facilitate participation, both of these groups, residents and planners, represented the end users of this product and were considered to be experts. These groups should have been involved more closely in the development process of the service. Residents were approached mainly in the testing phase of the usability of the methods, the urban planners continued to dominate the process and the residents were neglected in the development work. Even though this problem had been identified, it was not taken seriously enough. A few reasons were identified: The residents represented a very broad group of people, thus limiting the amount of participants was difficult, the projects lacked the required resources to arrange the collaboration and among the researchers and planners, there was an assumed belief and shared understanding of the residents' needs.

5.6.3 Shared Jargon: Pitfalls in Communication

To reach working collaboration in a trading zone, the tools of collaboration needed some attention. As Galison (1997) highlighted, collaboration between traders from

different disciplines demands a new language as a tool. This new language can evolve through different phases where there first exists jargon, which is followed by basic pidgin language and could then eventually lead to a full-scale new interlanguage as creole. In the SoftGIS development work, it was evident that the research team had not fully attempted to develop a new metaphoric language. Instead, they had tried to keep up the existing established ways of communication that researchers from different disciplines and IT specialists in particular hold very dear. On the other hand, during the development processes, visualisations were used a lot, especially in the phase of the process where user interfaces were designed. Used visualisations were more familiar and usable to a part of the team, which might be the reason why these had not been utilised equally among the traders and did not evolve to support the creation of interlanguage. This would have demanded a more shared understanding of the need to create a shared interlanguage already at the beginning of the process. To reach more symmetric exchange of information, all of the traders involved in the trading zone would have needed a shared understanding of the others' views and have the ability to develop some new metaphoric ways to communicate.

In the interlanguage trading zone, where collaboration and homogeneity in the collaboration is reached, a new language evolves from the cooperation of the traders. The end result in the interlanguage trading zone can already be a new relationship between the developer and the customer, which leads to coevolution of a new technology (Gorman and Spohrer 2010). The achievement of this stage was not seen as being that important in the development of SoftGIS surveys where the research interests needed to dominate. However, this type of trading zone would have offered new possibilities for the research and development work of new services. What needs to be discussed in the coming SoftGIS service studies are the possibilities to lead the development work towards an interlanguage trading zone.

To develop planning support systems and to tackle the implementation gap in the future, the demand for multidisciplinary collaboration needs to be phased. Even though our educational system mainly aims to produce disciplinary expertise, it is evident that a lot more effort should be put into supporting the development of interactional skills. During the development process of a new PSS, trading zones evolve and lead to new practices, tools and systems. After reaching the level of interlanguage trading zone, a PSS can become a widely used new practice in the field of urban planning. On the other hand, this might restrict some other practices when a need for the development processes of new systems occurs. This enables approaching the evolution of different kinds of trading zones as a more comprehensive and cyclical process where new evolution processes follow each other. Hopefully, in new evolution processes, some lessons will also be learned from the earlier ones. SoftGIS development work is going to phase this in the near future, as the Finnish Ministry of the Environment has decided to develop a national survey tool like SoftGIS to be utilised as a PSS in participatory urban planning practices.

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Chapter 6
A Neighbourhood Laboratory for the Regeneration of a Marginalised Suburb in Milan: Towards the Creation of a Trading Zone

Claudio Calvaresi and Linda Cossa

Abstract This chapter presents the case of a neighbourhood regeneration programme. It focuses on the experience of Ponte Lambro, a neighbourhood of 4,000 people in the south-east of Milan. The programme, started in 2006, is ongoing. It has accomplished the renovation of the social housing stock and public facilities, the creation of new housing units and the improvement of green spaces.

In order to support the programme, Milan City Hall established a Neighbourhood Lab tasked with the promotion of public participation, building communication channels, coping with the difficulties that change might create and informing local community about the development of the programme. Both authors, as appointed consultants, have been responsible for the management of the Lab.

Five years into the regeneration programme, it is possible to interpret the life of the laboratory as a trading zone's building process that passed through different stages along its development.

This chapter describes the evolution of the laboratory according to the prototype conditions formulated by Collins et al.

The laboratory began work in a situation of lack of communication, of distrust between the local authority and residents and of great heterogeneity in terms of cultures, languages and forms of knowledge. It tried to encourage the collaboration, presenting the regeneration programme as a "boundary object", a space of opportunity to fill in with projects by different actors. The laboratory made a great effort to translate technical languages for the residents, to build mutual trust and to create a sense of ownership of the programme. As a result, an "interactional expertise" has emerged.

C. Calvaresi (✉) • L. Cossa
Urban and Territorial Policy Unit, Istituto per la Ricerca Sociale,
via XX settembre 24, Milan 20123, Italy
e-mail: ccalvaresi@irsonline.it; lcossa@irsonline.it

A. Balducci and R. Mäntysalo (eds.), *Urban Planning as a Trading Zone*,
Urban and Landscape Perspectives 13, DOI 10.1007/978-94-007-5854-4_6,

In the final section, the chapter tries to answer to more generic questions: under which conditions can this case be a lesson for other similar situations, and to what extent can the TZ theory be useful to interpret how an integrated urban approach really works*?*

Keywords Boundary object • Integrated policies • Interactional expertise • Neighbourhood Contract • Neighbourhood Lab • Urban regeneration

6.1 Introduction

This chapter presents the case of the Neighbourhood Contract of Ponte Lambro in Milan. The Neighbourhood Contracts were an initiative, jointly funded by the Ministry of Infrastructure and the Regional Governments, in order to favour the regeneration of social housing neighbourhoods in several Italian cities. The Neighbourhood Contracts, promoted for the first time in 1995 and again in 2001, implied the renovation of the existing social housing stock and public facilities, the creation of new social housing units and the improvement of the open spaces, the promotion of policies for active inclusion and social cohesion. They represented a national framework for the regeneration of social housing settlements (CEC 2009).

The municipalities that intended to implement a Neighbourhood Contract were strongly encouraged to promote a process of public participation (MIT 2001). The basic idea was that a regeneration initiative, in order to be effective and successful, had to be carried out through the involvement of representatives of the local community, within the context of an integrated approach. Each Neighbourhood Contract established a Neighbourhood Lab, tasked with promoting public participation, building communication channels between public institutions, local groups and local residents, coping with the difficulties that the implementation process might create and informing local community about the development of the programme. The word "contract" was purposely chosen to convey the idea of a programme jointly promoted, as a pact between public institutions (municipality, regional government, social housing agencies), locally rooted NGOs and groups of citizens.

The Neighbourhood Contracts formed part of a group of initiatives (Urban I, Urban II and "Urban Italia" programmes, "Territorial Integrated Projects" in Objective 2 Regions for the 2000–2006 programming period) which represented the "Italian way" to the urban development approach. These initiatives have been built around some common principles: they are place-based (they should necessarily be referred to a specific territory), participative (they implied the mobilisation of a plurality of different actors) and integrated (they linked together a number of different sectoral interventions).

Despite the fact that several Neighbourhood Contracts have been implemented in Italy in the last few years, comparative analyses are absent, and only few attempts to assess their results have been undertaken (Coppola 2010; Cremaschi 2008; Savini 2010).

This chapter tries, at least partially, to plug this gap, through an analysis of how the urban development approach has been implemented in a specific case. We will consider the case of Ponte Lambro, one of the five Neighbourhood Contracts that the Municipality of Milan promoted in 2004. The experience of Ponte Lambro will be framed in this chapter according to an evaluation perspective, with the aim to recognise and bring out generalisable conditions of effectiveness.

By and large, studies assessing how the urban development approach has worked in Italy (Briata et al. 2009; Cremaschi 2010; Palermo 2009) reached similar conclusions: outcomes have generally been poor and far from the initial ambitions. Due to the difficulties encountered in the design and implementation of integrated policies, the urban development approach is under pressure, and policy makers are searching for new ways of coping with the phenomena of social exclusion and marginalisation in urban areas. Some scholars consider the integrated approach experimentations a failure. According to Pasqui (2011), this can be seen in the tangible ineffectiveness of policies that tried to deal with the urban regeneration problems, a field where innovation was strongly needed. As a consequence, the potential of integrated urban policies is not longer a top priority in the political agenda.

In such a situation, urban problems are experimenting a process of redefinition. Access to housing is emerging as a key dimension of social exclusion in the cities and social housing provision as the main field of interventions for marginalised groups and communities (Tosi 2006). Consequently, the current debate in Italy seems to go to the opposite direction of the European discussion concerning the reform of the cohesion policy: whilst the European Commission has mainstreamed the urban development approach and methodology into the regulatory framework for the Operational Programmes and many European cities are still carrying out integrated urban projects, in Italy, we are living a sort of renaissance of sectoral policies.

There are certainly good reasons to argue that the integrated approach in Italy has not produced the desired results. In the last decade, a series of innovative policies has been implemented, producing "an enormous proliferation of devices rarely well coordinated, both in terms of sources of financing and of functional integration and management" (Pasqui 2011, p. 148). However, before dismantling a long season of integrated experiences to go back to practices characterised by sectoral approaches, it can be useful to investigate whether the integrated approach those programmes are based upon has been fully implemented.

An integrated approach capable of confronting multidimensional problems should not be conceived as an encroachment between fields of intervention that often have to remain distinct but must become a steady tension that drives the involvement of actors "in the consideration of content connections, of different sites activated in a process of local development, of possible synergy between issues, times, outcomes, resources" (Laino 2001, p. 153). That did not happen in most of the urban regeneration experiences in Italy. The integrated approach has been interpreted as a rhetoric device for plans and policies, which declared to be integrated because they were built as "shopping lists" including all sorts of interventions. Actually, they realised the interventions that were the easiest to implement. Between the design and the implementation stages, devices that could support the process of transformation – such as those governance arrangements that could match the

contributions of actors with different skills and points of view (Laino 2001) – were not put in place.

We must not forget – as Laino (2001, p. 153) points out – that "integration is a (possible) effect of the collective action; a desirable and partly encouraged effect that cannot be pursued as a mechanic effect of an holistic approach".

Where ad hoc devices for the management and support of transformational change have been activated (some Italian Neighbourhood Contracts are potentially promising experiences), adequate comparative studies aimed at understanding their operation beyond what constitutes a good and successful experience can be useful.

Our hypothesis is that designing and implementing integrated policies (or redefining a sectoral policy, such as that of housing, according to an integrated approach) means to build a "locality of practice".[1] In our view, integrated policies are local language practices (Galison 2010). They incorporate a process of "linguistic socialisation".

According to this interpretation, the establishment of a trading zone is a way to experience the integrated approach as a whole. It is also a way to experience the integration and the effectiveness of the interventions. Among all the experiences, where enough attention has been paid through the establishment of a trading zone, we can recognise important results.

In order to assess how they work on the ground, we concentrate on the Neighbourhood Lab. It is a body that copes with the problem of communication between the promoters of the Neighbourhood Contract (the Milan Municipality and the agency of social housing) and the local community. It works as a place where different "cultures meet, languages are learned and tacit knowledge shared" (Collins et al. 2007, p. 665).

The chapter presents the process of formation and consolidation of the Neighbourhood Lab. Following the description of a trading zone's evolution process provided by Collins et al. (2007), we analyse how the Lab has developed over time by moving between different states. Considering the Neighbourhood Contract of Ponte Lambro, as a situation characterised by high fragmentation, this chapter describes the move from an initial condition of relative degree of coercion ("encouraged to collaborate") to a condition of collaboration ("boundary object" and "interactional expertise").

6.2 Ponte Lambro and the Neighbourhood Contract

Ponte Lambro is a suburb of 4,000 people in the south-eastern part of Milan. It is physically segregated from the rest of the city: located beyond Milan's ring road, it is linked to the city centre only by an underpass next to the motorway interchange. It consists of two different parts which give evidence to the two phases of construction of the suburb: the historical part and the more recent one, developed around the settlements of social housing built during 1970s – 500 dwellings

characterised by a very low architectural and building quality, which presented serious problems of deterioration. Ponte Lambro, as many social housing settlements, actually shows serious social problems: poverty, social exclusion, unemployment and crimes rates higher than the rest of the city, a difficult integration of the foreign communities, etc.

The response by public policies has been twofold. On the one hand, many initiatives and proposals of interventions have explicitly tried to cope with this kind of problems, but the results have been in general very poor. The most significant example is a flagship project designed by Renzo Piano that has never been realised.[2]

This sort of "therapeutic obstinacy" (Cognetti 2009, pp. 111–112) has labelled Ponte Lambro as a "difficult neighbourhood", a suburb that represented a "wicked problem" for public policies (Rittel and Webber 1973) and an intractable target area.

On the other hand, the serious problems that affected the neighbourhood have been denied, and Ponte Lambro has been considered a "tabula rasa", a marginal part of the city for projects in search for a location: a hotel for the World Football Championship in 1990 (never completed) and a primary school converted to a court for mafia trials.[3]

Ponte Lambro can be considered as the result of "planning disasters" (Hall 1980), which have contributed to construct a stigmatised image of the neighbourhood and to produce a strong feeling of distrust from the local community towards the public policies and the possibility of change.

In 2004, Milan City Hall decided to participate in the Neighbourhood Contract initiative presenting five programmes for five social housing neighbourhoods, in partnership with Aler (the regional agency for social housing). One proposal was for the area in and around Ponte Lambro. The Ministry of Infrastructure and the Regional Government bankrolled the programme for Ponte Lambro with 32 million Euros.

The programme that started in 2006 and is now almost completed consisted of three axes of intervention: (1) *housing*, which regarded projects of renewal, enhancement and increment of the social housing stock; (2) *infrastructures*, which entailed interventions for the upgrading and improvement of social and community infrastructures and open spaces; and (3) *community*, aimed at implementing a "Social Development Plan" through the establishment of a Neighbourhood Lab.[4]

The Lab supported the development of the Neighbourhood Contract performing the following activities:

- *Participatory design of interventions.*
- *Activation of direct or indirect forms of self-management*, regarding care and maintenance of buildings and facilities.
- *Support and management of the "mobility plan" for families* whose transfer is necessary for restructuring and parcelling the existing public housing stock.
- *Acknowledgement and orientation of the instances of social emergency*, coming from public housing tenants involved by interventions.
- *Widespread communication* to the neighbourhood inhabitants and targeted to the public houses' tenants, aimed to keep them informed of the programme progresses.

– *Information support to manage, guide and accompany the development of the transformations* that change living habits, reducing the distance between the beneficiaries of the interventions and the various initiatives promoted by the Neighbourhood Contract.
– *Interface* among different subjects/actors.

6.3 The Background: The "Social Forum" or Encouraging to Participate

Telling the story of the regeneration process of Ponte Lambro requires to go back in time, when the Neighbourhood Contract was not yet promoted. In 2000, the Municipality of Milan decided to appoint the famous architect Renzo Piano ("UNESCO Goodwill Ambassador for urban areas") for a flagship project in Ponte Lambro. Piano proposed to create a "Laboratory for the regeneration of the neighbourhood", a new building that would host together social housing units, community facilities and a "business innovation centre" to promote new job opportunities.[5]

Immediately, the project generated a harsh debate around its real capacity to cope with neighbourhood difficulties. The main critics were generated by the concern that Renzo Piano's project seemed to be more a marketing action than an effective regeneration intervention. This concern convinced the Milan City Hall to promote a "Social Forum", an arena for the involvement of local community representatives, with the aims of debating how to tackle the problems of Ponte Lambro, building a new vision for the neighbourhood and integrating the Piano's project with a bottom-up approach. Through the forum, people who lived in Ponte Lambro interested in contributing to improve the quality of life in the neighbourhood were invited to express their ideas and discuss and collaborate with other local actors, taking a first-person responsibility in the regeneration process.

When the process of implementation of Renzo Piano's project became problematic (mainly due to lack of financial resources), the expectations generated by the forum were largely left unanswered, but the promotion of Neighbourhood Contract represented a new opportunity for the local community to come again into play.[6] The City Hall encouraged the representatives of the forum to participate in the preparation of the Neighbourhood Contract's proposal. As a member of the forum declared, this allowed the new programme not to be seen as a top-down prepackaged product but as the result of a process which had already begun, in which the local residents have already been involved and have expressed their needs and aspirations.

Actually, it represented local associations and very few local residents, in particular those already involved in political and social groups. So, when the Neighbourhood Contract started, the forum showed its weaknesses. Its capacity to represent local community and to channel concerns and demands of the citizens towards the NC's interventions was very poor. The implementation of the regeneration

programme required a change in the participation strategy. More specifically, it was necessary to adopt an "issue-based" rather than a "structural" approach, defined on the basis of the issues at stake, and not oriented towards the elaboration of an agreed future vision. This kind of approach emphasised the role of workgroups open to all potentially interested residents, and it was mainly not addressed to local community's representatives. It involved citizens on single operative decisions; it did not want to build a formal representative body.[7]

The interesting point here is that many of the previous members of the Social Forum decided to participate in the initiatives of the Neighbourhood Lab.

6.4 The Development Phase: Transforming the Neighbourhood Contract in a Boundary Object

In the first stage of the programme, the main goals of Neighbourhood Lab were to legitimate its presence and to gain the trust of the local residents. In order to pursue such goals, the Lab started to work in three directions:

- An intense activity of communication regarding objectives, interventions and time schedule of the NC.
- The preparation of "local events", aimed at creating a climate of cooperation among the citizens and at rediscovering and reusing neglected public spaces.
- The management of specific activities in order to set the conditions for the programme's implementation.

With regard to the first point, the Lab started to produce a periodic newsletter, with the aim of making the implementation process of the NC transparent and accountable.

An example of "local event" was that promoted in 2006, "A bridge over the World Football Championship".[8] The matches of the Italian team were screened in the "Civic Centre" of Ponte Lambro, a community space that would have been one of the interventions of the programme. The event was intended as a tool to put attention on the Civic Centre, in order to trigger a process of re-appropriation of the space by the local community and to generate new ideas for its use. For the preparation and the management of the event, different groups and individuals were involved: some inhabitants set up the space, the parish provided the equipment whilst a group of young people installed it, and the Lab dealt with promotion and communication of the event and with the whole organisation. The event showed that the local community, if adequately supported, could take the responsibility to manage such a structure. After the event, a group of local residents got involved in a participatory process to identify guidelines for the restyling project of the Civic Centre, which were later implemented.

The renovation of particularly dilapidated buildings implied the transfer (a.k.a. "decanting") of the residents. This proved a critical issue that required careful handling by the Neighbourhood Lab. The first intervention of this kind was that of

35 households. The Lab started to meet the tenants, presenting the work plan of the intervention and gathering information about the specific problems of each household. The Lab prepared a specific tool, named "Geography of the Households", with an updated set of information concerning the families (number of members, specific requests, preferences for the new dwelling to be occupied). After that, it organised meetings with the architects and the construction firm in order to report the needs of the tenants, to adjust the time frame of the intervention and to redefine specific critical issues. The Lab organised meetings with Aler (the regional social housing agency) to identify the new housing solution that best suited the needs of local residents (size, location in the city, etc.). The Lab assisted the tenants, presenting them the new flats and reporting to Aler requests concerning eventual problems aroused during the first period of the occupancy.

In this first stage, the Lab worked to frame the Neighbourhood Contract as a boundary object.[9] It tried to transform it in something able to include different preferences and interests, coming from the local groups, the households, the public institutions, the private actors, etc. In order to reach such an objective, it refused the idea that was necessary to build consensus on the future vision of the neighbourhood, overcoming the past experience of the Social Forum. The Lab redefined and segmented the problem: it organised an "issue-based" participation process, managing different working groups for each of the critical issue of the programme; it built new channels of communication towards the local community; it tried to restore trust towards the public institutions by the inhabitants, with a work deeply rooted in the neighbourhood; and it probed the possibilities of cooperation between various actors, managing specific events.

According to this perspective, the physical transformations have been crucial. As in all those neighbourhoods where the conditions of dwellings and infrastructures are particularly deteriorated, a firm action for the improvement of the built environment corresponds to a strong request that comes from the local community. It gives an evidence of attention towards the local residents and allows to rebuild the credibility of public institutions. The interventions have changed the neighbourhood that has taken a new appearance, and first signals of positive impacts have emerged: a caring attitude for the public spaces and a sense of ownership for the neighbourhood. But, if the requalification can show its effects in a relatively short period, the regeneration process takes a longer time to generate results because these are very fragile and need to be steadily consolidated.

6.5 The Implementation Phase: The Role of Neighbourhood Lab in Promoting Interactional Expertise

At this stage, the Lab was a promoter of activities aimed at strengthening the process of transformation and promoting social cohesion. During the implementation phase, the neighbourhood began to change. The idea was to make the transformation

evident by using the colour, proposing to paint the facades of the renovated houses through the direct choice of the inhabitants who were called to express their preference for the colour.

So, the Lab organised a specific activity of consultation addressed to all the tenants: architects prepared different colour options for the facades and the interior common spaces of the buildings, producing descriptive panels and small models for each alternative; the construction firm prepared the colour tests in order to facilitate the choices of tenants; and the Lab managed the referendum. The ballot boxes were put in several places (the post office, the bar in the main square, the park, the Civic Centre, the oratory), for 3 days, at various hours, in order to reach as many people as possible. Around the ballot boxes, groups of people discussed and confronted each other, even in a lively way, around the best choice. Flyers, boards and newsletters inform the residents about the outcomes of the "referendum", and in a very little time, the "white houses" assumed various shades of yellow, and the "yellow houses" became red.

This kind of consultation activities were extended to other issues of the project, sometimes with the scope to deal with conflicting situations. Such it was the case of the restyling of the ground floor spaces. Until then, the ground floor could be easily trespassed by anyone, as any other collective space. Since the beginning of the Neighbourhood Contract, the tenants of the houses had requested a fence around these spaces so that the ground floor could be linked to their apartments and become effectively domestic. The issue was controversial: on the one side, the request of the residents represented a response to their security issue and on the other side, the point of view of the architects, which defended the value of the space under the houses as "urban space" and as "vision" of the original project.

In order to treat this dispute, the Lab decided to manage a negotiation process that was addressed to find out an acceptable alternative for both of the positions and to gain better results from the intervention. The Lab was convinced that the fence should have improved the living conditions of the residents and incremented their feeling of safety and ownership towards the neighbourhood. Therefore, the starting point would have been the realisation of the fence, whilst the mediation process would have regarded the concrete definition of its characteristics. A dialogue between residents, architects, Aler and Lab was established, producing at the end a hypothesis for the fence that met technical criteria. A process of "privatisation" of those spaces started, with the residents that furnished them with flowers, plants and seats.

At the very last stage of the programme, a significant action concerned the insertion of new households in a refurbished building. The traditional mechanism works simply by matching the available dwelling with the family that occupies the first position in the list of potential beneficiaries, the list reflecting the socio-economic conditions of the family. The Lab, in cooperation with the Housing Department of Milan City Hall, has introduced new criteria for selecting tenants, with a view to the social mix that the insertion of the new households would create. For example, it has balanced young and aged families, foreigners and Italians, families and singles, etc.

The Lab wanted to assume the new households as a "community in progress" to be assisted along its insertion process in the neighbourhood. The Lab realised a "Little Guide to Ponte Lambro" to provide information on the history of the neighbourhood and its main infrastructure and facilities, what the Neighbourhood Contract is, rules for the management of the dwellings and the common parts of the building.

An event named "Welcome to Ponte Lambro!" which took place in June 2011, has symbolically closed the settlement process of the new inhabitants. During the event, the "Guide" has been distributed, and there has been a presentation of the neighbourhood by some long-term residents. During a final aperitif organised by the local residents, the tenants were encouraged to fill out an original "bank of capabilities": the Lab asked each of them to present her/himself and her/his story and report what she/he can offer and share with others.

For the communities which live in the social housing neighbourhoods, it is hard to trust the public institutions, given the catastrophic results of many of their interventions and the constant feeling of having been let down. As a consequence, the main tasks of public policies are "to make society", to account for the residents and to care for them. The "difficult neighbourhoods", which are the parts of the city where public policies have failed, "need specific attention, an ad hoc commitment to make possible, for the human beings, to maintain the capacity to establish relations among them" (Magatti 2007, p. 28).

The activities of the Lab can be considered as an instance of such an attitude. It represents a "work of proximity", oriented towards the construction of a common "trading zone" involving various dimensions.

The first dimension is that of the physical proximity to the local community.

The Neighbourhood Lab is opened in a flat at the second floor of a residential building. An information panel at the main entrance of the building, announcing its presence with the Lab's logo and its working hours (on Tuesday and Wednesday from 9 am to 18 pm), has been installed.

The Lab consists of four rooms, each of them occupied by different activities: in the entrance hall, where people can sit and chat, panels display information on the programme's interventions, and a notice board allows people to be informed of what is happening in the neighbourhood; two rooms host counter services, provided by IRS (the cooperative of researchers that manages the Lab on behalf of Milan City Hall), Aler (the regional social housing agency) and housing associations. Meetings are held in the fourth room.

All the Lab spaces are characterised by their informal style and by simple and "laboratory" furnishings, more and more enriched during the development of the programme with material produced during the activities: leaflets and posters, information panels and materials used during the participatory design, panels and pictures and newspaper articles. The Lab actually is a flat open to the citizens. Its codes and rules are more those of an informal meeting space than those of a public office: during the working hours, the Lab is widely accessible. People can come in to gain and exchange information to meet each other. Children can sit and draw or do their homework. Their parents talk, drink a coffee together and smoke a cigarette on the balcony.

Located in a flat without a direct access from the street, the Lab has poor visibility. At the beginning of our work in Ponte Lambro, considering that other Milan Labs were much more visible, being located in the central square of the neighbourhood, we considered this element as an obstacle to make the Lab the "reference point" of the neighbourhood process of transformation. In order to try to overcome such a difficulty, we organised itinerant services, setting up information points as "temporary Labs" that animated parts of the neighbourhood at different hours: in the public park, during the afternoon, when the mothers go there with their babies; close to the schools, when the children go out; in the market square, in the mornings; and outside the church, in Sunday mornings.

Working into the Lab, we started to understand that the location in a flat was not only a limitation but also a resource. Observing the behaviour of the people that came into the Lab, we realised that it was perceived as a quasi-domestic space, which allowed practices of use more similar of those that persons put in place when visiting their neighbour. Whilst a Lab located along the street is perceived as a "shop", where one can easily come in and ask for something, but where one does not stay for a while; for our Lab, one has to decide to come in, has to climb the stairs and has to ring the bell. But once one has overcome these first barriers, the space is more friendly, and one can stay and spend time there.

The second dimension regards the accountability. The Lab gathers the requests coming from the residents and informs them on how, in what time and by whom it will be processed. There is a protocol for the processing of the requests between the Lab (that receives them) and the other subjects (municipality, Aler, construction firms) responsible for the response.

A third dimension relates to the "translation" activity of the Lab that tries to bring together the language of the local residents and that of the institutions, distilling the former for the institutions and decoding the latter for the residents. The residents can approach the Lab without any particular filter. The rationale is not that the user must accomplish with the code of the bureaucracy, but it is the officer that must listen to what the user needs. In this sense, the Lab is a "user-friendly institution".[10] Acting in such a way, the Lab introduces a new routine in a context where it is perceived as an innovation.

A last dimension concerns a process that we could define as that of breaking the boundaries of the neighbourhood. It implies the breaking of the cultural and communication barriers, those stereotypes that still describe Ponte Lambro as the "Milan Bronx". It entails the opening of the networks, involving external experts in specific initiatives (such as those of cultural promotion) which bring to Ponte Lambro their expertise and systems of relations. This appears to be a methodological issue that has to do with breaking the boundaries of the project. In order to be effective, a regeneration programme should consider its field of intervention as not coinciding with that defined by the boundaries of the target area. The field of the programme is a strategic construct, not a datum. It depends on the deliberative choice to include actors, resources and opportunity to intervene that can positively modify the definition of the policy problem and introduce innovation. The Lab tried to work around the boundary areas of the programme, treating – as much as it was possible – those parts of the district outside the social housing settlement that could represent

resources for the programme (e.g. the Lambro river) or involve actors from outside the neighbourhood (a painter and a theatre company, both mobilised in initiatives with the primary school of Ponte Lambro).

Conclusively, the Lab tried to strengthen social networks to build bridges between people. The Lab worked as a catalyst to rebuild the relationships between the actors: after 5 years, some actors have abandoned the process, others that decided to get involved and have developed a sense of ownership towards the programme ("the project is mine as well").

6.6 Conclusions

In the conclusions, we try to answer the question concerning the profile of the Lab. What does the Lab represent? Is it a physical space open to the public, where the residents can bring their own requests? Does it allow for a much stronger relation between institutions and local community? Is it a tool, managed by appointed consultants, to build bridges among different rationalities, to exchange languages and to mediate conflicting interests? Is it a "knowledge hub" that has fostered mutual learning and has produced innovation in the management of the urban regeneration policy? Most probably, the Lab represents all these things.

Working into the between, the Lab built a common ground for interaction and set the conditions for participation. In this sense, promoting participation implies to recognise different roles and to maintain them to emphasise the differences. The Lab did not want to build consensus, but it tried to mobilise the actors, to intensify their systems of preferences for acting together (towards a "boundary object"), to increment a sense of ownership towards the programme and to create opportunities for self-reliance of the local groups and inhabitants (towards an "interactional expertise").

The Lab existence is strictly related to its ability to enhance the communication between different cultures (that of the inhabitants, that of the local community's groups, that of the public institutions and technical agencies), treating the various dimensions of a policy problem, trying to frame it according to different problem's definitions that come from different parties and using specific tools which allow them to develop mutual understanding (such as the "geography of households").

Moreover, the Lab is the device through which it is possible to take care of the implementation of interventions, paying necessary attention to the integration which must characterise them. This is what the Lab has done in Ponte Lambro, working between institutions and local communities, establishing connections, defining new local languages and redefining frames and building relationships among actors. An activity that takes time requires constant attention, passion and competence that is crucial to produce interesting results. An approach that does not stop after the design phase but continues through an intense support activity which has partly followed the indications of Milan City Hall, partly forced them, always reinterpreted them. In this way, the integration stops being a rhetoric and becomes a daily practice.

The Lab represents an opportunity to revitalise the perspective of citizen involvement. It has been a point of reference for the local residents, changing the public administration's rules, which usually consider the citizens as users of a service, to ask them to formulate their requests according to standard formats and the linguistic code of the bureaucracy. The Lab is a significant innovation in this field because it introduces a more friendly behaviour towards the local community. When the inhabitants meet the Lab, they can speak their own language. The staff members of the Lab listen to them and help them transmit their demands to the subjects which are in charge of receiving and handling the requests.

A field in which the proper role of the Lab as a trading zone might be detected, rooted in the heart of a difficult neighbourhood, is the housing policy. The Lab framed it as an integrated policy, from three points of view: multidimensional (it interpreted the housing problem as physical as well as social), participative (it involved public institutions, technical agencies, construction firms and developers, the local community, the tenants) and area-based (it considers housing policy as a local policy). In fact, the Neighbourhood Contract has not only dealt with the physical dimensions of the regeneration process (rehabilitation of the existing dwellings, creation of new dwellings), but it has treated its social dimensions (management of the transfer procedures of the tenants and of the insertion of new residents, designing new housing facilities, etc.). More specifically, approaching, involving and taking care of the new residents have fostered the development of a local and contextual dimension of the programme that has supported experimental actions.

In our view, these are the conditions to make the integrated approach work.

Following Fareri (2010), the urban policies have three main characteristics:

- They assume the local dimension of some problems, so urban is not the object but the level of elaboration of such policies.
- They assume a certain space (neighbourhood, city, territory) as field of intervention; in this sense, urban is the contrary of sectoral: urban policies are integrated policies.
- They assume, from a bottom-up perspective, the complexity of networks as a resource to design more effective interventions, taking horizontal and vertical integration into account.

To sum up, it is integration that matters more than participation. The latter is a condition to pursue the former. The integrated dimension of the urban policy – as Fareri argues – changes the policy design process: no more a pure technical process, but rather a social learning process, where the different actors exchange knowledge, a potential for innovation. That is exactly the scope of a trading zone.

Endnotes

1. Locality of practices, where trade focuses on coordinated, local actions that are enabled by the thinness on interpretation rather than the thickness of consensus (Galison 2010, p. 36).
2. See the following section.

3. According to the words of an inhabitant of Ponte Lambro, "In Ponte Lambro things happen in such a way: they remove the school and put a court for mafia trials, as an affront".
4. In particular, in 2005, the Milan Municipality launched a call for tender to assign the management of the Neighbourhood Lab. The Institute for Social Research (IRS), a not for profit cooperative of researchers, was appointed for this task. Both of the authors have been responsible of the management of the Neighbourhood Lab.
5. According to the "Manifesto of the project", the goal was to transform a deprived and marginalised neighbourhood into a vivid suburb, able to create new economic activities and to become an engine for a new urban development.
6. As Galison argues, a trading zone is "an intermediate domain in which procedures could be coordinated locally even where broader meanings clashed" (Galison 1997).
7. Here we use two ideal types of participatory endowments formulated by Savini (Savini 2010).
8. Ponte" means "bridge" in English.
9. "Boundary objects are objects which are both plastic enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common identity across sites" (Star and Griesemer 1989, p. 393).
10. As a resident in Ponte Lambro told us in an interview, "many inhabitants are not able to communicate with the institutions. They are afraid that the institutions do not understand them. This kind of problems does not exist with the Lab, because the informality allows all the people to express with their words".

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Chapter 7
The Locality of Boundary Practices

Helena Leino

Abstract The increasing amount of multiple actors and interests has increased the unpredictability, volatility and uncertainty of participatory planning processes. This chapter discusses the potentiality and usability of the concepts of boundary interaction boundary organisation and trading zones in the context of planning. In addition, two participatory planning cases from Finland, Tampere, are examined from the perspective of emerging situational boundary practices. Looking at the interaction of multiple actors from this angle emphasises the role of local knowledge and the social relationships that affect land-use management and planning. The chapter offers some support for the notion that these concepts have the potential to facilitate linkages between different actor groups and divergent social worlds. The temporal and situational arrangements are highlighted, as it is in the particular context in which issues are opened up to the public and possibilities to boundary interaction outside traditional municipal institutional settings either appear or don't.

Keywords Boundary interaction • Participatory planning • Multiplicity of actors • Trade-off • Broker • Negotiation

7.1 Introduction

A wide variety of novel cooperational forms – whether institutionalised or not – have emerged in the urban planning practices. In planning, the main objective for cooperation is to achieve a planning draft that everyone can live with and this within a reasonable time. The idea is to find consensus among the stakeholders, but often this

H. Leino (✉)
School of Management, University of Tampere, Tampere 33014, Finland
e-mail: helena.leino@uta.fi

A. Balducci and R. Mäntysalo (eds.), *Urban Planning as a Trading Zone*,
Urban and Landscape Perspectives 13, DOI 10.1007/978-94-007-5854-4_7,

goal is not fulfilled despite of the wide repertoire of participatory methods. Although a beautiful idea, the collaboration between different stakeholders is not an easy task to deliver. The challenge lies in the multiplicity of people and diversity of subcultures that meet in the planning processes these days. From the civic participant's point of view, the problem is to find place for the local, situational knowledge that is based on intuition and empirical experiences. This is hard to articulate as information that can be included into the plan (Asikainen and Jokinen 2009, pp. 351–355). As a consequence, the planning draft often simplifies and misrepresents the complexity of the social reality.

The knowledge used in the planning process is traditionally based on calculating and categorising information. These objective indicators of *rational knowledge* are very powerful and difficult to call into question (see, e.g. Gunder 2005, pp. 173–199; Leino 2012). However, Donna Haraway (1988, pp. 584–589) has argued for politics of location, positioning and situating, where partiality and not universality is the condition of being heard to make rational knowledge claims. From this perspective, the situational communication should be understood as contextual interaction, a space where local knowledge and values operate in a way that is meaningful for all of the participants and enable the coexistence of diverse social worlds (Leino 2008, pp. 41–48).

As Kahila-Tani points out in Chap. 5 in this book, one of the central questions in planning is how to create trust among the various stakeholders participating in the process. There is a wide repertoire of planning literature dealing with the question of trust as well as diverse empirical examples analysing the failure or success of collaborative practices (Healey et al. 2003; Pløger 2004; Rowe and Frewer 2004; Leino 2005; Nyseth et al. 2010). These somewhat inconsistent experiences in participatory planning have created uncertainty in many cities when concerning how to develop and govern city planning in socially acceptable ways.

One way to approach the challenge of the multiplicity of civic participants, their interests and knowledge of different kinds is to concentrate on boundaries. To be more precise, focus on the situations where boundaries are crossed. Innes and Booher (2010, p. 210) talk about boundary spanning, when they refer to sharing of information and building of understanding between differing agendas and competencies and, moreover, when creating the potential for discovering mutually beneficial actions. I agree with Innes and Booher as they argue for finding new, resilient and socially robust ways for enabling the flows of information and developing shared meaning among actors (ibid., 210).

The focus of this chapter is in the *locality* of participatory planning. The chapter approaches public participation and practices of participatory knowledge production by using the concepts of *boundary interaction* (Wenger 2003, pp. 76–99) and *boundary organisation* (Guston 1999, pp. 87–112). This is done in resonance with Peter Galison's concept of *trading zone* (1999, pp. 137–160; 2010, pp. 25–52). The aim is to examine the interconnectedness of situated, boundary interaction and the locality of trading practices. In these practices, trade is enabled by the thinness on interpretation rather than the thickness of consensus (Galison 2010, p. 36).

Taking these concepts as a starting point, I present two empirical case studies of participatory planning analysing the emergence, developmental path and the interaction involved in the processes by concentrating on the boundary objects, boundary interaction and trading zones. By examining the negotiations among diverse actors, the aim is to provide an insight into the intersecting social worlds of participatory planning. I close the chapter by discussing what trading zones, boundary organisations and boundary interaction can offer to the current debate on participatory planning practices.

7.2 The Hybrid Mix of Local Interaction

The discussion dealing with boundary interaction and boundary organisations usually at some point refers to the concept of boundary object. The concept originally used by Star and Griesemer (1989, pp. 387–420) has been discussed widely since, and as this book also demonstrates, the concept has found its way to planning field as well. The boundary objects can be, for example, maps, diagrams, architectural blueprints or medical records (e.g. Wenger 2003, p. 88). The point is that the objects are flexible enough to be used by different parties for their own purposes and yet robust enough to maintain a common identity across sites (Star and Griesemer 1989, p. 393). This way, boundary objects sit between two different social worlds such as science and non-science and help to provide stability to the process at hand (Guston 2001, p. 400).

Planning process involves several boundary objects that could be used as contact points for finding common ground for multiple actors. The boundary object can be the planning area itself, including the flora and fauna of the area. Participatory planning involves different types of boundary objects that satisfy the informational requirements of each actor: maps, Internet applications, public hearings and so on. The focal point is the local practices as they define the possible boundary objects in each particular case (Leino 2012, p. 387).

Planning process itself can be interpreted as an institutional embodiment of boundary organisation. Boundary organisations attempt to solve problems by meeting three criteria: they provide the opportunity and sometimes the incentives for the creation and use of boundary objects, they involve the participation of actors from both sides of the boundary and they exist at the frontier of relatively different social worlds (Guston 2001, pp. 400–401). Boundary organisations have usually been defined as social arrangements, networks and institutions increasingly mediating between science and politics (cf. Miller 2001, p. 482; White et al. 2008, pp. 230–243). Moreover, the definition of boundary organisation as *forums where multiple perspectives participate and multiple knowledge systems converge, collaboration between scientists and nonscientists is facilitated and combined scientific and social order through the boundary objects is created* (Carr and Wilkinson 2005, p. 261) seems to match with the current elements of participatory planning practice. Most importantly, the concept refers to a condition where linear and participatory models intersect; knowledge is

produced in diverse institutional settings that operate between different social worlds (Guston 2001, p. 401; Carr and Wilkinson 2005, p. 257).

Thus, the idea of planning procedure as a boundary organisation is not a far-fetched concept. Planning procedure serves to frame and define the scale of possible problems involved in the plan, mediates the information flows and provides the opportunity for stabilisation and negotiation of the boundary space that is responsive to the actors involved (White et al. 2010, pp. 220–221). All phases of planning procedure include knowledge production as well as the aspect of political decision-making. Preparing planning processes, sketching diverse planning drafts, allocating resources and, finally, ratifying the plan are all political choices. The knowledge used in planning is gathered and worked at in public hearings, cooperative groups, participatory workshops and Internet applications (Leino 2012, p. 386). One of the objectives of boundary organisations is to build bridges among multiple distinct groups and encourage adaptation while permitting divergent interests and unique social norms to persist (O'Mahony and Bechky 2008, pp. 422–459).

The characteristics of effective boundary organisations include participation, shared accountability and co-adaptive management. The participation of divergent actor groups can be interpreted as *boundary interaction,* a challenging area where actors can produce generative tension between them (Wenger 2003, pp. 84–85). Boundary interaction can create a basis for learning but also for separation, fragmentation and misunderstanding. Opposing pressures and accountability of the actors coming from different social worlds challenge the efforts to stabilise the boundary interaction. However, boundary interaction can be active, iterative and inclusive communication at best (White et al. 2010, p. 222). Most importantly, radically new insights have the possibility to arise at the boundaries between different communities.

From the deliberative point of view, it is important to analyse whether boundary interaction provides a two-way connection and an opportunity for negotiation for the involved actors. Moreover, does boundary interaction give novel access to the meanings people have in various local practices? Wenger (2003, p. 86) uses the concept of *brokers* when boundary interaction seems to need people introducing elements of one practice to another and this way enabling the common understanding to evolve. Brokers communicate the existing knowledge or knowledge demands, explore the possible alternatives and their implications as well as engage in the policy process at hand (Huitema and Turnhout 2009, p. 580).

The working methods of boundary organisations and boundary interaction are already taking place in participatory planning procedures. Plans require contribution from multiple actors and diverse fields of knowledge. The actors involved confront problems that are outside their competence and are forced to negotiate their own competence with that of others. Thus, planning procedures operate at the borderlands, but are they really providing space for new kind of learning? The assimilation of diverse social worlds and divergent, experience-based knowledge into the current planning practices is a problematic issue. The locality of space occurs as a physically shared space but, even more importantly, as a shared space for political interaction enabling and limiting the interplay of diverse actor groups.

For this reason, Galison's (2010, p. 36) emphasis on the locality of practices where the agreements in a situation are mere enabled by the thinness of interpretation rather than the thickness of consensus seems to help to interpret the political nature of boundary interaction in participatory planning. It is not always a question of mutual learning or agreeing on values and interests that usually are unequally present in the planning proposals. As Galison (2010, pp. 32–35) explains in his recent chapter, the answer lies in the locality of practice where the trading zone is created. Trading zones are intersections of discursive and material practices that are partially but not completely shared. When people are negotiating or trading things and matters, they do not have to agree on the ultimate meanings, just about the exchange. This perspective has intrigued recent planning debate, as Fuller (2008, pp. 1–18) and Mäntysalo et al. (2011, pp. 257–272) have highlighted.

As the hybrid mix of local interaction bridges heterogeneous actors together, there is no need to find a universal rationality or protocol for the exchange. Galison (2010, p. 50) encourages to focus on locality when analysing the techniques, languages and values of a particular process. This is a way to approach joint work without binding the cooperation strictly to a particular frame or method. Analysing in close detail the negotiations of local practices helps us to see the temporary solutions the actors generate when they confront problems that are outside their competence and force them to negotiate their own competence with that of other actors.

7.3 Boundary Interaction in the Local Practice

The two cases presented in this section help to outline the elements of boundary organisations, boundary interaction and trading zone in planning practice. The data consisting of interviews of key actors, questionnaire for the inhabitants, participatory observation and official documents for the Pispala case have been gathered and analysed in previous research projects carried out by the author 2008–2010, while the data for the IKEA case were collected by the Ph.D. student Johanna Tuomisaari (cf. 2009).

The city where the cases took place is Tampere, the third biggest city in Finland, with approximately 215,000 inhabitants. The wider Tampere urban region (345,000 inhabitants) is one of the most rapidly growing areas in Finland. Currently, within the region, there is an urgent need for new housing, which is given top priority in urban planning.

7.3.1 The Pispala KaOs Project 2007–2009

Pispala is a nationally well-known neighbourhood in Tampere with very original cultural and environmental characteristics. The area is on an esker between two lakes carved by glaciers. The district on the Pispala ridge was founded in the late

nineteenth century. No one actually planned the district – settlers just built their little cottages along the slopes in the manner they liked and could afford. This is why Pispala is a very colourful and peculiar housing district with small wooden houses built close to each other. Pispala is no longer a workers' district but more famous for its artists, authors and musicians.

The KaOs (abbreviation for neighbourhood in Finnish) project started as an independent participatory project in Autumn 2007. The initiative came from a Pispala inhabitant who was also a member of the Tampere architecture programme and thus knew the local planning officials beforehand. Together the planning officials, few local inhabitants and the Tampere Democracy Unit applied for money from the EU successfully and could therefore start a new kind of participatory project where diverse ideas of participatory methods could be implemented in practice.

A local coordinator was employed for Pispala, neighbourhood conferences were organised with eight thematic group sessions, and a German facilitator was hired to follow through the participatory parts of the project. The same project-arranged group trips to other Finnish wooden villages. The whole process gathered together new participants who were keen to produce a novel vision for the area.

The detailed local planning process of Pispala began at the same time. The participatory experiment and the local planning process were intertwined together very quickly. The public participants who were engaged in the participatory project did not quite realise that their project was distinct from the official local detailed planning process.

All the thematic group sessions produced their individual visions for Pispala's development. The architects from *EDGE,* Laboratory for Architectural and Urban Research Unit from the Tampere University of Technology (Partanen and Pylvänen 2009), produced diverse architectural blueprints for Pispala's development potential, in which they made local, sometimes contradictory, visions very transparent.

The detailed planning process was regarded as a success because of the new and versatile methods for participation that were used concurrently in the participatory project. The benefit of this particular emerging boundary interaction became apparent at the very beginning of the whole process. The local inhabitants had a hunch that there was a need for a wider public debate and more diversity in interaction with the public. This intuition resulted in a more extensive and constructive participatory process than would have been the case had the municipality used the usual budget for public hearings in planning.

Hence, the EU project provided the resources for organising diverse pilot projects of participation and collected colourful local perspectives that could also benefit the official planning process. The extra resources, in terms of arranging public events and workshops, accumulated self-organisatory elements among the local inhabitants. A surprising activity emerged from a group of people who were not used to be seen in the city planning events. This group called themselves *Permitted building volume*, whose statement was basically as follows:

> Pispala cannot be a museum where construction is banned. The area has been built spontaneously in the course of time and this has made Pispala a special place. We want to leave our mark on the area just like the previous generations have done and our vision will support the cultural heritage of the area (Pispala visio 2008, pp. 5; 32).

The actors within this interest group were not normally taking part in the public hearings or participatory planning forums. The KaOs project provided resources that enabled the detailed planning process to carry alongside a wide diversity of meanings and values the local actors had about the Pispala area. Some 370 people altogether took part in the participatory workshops and public hearings. The German mediator had the ability to keep the discussions going on and diverse actors were encouraged to impress their visions in the participatory gatherings.

The success was evident in the final report, *Visions for Pispala's development,* which linked different information together (Partanen and Pylvänen 2009, pp. 3–29). The boundary object was the important and nationally distinguished area itself, Pispala. It was apparent that the area meant different things for diverse actors, but, as a boundary object, it was robust enough to maintain a common identity across sites. In addition, the final report included a repertoire of smaller boundary objects used for sharing the results widely: a detailed description of the working process, various maps and a *puzzle for possible development*, supplementary figures for every development vision and comments of inhabitants. The neighbourhood conferences as well as the final report helped to identify knowledge gaps and uncertainties, to recognise planning norms and policy constraints and collaboratively develop the plan further. In terms of boundary objects, they served as communication channels between different social worlds balancing the various types of knowledge, local meanings and conflicting interests (Jokinen 2006, p. 211). The next step in Pispala has been to operationalise these goals into a plan.

The local politicians and official planners attended the local neighbourhood conferences where multiple forms of knowledge were gathered and discussed. Hence, the planning procedure enacted as a form of boundary organisation in the sense that the political and professional forums were intersecting and intertwining the participatory process. The whole planning process was heading to a reliable political decision-making in terms of the future use of the area. Furthermore, there was a sincere effort to build a robust basis for active, collective learning allowing the coexistence of diverse social worlds.

From a trading zone perspective, the trading happened in terms of procedural proceedings. The city planning officials agreed with the local inhabitants' point of view about the need for developing the participatory methods of the Pispala plan. Agreeing in this matter, the city benefited in the master plan process, as the participatory process was already ongoing and well planned compared to previous planning cases (cf. Leino 2005, pp. 59–86; Leino and Laine 2012, pp. 89–103). The trade happened also the other way round. After having the city to commit to the initiative in the first place, the local inhabitants had a sense of responsibility in terms of not leaving official complaints during the master plan process.

However, in the Pispala case, the process entailed several situations of boundary interaction, not just pure trading of interests. One is tempted to ask: is trading a more temporary and momentary action that can lead to long-term boundary interaction but is not necessarily doing so? Thus, the question is: can the case presented here as an example of local exchange and interaction develop into somehow more salient and iterative participatory planning practice? As White et al. (2010, p. 231)

have argued on the basis of their empirical example, the stakeholders tend to be fairly critical towards participatory experiments unless they cannot continuously be engaged and participate to the practical trade-offs in the process.

7.3.2 The Case of IKEA in Tampere 2007–2008

The central actor in the second example is the furniture company IKEA. The company opened a new store in the Tampere district of Lahdesjärvi in summer 2010. Three years before the opening, the interaction between local inhabitants and the planning officials had closed up in a permanently locked situation. The housing association made an official complaint about the traffic arrangements in their housing district to the Supreme Court in October 2007. The key issue was the interchange traffic alignment, creating the locus of the dispute. At the very early phase, the local planning officials thought that the housing association was not willing to discuss about the interchange and it was obvious that the process was going to end up in court. IKEA, however, needed to have an interchange traffic arrangement and this within a reasonable time. This had been the condition for the deal made earlier between the city of Tampere and IKEA (Tuomisaari 2009, p. 8):

> We said very clearly in the first meeting with IKEA that we have no communication whatsoever with the city planning officials, it doesn't work at all. The IKEA representative asked if they could try doing something and we said of course, no problem. Of course we don't know the discussions between IKEA and city, but I think that the IKEA representative has told the city planners that if we (the housing association) are not being heard, the plan won't proceed (Member of the housing assiociation in Tuomisaari 2009, p. 40).

IKEA was not waiting for the local inhabitants and planners to find reconciliation by themselves. The IKEA representative started actively running negotiations with the local inhabitants. After settling the situation with the housing association representatives, the discussions extended involving also the city planners. The appeal was withdrawn in two phases: in February and April 2008. The mutual agreement was based on the idea that the city planners agreed to incorporate the traffic arrangements into a smaller area in the plan and at the same time extend the green areas (ibid., p. 9).

The boundary interaction arose out of the communication between the citizen participants and the representative of the private company. The configuration is interesting since this kind of third-party intervention, with a company actively seeking to solve a conflict, is not a common practice in the Finnish planning context (Leino 2012, p. 391):

> We had prepared ourselves very carefully to the first meeting with the company. We explained our situation to them very thoroughly, and why we had appealed to the Supreme Court. […] Then they (the company representatives) told us very clearly what kind of traffic arrangements were needed, or IKEA will withdraw from Tampere. It wasn't a threat, it was a clear statement and we understood their point of view. Both sides spoke frankly, we both talked no-nonsense to each other (Member of the housing association in Tuomisaari 2009, p. 47).

This citation is important in terms of trading zone's situational agreement. It was exactly the thinness of the trade that enabled the cooperation between the civic

actors and the representative of the private company. They approached the wicked situation from a very distinct set of values but still managed to negotiate the situational agreement in a way that both sides were happy to sign it.

Thus, the IKEA representative can be interpreted as the broker of the case. In order to develop, boundary interaction needed a person who could frame the situation differently and this way enable the common understanding to evolve. From the perspective of legitimacy, credibility and salience (White et al. 2010, p. 219), the trade-off and responding to the critique of the housing association was very important in order to proceed in implementing the plan. The IKEA representative did not impose the company's vision of the plan, and as the negotiations moved forward, they stepped aside (Tuomisaari 2009, p. 60).

The boundary object in this case was the master plan and the interchange traffic arrangement in particular. All the actors could identify with this boundary object, but it had different meanings for different actors. IKEA needed the plan with the interchange as quickly as possible. However, at the same time, the master plan process and especially the traffic arrangements appeared as a burden for the local housing association. The city needed the interchange, as they wanted to have IKEA in Tampere and other smaller business entrepreneurs to the area. Thus, there was a strong interdependency among the key actors in the process. Interestingly, the plan, served as a boundary object in that precise moment, but at the same time, it connected other temporal horizons as well. For the inhabitants, the boundary object entailed meanings that were created within the last 30 years, whereas the temporal horizon for the city planners and IKEA was more future oriented, which also shaped the meanings they gave to the boundary object. The situational social sphere was this way integrating several temporal horizons (cf. Jokinen 2006, p. 211).

The city planning officials had the economic development of the area as their first priority, and the participatory process was left in the margin. Given the idea that a boundary organisation maintains its legitimacy by actively soliciting feedback and input from a diverse range of actors, the planning procedure did not act as a boundary organisation in this case. Only by responding to the critique of various actors can stakeholders be continuously engaged and progress made (White et al. 2010, p. 231). The lack of genuine interaction was the reason why the legitimacy of the proceedings suffered. However, the tension between the actors narrowed the multiplicity of interests and became as a fairly simple trade-off setting. The wicked participatory process turned into trade valid only in this case.

7.4 Conclusions

The aim of this chapter has been to elaborate participatory planning practices from the perspective of boundary organisation, boundary interaction and trading zone. The overall picture of the participatory planning setting employing these concepts is presented in Fig. 7.1.

The planning area acted in both cases as a boundary object that brought together diverse actors with differing interests and divergent goals within the planning

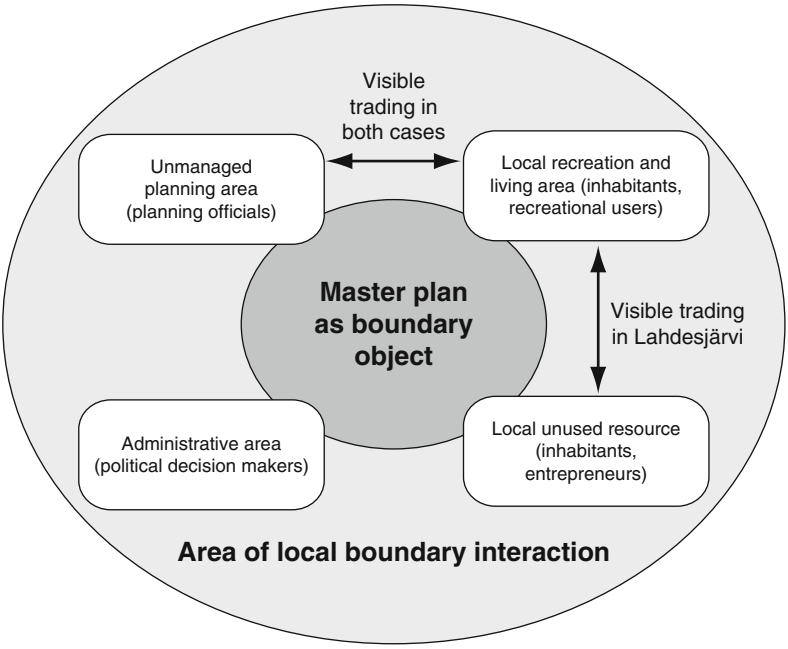

Fig. 7.1 Planning process as a boundary organisation (Picture remade according to Åkerman et al. 2010)

procedure. Thus, the planning area had the ability to attach to heterogeneous practices and interests. The boundary interaction was materialised between the actors and their differing social worlds. The planning officials' first objective was to update the existing plan in both cases aiming to a plan that would serve the current needs better. The previously unmanaged or outdated plan was to be developed into a more potential one for housing and economic purposes. The political decision makers viewed the area from a governance perspective. The planning procedure in both cases had to fulfil both national planning and conservation norms and still serve the diversity of local needs. For the local inhabitants, housing associations, different hobby organisations and local and international entrepreneurs, the planning area was either seen as a recreational living area or as an underdeveloped area.

Although the actor groups in Fig. 7.1 are strongly simplified, the interdependency among the actors was evident in both cases. In Lahdesjärvi example, the interdependency was very concrete, impacting directly to the proceeding of the plan. In Pispala, the interdependency among the actors was more discreet. There were no actual breaks in the communication between different stakeholders, but more importantly, the escalation of the participatory project as a process that intertwined numerous actors and their views into the process was enabled by people who approached the

area differently than just as a usual planning case. The local effort was dependent of the support and resources given by the EU and the willingness of the city planning department officials in trying out something new. The extensive participatory project was not totally outside the conventional planning process but was carried out alongside it. As a consequence, the identities, views and memberships of the people and actor groups started to multiply during the process (cf. Åkerman et al. 2010, pp. 181–188).

Thus, the whole setting in Fig. 7.1 can be interpreted as a boundary organisation where the complex layers of national and international planning norms and legislations intertwine with the local practical implementation and intersect divergent actor groups, interests and negotiations. However, as the empirical cases illustrate, the possibilities and resources for collecting and sharing diverse types of knowledge within the planning process are marginal and thus problematic. As Laura Lieto highlights in Chap. 9 in this book, there are always actors who remain outside the trading zone space and boundary interaction. As a consequence, in the IKEA example, there was a clear need for a negotiator in order to define the problem scale and mediate the information flows between the other actors. The situation required a solution that took a form of a trade between IKEA, the city planning department and the housing association. The trading and negotiating was apparent also in Pispala between the local inhabitants and the city planning officials.

When trying to find new and socially robust ways in developing a shared meaning concerning a plan among diverse actors, I want to highlight the importance of context. It is in the particular situation at hand in which issues are opened up to the public and the possibilities for boundary interaction outside traditional municipal institutional settings either appear or do not (Leino 2012, pp. 392–393). I agree with Fuller (2008, p. 15) that while the practical settings vary from case to case, they still contain significant similarities. In some cases, civic participants may evolve and enforce norms of their own, while in others, they may depend on formal rules (Fuller 2008, pp. 15–16; Leino and Laine 2012, pp. 96–97).

A common aspect with boundary interaction, trading zones and public participation is the fluid nature of cooperation. In spite of proactive preparation in planning, the objectives of the plan may radically change along the way and the whole process may become more unpredictable than before. Although not every form of participation in planning creates a trading zone or boundary interaction, the ideas behind the concepts of boundary interaction and trading zone encourage seeing the unstable elements as positive development also in participatory planning processes. As Jones et al. (2006, p. 732) have claimed, in terms of effective governance, the old regulatory structures have failed, and one element of this is the development of new institutional forms such as boundary organisations, in order to respond and react within multiple actors and interests. Hence, the unstable, temporary and sudden turns during the planning process should be seen as positive features. It is time to rethink how these elements could be used as strengths also when developing participatory processes.

Looking at the cooperation of multiple actors from this angle emphasises the role of local knowledge and the social relationships that affect land-use management and planning. It also means that boundary interaction leads to transgression of the

existing boundaries. Boundary interaction is not just bending the boundaries in terms of utilising knowledge; in addition, it is changing the position of citizen participants and direct citizen participation. The civic actors in the empirical cases were not just being heard; they influenced the processes in very concrete way. According to Bruno Latour (2007, pp. 814–815), public involvement in political decision-making processes should not be about trying to define the procedure in absence of an issue, as a question of procedure, authority, right and representativeness. This applies to participatory planning as well. The questions of issue and the assemblage of the public are defined in the particular situated location which makes both trading zone as well as boundary interaction interesting concepts also from the standpoint of pluralist democracy.

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Chapter 8
Trading with Enemies? The Trading Zone Approach in Successful Planning Processes in Sicily

Daniela De Leo

Abstract This chapter examines two cases of successful planning in Sicily, within a Southern Italy context characterized by a high level of social fragmentation, a strong territorial relevance of the Mafia, widespread corruption and incapacity of public action, and a general absence of civil society.

In both cases, planners revised their approach to problem-solving, thereby 'developing new procedures and terms to address the complex and specific problems they were tackling' (Fuller 2006, p. 51).

This chapter interprets these cases as an example of trading zone, whereby planning tools were able to effect a positive change for cities, places, and practices.

Two cases do not constitute a 'regularity' (Galison 1999, p. 18), although the 'thinness' of their success in such 'extreme contexts' prompts us to explore the processes that unfolded within the 'thickness' of the established culture, with its norms of domination, individualism, and 'particularism'.

It seems important to understand what has really been done here and how different actors with apparently irreconcilable differences and interests have cooperated and achieved surprisingly good results in urban planning. To further this, the aim is to contribute to planning theories and practices and to understand how the trading zone approach could enhance the capacity of urban governance in these difficult and 'extreme' contexts; it will not only contribute to the current lexicon of planning theories and practices but also help establish new strategies 'to encourage positive outcomes' in multiple urban contexts.

Keywords Organized crime • Disorder • Intractability • Alterity • Extraordinary commission • Inertia

D. De Leo (✉)
Department of Design, Architecture, Technology and Environment,
Faculty of Architecture, "La Sapienza" University, via Flaminia, 70, Rome, Italy
e-mail: daniela.deleo@uniroma1.it

A. Balducci and R. Mäntysalo (eds.), *Urban Planning as a Trading Zone*,
Urban and Landscape Perspectives 13, DOI 10.1007/978-94-007-5854-4_8,

8.1 Limits in Urban Planning Theories and Practices in Conditions of Disorder

This chapter examines the comparison between successful planning processes in two cities in Sicily. Their successes are relevant in a wider environment of the failure and inefficiency of planning. This suggests reading them through the trading zone approach, especially considering the effectiveness of these initiatives – according to Galison's point of view – within the 'thickness of the established culture', characterized by norms of domination, individualism, and 'particularism' (Gambettax 1988, 1996; Pizzorno 1991; Putnam 2002).

The widely documented failures of urban and development planning processes in Southern Italy demonstrate the limited utility of current planning theories to actual urban problems in this territory.

Although certain phenomena may be qualified as extreme, given the extraordinary power of organized crime (OC) on urban dynamics of these regions, the cases illustrated here may help us to understand some of the broader limits of communicative planning: the asymmetry of power, lack of social capital, conditions of mistrust, and discordant value systems among people are particularly crucial in these regions.

In a context historically occupied by regional organized crime (the Sicilian Mafia[1]), the regulation system is usually bent to private interests (Cremaschi 2007). Urban planning regulations and practices are frequently geared to protect private interests, even if illegal. In this political climate, the general public is rendered sceptical of the legitimacy of government and technical powers and comes to doubt the presence of an intact institutional value system.

As indicated by recent researches (Donolo 2001; Cremaschi 2008; De Leo 2008a, b, 2009, 2010, 2011a, b), criminal organizations in these areas often influence the design and implementation of urban public policies.

This process is not a marginal phenomenon but rather the society's organizing norm, complete with its social detriment and effects on the practices of urban and territorial planning. The result is a stagnant and depressed state of affairs regarding public spaces and general living conditions, since the public sector has minimal ability to change or improve the quality of life in the cities.

These conditions bring new questions to current planning theories (Mazza et al. 1996; Friedmann 2003; Sanyal 2005; Balducci and Bertolini 2007; Thomas 2007) and paradigms (Faludi 1982; Innes 1995; Allmendinger and Tewdwr-Jones 2002) as we know them.

Indeed, existing theories and practices – ranging from the traditional to the collaborative (Healey 1997; Innes and Booher 2005; Innes et al. 2007; Forester 1999) and to the more radical (Alinsky 1971; Grabow and Heskin 1973; Friedmann 1987, 1999; Sandercock 1998; Hartman 2002; Douglass and Friedmann 1998) – all seem ill-equipped to explain such 'extreme conditions', primarily because they do not account for the role of *illicit and informal power structures*[2] (both visible and invisible) as part of the planning process (from decision making to implementation, and so on).

The term ‘extreme conditions’ refers here to conditions in which organized crime, corruption, and ‘disorder’ are structurally concentrated; conditions experienced mostly in poor and underdeveloped locations (neighbourhoods, cities, and regions) are in fact present in both advanced and less developed countries.

Research into developing countries has elucidated a number of useful issues (Roy 2006, 2009, 2011; Wacquant 2008; AlSayyad and Roy 2003; Rotker 2002; Caldeira and Holston 1999), even if it is evident that planning theories have not yet clearly addressed such ‘extreme conditions’ outside the scope of total poverty or in conditions lacking a sociopolitical structure, but which entail perverse forms of development and weak or corrupted institutions.

In this framework, planning theories must also reckon with a different set of implications for some of the crucial aspects of the broader disciplinary debate – for instance, urban governance and institutional transformation (Beauregard 2005; Healey 2005; Moulaert 2005).

On the one hand, the exploration of the contradictions between formal and social regulations is very limited, and theories show the strain of planning systems when regulatory systems are under pressure and not particularly developed. On the other hand, the survey of the literature pinpoints a significant underestimation of the relationships between urban practices and criminal/illicit and informal power structures, despite significant evidence, empirical and nonempirical, about the important role played by them within the planning processes.

In areas with a strong presence of criminal organizations, these powers are able to bend the system to support real estate profits (Schneider 2004; Schneider and Schneider 2001), or other various purposes; illegal building (‘abusivismo’) and political patronizing (‘clientelismo’) are frequent and evident in many parts. The facets of power garnered by these organizations include the ability:

- To defend and promote private interests (especially those that are their own, but not exclusively), therein jeopardizing and marginalizing the public arena.
- To delegitimate the public power (of politicians and technicians) by hook (corruption), by crook (violence/intimidation), or simply by preserving the *inertia.*

For planners, the main problem is that outside of a framework of a public interest and legitimacy, it appears that ‘urban planning is nothing’, since planning theories and their application are unable to promote better living conditions for cities and citizens in extreme conditions of this sort.

However, in apparent defiance of these very problems, two distinct but equally remarkable urban programmes presented the opportunity to manifest a different reality, defining rules, projects, and new behaviours. These initiatives transformed cities in ways that must be understood fully if similarly positive processes are to be sponsored in other urban contexts. By understanding the mechanisms of these two programmes, we may be better equipped to create successful strategies and encourage favourable outcomes in other contested conditions.

8.2 Successful Thin Stories: Contrasts to the 'Thickness' of the Established Culture

The *Urban-Italia Bagheria Program* and the whole design and approval process of the *General Town Planning Scheme (PRG) of Villabate* were successfully conducted in two municipalities within a region historically managed by the Mafia. These cases represent a positive discontinuity when compared with the traditional abuses and common bad territory government. Indeed, here the planning tools and processes applied in these initiatives were able to change the two cities, both from physical and social points of view.

Both municipalities stalled (twice) when their members resigned due to Mafia infiltrations and were then replaced by a *special temporary commission* with extraordinary powers in planning matters (called *Extraordinary Commission*).

Undoubtedly, the period of external Extraordinary Commission offers a unique environment of stability and certainty, often simplified compared with ordinary conditions: commissioners give clear guidelines for specific technical problems, often related to plans and planning practices. As part of the activities under the commission, those relating to urban planning can go through the revision or preparation of an 'urban programme' or a master plan, with or without the real ability to concretely change or improve the quality of life in a certain place.

Change can be temporary (for the duration of the Extraordinary Commission) or longer lasting. Of course, to make 'change' happen, it is not sufficient to draw up a plan: as the two cases show us, it is necessary to define practices, new ways of working, new tools, and new institutions (even temporary ones) able to change interpersonal relations, through the design of standards, rules, and spaces.

It is necessary, then, to ask what has worked and what has made it possible, in both cases, to define a path of unprecedented change for these areas.

The trading zone approach offers interesting ideas to understand who and what has been done through trading.

Specifically, this case-studies comparison explores how the concepts and tools applied 'in that specific site, in that specific time' (Galison 1999) (a) affected trading between the different subjects involved in a changing process and (b) constructed a previously non-existent 'common sense' with tangible effects on the physical spaces and the public sphere, all things regarded as the most significant results of these planning processes as a whole.

This chapter tries to deal with these questions in order to understand if the trading zone approach – useful when used in conflict-laden situations qualified by discordant interests – could help us to improve planning practices in contexts in which organized crime plays a very relevant role, especially in terms of a distortion of interests.

This role of organized crime is strong not only in terms of corruption but also in the reproduction of a particularistic and opportunistic *habitus*, which is clearly opposed to urban transformation and to good territorial government.

If corruption is (or should be) a concern of the general judiciary and police departments, then proper plans for each context and an effective implementation of urban

and regional planning processes are clearly the responsibility of planners. This could be done in several ways. The success of a planning process depends upon appropriately identified goals and effective practices leading to the desired transformation. Of course, there is always the strong influence of the political framework (whether a support or a barrier to the specific action planning and governance of the territory), but there are different options for managing the challenge of each type of context.[3]

A brief description of the two cases will highlight significant similarities and differences.

8.2.1 Bagheria and Villabate: An Overview

Bagheria has implemented an urban programme of integrated actions that designed physical interventions, sponsoring the reclamation of public and private buildings, the renovation of several city squares, and the promotion of cultural and public events related to resources and urban traditions and territory.

In particular, the programme was able to activate a network of 'unexpected' subjects that have gradually been managing the challenges proposed by the Urban-Italia Program. This happened, above all, during the second phase of implementation (2004–2008) and through a significant renewal of practices, languages, and styles.

At the beginning of this process – with local institutions discredited by two Extraordinary Commissions for Mafia infiltrations in less than a decade – there were only discouraged people, adrift from institutions, with entrepreneurs rendered evanescent and distracted, and a very weak administrative and technical apparatus. Clearly, these were not 'optimal conditions' to trigger collaboration between citizens and institutions – a process that is indispensable for the implementation of an urban regeneration process, as proposed by the programme.

One of the most significant practical strategies was to facilitate access for all – equally and without distinction (thereby defying the existing culture of 'special favours') – to information resources, by means of communication campaigns, adult workshops, initiatives in schools, the promotion of cultural events, and the opening of public spaces for interaction and confrontation (the *UrbanCenter* and *UrbanPoint*). Similarly, the introduction of several simple but clear rules for access to public funds (to be allocated, e.g. for the restoration of the facades in the inner city) served to *facilitate trade* and generate a newly shared and relevant culture of regulation.

In addition to the information and communication activities sponsored by its urban programmes, the Urban-Italia Bagheria Program has built a sort of common language and 'culture of well-doing', consisting of clear, transparent, and simple slogans promoting the embracing of citizenship and exhortations to 'live in the municipality'[4]. Significantly, the revision of the initial slogan 'RESTART FROM THE VILLAS' to the second phase mantra 'LET'S RESTART FROM THE VILLAS' and later, the adoption of the dictum 'THE BAGHERIA WE HAVE WITHIN US' illustrated and inspired a culture of 'giving back to the city' through public initiatives in public areas. This process has newly defined the physical spaces and social opportunities for urban renewal in a broader sense.

In particular, the *UrbanCenter* has become the meeting place for groups of women and young people (previously unknown to each other), as well as the site of a 'Time Bank', an initiative inextricably linked to the assumption that people can live better by convening and exchanging what they have.

In recent years, Bagheria has breathed an air of renewal and transformation, invigorated by a revamped general appearance and a different way of experiencing the city and its spaces. The city discovered that it can be other than what it had always been: a city of houses with beautiful interiors but ugly exteriors, in a culture of disregard for the face of the public world. The city no longer needed to be a place without rules, governed only by the 'rule of the jungle', where the strongest did whatever she/he wanted, creating stagnancy for the collective, while the government fluctuated between a period of Extraordinary Commission and a state of regular election.

In Villabate, the town council was dissolved (for the second time) in early 2004 due to Mafia infiltration, amidst the development and adoption of a commercial plan that provided a huge shopping centre within a big urban area of about 15 ha. It was a project of disproportionate dimensions, even by the dimensions of large-scale plans, completely indifferent to the concrete urban dynamics and, last but not least, reported as the target of preferential investment of local criminal organizations by the DIA (Direzione Investigativa Antimafia – Antimafia Investigative Direction). The opposition to this project, strongly backed by the Mafia, pointed out the following problematic inconsistencies and disregard for technical regulations:

- The cacophonous overlap between different tools of urban destinations, all in force at the same time.
- The inappropriate size of the development, given its purported function
- The absence of a regional planning framework supported by inter-institutional consensus.[5]
- Since taking office, the technicians of the Second Extraordinary Commission produced a series of tools and planning practices with high technical profiles, such as the following:
- Speed: in the 'exceptional' time of 5 years, there developed a process that began with the revision of the PRG (town planning scheme) and came to the approval of nearly all the instruments provided for executive planning (PPE).
- *Rigour and transparency* of all procedural steps and sequences, within the motivations to support the process of law for each planning instrument.
- *Everyday Government, on time*: with regard for certain rules and punctuality, compliance as an important effort that allows no distraction or carelessness.
- These developments built a new relationship of trust between citizens and offices, based on clear rules for all, expedient action (when possible), and patient and unambiguous explanations of the reasons for denials (when they occurred).

At the end of the mandate of the Extraordinary Commission and subsequently, with the newly elected administration, Villabate ended up with an approved new PRG, Executive Requirements, and adoption of variations of the larger productive area (PIP), as well as the completion of a building amnesty program: a very important result in this context but also in the wider sense, because the extra power of the Mafia is fuelled by the lack of territorial government.

This renewed political and cultural environment created the conditions for constructing new buildings legitimately and efficiently. In this context, the role of offices at all levels is crucial: the respective ability of various parties to understand and support these processes is requisite for the promise of a new urban culture (Bazzi 2010).

8.2.2 Good News from the Cases: Opening a Space of Negotiation

One of the important elements of success of these cases is the fact that the two planners were able to plan and then implement an urban programme and a master plan.

In this framework, the most important actions in both programmes were the following:

- Improving the budget, quality, and collective appropriation of public goods, common spaces, and commons.
- The definition of new rules and procedures entailing simple and clear processes of urban renewal and urban development.
- Transparency and public communication of decisions by public officials and offices directly involved in the management plan/programme.
- The involvement and empowerment of the people (especially youth) in the new procedures and sound reasons for the public interventions.

Through the PRG and the urban programme, the municipalities have been able to impose a number of regulatory restrictions that are generally not easily acceptable: for example, in Bagheria, it was decided that public funds for the recovery of the facades could be granted only for the facades of legally condoned or legally constructed buildings. In this way, in addition to the request of anti-mafia certificates for all construction companies involved in projects funded by the municipality, the new legislation has also produced the tangible effect of legalizing the buildings in the process of restoring them.

Different urban practices, a change in styles and procedures, and an exchange of balanced and benefits rules have produced important and unexpected effects that have helped change the city.

In addition, both the Urban-Italia Bagheria Program and the PRG of Villabate have had positive impacts on the institutions themselves as they have:

(a) Prompted the town to take on new commitments, some of which are ordinary and simple, but which regard a large part of the community.
(b) Renewed the public image of the city: Bagheria at local, national, and European level, thanks to the performance achieved in the implementation of the programme; Villabate on a local scale, with its uniquely regional effectiveness and the efficiency of ongoing work by the commissioners.

The urban programme and the implementation of the PRG have contributed to the qualification of public action and the assumption of codes of conduct to account

for and balance various interests, in the pursuit of enlightened programming, with transparency and legality. Certainly the introduction of simple and clear planning rules functioned as a device that allowed trading in a different form of relationship between citizens and institutions and brought to fruition conditions that were previously unimaginable.

To understand how this was possible, we can think of planning activities and implementation as the outcome of an unprecedented state of collaboration, apparently born of a kind of *truce*. The truce, however, is not simply a product of the Extraordinary Commission: in most cases – even if, as in these cases, the Extraordinary Commission is due to reasons related to town planning activities – the process tends to produce little or no change. In fact, the Extraordinary Commissions often lead to stagnation and further inertia and not to the production of plans and projects, much less to any reliable and efficient implementation.

In these cases, the truce has concerned the definition of a different area of the relationship, as the result of a negotiation that simply was not possible before. It appears that bonds of trust were constructed in Bagheria, as we previously stated (De Leo 2008b; Cremaschi 2008), but the new-found trust came from an unexpected and unprecedented exchange area in this context. It is here that the cases seem to define the trading zone as yet unknown by the people and institutions, by no means a foregone conclusion in an area where public action tends only to preserve the status quo and the existing interests rather than incite any transformation process regarding the interaction and combination of subjects and interests.

As the trading zone approach suggests, this small set of concrete actions has served as a 'boundary object' (Star and Griesemer 1989; Galison 1997) within a specific 'time of negotiation' during the entire planning process. This is where the largest gap is, compared to other processes: *the discontinuity* lies in the relationship with inhabitants and in their traditional endorsement and common defence of vested interests; people rarely mobilized and involved in public events and participatory processes, due to an atavistic distrust of institutions, and in parallel confidential convergence of interests and benefits to the system of protections and guarantees that is afforded by organized crime.

For the sake of familiar relationships (especially in small towns or on the outskirts of bigger cities)[6] or for the (better conditions offered for the) most efficient supplying of goods and services (including security) in some areas, organized crime is a concrete *alternative*[7], which moves in opposition to the relationship with the institutions and the visions proposed by the initiative of public programmes, especially those born under the Extraordinary Commissions, too often short-sighted and conservative.

The proposal for new types of institutions and a different vision of the city can attract the attention of the inhabitants, but only if it is possible to pave the way for the relationship, for the trading zone, indeed. Without this trading zone, there is no plan or project, however perfect and well communicated, that could be implemented to change the ongoing status quo. It clarified for us, once again, that the quality of the communicative project is necessary but not sufficient to guarantee the success of a planning process.

8.3 Through the Lens of the Trading Zone Approach

8.3.1 Trading Zone Is About Interests

The trading zone approach allows us to place under observation what has happened between the parties (citizenship and institutions) to allow plans and programmes to be successfully designed and implemented (Balducci 2011; Mäntysalo et al. 2011).

In these unusual cases, it was not a question of inertial stasis (a sort of waiting for 'better' times to return in order for business to take place) according to the usual and widely accepted social norms of *particularism* and individualism. On the contrary, there was a swift call to action in the face of existing barriers. In this sense, it is limiting to think that the success of the cases is the effect only of the Extraordinary Commission, since they are not really able to change gear in terms of the renewal processes of government of the territory (Mete 2009).

This was something stronger than any effect of the Extraordinary Commission where the aim was (only) to change (temporarily) the relationship between organized crime (temporarily paralysed given the prosecution or the simple tactic of survival) and the commissioned institutions with special powers. Both Villabate and Bagheria contain territories in which the entire social agenda depended on connivance with the Mafia. Bad governance and poor management of particularistic interests were customary.

Hence, in this case, it has been crucial for the possibility of a reduction – even temporary – of the distance and conflict among the common social fabric, with background and cognitive values structurally hostile to public action (directed for processing by a different design of spaces and public sphere) and the 'new institution' (transient/temporary, with no past and no future, renewed ostensibly to do well).

In this relationship, the cases' success seems to be located. Particularly, through the lens of the trading zone approach, it is clear that the success of the urban plans depends upon the interruption of a condition of prevailing indifference, hostility, and substantial delegitimization of public institution activities.

This condition, of course, precludes not only shared objectives for an urban programme or development but also participation in the 'project of change' which can only be such if it can involve a large section of the population.

Therefore, the significant fact is that in both cases, an intense and rapid process of change ensued, involving a loss of control and power for the organized criminal body, in which the institution and the 'social fabric' actually cooperated for change, creating a situation which did not exist before, similar to a trading zone.

In these cases, a higher degree of *irreconcilability* and *incompatibility* of values and purpose is found, from a neo-institution (temporary and aimed to achieve special urban and regional interventions illuminated by legality and transparency) and a population largely hostile and culturally alien[8] to public interest and intervention. The negotiation was thus conducted on a specific steep terrain of previously unimaginable interest, but one which has proved crucial (in general and in context)

for adherence to the transformation programme: the public (or *collective*, according also with Tait 2011) interest.

In particular, in the cases under consideration, it was possible to trade:

- *Redefining the boundaries of the legitimacy of private interests:* 'it is not permissible to do anything that is not technically relevant', 'whatever is outside the rules is outside public funding, but following these procedures – the same for everyone – it is possible to regulate one's position and obtain funding', and so on.
- *Reintroducing through practices (the idea of) the public interest:* redefining and rebuilding the public spaces of relationships and social life within urban tissues which developed autonomously, and unplanned; promoting cultural events well rooted in local traditions; providing training opportunities and 'normality' to the most vulnerable people; and also investing public funds for roads and sidewalks.

This process of negotiation remains, of course, strongly provisional in nature and could end up by gradually reabsorbing the results achieved through implementation: the closure of the Urban Center in Bagheria, which occurred after the end of the programme, is a clear evidence of this. In a similar state are all the degradation/disorder processes that attack the final outcomes of a transformation process by restoring the status quo. The effects are devastating since these demotions appear to produce not only physical effects, but general distrust and, again, the discrediting of public action.

8.3.2 A Slow Transition from 'War' to 'Peace'

As has been pointed out, it is possible to think of these cases of success in difficult situations by using the theories of conflict resolution[9]. In this way, they appear as possible transitions from the 'war', or the uncertainty and instability, to the 'peace', the renewed action of the city government. Within this theory, it is assumed that this step is only possible *through negotiation*, clearly feasible even in a condition in which the interests, orientations, and values are not shared but are in conflict.

In this kind of conflict, it is not possible to immediately switch 'from war to peace', just as in our case it is not possible to go 'to order from disorder', but it happens during a slow process which is here read as a process of trading.

Certainly the contrast between the government (of the territory) and Mafias can be read as a permanent and, normally, low-intensity war[10]. In both cases, the planning process did not follow a traumatic disruptive event[11] that disturbed the strong social orientation and was thus able to form the basis for new relations between citizens and institutions. We are not, therefore, in the presence of what Galison called 'external forces that can drive participants into exchange', but in a state of stasis. Although probably, in areas historically less compromised by the 'mafia' than these two, an Extraordinary Commission may in fact constitute a break or set the scene for new forms of agreement between the parties.

At the beginning of the described processes, the condition in which both cities found themselves was much closer to the acceptance of people living with bad governance without complaining, or asking for a new course; and breathing in the fatal belief that (politicians) are all equal and that no project will change anything, or nothing much will ever change.

It becomes crucial, then, to understand how it has been possible to emerge from this state of 'war' (in this case, more appropriately, of disorder and misrule in ordinary public affairs), and reach a different condition, at a different stage.

In this sense the trading zone approach offers some ideas to interpret the trading action that took place in the negotiations: it suggests that there was no abuse of power or the surrender of any of the parties involved in the conflict, but a partial adjustment that produced new conditions in which subjects and things arranged themselves for the changing.

8.4 Trading with Enemies?

The guiding principle is that A cannot convince B of A's own values; A cannot forget what has been done to them or their family (in this case, for example, that B is someone who has had to deal with the Mafia, has been corrupted by the mafia, or has a relative in the mafia). Despite this, to allow government action it is as possible as it is necessary to find room for interaction. Therefore, it seems useful to understand how to find the common value, positive for both parties, that will allow change in the status quo, even if this may mean interacting with the enemy, with those who think differently but can be led to act jointly.

8.4.1 Who? The Crucial (and Impartial) Role of the Planner[12]

The relevant aspects which emerged from the case studies confirm the crucial role of the two planners, in this case two female urban planners, Dr. Marina Marino in Bagheria (with Maria Cristina Lecchi) and Agata Bazzi in Villabate. These have played the role of third party with regard to the commissioners or the elected mayors and have facilitated negotiations through their new practices and languages.

In detail, the cases are slightly different because:

– Dr. Marina Marino, in Bagheria, a manager on temporary contract, has already had several roles in the recent history of the municipality and with the former Extraordinary Commission, as well as in the design of the urban programme: she has a programme to implement, designed by herself in conjunction with a group of expert colleagues and relatives closely involved in the action of urban transformation; moreover, with the funds of the Urban-Italia Program (extra, specially allocated funds for the municipality budget), she set up an efficient working team, especially through a *symbiotic relationship* with a communications expert,

Maria Cristina Lecchi. She opened the Urban Center and coordinated a group of active young local people.
– In Villabate, the architect Agata Bazzi was part of the second Extraordinary Commission, afterwards becoming technical manager for a full-time and indeterminate period; she worked with people within the institution and with an external consultant (Dr. Marina Marino) by changing the rules and procedures of Public Relations Office of the City/Technical Department. She has been available to all those who had doubts or concerns about the choices of the plan they were working on and opened the doors of all the offices, in the position of a technical expert who explains and listens without being intimidated or corrupted by anyone.

In both cases, however, the planners have acted in their own role as follows:

– *Technicians*: hired directly by the Prefectures Committee on the basis of their qualifications and merits in the field in similar and neighbouring territories.
– *Outsiders*: neither of them lives in Bagheria, which means that, theoretically, they have no strong local ties of kinship, and own no land in areas covered by the plans.
– *Temporaries*: they were called to perform a task *with a beginning and an end*, so they do not have to spend the rest of their life there and were able to do what they were supposed to do, to the best of their abilities, even if Agata Bazzi remained at the end of the process as technical manager, thus able to follow through the details of implementation phases.
– '*Clean*' and on no-one's covert payroll, arriving ex novo as part of the Extraordinary Commission.
– *Not politicians*, 'because in the end all politicians are the same', but technicians, and therefore representing pure government action in the territory.
– *Not part of the police force either*: the police, in this case, are the commissioners, with a specific job to carry out, and as such, outside the friend/enemy logic whereby, in this area, the police are not always friends.

8.4.2 How? Activation of Tactics of Reconciliation and Resolutions of Conflicts

In keeping with conflict situations, in these cases too, it is useful to think about the results achieved by negotiation in terms of reconciliation and resolution. In both processes, in fact, a kind of double level of *reconciliation* and *resolution* has been determined.

On the one hand, the *reconciliation* is obviously *temporary* from the point of view of social conditions and the general transformation of relationship dynamics: no miracle has happened, and it is not true that after these processes, the Mafia will no longer exist in local government. Its bulky presence is still reflected in relations between citizens, institutions, rules, and behaviours, which are not *magically*

transformed into the final resolution of the conflict – insoluble conflict between public interest and the deeply rooted and widespread conviction of the *uniqueness* of private interests, whether legitimate or illegitimate. We have no illusions, of course. On this level, the maximum possible result (confirmed by the remarkable work of the two urban planners) seems to be the production of a temporary kind of trust between citizens and institutions, producing new codes of conduct.

These trading zones are achieved through a number of actions and objects/things introduced into the process as an 'intersection of discursive and materials practices' (Galison 1999, p. 7). *Boundary objects* (Star and Griesemer 1989; Galison 1997, 2010) differ in situation, role, and function, and are specifically used as useful items to shorten the distances that prevent the relationship, and in this way allow and encourage implementation.

In the cases examined, the boundary objects are not so much the plan or the urban programme itself (in Villabate, indeed, the previous plans allowed access to the mafia power and economy), but what they contain are as follows:

- Clear rules.
- Renewal of technical equipment.
- Containment of the regular abuse of 'the strongest' (the Main Squares in Bagheria returned to public use, or in Villabate, the stop to the construction of an oversize and unreasonable commercial mall).
- Rehabilitation of public and private places, in a sound balance between a wider rehabilitation of several small, single, private interests (the restoring of the facades of all the houses in the Bagheria inner city, as well as amnesties for all the illegally built houses of Villabate, granted through the correct procedures: a record) and the introduction of spaces (physical and social) for the public.

However, some effects come even closer to a *resolution* of conflict. This has to do with the implementation process: the restoration of the facades of the houses built illegally or without authorization, the release of squares from the parking areas controlled by local bullies in Bagheria, as well as the construction of new residential areas or the resolution of amnesty practices in Villabate; all these are tangible and *positive* real outcomes of a broad and deep negotiation process regarding the public interest that has allowed the implementation of such interventions. Obviously, the visibility of these actions makes temporary trust easier and in the long run may also contribute to a (painstaking) resolution.

The nature of the design and planning practices requires the ability to define courses of action with concrete results on which the failure of agreement implies a lack of effectiveness or duration of the effects of the actions ('I won't let you implement that project, using ostracism or intimidation, or just when you have finished it, then it will be destroyed, vandalized, or put to other incompatible uses or functions').

In this sense, it is a more incremental vision of negotiation that aims to produce concrete and visible effects, very often able to amplify the intangible and symbolic results in terms of a change in relationships between citizens and institutions.

The combination of the level and duration of actions of 'mere reconciliation' with the quantity and quality of 'concrete resolution' actions through

implementation activities characterizes different levels of effectiveness, differing in consistency from the overall changes in contexts usually marked by inertia and in-transformability.

So the logic of a combination of 'discursive practices and materials partially but not completely shared' is confirmed within a certain time, a 'time slice' (Galison again); this, however, may also be the effect of previous trading, imagining that an area of trading can be the basis for subsequent trading areas, in deferred time.

8.5 A Different Idea of Interaction

In such conditions, planners are called on to deal with subjects and methods within social systems profoundly influenced by organized crime (historically rooted in some areas) and to find an agreement that allows local government to act. It is necessary to work on 'a set of coordinated local actions, enabled by the thinness of interpretation rather than the thickness of consensus' (Galison 1997, p.10), more than on the general system of values and guidelines (e.g. what is 'legal' and what is not). Although these actions could gradually impact on the redefinition of the boundaries of legality/legitimacy of practices, the aim of the planner's work should not be to correct, educate, or redeem opportunistic, speculative, or deviant behaviour in urban practices. What is needed is what was used successfully in Bagheria and Villabate, 'a set of tools that is not a doctrine' (Galison), to reduce the distance between public action and the complexity of interests that are an obstacle to planning activities and their effectiveness.

We cannot wait for the Mafia to be 'definitely defeated' in its control and management of the territories in order to free urban and development plans or programmes from the dangers of criminal powers, since in the meantime, in the absence of management, it would be strengthened[13].

Similarly, it would not seem profitable to rely solely on the iron fist of the police for a strong or interim government with special powers; the latter then ceases to act as the government because it is outside the norm and often in the 'state of exception'[14] and is, in any case, susceptible to corruption.

On the contrary, it seems possible to do our job as planners by promoting trading through trading in the reconstruction of a system of social and spatial regulation.

While under no illusion whatsoever that we are all equal, good, and equally interested in participating in a process of positive transformation and shared space in which we live (a good project and communication campaign are not sufficient), it is possible to direct planning actions in a different direction: planning does not require the criminalization of the various components of society – which, incidentally, is not the planners' job – but an area of significant agreement (on some aspects) must be found in order to achieve the objectives of the transformation of cities and territories. To do this, we have to take a substantially different dialogue as mode of interaction: one which will open up spaces of mediation with otherness (Trey 1992), which in these cases means the Mafia, or even strongly 'criminogenic' contexts (Garland 1997).

What do we do then: 'trade with the enemy', in order to plan and implement effectively?

In this sense, a direction of Galison's (2004) which is basically consistent with 'trading with enemies' seems to be that of the *Contractual Governance of Deviant Behaviour* (Crawford 2003) or even restorative instead of retributive justice (Barton 2003).

All these approaches converge in the idea of a fundamentally different type of interaction. The assumption is that the difficult defeat of 'evil' cannot be a prerequisite of public action (since often it is far from completely alien to it); it is believed, indeed, that only the promotion of a positive course of initiatives in terms of a different relationship between individuals, groups, and institutions could provide essential background on which progressively to build the conditions for the implementation of durable social and physical renewal.

The orientation of recent critical research into urban governance from the point of view of chronic violence and organized crime looks at this hypothesis with interest because in areas of chronic violence, it is not realistic either to rely on the effectiveness of the opposition to 'the enemy' or for the planner to take the place of a criminal justice system, which is inevitably in a state of crisis in those very areas.

In this same logic, it is possible to agree with those who suggest focusing on the adoption of a framework of restorative rather than retributive justice which goes far beyond their use in the criminal justice system (Strang and Braithwaite 2001): remunerative justice aims at the punishment of deviant behaviour, restorative, at social balance.

What changes dramatically in restorative justice is the idea of public accountability in terms of collaboration for social harmony, with an emphasis on social regulations in general (Gerard 1996). Of course, in this different setting, the responsibility of planners also changes, since they work to strengthen the social fabric. In this logic, as we have seen in the case studies, our planners are more interested in 'getting things right' than imposing sanctions or punishment, while they are defining substantially renovated languages and behaviour as part of their techniques.

Unlike *retributive justice* that focuses on offences and deterrence, restorative justice uses informal processes of mediation and conflict reduction through negotiation (ibid.). This, of course, puts 'planners into new relations of responsibility' (Sager 2009). As a result (and not as 'impossible and unreachable' preconditions), this approach works basically to strengthen the capacity of *civil society* and establish it as the true resource for public action in conditions of disorder.

Endnotes

1. In Italy, organized crime is regionally based, with different names and rules in each region.
2. This is a kind of working definition by Diane and Daniela De Leo (Cfr. Davis 2012).
3. Every time, the planners have the opportunity to say 'yes or no' (Friedmann 2002).
4. 'Municipality' in Italian sounds like 'in common' or in a shared way.
5. Bazzi (2010) and Bazzi (2012).

6. Both are very close to Palermo.
7. Castells (2000) on organized crime as a 'perverse alternative'
8. Compare with the 'Alterity' in Trey (1992) with a special thanks to Tore Sager that cited and sent me this reference.
9. In our very productive meeting in Boston, Larry Susskind suggested to me that I should consider conflict resolution theory for my cases (i.e. Israel and Palestine; Northern Ireland). Scholars of intractable policy disputes argue that stakeholders in intractable public policy disputes are often fighting not only because of their competing interests but also because their values, identities, and frames seem to be irreconcilable (Putnam and Wondolleck 2003; Kriesberg 2003; Schön and Rein 1994). When applied to these conflicts, ADR theory proposes that these more fundamental differences should be discussed and explored, but with the purpose of defining a practical problem that all parties can agree to work on. Usually these groups proceed with the understanding that the process will not seek to change any parties' fundamental values' (Forester 1988, 1999; Fuller 2006).
10. It is well known that criminal organizations prefer peace in the territories where they are, thus avoiding trouble and too many policemen on the ground.
11. For example, as the City of Palermo in the period after the 'Falcone and Borsellino slaughters', with the election of Leoluca Orlando, the new PRG process, and so on.
12. The planner's role is relevant if we consider 'the five golden rules' of the conflict resolution of Larry Susskind, who states that planners are not the right people to be the mediator, although he does not say what their role should be.... (cf. Susskind and Cruikshank 1987).
13. Absence of PRG and urban plans is a common condition in municipalities infiltrated by the Mafia: where there are no (land-use) planning rules and everything has a price; the Mafia has the power to buy and govern at will.
14. Compare De Leo (2008a) for a 'state of exception' interpretation in contexts of the kind.

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Chapter 9
Place as Trading Zone: A Controversial Path of Innovation for Planning Theory and Practice

Laura Lieto

Abstract In this chapter I will argue that place-making can be regarded as a "trading practice" involving different actors who compete, negotiate and eventually agree upon specific socio-spatial arrangements we can call "places". Places should not be regarded as naturalistically given nor as imbued with some long-lasting "identity"; rather, they should be seen as arrangements of power relations in space, elective contexts for subjectivities to emerge, clash and develop, and thus as inherently political.

As a practice of social production of space, place-making is not necessarily based on a dialogue aimed at resolving disputes and finding agreements on values and beliefs; rather, it appears to be mostly based on an ability to cooperate "while still disagreeing", as focused observation of place-making practices will bear out. In this perspective, the trading zone theory developed by Galison – based on the idea that effective cooperation between different groups and subcultures is not necessarily a matter of value sharing, of agreeing about the full signification of what is exchanged – may work as a useful conceptual frame for a theory of place-making as a trading practice in space and, as the case study presented here seeks to do, offer an interesting perspective to learn from, to rethink social innovation in the urban space and how planning acknowledges it.

Keywords Pidgin • Creole • Subculture • Thick description • Boundary object • Transaction

L. Lieto (✉)
Department of Architecture, "Federico II" University, via Forno Vecchio 36, Naples, Italy
e-mail: lieto@unina.it

A. Balducci and R. Mäntysalo (eds.), *Urban Planning as a Trading Zone*,
Urban and Landscape Perspectives 13, DOI 10.1007/978-94-007-5854-4_9,

9.1 On Place-Making and Planning

As many agree, the term "place" generally refers to specific socio-spatial arrangements where physical forms entwine with social patterns at different time-space scales (Hillier 2007), institutional rules with daily practices and uses (Amin and Thrift 2002) and technical representations with narratives and social imaginaries (Decandia 2008).

The complex spatiality of places spurs cognitive and psychic performances of individuals and groups, which are essential to the development of subjectivities. These performances have to do with processes of "political subjectification of liberal subjects" (Huxley 2007, p. 189) occurring in urban space over time. Therefore, places are not to be considered – as is the case when they are assumed as stereotypes – as pre-political entities with a given identity. They are inherently dynamic.

In this perspective, the issue of power matters as well. Certain socio-spatial entities are forged both by repressive institutional forces and agonistic social relations and thus function as contingent arrangements of power. Therefore, they are contested and fluid, being often rearranged to reflect different political frames of reference, social implications and interests (Amin and Thrift 2002).

Place-making – as a practice of social subjectification in the spatial context – often occurs when people are confronted with some form of scarcity, for example, the lack of certain collective facilities or public services. Cases may vary a lot depending on factors such as social and ethnic composition, levels of income, the local job market, environmental quality and the grade of preservation of the urban fabric. But we may reasonably argue that place-making is a matter of creatively producing solutions to everyday life problems that are perceived as such by different social groups and sometimes left unsolved or simply ignored by institutions. In this perspective, place-making can be regarded as an expression of "negative capability", a particular form of deviation from routinized behaviours, or an application of institutional routines in unusual situations (Mangabeira Unger 1987; Young 1996; Lanzara 1993). Acting outside habitual sense-making or institutionalized contexts may give people the opportunity to develop new conceptualizations of perceived problems. That is why negative capability usually arises as a creative resource in critical situations, characterized by uncertainty and emergency, and where institutional competencies do not work effectively.

This kind of capability, quite common in everyday urban practices, can produce innovations – as an unintentional outcome – in the form of collective services or facilities which institutions, for various reasons, are not able to provide. This is typical of certain sectors of urban societies: starting from their specific point of view and interests, groups of citizens, associations or other social organizations can come up – under certain conditions – with original ways to combine their capabilities and available resources in order to improve the quality of life in local contexts. It thus happens that society contributes to the production of commons, but the commons it produces differ from those produced by institutions, being based on a different, contextual and contingent kind of rationality.

Place-making can also be regarded as a linguistic matter. To understand what urban places are and how they work, Michel de Certeau, in *The Practice of Everyday Life* (1990), introduces the metaphor of "textual poaching" to characterize a tactic (as distinguished from a formal strategy) ordinary people creatively deploy to resist, counteract and make active sense of mass consumption and domination strategies in contemporary societies. But why "textual"?

Textual poaching corresponds to a practice of active reading, based on the idea that, when we read a text, we are not just passive recipients of a written message, but we actively collaborate with it to reformulate it and make our own sense out of it. In this metaphorical perspective, the reader is the city dweller and the book is the urban space, with its symbolic and syntactical structures, which the reader needs to be able to interpret correctly and promptly in order to effectively cope with the multiple and unforeseen occasions that the city offers (Lieto 2006).

Everyday life can be depicted as a constant and creative – and sometimes subconscious – dialectics struggle, between normalizing and insurgent powers. It is the arena where people contend with institutions striving to regulate their preferences, behaviours, movements and lifestyles and assimilate them into prefixed, normative schemes. In de Certeau's perspective, this struggle is, in substance, a clash between different linguistic codes.

Conceptualizing places as creative and symbolic settings, open to social innovation and having their own "linguistic" structures, draws our attention to power relations in space as mediated by language. These relations obtain between different subjects (not just the public or organized groups, as in formal governance settings, but all potential competitors and place-producers) who negotiate, contend and make temporary agreements about material and symbolic arrangements of their lifeworld. These agreements are not necessarily based on shared moral and cultural values; in fact, they are often reached despite irreconcilable differences between the parties involved.

In these terms, place-making can be regarded as a matter of "space politics" (Dear and Flusty 2002; Soja 1999). In this context, "politics" is to be intended in the broadest sense of the word: it is not necessarily driven by the law, morality or civic responsibility nor is it the expression of a political party, but "when it occurs, it is always original, always a rupture with tradition" (Zanardi 2011, p.104, *my translation*).

This perspective strongly challenges "professionally certified" planning (Davoudi and Strange 2009), insofar as it stretches the latter's underlying ideology to its limits by deploying socio-spatial practices producing innovations. Although there is a wide agreement about the need for collaborative forms of planning (Healey 1997) addressing diversity, multiplicity, contingency and the conflicting practices and demands arising from socio-spatial contexts, we should be nevertheless aware that irreconcilable differences (in values, identities, cultures) between actors stand in the way of a full agreement about change and future based on mutual recognition, inclusion and respect. And these differences may undermine the principles of justice, equity and conformity that form the ideological background of spatial planning.

9.2 The Applicability of the Trading Zone Theory to Place-Making Practices

So how are we to deal with irreconcilable differences and bring about change in a collaborative perspective within the socio-spatial arrangements we identify as "places"? What kind of theoretical frame is best suited to address this issue in planning terms?

We cannot presuppose the nature, values and objectives of actors involved in place-making. Their identities, as in the case of places, are not naturalistically given. Neither are they fixed, as they change over time in relation to several, variable factors. Furthermore, we cannot presuppose that when actors agree on spatial arrangements fitting certain needs or requirements, they also share values and beliefs.

If we look at this issue from an informal perspective (i.e. a "non-planned" one), this becomes even clearer: in many cases of place-making practices, such as the one I present below, collective solutions to perceived problems are produced on a thin basis of agreement which does not necessarily presuppose value sharing to work. In other words, people involved in place-making can achieve innovative results by "cooperating and still disagreeing" (Fuller 2008).

In such a perspective, the trading zone theory – which in recent years has been taking hold in different fields of knowledge (Kellogg et al. 2006; Gorman 2007), since the seminal work of science historian Peter Galison – offers a useful conceptual frame to understand in practical terms how urban places can function as contingent and contested arrangements of power relations in space. This frame is also useful as a means to bring into focus the problematic relation between place-making and planning, which – as we will see in the case study presented below – may strongly undermine ideological principles of social equity and justice deeply embedded in "professionally certified forms of planning practice" (Davoudi and Strange 2009).

Born in the field of science epistemology, the trading zone theory aims essentially at understanding why it happens that irreducibly different fields of knowledge, or subcultures within the same field of knowledge, manage to cooperate and achieve, in forms of "incomplete coordination", concrete scientific results and in some cases true innovations. This happens, according to Galison, because subjects belonging to different subcultures sometimes create interlanguages, that is, linguistic systems that – like pidgin or creole languages in anthropology – work as a "trading zone" where all actors involved *agree to exchange*.

Galison (2010) argues that "at root the relevant aspect of exchange is this: what an object means to me when I give it to you may very well not be what you, as the recipient, understand that object to connote" (p. 9). This "relative superficiality" makes exchange easier when the terms of exchange do not share the same values, languages and cultures. Galison (2010) defines the discourse genre to which a trading zone's interlanguage belongs as "thin description". "Thin" means here that "we do not need to refer to some universal currency of rationality or value. And […] we can bypass the presupposition that there is any agreement among the people exchanging things about the full signification (thick description) of the object exchanged" (p. 10).

In Galison's theory there is an underlying assumption about theory and practice and their mutual relations, which – despite being mostly driven by his research experience in physics labs and similar work settings – can find application in the planning field as well.

Experimental practice, according to Galison (2010), has its own weight "as a distinct form of reasoning – not reducible to inspiring theory or checking it after the fact" (p.1). If we look at the gap between theory and practice in Kuhnian terms, it appears as a paradigmatic split, a cleavage between cultures, which in some cases (such as that of "scientific revolution") may lead to a synchronic incommensurability; however, looking at it this way obscures the fact that – in many cases – there is a crosstalk between subcultures that allows exchange among different parties who may reach an agreement to achieve mutually advantageous results. Which amounts to saying, following Galison's (2010) reasoning, that Kuhnian theory may turn out to be inadequate in "hybrid arenas of practice as forms of language" (p. 3). A narrow definition of compromise describes cooperation more effectively when it is not moved by shared principles, but by thin descriptions of the problems at hand.

What is exchanged in a trading zone are "boundary objects" (Star and Griesemer 1989; Star 2010). These are "plastic enough to adapt to local needs and constraints of the several parties employing them, yet robust enough to maintain a common identity across sites" (Star and Griesemer 1989, p. 17). They "are material (rather than conceptual) entities through which two or more groups coordinate their activities. Boundary objects do not translate ideas between subcultures. They provide structures that suggest ways forward while limiting the array of options" (Fuller 2008, p.4). Experimental instruments – as in Galison's field research work – are typical boundary objects.

There is quite an evidence, in collaborative planning and dispute resolution literature, of material entities working as boundary objects: maps, documents, reports and models are all material devices that give structure to and organize information and options and therefore deliberation (Fuller 2008). The concept is indeed quite plastic and can be applied to a variety of objects. What is of interest here is its explicative potential as applied to some of the main features of urban spatiality in the perspective of place-making.

9.3 Place-Making in the Spanish Quarters, Naples: An Example of a Trading Zone

The following is a case of place-making presented first in the form of a short ethnographic report and subsequently discussed more in depth, employing the concept of trading zone as an interpretive frame. The place in question is the Spanish Quarters, a neighbourhood in Naples' historical centre considered, not just by residents, as a "place", a *topos*, for various reasons:

- It is densely populated and lies in a central location in the historical centre, right across a major tourist and shopping area (Via Toledo).
- Its historical urban structure, a dense gridiron founded during the Spanish domination (fifteenth century), has been kept unaltered over the centuries.
- It is a multiethnic neighbourhood, where autochthonous people coexist quite tolerantly with migrants of various ethnicities and religions.
- It has a quite differentiated social mix of residents and users, from professionals to workers and from students to low-income families and criminal organizations.
- It is the site of two historical food markets of the inner city, always crowded for the quality of their fresh food and their low prices.
- It boasts two off-theatres, very active on the local and national scene. Nightlife is vibrant in the areas around the theatres and some restaurants (both local and ethnic), attracting people from other neighbourhoods in the city and the metropolitan area.
- Street life is a key cultural feature of this neighbourhood: the locals, both autochthonous and immigrant, habitually get together in the streets – especially in front of the typical ground-floor dwellings opening directly onto the street – to socialize and perform various activities. Children play soccer in the streets, oblivious of the motor scooters and cars, young people meet in the streets at night and so forth.
- Some non-profit organizations supporting low-income people and borderline youngsters are long established in the neighbourhood and are a reference point for many families, social workers and welfare operators.

9.3.1 The Practice of Car Parking: A "Thin" Description

In the Spanish Quarters, even simple everyday actions can be very problematic, and car parking is a case in point. The place is not sufficiently equipped with parking facilities, and the very narrow urban fabric offers very little space on the streets. In this context, car parking has become a quite complex space management ritual. There is an unwritten code that people need to know. They need to pick the right spots – if any are available – to park their cars, since a mistake could bring on, in the worst cases, harsh fights or car damage.

The point here is not to underscore the rudeness of the locals' social behaviour – however deplorable it may be – but illustrate how a certain degree of "place mastery", that is, some specific knowledge of the spatial patterns and boundaries *written* and *enacted* by social practices, is required to cope with everyday situations. Car parking in the Spanish Quarters is subject to certain "strict" conditions, which an outsider lacking experience of the place and its behavioural codes is at loss to figure out, since no written indications are provided, and people will not tell you how they work.

In a central neighbourhood like this, in one of the most traffic-jammed cities in Italy, parking is a serious issue. Public parking places – even when provided for free to residents by the municipality – are exiguous, as in the whole historical centre of Naples there are only very few spaces complying with normative parameters for car parking. So people have to come up with their own tactics and practical arrangements.

In the Spanish Quarters, people usually occupy small portions of public ground suitable for car parking, which are under no specific jurisdiction. This practice is an expression of a social minority, not representative of the totality of residents. They are mostly low-income people, often living in ground-floor dwellings, in some cases below the poverty line and making a living out of informal and sometimes illegal economic activities.

Before illustrating how ground occupation occurs, let us dwell a bit longer on these small pieces of "no-man's land", which become so important – and therefore contested and longed for – when people need to solve a practical problem before it turns into a wicked one. These portions of public ground – recesses in the sidewalks, or small spaces in front of the entrance of abandoned or underutilized ground-floor rooms opening onto the street – make up an urban-scale pattern of tiny spaces that has become a valuable resource for residents.

As far as I can tell from the observations I have made over the years, this network of small spaces works as a "no-man's land". In military language, a no-man's land is a space where ordinary rules are (temporarily) suspended,[1] a form of extraordinary territoriality where a state of exception is in force (Agamben 1995).

The occupation of these pieces of land for car parking is the result of a transaction between people competing with one another over a scarce material resource. This practice can be likened to an expression of negative capability. It is a way of creatively coping with space scarcity, and finding a practical solution to what for many residents is a chronic problem.

The transaction over parking space obeys an urban code people need to have access to in order to "play by the rules" when looking for a parking spot. Drying racks or chairs are the basic elements of this code, working as boundary objects in an interlanguage shared by the residents. People start by placing these objects in "free" spots that are not used for any specific purpose. In doing so, they have a double goal. One is appropriating space for functions, such as drying their laundry or sitting outdoors with friends to chat, that are usually ill-accommodated by very small homes, as most are in the neighbourhood, which has a high number of tiny ground-floor dwellings. The other goal is to occupy – both physically and symbolically – a small piece of ground, which when the laundry is dry and the drying rack is folded and stored away in the house, usually at night, becomes a reserved parking space for the owner of the drying rack or one of her relatives.

People living in the neighbourhood and users who have access to this code know that the drying racks or the chairs out on the street are not just there to perform the function they were made for. They know very well that they are physical and symbolic parking reservation devices. The locals negotiate for use of parking spots and sometimes fight over them, but usually, with some adjustments or alternative "creative" solutions (such as parking turns among relatives or friends), they achieve an agreement based on a somewhat steady spatial configuration.

An outsider who does not even suspect what the drying racks or the chairs really mean beyond their specific function would say that parking is impossible in such a place, with its very narrow alleys and no public or private parking facilities. He or she would be surprised to learn that several residents have found their own solution to the problem, usually a few steps away from their house door.

When people have reached a somewhat steady agreement over one of these no-man's spots, another code arises, with different meanings. Instead of drying racks or chairs, little iron poles appear, planted into the ground with concrete and secured by padlocks. For insiders, this is the sign that those portions of ground are no longer no-man's land; they have become private parking spots, that is, exclusive services connected to the residential function.

In technical-juridical terms, this is a misappropriation of public space, a breach of the law. It is worth remarking that only in very few cases – I have personally never been a witness to an instance of this – are transgressors actually punished with legal sanctions for these violations of a public norm. This is not just a matter of laxity and weak institutional capability in terms of social control and law enforcement – although such laxity and weakness are undoubtedly part of the traditional cultural background of the south – what we are looking at is also a form of flexibility on the part of the authorities to allow people to find solutions to what would otherwise be a serious problem.

It goes without saying that this code is ultimately enforced by violence. Should somebody complain about the iron poles or dare to remove them to park his or her car instead, or just to free up illegally seized public ground, a harsh reaction may be expected from the "owners" of the locked parking spots. Usually, for the sake of the neighbourhood's peace and also due to the embeddedness of this practice, people do not complain, unless they decide, for some reason, that it is time to start the ground-occupation game all over again and negotiate new parking arrangements.

9.3.2 The Practice of Car Parking in a Trading Zone Perspective

Let us now retrace the case using a trading zone interpretive frame. Very schematically, in a trading zone, two (or more) parties wish to undertake a joint action or make an exchange, but lack a common language. If they stay within their respective languages, however, any attempt at cooperation will be unsuccessful. Thus, they need to develop an interlanguage that will conceal or attenuate their differences. Since both parties benefit from this, it is a win-win game.

To apply this approach to our case study, first of all we need to recognize the elements of the trading zone: who the parties involved are, what their main linguistic differences are and why they are both motivated to create a trading zone.

In the Spanish Quarters, the trading zone is not established just among residents directly involved in car parking; if so, there would be no need for a trading zone, since there would be no significant difference of "language" within what is a quite homogenous social group. (I am using the term "language" here in a broad sense, to designate a specific, situated vision of the world, a system of values and beliefs, a cultural context we could call – to use Galison's terminology – a "subculture".)

Other subjects are involved in the zone in order for it to function as a field of practice. These subjects are representatives of public institutions, mainly municipal police agents, who are in charge of local control and security, and are hence locally based. These subjects regularly hang around the neighbourhood, and, without their

tacit connivance, the parking game would be impossible or at least much more difficult to carry on.

The two parties – residents and police agents – differ in several ways. Most importantly, they bear different rationalities and have different goals in performing their everyday routines. For residents (those involved in the practice), parking in the neighbourhood is what we could call a "survival tactic" in a socio-spatial context characterized by material scarcity and economic marginality. As such, it is mostly an informal practice of self-organization in an urban space, a typical feature of critical neighbourhoods in cities in southern Italy. For those who are in charge of public order and security, the deployment of this tactic is a violation of public norms, notably of admitted uses of a public good such as a sidewalk or some other element of the public space. For this party, the boundary between private and public property has been crossed, and municipal traffic regulations regarding car parking have been transgressed.

Given these differences, a (imperfect) trading zone is de facto established in the neighbourhood: residents and police agents share an interlanguage made of boundary objects (chairs, racks and poles), and both benefit from the trading zone, even though, as we will see, the benefits are not "equally distributed". Cooperation in this case cannot be regarded as a "win-win game", given the strong power asymmetry.

To understand how the system works, we need to take a closer look at the way the micropowers involved interact (Foucault 1977). Agents are locally based. They know the place and the people living there, and, most importantly for our purposes, they are familiar with the code of chairs, drying racks and iron poles; they know what these things mean beyond their intrinsic function. Police agents are not "neutral" executors of norms and formal routines – both in this case and in general – insofar as they have to deal with issues of social stability in critical contexts such as the one under discussion.

Trading, in the case at hand, takes place between different but converging practices, each based on a specific order of necessity and convenience and different rationalities. All these practices, as I observed above, are to some extent a violation of public norms. These violations occur on the basis of a habit, a reiteration of specific behaviours that creates an "objective condition" for a habitual norm to be established and for some irregular behaviours to be tolerated.

Seen from the standpoint of social justice, the "parking game" is undoubtedly exclusionary (there is simply not enough space for all residents to park their cars) and, to some extent, based on violence. Once a tiny piece of ground has been occupied by an individual, its public use is interdicted to anybody else or, at least, it is discouraged by nasty or even intimidating behaviour. This trading around these small portions of public ground is thus the province of a quite restricted "community", whose social composition is essentially characterized by medium- to low-income levels and the affiliation of its members to the neighbourhood, both in terms of long-term permanence and strong cultural identification with the place.[2] This consideration brings to the forefront some major limits and distortions of this community-based culture: while the participants in the "parking game" are creatively seeking to cope with the scarcity of a public good, people who are not affiliated to

this minority may be negatively affected. Nonetheless, it is also true that this practice allows as many members of this minority as possible to park their cars in front of their houses and – despite periodical discord and conflicts – it is fairly tolerated in the neighbourhood. Why is this so?

To address this question, we need to turn to the role of public authority "in the field". As I remarked above, according to my own experience and that of other people living in the Spanish Quarters I have been interviewing as part of my field research work,[3] the practice is not subjected to any form of control. Policemen basically tolerate these informal arrangements and issue no tickets or any other kinds of sanctions to the people responsible for them.

This happens for various reasons. Two are worth highlighting here, as they clarify the mediatory role of police agents in the trading zone. Firstly, the failure of local government to implement urban planning programmes such as urban renovation and pedestrianization. Despite the fact that the Spanish Quarters have been, over the past two decades at least, one of the main target areas of the urban renewal rhetoric – consistently with the strategy outlined in the local master plan for the whole historical centre of Naples – the goals outlined by this rhetoric have remained unfulfilled, essentially for financial and political reasons. This means there is no particular urge for change on the part of the city government. Secondly, there is a social cohesion issue related to the parking game in the neighbourhood. The minority involved in the trading zone is, as I mentioned above, partly made up of families formally living close or below the poverty line. Welfare policies, in the context of the general crisis of the national welfare system, fail to address the problems of this social group. Finally, informal and illegal activities are historically embedded in these communities, as is typical of marginal economies in critical social contexts (Laino 2001).

Many people simply cannot afford the price of a private parking facility, and the historical urban fabric, so narrow that sidewalks are rarely to be found, does not offer standard parking space that the public could provide for free to residents (as it does in other, more spacious areas of the city).

The problem is even more complicated. So far, the city government has failed to effectively address everyday mobility needs in the Spanish Quarters. Despite its central location, this neighbourhood still suffers from very low accessibility to the public transit system. Only recently have the local governments (City and Region) started to build an underground station connecting the neighbourhood to the subway network, but until now the Spanish Quarters have been, from a public mobility point of view, hemmed in between a lower pedestrian main avenue (Via Toledo) and an upper road (Corso Vittorio Emanuele) provided with bus service, but hard to reach, especially for people with mobility problems, given the steepness of the hill the neighbourhood extends on. The main alternative to walking is still the private car, and people therefore feel entitled to park their cars in the neighbourhood.

Public officials find themselves caught in between, in a way. On one side is the inadequacy of welfare and public transport and on the other, social cohesion and a community-led culture. "If we gave tickets to all who irregularly park their cars in this neighbourhood, two things could happen: either nobody would pay – the more

probable alternative – or, in the worst case, there would be a social mobilization against the representatives of public authority", said a police agent I interviewed some time ago.

Micropowers in a real context – as the trading zone perspective allows us to see – work outside "ought-to-be" schemes based on values such as legality and conformity to the norm that the state is supposed to enforce. There is no clear distinction here between "formal" and "informal": the two spheres are entangled (Roy 2009).

In theoretical terms, the role of municipal police agents – who understand the "pidgin" of boundary objects people use to negotiate scarce spatial resources in order to satisfy the demand for parking space to the highest possible degree in a limited opportunity game – is crucial. They are a "flesh and blood" power that basically works as an imperfect cohesion device on behalf of a "critical social minority", allowing the formation of a trading zone where what is really traded is not just space but also rights and norms. And this trading is – to a certain extent – a tolerant response, in terms of a sort of "moral economy", of a broader "public" made up of residents, users and public officials to everyday problems affecting a disadvantaged minority.

In abstract terms, norms cannot be traded. In a democratic scheme of rights and duties, they can be questioned, discussed, amended and even repealed in formal institutional settings, but for this to be possible, a general sharing of values and principles is required. But they cannot be the object of trading, since their basic principle is their general applicability (Agamben 1995).

In real life, however, there is negotiation over norms and their meaning. In the case of the Spanish Quarters, here all parties in the trading zone agree that, in order to provide as many people as possible with parking facilities, the official norm needs to be dis-enforced, placed in a state of temporary and informal suspension, to give way to the de facto, informal norm.

9.4 Open Questions

The trading practice here described raises clashing considerations.

From a moral perspective, the negotiation of norms can be considered as a form of violation of the law and collusion by all the parties involved, whereby a minority seeks to provide a feasible solution to what it perceives to be a problem at the expense of a more general – as well as undetermined and abstract – "public" (the citizens as a whole).

From a pragmatic perspective, this same negotiation works as an "acceptable compromise", a means of keeping social cohesion, promoting a moral economy and containing discontent in the face of an essential lack of the public services and welfare policies this minority would be entitled to.

From a sociocultural perspective, the "parking game" played with boundary objects such as chairs and poles can be acknowledged as an innovation in a context of material scarcity and a lack of collective facilities.

The trading zone model actually shows some inadequacies when we try to apply it "as it is" to planning practice. In fact, the case discussed in this chapter is more a counter case than a practical proof of the validity of the trading zone theory, since the trading practice here does not really fit all the lifeworlds involved and the benefits are not equally distributed among the traders – as they should be in "win-win game" – and, furthermore, the process by which these benefits are gained produces some negative repercussions on the context, on the neighbourhood "as a whole", since some parties are necessarily left out of the picture or negatively affected. The main reason for this is that the space of social interaction is much more variable and undetermined in the field than in the lab.[4] Once some parties have established a trading zone, there will always be some other party at risk of exclusion.

Applying a trading zone model of interpretation to an urban place-making practice undoubtedly helps us to understand the latter's manifold structure. However, we must acknowledge the problematic coexistence of different planes as revealed by field investigation if we wish to usefully apply this theoretical frame to urban planning practice.

Among the issues arising from the case presented here, two are worth highlighting, in conclusion, as open, interconnected questions that present themselves when we try to apply a trading zone approach to planning practice. One of these questions has to do with social innovation, the other with planning ideology.

Social innovation still occurs – following Galison's reasoning – even when all the actors involved in the process do not agree about goals, values and rationalities, as long as they all benefit from creating a limited area of exchange and negotiation: a trading zone. Nevertheless, innovation – as the case just discussed demonstrates – may not necessarily be a fully positive outcome, a win-win game, at least in terms of a "just and democratic city" as a latent ideal of town-planning culture (Fainstein 2006). Place-making practices in cities often display innovative elements which could be worth learning from and – eventually – supporting through inclusive and democratic planning processes. Following Healey (2007), in collaborative perspective planners would strategically select single processes of social innovation in urban space and support their institutionalization to thereafter attempt to change town-government cultures. Selection is in point, here. What should we select and why? Who would be left out of the picture?

What we learn here, through our adoption of a trading zone perspective, is that acknowledging innovation is a tricky task for planners. It means critically dealing with different visions, values and goals. Maybe we cannot positively exchange "and still disagree". Maybe values need to be included in the picture when we select processes of social innovation to be acted out in a planning process. And here the ideology issue comes to the forefront.

As regards planning ideology, one major issue arising from the case presented here – and generally acknowledged by planning scholars – is the clash between general, underlying ideals or values such as equity, justice and conformity, which planning needs to be inspired by (and the normative apparatus of "certified planning" stemming from the modern tradition speaks on this behalf), and the specific, one-sided behaviours of real people in real contexts, which are much more exclusionary and destabilizing than abstract, universalist values.

One of the inspiring principles of the trading zone theory – we can "cooperate and still disagree on what really matters" (Fuller 2008) – sounds as a reasonable and innovative way to address decision-making in planning as well as other fields. However, at the very moment that we, as planners, put values and principles outside of the big picture, some criticalities arise. To what extent is it acceptable to suspend moral conceptions and institutional guarantees in order to achieve effective results on the base of substantial disagreements? By what criteria should we determine which issues and solutions in the planning process call for the application of a trading zone legitimacy?

Drawing on Star and Griesemer's theory of boundary objects, Balducci (2011) argues that "instead of trying to create sharing, we [the planners] need to look for those solutions which can fit different life worlds, different strategic visions and different stakeholders, even assuming that these visions are and will be conflicting" (Balducci 2011. p. 43).

The planner, like any other stakeholder, joins decision-making arenas with his/her own goals, values and visions of the world. To act as a non-neutral agent of mediation and cooperation, the planner "requires justification and legitimacy, a set of powerful arguments with which to confront warring factional interests and class antagonism. In striving to affect reconciliation, the planner must perforce resort to the idea of the potentiality for harmonious balance in society. And it is on this fundamental notion of social harmony that the ideology of planning is built" (Harvey 1985, p.187). This commitment to the ideal of social harmony explains "why the planner seems doomed to a life of perpetual frustration" (Harvey 1985, p. 194).

Insofar as recent approaches to planning propose alternative and innovative ways to deal with this problem – especially those inspired by pragmatism (Forester 1989, 1999; Healey 2007) and those adopting an agonistic orientation (Hillier 2007; Mäntysalo et al. 2011) – the shift the trading zone paradigm seems to bring about sounds as a challenge to those "fundamentals of ideology [that still] remain intact" (Harvey 1985, p. 194).

Susan Fainstein (1999) argues that, in the face of the substantial failure of comprehensive visions of the "good city", "today planning practitioners conceive their mission more modestly". Nevertheless, the search for feasible and inclusive ways to deal with contemporary urban problems calls for new efforts, which – as the trading zone theory itself seems to suggest to planners – cannot but address, theoretically and practically, concepts such as justice, equity and conformity as "relational to context without being wholly relative" (idem).

Acknowledgements I wish to thank Robert A. Beauregard for his comments on an early version of this chapter and Sara Lieto for her suggestions on normative issues. Needless to say, I am the only responsible for this text.

Endnotes

1. A no-man's land "is not occupied or is under dispute between parties that will not occupy it because of fear or uncertainty. The term was originally used to define a contested territory or a dumping ground for refuse between fiefdoms. It is most commonly associated with the First

World War to describe the area of land between two enemy trenches that neither side wishes to openly move on or take control of due to fear of being attacked by the enemy in the process" (Wiki quote).
2. It is symptomatic, in this regard, that migrants – although they are themselves a medium- to low-income group of residents – are excluded from this place-making practice.
3. Mostly residents, some planners, professionals and artists living in the neighbourhood.
4. The term "practice" deserves the plural, as practices are "what everybody does, intentionally or not, within structured fields where our doing (including not doing anything, idleness, inaction) occurs in a continuous process of transformation that produces sense and *multiple outcomes*" (Pasqui 2008:48, *my translation – emphasis added*). Practice is therefore by nature radically plural. Innovation, as one possible dimension of practices, comes along a whole bunch of other practices, each driven by different intentions and producing different outcomes.

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Chapter 10
Trading Zone and the Complexity of Planning

Vesa Kanninen, Pia Bäcklund, and Raine Mäntysalo

Abstract In this chapter, we explore the applicability of the *trading zone* approach by addressing the complexities that frame and penetrate all contested planning issues. Planning issues are thoroughly political, and the 'political' is thoroughly complex. The complexities in planning include not only issues of ontological and epistemological differences about what should be done and what is a 'good city' but also questions such as what kind of processes of decision making, information gathering and valuation should be incorporated in planning. By addressing the political, communicative and technical 'dimensions' of planning through two illustrative planning cases, we discuss how trading zone as a concept resonates with these complexities and whether it can bring theoretical and practical insights into planning. We find the nature of planning to be often more complex than the illustrations of trading zone formation thus far have portrayed. Hence, complexities may restrain the applicability of the trading zone concept as a planning tool. Overcoming the seemingly irreconcilable differences between actors in any planning case calls for creative, dialogical, locally sensitive and flexible planning. These issues are at the heart of the trading zone approach. Therefore, the trading zone approach can be suitable in a range of descriptive and normative uses within planning, when applied with due attention to different aspects of complexity.

Keywords Local boundedness • Bounded rationality • Consensus • Agonism • Normative

V. Kanninen (✉) • R. Mäntysalo
Department of Real Estate, Planning and Geoinformatics/YTK,
Aalto University, P.O. Box 12200, 00076 AALTO, Finland
e-mail: vesa.kanninen@aalto.fi; raine.mantysalo@aalto.fi

P. Bäcklund
School of Management, University of Tampere,
Tampere 33014, Finland
e-mail: pia.backlund@uta.fi

A. Balducci and R. Mäntysalo (eds.), *Urban Planning as a Trading Zone*,
Urban and Landscape Perspectives 13, DOI 10.1007/978-94-007-5854-4_10,

10.1 Introduction

> So the jury on what sort of planning we should have, and how much "knowledge" (and even what sort of knowledge) is necessary for good planning, is, I'm afraid, still out.
>
> […] Such decisions are ultimately left to politicians, bureaucrats, business lobbies, urban social movements, and the media to resolve—that is, to the political process (Friedmann 2008, p. 251).

Our chapter has been inspired by the above note by John Friedmann. Indeed, planning issues are thoroughly political, and 'the political' is thoroughly complex (e.g. Innes and Booher 1999; Hillier 2003; Innes et al. 2011; Mäntysalo et al. 2011a). This complexity includes not only issues of ontological and epistemological differences about what should be done and what is a 'good city' but also questions such as what kind of processes of decision making, information gathering and valuation should be incorporated in planning. In this chapter, we explore how and to what extent can the notion of *trading zone* (Galison 1997) be used in addressing the complexities that frame and penetrate all contested planning issues – acknowledging that in modern democracies, the politicisation of planning issues should be seen more as a goal than a problem in planning practice.

The concept of 'trading zone' is coined to address situations where, in the face of seemingly irreconcilable differences and understandings, communication can progress and mutual coordination can emerge. In the context of exploring the practical applicability of the concept in urban planning contexts, we start from Galison's (1997, p. 783) idea of trading zone as a situation in which:

> […] groups can agree on rules of exchange even if they ascribe utterly different significance to the objects being exchanged; they may even disagree on the meaning of the exchange process itself. Nonetheless, the trading partners can hammer out a local coordination, despite vast global differences.

In turn, Collins et al. (2007, p. 658) attempt to clarify what a trading zone is and is not:

> Not all trade is conducted in trading zones […] We define 'trading zones' as locations in which communities with a deep problem of communication manage to communicate. If there is no problem of communication there is simply 'trade' not a 'trading zone'. Here, however, we consider only those cases where there are difficulties of communication and ask how they are overcome.

While we agree with the high priority asserted to communication in the trading zone concept, we also argue that only rarely can any planning problem be seen exclusively as 'communicative'. Various dimensions are most often present and intermingled in ways that make their separation impossible in practice, even if such divisions can be traced analytically.

In our attempt to scrutinise the normative use of trading zone in the face of complexities of planning, we use an analytical toolkit consisting of the political, the communicative and the technical dimensions of planning. Like many scholars before us (cf. Forester 1993; Friedmann 2008; Alexander 2008), we find these analytical tools useful for highlighting the way in which these dimensions are emphasised in concrete planning situations. However, our meta-level framing

still accentuates the thoroughly political nature of all planning, in which all these dimensions coexist and are constantly interweaved. With our empirical illustrations, we make these situational dimensionalities visible.

We illustrate our theoretical thought through two cases. In both cases, the empirical data consists of actor interviews, newspaper coverage as well as technical and policy documents. The analysis is also supplemented by our previous research. Through the case illustrations, we attempt to show that, under certain circumstances, this complexity may restrain the applicability of the trading zone concept as a planning tool. Our ultimate aim is to provide fertile feedback to the theoretical discussion on the trading zone concept. Our goal is to make visible the concrete challenges associated with the complexity of planning, not to evaluate the outcomes or success of the case processes. However, this is not an easy task, as the nature and environment of planning are often more complex than what has been portrayed in the illustrations of trading zone formation thus far. Therefore, we must ask, what exactly are the planning issues for which the trading zone could be suggested as a feasible solution.

At the onset, we describe our analytical framework in more detail by shortly elaborating on the aspects of the political, communicative and technical dimensions that we see pivotal for the discussion of the limits and applicability of the trading zone concept in planning. Second, we walk through the illustrative cases. Next, we analyse the political, communicative and technical dimensions of the cases in the context of theoretical and practical trading zone frameworks. In conclusion, we discuss the terms with which the theoretical discussion on trading zones could be useful and applicable in the face of complexity in planning.

10.2 Three Dimensions of Planning: Political, Communicative and Technical

In this section, we first discuss the issues of political, communicative and technical dimensions of planning that we find to be of importance. We call them ‘dimensions’, as they are both interdependent and separate. However, we do not attempt to portray them as a ‘conceptual space’ where issues could somehow be located by asserting coordinates for these three dimensions. We see them in many ways intermingled, with the political always present in communication and technicalities alike, with communication necessarily impregnating the political and the technical and with the technical providing both the operational foundation for planning practices and ‘fuel’ for the issues to be communicated and politicised.

We do not attempt to make any general remarks about what are the most important issues in political, communicative or technical planning today. Instead, through these dimensions, our aim is to tap into the complexities of planning and thereby gain a better understanding of how these complexities affect the perceived potentiality of the trading zone concept for planning theory and practice. Second, we introduce the illustrative cases through which we want to show how these dimensions are

present, intermingled and conflicting in concrete planning situations (Sect. 10.3). In the following Sect. 10.4, we analyse them in the context of the trading zone concept.

For the political in planning, our starting point is that, overall, various planning processes are important in defining and reproducing the state of democracy in societies. They always demarcate both the sphere of individual political agency and the possibilities for politicisation (Bäcklund and Mäntysalo 2010; for politicisation, see, e.g. Leino, in this book). In Habermasian (1984, 1987) terms, every planning case concerns the colonisation of citizens' lifeworlds by the system via defining and controlling the need for planning, criteria of necessary and viable knowledge and the roles of individuals as participants and stakeholders. Central for the realisation of political agency is whether planning processes enable the right to define the issues that need public scrutiny. This right has been seen as the true core of a living democracy, since it is only this point at which political agency becomes possible (Rosanvallon 2008). It is seen that new participatory practices must be sensitive to what kinds of political agency they enable (Bäcklund and Mäntysalo 2010), as well as to how and to which degree perceptions of inclusion (in the sociopolitical community) are promoted (Silver et al. 2010; Agger and Löfgren 2008).

Our ontological starting point is in democracy-theoretical and politico-philosophical views of Chantal Mouffe (2000), concerning agonistic confrontation as an integral part of societal action, meaning that planning conflicts can be seen desirable rather than problematic for the development of democracy. As pointed out by critics of the consensus-seeking Habermasian deliberative view of democracy (cf. Pløger 2006) and consensus-theoretical approaches in general (c.f. Fuller 2006), consensual process based on the idea of universal reason pushes genuine political conflicts out of the arena of politics. Chantal Mouffe (2000), to whom the deliberative model represents an attempt to reach for transcendental reason beyond the realm of political struggles, argues that western democracy is characterised by the tension between two kinds of logic: one relying on individual rights and the legal state (liberal democracy) and the other on equal citizenship in the public sphere (deliberative democracy).

Therefore, we see the political dimension of planning as the ability to allow and offer possibilities for open politicisation of issues in planning practices. We hold this to be a necessary precondition for a democratically functioning society. For our discussion, this means looking at how the trading zone does function in this sense and how could it bring forward this crucial issue.

Planning processes evolve in a world of (political) ambiguity, where different and conflicting interests and operational logics coexist and collide. At the core of *the communicative dimension of planning*, we find the way in which different actors and different lifeworlds make contact, recognise each other and interact in concrete planning situations. Especially, the communicative turn in planning (Forester 1989, 1993; Sager 1994; Healey 1992, 1997; Innes 1995) made communication a pivotal part – and even a central issue – of planning practice. However, strong critique towards communicative planning theory has grown (Flyvbjerg 1998; Hillier 2000, 2002; Tewdwr-Jones and Allmendinger 1998; Mäntysalo 2002); on the practical

level, communication remains an organic part of planning work. This, in our opinion, coincides well with Galison's stress on the linguistic aspects of a trading zone, one in which 'language' is seen as a broadly defined means of communication in the local(ised) context. Also, the idea of a trading zone is geared towards providing solutions to problems of communication.

This notion of the communicative dimension of planning also begs a question: who are the communicating parties, actors or stakeholders in each concrete planning situation? In addition, the issue of framing the communication is brought up by the political dimension of planning: what can be discussed and which issues are to be taken as given in each situation?

The differing time frames of actual planning practices pose a specific challenge to communication: within a planning process, seemingly inactive and unpredictable lengths, during which some activities may or may not be in progress 'in the background', are interlaced with specific short periods of formal preparation and decision making in the public sphere. Different stakeholders and participants have their own time frames for both participating in the planning process and dealing with their own errands in relation to the planning situation at hand. From a trading zone point of view, we thus need to pose another question: how do we know that those who should be at the table today in fact are there?

We argue that communication between different actors (e.g. between inhabitants and operative administration) has become more complex due to changes in the frameworks of administrative practice. A profound and often neglected aspect of communicational complexity in planning is, for us, the multifaceted nature of its operational logic. By this, we refer to the internal ambiguity of the rationality of administration (c.f. Hajer 2004). Firstly, planning as public sector activity is in many ways directed and defined by local rules and ordinances aimed at preserving the fairness and equity of bureaucratic processes, e.g. in Finland, many administrative documents that control the working procedures of the planner (c.f. Vartola 2004; Jalonen 2007; Peters and Pierre 2004). Secondly, organisations always possess informal operational cultures and practices that revolve around modes of operation that are not explicated. Different actors may thus have very different criteria of rationality in relation to their action (Barnes et al. 2003; Jalonen 2007; Bäcklund 2007). This may lead to pathological action (Mäntysalo 2000; Mäntysalo et al. 2011b), where the actions cannot anymore be identified as connected to the official explicated goals or strategies of the planning organisation. Thirdly, the planning environments – spatial jurisdictions, actor networks and strategic goals of urban planning – are influenced by outside forces such as globalisation, international agreements and environmental imperatives. These are seen as profound instigators behind many pressures for administrative reforms. Instead of being connected to a certain rationality, existing administrative practices include aspects of different models (for Finland c.f., e.g. Hiironniemi 2005). Hence, it may be difficult to find a common language even inside one institution, e.g. the city administration.

We also see *the technical dimension of planning* important in understanding planning in practice. Technicality is underlined in planning situations in many ways. Forester (1993) attached technical planning to the world of uncertainty

(c.f. Christensen 1985), where problem solving can happen through collection of systematic and precise but unavoidably insufficient information and knowledge, aiming for rationality and acknowledging its character as 'bounded'. According to Forester, planning also takes place in the world of informational ambiguity. In this world, a more profound question is why do we need the information/knowledge we feel is needed. In this sense, the political dimension is always present in the technical. To shrink planning cases to tasks of mastering planning knowledge technically is to mask the fact that planning is not just about certainties and uncertainties in the 'factual' knowledge base.

Friedmann (1987) sees technical planning as including most of what planners and experts do in a planning process, starting with problem setting (for political processes and politicisations to work with), including specifications of goals and objectives for solutions, implementation (of actual planning tasks) as well as evaluation and impact analysis. As he sees (Friedmann 2008) the evolution of planning, over the last decades, as unfolding from technical to political activity, many aspects of planning are still technical – not the least in the planner's skills and expertise toolkit. Mazza (2002), on the other hand, provides a compelling critique of both political and communicative emphasis in planning, arguing that political and communicative aspects make little practical sense if they cannot be turned into technical-level decisions. He sees the technical level as the 'surface' of planning, one that is laden with political content (and communicative challenges, we might add) but still technical in nature.

By the technical dimension of planning, we mean those practical situations in planning in which it can be agreed that the planning problem can be solved by knowledge provided through professional perspectives (c.f. Forester 1993). In our view, the technical dimension is emphasised when the politicisation process of an issue has 'matured', maybe even a formal decision has been arrived at. For example, issues in planning for housing such as 'what is good housing' and 'in what kind of environments should we live in' are within the political dimension, but as soon as these issues are solved in some way, implementation means engaging with the technical – e.g. zoning, site specifications such as roof angles, drainage, parking – all the way to geological and soil issues or the effects of building and site design on the microclimate. In this context, also the communicative dimension is highlighted, considering how these technicalities are coordinated and what kind of cooperative action is needed. This may again be boiled down to a question, also central to the trading zone approach: how can we, with different forms of expertise, communicate so that we all may feel we are understood and respected?

10.3 Local Contexts: The Case Storylines

The complexity of planning concerns also the importance of the local boundedness of planning – legislation, culture, procedures, practices, issue sets, types of politicisation and actor positions, to name a few. In order to have a fruitful connection

between the theoretical discussions about trading zones and the planning practices, we need to pay attention to the local contexts on several levels. As Luhtakallio (2010; c.f. Leo, in this book) notes, the local context is a mixture of state and regional legal and policy frameworks, local planning cultures and place-bound specificities. In the Netherlands, the planning system has historically enjoyed a strong position vis-à-vis private interests, and the planner's position has been much stronger than in Finland. Strong meso-level government in the Netherlands has also created a powerful strategic spatial planning framework, one which has been relaxed in the recent years. In Finland, the trends have been quite the opposite.

European countries also provide very different frameworks for acting on different levels of representative democracy – e.g. in the Netherlands, neither a minister of the government nor a municipal civil servant can have a seat in a municipal council. In Finland, however, this is not only possible but common – the Helsinki municipal council includes three incumbent Ministers of the Finnish Government and numerous local civil servants. This creates quite different political contexts for individual planning issues. In terms of the dimensions of planning identified in the previous chapter, what in each case can be identified as 'technical' or 'political' depends on local differences in the scope of planning and the role of the planner (e.g. responsibility for providing impact analyses, openness of pre-planning consultations or requirements for public consultations). Therefore, local practices define quite essentially which and what kind of issues can be and are politicised and by whom (c.f. Luhtakallio 2010).

We now turn to two illustrative cases, one from Helsinki, in Finland, and the other from Tilburg, in the Netherlands. These cases, ones with which we had become familiar during our earlier research and experience, seemed to defy the notion of trading zone creation, presenting such degrees of complexities – both 'natural' and 'created' – that the seemingly irreconcilable differences proved, in fact, truly irreconcilable. With these cases, we attempt to probe the 'outer edge' of the conditions of trading zone formation, keeping in mind that these cases (like all) are, indeed, framed by both local laws, conventions and practices, as well as conditioned by broader, if not universal, issues, trends and societal norms.

The Kruununhaka District in downtown Helsinki, Finland, is one of the oldest parts of Helsinki. The building stock includes many late nineteenth- and early twentieth-century apartment buildings. The dominant form of ownership is through housing companies who own the buildings and the land they are built on. Inhabitants own apartment-specific shares of the company. Many of the buildings' facades of the period are protected by land-use plan orders. The Finnish land-use planning law determines that a detail plan may include orders for conserving the buildings. While this is often interpreted as relating to facades and other features that affect the cityscape or are part of the public realm, governmental guidance leaves this demarcation open, thus possibly enabling conservation orders other parts of the building.

In 2002, a housing company owning a late nineteenth-century five-storey building applied for a building permission for elevators to be installed in the staircases. Upon inspection of the site, the city museum officials noted that the staircases were exceptionally well-preserved pieces of the art nouveau style, 'holistic works of art' that,

in their opinion, should be protected from any changes. As a consequence, the permission was denied.

The city museum decided to evaluate all staircases in this part of downtown in order to get a picture of how many such staircases there were in need of partial or full conservation. The evaluation study showed that there were nine buildings where many of the staircases had such cultural values that they should be conserved. These buildings, all originating from late nineteenth to early twentieth century, were placed under a building/development ban in 2004, effectively stopping any elevator schemes but also complicating other major renewals.

City planning office started, arguably sluggishly, drawing up a new plan for these nine buildings, with the aim of controlling elevator construction so that the historic and artistic values of the staircases would be preserved. In 2008, the city ordered a study of suitable elevator constructions and installing techniques in order to determine what kind of protection measures would be needed in the plan. The plan draft was publicised in 2009 and a slightly altered proposal in late 2010. The Planning Board approved the draft to be presented to the council.

The plan proposal prohibited the alteration of the staircases but provided possibilities for adding elevators on the outside or by taking the space from the apartments. This was seen by some of the inhabitants to effectively prohibit feasible installation of elevators. Others saw conservation as a welcome development. The opposing inhabitants swarmed the planning office with complaints, based, e.g. on city policy that favours and part-finances elevator installations to old buildings, equal rights of the elderly, future prospects for getting more families with children to move in and possibilities for developing the properties in the same manner as in other, non-conserved buildings.

The most compelling argument, however, was that the staircases were in fact not within the realm that could be controlled by a detail plan and that they were clearly private spaces. The planning office had made a notion in the draft that the staircases can be controlled since they are ‘semipublic’ spaces.

Some of the inhabitants also lobbied the interested and involved politicians heavily in order to gain political support to their views. As a consequence, in early 2011, the City Board ordered the draft to be revised so that building the elevators could be realised in all staircases of all buildings, where technically possible. The new draft reached the Planning Board in June 2011, and as the political balance in the Planning Board was in favour of conservation, it now returned the draft to be rephrased so that conservation would be more favoured. The City Board quickly reacted to this by cancelling the Planning Board decision on grounds that the new advice on revising was not in line with the earlier City Board decision. At the moment of writing, the plan revision is still underway. However, the case will progress during the autumn of 2012 to some extent, since the building/development ban – extended throughout the process – will finally expire.

Mall Tilburg, Stadscentrum Noord, *the Netherlands,* was an initiative to build a new type of shopping and leisure facility near the town of Tilburg. The scheme was initiated by OVG Development and McMahon Development Group Europe BV in 2007. The plan concerns the development of a large enclosed shopping mall on an

out-of-town location. The development was to be located on a site previously used by the military, located just north of the city and near an exit to a highway. Due to the land-use specification in the regional plan, the planning case would need to be approved by the provincial council (in accordance with the planning system of the time). However, the final decision would lie in the local council.

The case was pivotal if not historically unique in the Dutch context. Post-WW II planning has emphasised hierarchical retail service structures, with an idea of providing localised daily services within a walking or cycling distance, and town centres as the locations for most of the specialised retailing. This has created dense urban structures. Out-of-town shopping centres do not really exist in the Netherlands, despite several attempts by local and international developers. However, as a consequence of a relaxation in provincial guidance on retail location planning, basically abandoning earlier strict nationally constituted guidance in favour of the provinces' own models, a number of initiatives for out-of-town schemes were drawn up at the time when most provinces were still in the process of developing their own guidance.

The decision-making process for the Tilburg Mall started in 2007 when the developer and the local government signed an agreement to jointly study the possibilities for the realisation of the project. At the end of the survey, a no/go decision was to be arrived at. The research included impact studies that portrayed the effects of the new development to the city centre and the surrounding towns. The possible locations were scanned, starting with 15 different options. These were narrowed down to four and eventually the proposed site was chosen as the best overall compromise.

The local government and the developer shared the research costs – to add transparency and objectivity to the decision making, as noted by Janssen (2009). As a reaction to the impact study reports (…), four neighbouring cities (together with whom Tilburg is a part of a network city cooperation called 'Brabantstad') commissioned another consultant as an advisor to get a second opinion about the effects of the mall to their economic position. While considering the same informational basis concerning the development and economic performance of the towns, the two reports came to different conclusions about the effects of the mall.

In the city council, the political support for the development was not overwhelming. There was a subdivision between municipal parties: on the one hand, some political parties were concerned about the negative effects on inner-city retail; on the other hand, other political parties saw the initiative as a needed economic stimulus for the city (c.f. van Eeden 2010). The council made a decision to hear viewpoints from different interest groups. As a major contributor to the political and public discussion, the main local newspaper took a strong position against the development, stressing the negative effects to the local retailers.

When the consultations had been finalised, the political environment had turned around. As a result of local elections, political support for the project had diminished in the local council, and the probable opponents had gained majority. As an escape plan for the planner-developer cooperation contract to still operate, the mayor proposed that the feasibility of the plan would be investigated in more detail, according to 14 conditions defined by the council. Should the results of this feasibility study

be positive, the citizens of the municipality would then make the final decision via a referendum.

The discussion revolved around 'the mall' and its possible effects on the urban structure. As the concept 'mall' had been interpreted in an American context – whereas (affirmed the developer) the actual development would be more respectful of the local culture and have no such effects as a 'real mall' – the developer attempted to realign the discussion to a more favourable direction by giving a title to the project. Thus, Tilburg Mall became avenTura Brabant – emphasising the regional character of the endeavour.

As the feasibility study turned out in favour of the development, the referendum was set up. In the days prior to the referendum, the city and the developer provided an info-stand to inform the public about the planned development and its calculated positive effects, and the local newspaper brought into light the perceived and calculated negative effects to traffic conditions and retail in the city centre. The outcome of the referendum was a 53/47% split against the development. In light of the earlier commitment to the outcome of the referendum, planning was abandoned and the cooperation contract dismantled.

10.4 Analysis: Trading Zone and the Political, Communicative and Technical Dimensions of Planning?

In this chapter, the issues of planning complexities presented above are placed in context with the concept of the trading zone through the cases. First, we elaborate further the trading zone discussion in the light of our focus. Next, we present how the dimensions of complexity and aspects of the trading zone concept come together in our cases. The analyses aim to show both the main issues for each dimension and each case, as well as provide insights to the complexity of combined complexities within the cases. Lastly, we aim at further understanding and 'evaluating' the trading zone concept in planning contexts. To lay ground for our conclusions, we look at how the idea, concept and practices of the trading zone approach could provide for a better grasp and novel solutions for the complex situations found in practical planning situations.

The idea of a locally bounded cooperative solution based on a limited set of issues is found in many trading zone descriptions (e.g. Fuller 2010; Jenkins 2010; Gorman et al. 2009; Gustafsson 2009). Notions of the evolutionary nature of the trading, endorsed by Collins et al. (2007) and further developed by, e.g. Jenkins (2010), attempt to increase the descriptive scope of the trading zone concept.

In order to develop a general model of the trading zone, Collins et al. (2007) devised a typology around the two dimensions of power and exchange. The ability and way in which power is exerted in a trading zone can be seen along a continuum from coercion to collaboration. The cultural dimension runs between homogeneity and heterogeneity, providing clues to the degree of integration or hybridisation of the fields of expertise involved. This two-dimensional model of the trading zone as

tested by Jenkins (2010; see also Maarit Kahila-Tani's chapter in this book) showed promise for a normative use of some types of trading zones in specific situations. For Jenkins, the crucial 'dimension' turned out to be the level of shared language development – both coercive and collaborative situations could form into trading zones if interdependence and the mutual exchange language would reach 'threshold levels'. In Jenkins' study, questions of relative attachment and detachment in regard to the central controversies or boundary objects became a crucial issue in the ability to create interactional expertise.

Mills and Huber (2005) provide an account of trading zone formation – or rather the lack of it – in academic education. They identify two basic conditions that work against the realisation of such cooperative activities across different institutional and theoretical schools of thought and practice: their relatively weak power position and lack of perceived benefits.

Seeing the institutional and political environment of planning as Mills and Huber see in the case of education, as framed by powerful hierarchical forces, leaves collaborative planning practices – despite their often central role in determining future development – in a weak power position in relation to the stakeholders' situational positions. Each of the stakeholders has not only stronger stakes outside the planning situation but also stronger means external to planning for advancing their case.

Related to this is also the position of planning practice in relation to the institutional and personal processes of the actors. The institutional and individual planning spheres (e.g. lifeworld and personal development, corporate strategies, civil society ideals, political agendas) of the actors are most often primary in relation to the spatial planning processes in which these actors engage. As Mills and Huber note, actors act according to their own logic and expertise, utilising and necessarily connecting with their own history, modes of operation and models of thought and values.

The Kruununhaka case shows how the question about what is and is not planning – under which circumstances and in which cases the (public) system may penetrate the (private) lifeworld – can become a most practical issue. It is exactly the issues framing a successful trading zone approach that are being decided: by whom and on what grounds are the boundaries of planning jurisdiction drawn and by whom and on which grounds are the 'traders' defined.

As Galison (2010) shows, trading zones may arise under extremely unbalanced power relations (c.f. Collins et al. 2007). However, the Kruununhaka case illustrates how the local politicisation of planning may prevent even the most elementary precondition of agreeing upon exchangeability (Galison 2010). In the Kruununhaka case, many of the citizens saw no case for planning at all – they politicised the legitimacy of planning itself. This reaches beyond bringing up and discussing contested issues, the willingness to cooperate. Even a most difficult 'apparently irreconcilable' planning situation described by Fuller (2010, p. 666; c.f. Fuller 2008) does not equate with this situation. The contestation is first about do we have a planning situation at hand or not.

Another point of interest is the process by which the actors are 'found' or are able to 'join in' with planning practice, therefore becoming potential traders (e.g. Fuller

2006). In the Tilburg case, the only real trading that took place was positioned inside the planner-developer team. Otherwise, the potential actors did not become part of the planning procedure in ways that any 'official' trading could have started. This was partly due to an intended strategy of keeping the 'pre-planning' team a closed one, one that would only 'call' experts as needed to provide technical information, 'involve' citizens through controlled interaction and 'inform' politicians on a need-to-know basis. This, however, resulted in insufficiency of information to the potentially affected community, which in turn led to a politicisation of the idea itself. Partly, it was a question of trying to ensure political support for the project by concentrating on not stirring up any political discussions that might undermine the (pre-)existing slightly favourable local political climate – a strategy that could well have worked, had the unforeseen changes in the local council power relations not taken place.

Accordingly, in the Kruununhaka case, the Finnish planning law that calls for the planner to initiate and foster public participation of all relevant stakeholders meant that the planning system needed to include the citizens in the process. However, legitimate the 'citizen' is as an actor, the politicisation and contestation of the premises and need for planning meant that 'active citizenship' dissolved into several types and their combinations: there were citizens who participated through their willingness to contribute and cooperate, citizens who opposed but were willing to cooperate and strike bargains, citizens who participated but only to press the notion that there was no reason nor legitimacy for planning and finally, citizens whose main interest was to use external channels to influence the decision-making processes. One may easily conclude that the differences, concerning the procedure, practices and content of the case, between the active citizens far exceeded any other differences between other actors and stakeholders. As Leino (Chap. 7 in this book) points out, the planning practices often take an oversimplifying attitude towards the practices of everyday life and the complexity of social relations, hence marginalising the citizens' views. It is yet to be determined whether this will occur in this case.

Complexity is also produced by different time frames of the actors and the issues, which has a profound effect on the communicative dimension of planning. As Galison (2010) points out, it takes time to secure trust, understanding and respect towards your adversary. Jenkins (2010) describes the Turtle Excluder Device trading zone as having developed over three decades, with notable changes and ruptures in the actor compositions and, indeed, trading zone designs.

The focus on endurance and development over time puts emphasis on the evolving planning environments, in which forces working for a stable platform for cooperation intermingle with those working to create breaks. Different stages are evolving within a case as the process involves new actors, drops old ones and develops into new phases. In the now 9-year course of the Kruununhaka case, there are new 'incoming' inhabitants who are taking new approaches to the issue, as well as established, 'old' inhabitants for whom the process is becoming a meaningful part of their citizenship.

Eventually, instead of developing mutual 'pidgins' and sustaining cooperation and coordination, the process may become a shell in which both the actual actors (people, organisations, firms) and agendas change over time (e.g. Kanninen 2010).[1]

In the course of the process, the stages are not progressing in unison but form juxtaposed constellations that evolve over time, with possible ruptures and discontinuities. As the case progresses, the emphasis may change even quite dramatically. In the Tilburg case, new council members tipped the local political balance and forced the active proponents into adopting a 'plan B' to regain legitimacy. Consequently, new opponents were activated by this turn of events.

The Tilburg case portrays the politicisation of knowledge that also frames the discussion about planning (c.f. Bäcklund 2007). This is also a question of balance between the 'Foresterian' technical and political dimensions: whether to go for incontestable knowledge in support of legitimisation of previously defined goals or operate further in the world of ambiguity and unavoidably keep open the issue of legitimacy of goals. In Tilburg, the process was seen largely as a technical planning case by the planning team – while it was acknowledged that there might be even strong local opposition, the team was confident that support from the local representative political system (local council) would suffice in dealing with the politics of the issue, largely relying on the dynamics of partisan politics. The political decision-making bodies were to be used mainly for rubber-stamping the plans, whereas all planning would be determined by reference to expert opinions, economic calculations, market and environmental analyses and design features to match them. However, politicisations in the form of challenging the 'knowledge' produced started as soon as 'outsiders', including the local council, gained access to the initial information. This contested knowledge including not only analyses but also evaluations of these analyses. The different reports as such were not so much disputed, but the interpretations that based on them were. The economic impact figures, dependent on the scale and scope of inquiry, were seen as based on 'wrong', 'insufficient' or even 'purposeful' demarcations, limitations and omissions. Therefore, conclusions based on the knowledge were prone to dismissal (e.g. Bäcklund 2005).[2]

In Tilburg, the issues of scale, territoriality and local boundedness played important roles in the disputes: while the development was portrayed as regional and national in terms of customer catchment, the impact studies handled mostly local and city-regional effects. Decision making was also still local at the point of referendum – the project was yet to be formally discussed at the provincial level, which would have been the following step in the process. Accordingly, the regional cooperation within the 'Brabantstad' network city concept played no part – cities who market themselves as cooperating and complementary had no interest in communicating cooperatively with the case of regional/national shopping and recreational centre planning. This also reveals a rupture in strategic urban planning: while the regional 'network city' concept had been developed for years, this seemingly competitiveness-oriented venture was neither able nor willing to challenge local ideas of retail structure. However, opposing parties in the public debate over the development did utilise the connection to the 'Brabantstad' idea, presenting the development either as detrimental or innovative to the network city concept.

Just as in the case of integrative land-use and transportation planning, there are opposing forces functioning to integrate and separate 'disciplines' (Kanninen et al. 2010). Kellogg et al. (2006); note that even in the case of cross-boundary work actually

taking place, there are hindrances associated with collaborating communities protecting their local knowledge, social identities and perceived interests. This is also an intended consequence of creating well-defined separate responsibilities within the public administration. The different planning offices, while competent in their own turfs, rarely have the impetus or resources to cross-pollute their expertise even within their own institution – more likely they will compete (Hull 2008). Cooperation across different administrative units is as unlikely as between any private sector actors who operate in similar, overlapping but distinct territories – unless there are legal obligations or administrative protocols for such activities.

10.5 Discussion: The Relevance of Trading Zones in Planning?

In our account of planning as a sphere of multiple complexities, ranging from ontological, epistemological and territorial issues to the practical how-to's, the 'Galisonian' trading zone exemplifies a situation where outside the trading zone itself, the actors have already come to contact by way of force, cohabitation, mutual need or some other external influence (c.f. Galison 2010). As the very foundation of a trading zone entails mutual perception of benefits (if not necessarily equal) in the engagement, there needs to be some common ground. The positioning of actors and stakeholders within the framing hierarchies (societal, political, institutional, informational) affects their perception of possibilities to gain from cooperation. At the one end, this resonates with Flyvbjerg's (1998) notion of the lack of motivation for cooperation when power can be asserted otherwise. At the other end, the perceived powerlessness within the planning situation may lead to fears of losing, in the collaborative process, whatever small bits of influence one might have.

What may, then, provide the impetus for seeking mutual benefits? How can the actors find the motivation to work cooperatively for a local solution in a dilemmatic planning situation? Gorman et al. (2009) add an important aspect to the creation of a trading zone when they call for moral imagination – as they put it, 'the ability to disengage from a particular point of view' and create dialogue, evaluation and moral decisions – to incorporate so-called superordinate goals that may enable the parties to overcome their hostility. Galison (1997) points to a similar direction when he talks about consensual actions that can frame or facilitate the trading processes through the creation of, e.g. common goals, by reference to a larger community or common ideas of how to proceed.

Mills and Huber (2005, c.f. Barry and Porter 2011) point at a notion of a 'contact zone'. Pratt's (1991) theorising of a contact zone that, in analytical sense if not historically, can be seen as a precursor to the trading zone provides a useful addition to understanding the trading zone concept. Pratt defines contact zones as 'the social spaces where cultures meet, clash, and grapple with each other, often in contexts of highly asymmetrical relations of power'. Mills and Huber note that contact zones may be imposed, whereas trading cannot be enforced – which puts them at a slightly

different plane than, e.g. Galison (2010) and Collins et al. (2007), who see that somewhat enforced trading zone creation is rather common. Furthermore, Messeri (2010) and Wilson and Herndl (2007) see a more or less necessary interrelation between the boundary object and the trading zone: the boundary object is a facilitator of a trading zone, an embodiment of the rhetorical space of understanding and difference.

Hence, a trading zone can be said to consist of three related aspects: a contact zone where exchanges may happen (Pratt), trade that accounts for the interlingual search for coordinative solutions (Galison) and boundary objects that bind different viewpoints during the problem-solving stage (Star and Griesemer 1989). A trading zone can form or be formed when there is enough common ground for agreeing on at least what the opposition is – as in the Kruununhaka case, that there is need for both elevators and conservation or, as in the Tilburg case, that there is need for different knowledges to be incorporated . This corresponds with, e.g. Jenkins' (2010), trading zone evolution as a consequence of accepting a design that the parties could relate to – as they really only became interacting parties after this choice.

In a Galisonian vein, a trading zone can be seen in the sense of 'hammering out a local coordination' where shared local practices, cultures and also physical places play important yet often difficult-to-unveil roles. The similarly local nature of planning practice necessitates further reflection on the relation between local and universal contexts. Without such reflection, a locally developed, socio-spatially context-dependent operational model may be taken as a universal, context-independent solution to solve methodological planning problems in general. The idea of the trading zone is then turned into a general planning method, overlooking its boundedness to unique local circumstances (see Mäntysalo & Kanninen's discussion of the Kuopio case in this book). This also runs the risk of emphasising the technical aspects of planning over the political (c.f. Forester 1993).

In line with Forester, we see that if planning is taken primarily as a technical question, it may lose the political dimension that focuses exactly on the questions of legitimacy of goals and means. This may unnoticeably take planning back towards the bounded rationality frame where the problem can be fully embraced within the 'technical'. Consequently, the role of the citizen diminishes into an object of expert planning, instead of gaining a more equal subject position. Planning is not only about dealing with a set of values within a specific issue – it is as much about values that are potentially contesting the very existence of the issue. Not only are different groups bringing different worldviews and viewpoints into a planning process, they are also challenging the notion and the knowledge base of planning. The political nature of planning includes politicisation of issues and acts of politicising by different interest groups – such as inhabitants, NGOs, entrepreneurs and the like.

However, since planning always has a strong 'technical', concrete aspect that deals with the lifeworlds of citizens, planning expertise has an important role to play: it may not be to define exclusively the nature of the planning problems, but it is most certainly about attempting to solve the problems that are framed and given form in the politicisation processes, aided by the politically sensitive expert planner himself/herself.

Indeed, we find that trading zones are needed here – in cases where the planning issues are in the process of gradually transforming from the 'political' into the 'technical'. In such planning processes, existential and ontological political debates have 'matured', contradictory antagonism has turned into respectful agonism and a degree of political will exists for agreeing on the planning task as a platform for communicative dialogue. Nurturing that dialogue may give birth to a trading zone.

10.6 Conclusions

Most of trading zone research has used the trading zone concept as a purely *analytical* tool, using the concept as an interpretive and descriptive concept in studying existing and historical local cases of interdisciplinary cooperation and exchange. Such use of the concept in planning research offers promising prospects. As the many case studies in the chapters of this book reveal, the trading zone concept is very helpful and appropriate in attempting to analyse how coordinated interaction between professionally and culturally different groups has been achieved.

However, when the analytical research tool is turned into a *normative* planning tool, as we are tempted to do in normatively orientated planning research, we may lose sight of the deeper political ambiguities involved in planning and, related to this, sensitivity to local circumstances. Successful local case analyses of politically less contested trading zones in planning may be taken as normative and generalised models for future planning processes, thus misusing the concept. Thereby, we could end up offering planning tools and recipes that unwittingly carry characteristics of political domination, 'technicising' some of the political ambiguities and turning certain local peculiarities into default prescriptions for planning platforms.

When associating the trading zone concept with our normative aspirations in planning, we should rather approach the concept as a medium for advancing our understanding of the linguistic and cultural challenges we may face in attempting to generate shared platforms for exchange between different groups with different value systems and understandings – but also of the local resources that may aid us crucially in these attempts. This calls for creative, dialogical and locally sensitive and flexible planning – not reliance on universal recipes for action. The political challenges that in some planning cases, as in the two cases studied above, are too complex to enable such platform generation (and agonism), call for adjoining political studies that go beyond the scope of the trading zone concept. Such a broader perspective is necessary for future research aiming to grasp both the limits and the full potential of the trading zone concept in the context of urban planning, addressing its political ambiguities in their full depth.

Acknowledgments The work on this chapter has been partly funded by the Academy of Finland, research grant 253845.

Endnotes

1. Kanninen's (2010) account of shopping centre planning in Aberdeen also showed that in the 13-year span of planning, the process saw not only several changes of developer organisation and major reorganisations of other stakeholders but also a total circulation of planners – not one of the planners stayed with the project for its duration.
2. In her study about planning a new housing district in Eastern Helsinki, Bäcklund (2005) shows how the knowledge utilised by the planners (e.g. population figures and forecasts, natural characteristics) was totally rejected by the inhabitants. Whereas the planners were in favour of a compact city model in order to save as many natural habitats as possible and avoid 'in-between shrubs', the inhabitants saw this as building overtly crowded slums and clearing natural and recreational 'pockets'. Hence, the inhabitants politicised the technical approach to planning.

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Chapter 11
Trading Zone as a Sensitizing Concept in Planning Research

Jonna K. Kangasoja

Abstract This chapter charts the theoretical terrain between planning theory and social studies of science and technology. It reflects on the intellectual undertaking of 'translating', or adopting, into the planning field, the concept of trading zone developed by Peter Galison in the field of social studies of science and technology (STS). The chapter proposes to view the concept of trading zone as a *sensitizing concept* rather than a definitive concept, following the distinction by Herbert Blumer. Methodological development is needed in order for the concept of trading zone to become an analytical tool in the study of on-going planning practices. The chapter ends with still timely reminder by Blumer, of the need to develop a methodological stance, which respects research objects as 'persons with a self', that is to say, as persons who have their unique interpretive horizons, meaning making facilities and agency, all of which need to be incorporated into an analysis of joint action.

Keywords Artefact • H. Blumer • Object • Remediation • Sensitizing concept • Trading zone

11.1 Introduction

In his book titled 'Planning Theory', Peter Allmendinger portrays the field of planning theory as a landscape, where one can map the coexistence of various schools of planning thought, or what he calls 'indigenous planning theories'[1] (Allmendinger 2009, pp. 30–48). He situates the indigenous planning theories in a larger theoretical space

J.K. Kangasoja (✉)
Department of Real Estate, Planning and Geoinformatics/YTK,
Aalto University, P.O. Box 12200, 00076 AALTO, Finland
e-mail: jonna.kangasoja@aalto.fi

A. Balducci and R. Mäntysalo (eds.), *Urban Planning as a Trading Zone*,
Urban and Landscape Perspectives 13, DOI 10.1007/978-94-007-5854-4_11,

together with exogenous theory, framing theory (e.g. modern and postmodern perspectives), social theory (e.g. structuralism, functionalism, Marxism) and social scientific philosophical understandings (e.g. positivism, realism, idealism) (ibid., pp. 43–44). Regarding exogenous theory, he notes that planners have always drawn on various theories, which are not about planning, but which can have relevance, e.g. with regard to space, policy processes or governance. Exogenous theories are characterized as typically 'meso-level' theoretical constructs adopted from various fields. They differ from social theory in their level of abstraction: They do not intend to provide a holistic understanding of society, but are generally more empirically based (ibid., p. 43).

In this chapter I want to reflect on the intellectual undertaking of 'translating',[2] or adopting, into the planning field, the exogenous theoretical construct of trading zone developed by Peter Galison in the field of social studies of science and technology (STS). The concept of trading zone is precisely a 'meso-level', or an intermediary theoretical construct. It is neither a general theoretical framework nor a method. It has been developed for the specific purpose of interpreting generative encounters of distinct local language practices in science.

With regard to the task of translating ideas from one domain to another, it is necessary to take a moment to think about the nature of the task. Since theoretical concepts are meaningful only as part of a theoretical structure of some kind, the question is as follows: What is to be translated? Is it sufficient to try to dissect and appropriate an individual term, or a single idea? Or should we also be interested in getting to know and appreciate the living theoretical body the concept has originated from? I will argue for the latter, not only because the 'identity' of a concept is tied to its origin, but also because we can learn something valuable by looking at how issues and understandings have evolved in neighbouring fields.

11.2 Galison's Contribution to the 'Practice Turn'

The larger context of Galison's work, on the trading zones in scientific practices, was a shift in focus in the philosophy and sociology of science, making everyday practices a centrepiece of attention. This shift marked an epistemological break in the research tradition and brought about new research objects, methods and questions (Fleck 1979; Kuhn 1962/1970). Also the understanding of the nature of scientific knowledge underwent a profound reassessment.[3] The so-called laboratory studies (e.g. Woolgar, Latour, Callon) started a programme of ethnographic studies of scientific practices, with researchers following, like anthropologists, the scientists acting together with their specific material and conceptual artefacts.[4] This intellectual project was connected to a broader shift, which has been described as the 'practice turn in social science' (Miettinen et al. 2012, p. 209, see also Schatzki et al. 2001; Wagenaar 2011).

Galison was not, however, working only from the perspectives of history and philosophy of science, but having also been trained as a physicist, he had a unique

position for understanding scientific practice. He found the idea of a trading zone from anthropological linguistics:

> My original problem – the problem that drove me to the idea of trading zones and scientific exchange languages in the first place – was my frustration in trying to join a local picture of practices with this fixed, global idea of language. The two clashed. By contrast, interlanguages are exactly characterized by their change over time and by their locality – exactly what one needs in order to talk about scientific language in the context of a shifting set of laboratory and blackboard practices (Galison 2010, p. 42).

11.3 What Is the Nature of the Concept of Trading Zone?

For a concept to have explanatory power, it cannot be applicable to everything, as Leigh Star noted in her essay on boundary objects (Star 2010). Where does Galison see the limits of applying the concept of trading zone in the analysis of local practices?

> Should we characterize any set of embodied practices as a subculture? The question is an empirical one. Is there enough regularity, enough covariance within a given set of practices, to merit our picking out regularity for attention? We have to be prepared for the answer to be "no." If there is enough regularity to justify speaking of quasi-stable subcultures in contact with one another, then, and only then, is the trading zone idea useful, because it is then that the thinness of the exchange proves valuable – in contrast with the thickness of the established cultures. For emphasis: the trading zone concept is *not* always applicable (Galison 2010, p. 46).

This caveat is necessary, but it is not to be read as saying that all trading zones would share the same set of characteristics or attributes, which could somehow be discovered. In this sense the concept is not a 'definitive concept', but rather a *sensitizing concept*, following the useful distinction by Blumer (1969/1998):

> I think that thoughtful study shows conclusively that the concepts in our discipline are fundamentally sensitizing instruments. Hence, I call them "sensitizing concepts" and put them in contrast with definitive concepts […]. A definitive concept refers precisely to what is common to a class of objects, by the aid of a clear definition in terms of attributes or fixed bench marks. This definition, or the bench marks, serve as a means to clearly identifying the individual instance of the class and the make-up of that instance that is covered by the concept. A sensitizing concept lacks such specification of attributes or bench marks and consequently it does not enable the user to move directly to the instance and its relevant content. Instead, it gives the user a general sense of reference and guidance in approaching empirical instances. Whereas definitive concepts provide prescriptions of what to see, sensitizing concepts merely suggest directions along which to look (Blumer 1969/1998, pp. 147–148).

The promise of the concept of trading zone lies in how it focuses the researcher's attention to the significance of particular forms of collaboration and emerging regularities: to the evolution and dynamics of new practical and discursive 'interlanguages' for boundary crossing. Galison writes:

> In instances of unequal exchanges between scientific-technical subcultures, what precisely does make it to the interlanguage from each side? It is a question that cannot even arise if we stop our analysis with proclamations about "interdisciplinarity", "collaboration", or "symbiosis". Those terms point at the problem; all the interest, in my view, lies in unpacking what the nature of this coordination is, and how it evolves over time (Galison 2010, p. 23).

Understood as a sensitizing concept, rather than a definitive one, the concept of trading zone is open for further development.[5] Blumer stresses the importance of understanding the role of concepts in social science and the value of a method, which would not make them immune to the real life being studied but subject to revision:

> Sensitizing concepts can be tested, improved and refined. Their validity can be assayed through careful study of empirical instances of which they are presumed to cover. Relevant features of such instances, which one finds not to be covered adequately by what the concept asserts and implies, become the means of revising the concept (Blumer 1969/1998, p. 150).

What does the concept of trading zone sensitize us to? The concept highlights boundary crossing phenomena and local coordination where global difference prevails. With the notion of interlanguages (jargons, pidgins, creoles), we become attentive to the creation and development of local cultural tools, linguistic as well as other material and semiotic means, which play a decisive role in collaborative practices across various boundaries.

11.4 Engaged Scholarship in STS and Planning Research

Planning research and STS have not had notable contact with each other, but the interest in STS is rising in the planning field (e.g. Hajer 2005; Goldstein 2010; Beauregard 2012, Leino in this book). There are many points of contact between these two fields: they are both studying politically complex social practices, in which materiality and the spatial dimension of the activities studied are central. Both are also dealing with issues of public interest and democracy and share the search for a humanistic philosophy as a basis for their normative and activist stances.[6]

Hackett et al. quote Ina Spiegel-Rösing as she describes the field of STS by identifying its five cardinal tendencies: 'The field, she observed, tends to be *humanistic* in its focus on real acting human beings, *relativistic* in its systematic attention to place, time and history; *reflexive* in its critical self-awareness of the potential influence of research on the object studied; *de-simplifying* in its commitment to "un-blackboxing" phenomena, understanding mechanisms, and delineating reciprocal influences; and *normative* in its commitment to understanding the ethics and values implicit in science and technology and to using that understanding to guide the transformative powers of science and technology in ways that are more generally beneficial and less potentially harmful' (Hackett et al. 2008, p. 6).

This theory–practice unity, by which I mean, e.g. the understanding of the consequential nature of research with regard to the phenomena being studied, is perhaps the key to understanding both planning research and STS as academic disciplines (see, e.g. Friedmann 1987, 2008; Hackett et al. 2008; Sismondo 2008). Scholars in both fields see their work not distinct from the engineers, policy makers, scientists and citizen groups they study. In the STS field, the reflexive discussion has continued a fairly long time and resulted in both more and less activist stances.[7]

In the planning field, the tension-laden unity of theory and practice is pervasive. I see it as a central feature of the field and hence, a subject of continuing discussion (see Healey 2012). It is reflected in the names of some of the leading journals, e.g. 'Planning Theory and Practice' and 'Planning Practice and Research', and in the central notion of 'planning'[8] itself. Straatemeier et al. (2010) address the question of theory–practice tension in planning research by taking up the division into 'descriptive science' and 'design science'. They take up an old idea of dialogue with practitioners and formulate it in terms of 'an experimental approach to research in planning' based on Kolb's model of experiential learning.[9] This stance is connected to the programmatic goal of casting planning research as 'reflecting with practice' and 'engaged scholarship' (Balducci and Bertolini 2007).

11.5 Methodological Considerations for Interventionist and Developmentally Oriented Research

I find the questions of methodology to be the most interesting dimension along which the theory–practice relationship is currently being worked on. It is precisely there, in the practical choices of how to carry out planning research, where new conceptual tools are needed. How can the notion of trading zone inform these choices? Gorman (2010) have outlined possible uses of the concept of trading zone in detailed empirical–historical analysis of local practices, in both past and contemporary cases. The planning field can benefit greatly from the systematic attention given to aspects of local practices developed in STS research, including the attention to particular trajectories of institutional and artefactual (material and symbolic) constellations. This is the type of social scientific research Straatemeier et al. refer to as 'descriptive science'. I don't think any design experiment can substitute careful analysis. Both are needed.

However, when the research interest and orientation is directed to practical intervention and change, I see that additional theoretical, as well as methodological, work is needed. The concept of trading zone can be brought together with other concepts more directly addressing questions of change and agency. I propose looking at two classical practice theories, namely, Deweyan pragmatism and Cultural Historical Activity Theory (Miettinen et al. 2012, see also Engeström 1987) for two reasons: first, in order to find a sound epistemological and ethical basis for intervention and experimentation (Miettinen 2006) and second, to find a praxis conception and theory of artefacts which allow for distinguishing analytically the different functional roles of artefacts – artefacts as *objects* of collaborative efforts and the targets and goals of joint efforts being pursued as well as artefacts as material and discursive *tools* and *means* employed in joint action (Cole and Engeström 1993; Cole 1998). This functional differentiation is well clarified by Engeström and Escalante in their article on problems encountered in the launching of a technological innovation called 'Postal Buddy'.

> In classical German philosophy, the object's embeddedness-in-activity was captured by the concept of *Gegenstand,* as distinct from the notion of mere *Objekt.* … objects do not exist for

> us in themselves, directly and without mediation. We relate to objects by means of other objects. … This means that objects appear in two fundamentally different roles: as objects (Gegenstand) and as mediating artifacts and tools. There is nothing in the material makeup of an object as such that would determine which one it is: object or tool. The constellation of the activity determines the place and meaning of the object (Engeström and Escalante 1996, pp. 325–373).

The praxis conception of classical practice theories sees cultural transformation connected to social or societal *objects* and *motives*, which are internally contradictory and historically stratified. Objects understood in this particular way (e.g. a plan, a building, an area, a strategy or the public good) are the reason for temporary and sustained collaborations across boundaries in planning: The objects draw actors together as well as mobilize considerable resources. The objects embody meaning and moral commitments to what is important and valuable, what should or ought to happen. That is why these objects are under constant negotiation, debate and reworking in local settings of collaboration and coordination. The idea of 'remediation', central to both Deweyan and Vygotskian traditions (see, e.g. Miettinen et al. 2012; Engeström and Sannino 2010) could be the fruitful theoretical and methodological link between intervention-oriented research approaches and Galison's idea of emerging interlanguages.

11.6 Asking Questions Instead of Having All the Answers

I want to end by looking at what Blumer has to say about requirements for a methodology when studying humans acting together (ibid. pp. 21–39). Building on the legacy of G.H. Mead, Blumer exhorts researchers in social science to treat their research targets as 'persons with a self', that is to say, as persons who have their unique interpretive horizons, meaning making facilities and agency:

> The contention that people act on the basis of the meaning of their objects has profound methodological implications. It signifies immediately that if the scholar wishes to understand the action of people it is necessary for him to see their objects as they see them. Failure to see their objects as they see them, or a substitution of his meanings of the objects for their meanings, is the gravest kind of error that the social scientist can commit. It leads to the setting up of a fictitious world. Simply put, people act toward things on the basis of the meanings these things have for them, not on the basis of the meaning that these things have for the outside scholar (ibid. p. 51).

Without this kind of understanding, the research into ongoing collaboration in trading zones risks equating participants with their positions or supposed interests, or with the educational, disciplinary or organizational backgrounds, or any other researcher-assigned positions. In such research, people can get reduced to mere 'proxies' for 'social worlds' or 'meaning systems', the emergence or transformation of which is not accounted for. This would be an instrumental and functionalist understanding of humans; although it is not uncommon to social scientific research, it is an untenable position (Blumer 1969/1998, pp. 24–26, 49; see also Forester 1989, pp. 68–70).

Several practical ways aiming to integrate the interpretative perspectives of the researchers and the subjects have been developed in the field of STS, activity theory[10] and planning research. One of the interesting contributions in the planning field is that of John Forester. John Forester has formulated the programme of critical pragmatism and a method of 'critically pitched discourse analysis', where planning students interview planning and mediation professionals working across multiple boundaries and create practice stories for conveying their practical wisdom and ethical judgement (Forester 2012, pp. 11–26).

In terms of making sense of the various contributions to the theoretical and methodological landscape discussed in this chapter, the intellectual task we face is the same as with the people we study: *to avoid reducing* each other to stances, schools of thought, or proponents of only one idea or another, but rather trying to understand how the scenery looks different from the respective standpoints each of us has arrived to, through unique paths. It is not about finding the one right way to interpret something, but about learning from each other.

Acknowledgments I want to express my deep gratitude to those who made it possible for this contribution to emerge: Jussi Silvonen for being an excellent teacher and mentor in the history, philosophy and methodology of social sciences; Raine Mäntysalo for showing by personal example that academic research can be a creative joint enterprise; and Kaisa Schmidt-Thome for her invaluable help in the final phase.

Endnotes

1. The schools of thought discussed by Allmendinger include systems and rational theories, critical theory and Marxism, neo-liberal planning, pragmatism, planners as advocates, 'after modernity' (including complexity and poststructuralistic theories) and collaborative planning.
2. In his recent essay (2008), John Friedmann, a foundational figure in planning theory, identifies three tasks that planning theory should address: Firstly, planning theory should evolve a deeply considered humanist philosophy for planning and trace its implications to practice; secondly, planning theory should help in adapting *planning practices to the continually changing course of human affairs*, i.e. to their real-world constraints of scale, complexity and time; and thirdly, planning theory should translate knowledge/knowledges and ideas from other fields into the domain of planning.
3. On the ontological status of scientific theories, see, e.g. Knuuttila's work on Models as Epistemic Artefacts (2005).
4. See also Karin Knorr-Cetina's work on 'epistemic cultures' (2000, 2001) and Rheinberger's work on experimental systems and 'epistemic things' (1997).
5. Boyd Fuller's work (2008) is an example of how this kind of theoretical development can be undertaken with negotiation and consensus building theories.
6. Also see Woodhouse et al. (2002) for an articulation of the activist stance in STS.
7. Sismondo (2008) explicates the division of the STS field to 'high church' and 'low church' and discusses the meaning of the 'Engaged Program'.
8. We should be aware of a tendency to speak about 'planning' and 'planning education' in universalistic way (see, e.g. Healey 2012). There is considerable national and even local variety in what is referred to by planning and what the education under the heading of 'planning' consists

of. Rachelle Alterman (1992) charted the situation 20 years ago on both sides of the Atlantic and noticed that the variety is striking and the national developmental paths are very much dependent on the local 'professional milieu'.

9. See Reijo Miettinen's insightful critique of Kolb's model (Miettinen 2000). Also see Miettinen (2004) on the roles of the researcher in developmentally-oriented research.
10. For an activity theoretically oriented STS study, see, e.g. Hasu and Miettinen 2006. Mervi Hasu (2005) has developed such a methodology under the rubric of 'sensitive ethnography'.

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Chapter 12
Conclusions and Afterthoughts

Raine Mäntysalo and Alessandro Balducci

Abstract In urban planning research, trading zones can be approached as practical *toolkits for mutual coordination* between different groups. While acknowledging political difference as a legitimate condition in itself, we may try to establish local planning strategies that could *coordinate* the activities of the different groups, despite even fundamental differences in values and epistemic understandings. Originally, the concept was introduced as an interpretive tool in dealing with communication problems in conditions of cultural-epistemological heterogeneity. But can the concept be "stretched" to aid us in trying to resolve deep political conflicts in planning? In itself, the trading zone concept *does not* bear political implications. Trading zones may be found and generated in *both collaborative and coercive* conditions. The *theoretical* implications of the concept are highly relevant in addressing the communicative planning theory dilemma. The realm for its *empirical* uses, both normative and descriptive, is wide.

Keywords Coordination • Language • Planning practice • Agonism

R. Mäntysalo (✉)
Department of Real Estate, Planning and Geoinformatics/YTK,
Aalto University, P.O. Box 12200, 00076 AALTO, Finland
e-mail: raine.mantysalo@aalto.fi

A. Balducci
Department of Architecture and Urban Studies (DAStU), Politecnico di Milano,
via Bonardi 3, Milan 20133, Italy
e-mail: sandro.balducci@polimi.it

A. Balducci and R. Mäntysalo (eds.), *Urban Planning as a Trading Zone*,
Urban and Landscape Perspectives 13, DOI 10.1007/978-94-007-5854-4_12,

Our fascination with Peter Galison's (1997) trading zone concept, and initial motivation behind this book project, stems from the highly *pragmatic* implications of the concept to difficulties in communication between groups with different values and epistemic understandings. Galison's focus on situated coordination, instead of broad consensus, provided, for us, a fresh perspective on the *dilemma of the communicative (or collaborative) planning theory*, regarding the latter's arguably unrealistic reliance on broad consensus as a source of legitimacy of planning decisions. In this book, Alessandro Balducci reflects on this issue, in his retrospective study of *Città di Città* case in the Milan Metropolitan Region.

Already Boyd Fuller, in his doctoral thesis (2006), had been able to apply the trading zone concept as linked to one theoretical discourse that can be seen as search out from the communicative planning theory dilemma. Fuller's contribution connects with John Forester's *critical pragmatism* (Forester 1993) that has gradually shifted focus away from the Habermasian legitimacy criteria (Forester 1989) to the practical skills and other resources that planners utilize in mediating controversial planning cases (Forester 2006, 2009). The approach relaxes on the Habermasian idea of 'universalistic' communicative rationality and concentrates, instead, on the particular conditions of the actual planning cases themselves, and looks at possibilities to arrive at a *situated* consensus, with reflective planning. Fuller was further able to use the trading zone concept in his analysis of water management planning cases in California and Florida, in explaining how situated consensus between groups 'with apparently irreconcilable differences' was achieved through planning mediation that could draw on the establishment of a shared platform of hybrid communication.

The trading zone concept seems to offer a welcome addition to this research stream, as it addresses the practico-linguistic means in overcoming linguistic and epistemic barriers between the different groups, while sharing with the pragmatic orientation and the focus on the local conditions and resources, instead of universal principles. Furthermore, the trading zone concept seems to fit well to conflict mediation cases in planning, when the stakeholders, to be mediated with and to engage in the generation of a shared trading zone, are readily identifiable.

We, however, chose another route, in studying the potentiality of the trading zone concept, in the attempt to resolve the dilemma of communicative planning theory. We returned to democracy theory and associated Galison's notion of 'coordination is good enough' (Galison 2010) with a deeper criticism of Habermasian deliberative democracy. Forester and Fuller retain the general approach of deliberative democracy, although they move forward from Jürgen Habermas' universal reason, as the shared logic of deliberative communication, to *situated deliberation*, in line with Amy Gutmann and Dennis Thompson's (1996) approach to deliberative democracy. We, instead, chose to follow Chantal Mouffe's theory of *agonistic democracy* (Mouffe 2000), which she proposed as an alternative to the idea of universal reason behind the Habermasian deliberative democracy. Mouffe is critical of the association of consensus with political legitimacy, and she seeks to legitimize the condition of political disagreement as a natural one, when the very essence of politics is seen to go beyond any realm of reason or logic. What then is universal is political difference, not reason.

However, when studying the planning theoretical discourse on agonistic democracy (e.g. Hillier 2002; Pløger 2004; Bäcklund and Mäntysalo 2010), in the attempt to create a new agonistic planning theory, we arrived at another dilemma. This dilemma relates to the normative task of planning theory, which needs to take a step or two forward from the philosophical depths of Mouffean democracy theory. How can we climb, in practical terms, from the agonistic acknowledgement of political difference to actual planning decisions? And when a decision is necessarily made, how can it be justified, if both the proponents and the opponents to this decision may have equal legitimacy to their contrasting claims? If the Habermasian idea of universal reason does not seem practically advisable, then the Mouffean idea of the prevalence of political difference does not seem to bring us far, either.

In Galison's trading zone concept, we saw a possibility to move forward by approaching trading zones as practical *toolkits for mutual coordination* between different groups. The word 'coordination' became key: while acknowledging political difference as a legitimate condition in itself, in the sense of agonism, we may try to establish local planning strategies that could *coordinate* the activities of the different groups, despite even fundamental differences in values and epistemic understandings between the groups. The idea of trading zone as hybrid practice also shifted our focus from the level of planning decisions, and the issue of their legitimization, to the level of *planning practice*. *Can local planning practices be approached as coordinative platforms between different groups or stakeholders, without the necessity of mutual consensus, and can we develop certain trading zone tools to facilitate the emergence of such planning practices?* In Chap. 1 (first published in *Planning Theory*, 2011), we labelled this approach to planning as the 'trading zone approach'. The legitimacy of planning was brought to the level of practice, too: 'The exchange language of agonistic trading should be conceived as an organic, open-ended and continuously inclusive system of planning communication and interaction - and, moreover, as a system capable of developing self-reflexive boundary rules for judging mutually the legitimacy of the agreements and decisions made' (Mäntysalo et al. 2011, p. 268). The rules of legitimate conduct themselves were regarded as trading zone tools.

The legitimacy aspect is one of the questions we need to address when applying the trading zone concept to the realm of public planning. The question is still far from resolved.

There are also other questions to address, when we *translate* the trading zone concept, created in the field of sociological studies of science and technology (STS), and try to render it usable in planning theory and research. As Jonna Kangasoja remarks in the previous chapter, following John Friedmann (2011), such translation from another field is one of the tasks of planning theory. When translating a concept from a field of research to another field, we need to have some understanding of the research field where the concept was originated and how the concept has been used in the field. Then, we need to relate this research field to our own and acknowledge the crucial differences that may also imply different approaches to the concept when translated to our field.

In this book, Jonna Kangasoja's and Helena Leino's chapters broaden our understanding in this regard. They both connect the trading zone concept to a wider context of STS and reveal broader connections between STS and planning research.

In STS, the research approach is usually *descriptive*, using, e.g. qualitative, ethnographic and archive research to understand the development and nature of certain scientific and technological communities and organizations. Planning communities and organizations may also be studied this way, and in this book, we have a few case studies that resemble this approach. However, planning theory itself tends to have a *normative* orientation, especially communicative planning theory discussed above. Does the trading zone concept allow this kind of translation: moving from explaining how existing platforms of practico-linguistic interchange have emerged and developed to using the concept in a normative attempt to aid planning practices in dealing with political difference and difficulties of communication? This question was discussed in Milan, March 2012, when most of the authors of this book met Peter Galison. We came to an agreement that such a normative use of the trading zone concept is, in principle, possible.

What are then the limits of stretching the trading zone concept to new uses in new research contexts? In translation, the concept may also be rendered unrecognizable or turned into an all-embracing word that loses its analytical edge. As this book has an important role in introducing the trading zone concept to the field of planning research, we have a responsibility to nurture the analytical strength of the concept while allowing sufficient heterogeneity of the uses of the concept in our book, too.

The limits of the trading zone concept in the planning research context are discussed in Chap. 10 by Vesa Kanninen, Pia Bäcklund and Raine Mäntysalo, regarding its grasp on political ambiguities. They use Collins et al. (2007) association of the concept to problems of communication as their point of departure: 'If there is no problem of communication there is simply 'trade' not a 'trading zone'. But what do we mean with communication problems in the planning context? Are we then framing our concentration to linguistic challenges of sharing information and services between differentiated conceptual systems, or are we including political problems, too, and to what degree? The demarcation line between linguistic and political communication problems in planning is indeed difficult, if not impossible, to draw. As the trading zone concept may lend itself more easily to cases of generating pidgins and creoles between different professional groups in planning—as in Mäntysalo and Kanninen's Kuopio case in Chap. 4—we may become inclined to use the concept in such normative ways, which undermine political complexities and lead to further domination of the professionals in planning processes, as discussed in Chaps. 4 and 10. Is there a risk of technicizing planning at the expense of its political dimension, when applying the trading zone concept in the development of planning methods and practices?

On the other hand, 'technicizing' issues, as tasks of coordinating practico-linguistic coexistence, in politically inflamed and highly coerced conditions, may indeed provide a source of empowerment for oppressed groups and increase their livelihood. This observation can be made from Laura Lieto's and Daniela De Leo's case studies from Naples and Sicily, in Chaps. 8 and 9. Without addressing the

overwhelming political problems directly, coordinating local coexistence of different groups is a political act in itself and bears political consequences. Here, the trading zone concept reveals its *strategic potentiality*, regarding our political intentions. In the planning context, the concept may be applied into a vehicle to increase domination as well as emancipation. Valeria Fedeli's case studies of ideas competitions in Paris and Milan are an example of the latter (Chap. 3).

In itself, the trading zone concept is *not* politically inflected. Trading zones may be found and generated in *both collaborative and coercive* conditions, as clarified in Collins et al.'s (2007) categorization of trading zone types. In Chaps. 5 and 6, Maarit Kahila-Tani and Claudio Calvaresi and Linda Cossa found this categorization useful when studying the development of SoftGIS tools and services (Kahila-Tani) and the neighbourhood regeneration programme in Milan (Calvaresi & Cossa).

We are pleased with the inclusion of highly coercive planning contexts, too, in this collection of contributions. Otherwise, the theoretical project with which we begun—overcoming the communicative planning theory dilemma—could have led to a too narrow view of the applicability of the trading zone concept, as a concept that would be feasible to collaborative planning cases only. Many of the case studies, such as the ones by Laura Lieto, Calvaresi and Cossa and Mäntysalo and Kanninen, also show powerfully how trading zones in planning are not merely about verbal argumentation and persuasion but about practices and artefacts in shared material and spatial localities.

The theoretical discussions and case studies of this book have hopefully convinced the reader of the potentiality of the trading zone concept in the planning research context. Many questions still remain, though, that require further research, as discussed above. In this regard, this book rather serves as an introduction to the possible uses of the concept in urban planning and design research, not as an exclusive coverage of the thematic. The *theoretical* implications of the concept are highly relevant in addressing the communicative planning theory dilemma—and as shown in this book—the realm for its *empirical* uses, both normative and descriptive, is wide. Following Peter Galison's general comment in one of our discussions, we can conclude as follows: When using the trading zone concept in planning research, the essential question we need to ask is a pragmatic one: Do we find ourselves capacitated by this use?

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Chapter 13
Trading Plans

Peter Galison

One might think that architecture and planning are as far from the history, sociology, and philosophy of science as one could get. What could negotiations over construction in a wooden village in Tampere (Finland), contested parking spaces in Naples, and struggles over façade renovation in Mafia-confronted Bagheria (Sicily) possibly have to do with coordinating action and belief in science? A great deal—As the authors of this volume illustrate vividly through their exploration of city planning in twenty-first century Italy and Finland. Passageways between science studies and planning studies are subtle and productive—as it turns out, they began almost a hundred years ago.

In the hothouse environment of interwar Vienna, for instance, issues of science, planning, and philosophy entered hand in hand. Born in the aftermath of the hugely destructive Great War, Red Vienna, as it was soon known, had an unparalleled housing problem to solve—exacerbated by the cascade of rural population that descended on the capital along with disoriented and recently furloughed soldiers. Before 1917, Vienna, not Petersburg, was the city most socialists thought would be the first to lead a country to a revolution. By the war's end, Vienna was a turbulent political cauldron of conflicting socialisms, nationalisms, and ethnic-linguistic divides constantly threatening to rip the taped-together Habsburg Empire into fragments. With the peace accords, Vienna became the center of a rump version of the former empire. A world had collapsed, and ambitions to construct something fundamentally new—intellectual, political, and urban—ran riot.

In the midst of this world, a hodgepodge assembly of philosophically inclined thinkers began to make common cause. Their organizing center, the one truly certified philosopher, though one with very solid scientific credentials, was Moritz Schlick. Around him, forming what came to be known as the Vienna Circle, the beginning of modern philosophy of science, was the physicist-turned-philosopher/logician Rudolf

P. Galison (✉)
Department of the History of Science, Harvard University,
Science Center 371, Cambridge, MA 02138, USA
e-mail: galison@fas.harvard.edu

A. Balducci and R. Mäntysalo (eds.), *Urban Planning as a Trading Zone*,
Urban and Landscape Perspectives 13, DOI 10.1007/978-94-007-5854-4_13,

Carnap, the sociologist-economist-philosopher Otto Neurath, and the mathematician-philosophers Hans Hahn and Philipp Frank, joined by others, ranging from a dubious Karl Popper to an even more uneasy ally opponent Ludwig Wittgenstein. It was a group whose left wing was as interested in Freudian psychoanalysis, the new sociology, and Austro-Marxism as it was in special relativity and relation of mind to brain. Out of their meetings came a manifesto, the *Wissenschaftliche Weltauffassung*, a stirring call for a nonphilosophical philosophy that would be broadly systematic and scientific, discarding traditional metaphysics like so much chaff while keeping the wheat of psychology, sociology, and physics (Galison 1990).

Though the original Circle had to flee Vienna or die, by the mid-twentieth century, analytic philosophy was not just ascendant; it had ascended in many countries. But in the United States and Britain, victory came at a price: the imported work was heralded as a model of technical, unpolitical philosophy. Generations of students were taught that logical positivism stood for the core of philosophy: the new predicate logic coupled with simple observation statements—a protective shield against nonsense. So I remember reading Carnap's *Logische Aufbau der Welt*, one of the most celebrated works of twentieth century philosophy, and being shocked by the preface. It begins, as one might expect, with the spirit of cleansing—here was a book to strike down the demon of metaphysics:

> We do not deceive ourselves about the fact that movements in metaphysical philosophy and religion which are critical of such [a scientific] orientation have again become very influential of late. Whence then our confidence that our call for clarity, for a science that is free from metaphysics, will be heard? It stems from the knowledge or, to put it somewhat more carefully, from the belief that these opposing powers belong to the past (Carnap 1928 [2003], p. xvii-xviii).

But then Carnap's Preface takes a sharp turn, one that, if you expect logic and scientific observations inexorably disported, is utterly surprising:

> We feel that there is an inner kinship between the attitude on which our philosophical work is founded and the intellectual attitude which presently manifests itself in entirely different walks of life; we feel this orientation in artistic movements, especially in architecture, and in movements which strive for meaningful forms of personal and collective life, of education, and of external organization in general. We feel all around us the same basic orientation, the same style of thinking and doing (Carnap 1928 [2003], p. xvii-xviii).

Carnap went on to say that this new orientation would be attentive both to detail and to the whole, to a search to instantiate a clarity everywhere, for the binding ties of society while granting freedom to the individual—all while recognizing that "the fabric of life can never quite be comprehended." "Our work," the somewhat dour if nonconformist minister's son Carnap concluded, "is carried by the faith that this attitude will win the future" (Carnap 1928 [2003], p. xvii-xviii). Otto Neurath was even more involved with architects and planners—on the board of a journal, "Der Aufbau," he and his colleagues wanted to clear the old, dark Vienna of horse-drawn carriages and gaslights, using engineering principles. They wanted more light, more common areas, and more engineering—Neurath personally was involved with a myriad of attempts to get communities to engage in the bottom-up renovation of their built world. Planning and philosophy of science may be closer than they appear.

Both Carnap and Neurath saw the built environment as an embodiment of all they stood for—a change in the form of life from hypocrisy, pointless decoration, and destructive ideologies to one built on rational, intelligible shared experience. In philosophy, though Schlick, Neurath, and Carnap disagreed about certain points, they concurred that they wanted to ground knowledge in immediate, scientific experience. Their enemy?—All that was nationalistic, spiritualist, and clerical as well as all that could not be shared, understood, and dispassionately evaluated. Their tools?—A stripped-down allowable vocabulary and syntax for reliable knowledge. Aiming to avoid phrases like "unity of the soul and Germaneness," they much preferred logical-empirical utterances of the form "if these electrodes spark, then smell of ozone in the generator plant, 12:45am." Here was a hunt for an anti-philosophical philosophy, a unified science, and a transnational form of language. Material politics was never far from the scene—in post-World War I Vienna, the battle was always engaged over who controlled the right way to grapple with mass housing, public transport, worker education, and public space; all the while, they engaged with the upheavals in science then underway. Communicative universalism was not for that inter-war generation an arcane piece of school philosophy. The Unity of Science movement, as it came to be known in the 1930s, was all at once a reorientation toward knowledge and an antifascist infrastructure.

On the other side, through the long 1960s, the study of science shifted unrecognizably. Logical positivism, in the 1920s hoisted as a banner of the Central European left, had become an established philosophy. Science itself in the 1960s felt to many in a new generation of Anglo-American students and faculty not a liberating secularism but instead the instrumental arm of weaponry. Whatever their own politics, Thomas S. Kuhn's *Structure of Scientific Revolutions* (1962) and Paul Feyerabend's *Against Method* (1975) by the 1970s were celebrated across the disciplines (anthropology, sociology, philosophy, history…). To many in those years, the new talk of rankless paradigms blasted the logical positivists, creating room for a new realm of equal, autonomous cultures of knowledge, without hierarchy or universal means of assessment. On the reading of Kuhn and Feyerabend, Einsteinian physics was not a better (more verified, more confirmable, more falsifiable) theory of physics than Newton's mechanics. Instead, two different scientific cultures spoke two incommensurable scientific languages: Einsteinian and Newtonian. Each picked out both its own concepts and its own experimental worlds. To say that the "space" and "time" spoken of by Newton (part of the sensorium of God) was the same or even a limiting form "space" and "time" uttered by Einstein (procedurally coordinated, identical clocks and rulers), was simply to pun. *Translation* between the theories of x and t might be possible, but it was as awkward and incomplete as translating a poem from Chinese to Dutch. So it was, too, in anthropology, where Clifford Geertz used the notion of "thick description" to point to the autonomy, equality, and fundamental otherness of cultures—to understand another culture was to grasp its intricate web of symbols, values, and meanings.

The contrasting pictures of scientific language were as different as they could be. While the logical positivists thought there could be one language of science—observations and their connections—universally intelligible protocol sentences logically arranged, the anti-positivists thought there was not even the possibility of

a single translation from one scientific theory to another. Both understood language as fundamental; both agreed that there was no direct access to the world without it. But the disposition of language was radically different. The logical positivists hoped communication could join sciences and peoples. Anti-positivists hoped the language specificity of science would model a liberating relativism: all or nothing, universalism or nominalism. For several decades, the battle continued. Indeed, it progressed to the point where a new generation of science studies work began to ask questions skew to what was becoming more an incantation about truth, relativism, and authority than a substantive engagement with the practice of science.

In the 1980s, my main aim was to develop an account of science (mainly physics) that would recognize that knowledge was not just a top-down affair run by different incommensurable theory and fact-checked by the lab (anti-positivism) nor building-up affair from observations (logical positivism). The Annales School and sociocultural historians seemed onto something when they recognized that changes in politics did not always coincide with shifts in social structure or cultural activities. My goal was to capture the knowledge-generating work of experimentalists and instrument makers as historians and sociologists had for centuries put on theorists. More precisely, I wanted to depict physics as having three very different, but coequal subcultures (patterns of handling practices, values, symbols, meanings)—without making experimental work merely a support or generating factory for theory. There would be theoretical practices—diagrammatic routines, for example, as well as practices of tracking and amplifying signals on the laboratory bench. In *How Experiments End* (Galison 1987), one point was to show how these varied practices of physics could be well understood by treating all three subcultures as epistemically equal. "Observation" was not first philosophy (logical positivism) nor were the fragmented paradigms of theory (anti-positivism).

Epistemic subcultures in overlapping periodization appeared to solve a problem that had long troubled me: the logical positivist program was clearly unfit to capture scientific practice—it woefully underestimated the weight of theory, reducing it to a mere summing up of observations. General relativity and quantum field theory were clearly far more than that. But the relativist anti-positivist program suggested that scientists lived in a fragmented world, while physicists felt the long continuity of their discipline. The anti-positivist metaphors, "ships passing in the night," "radical, translation," "religious conversion," and "Gestalt switches," seemed utterly incompetent to capture the felt experience of doing science. Indeed, Bohr and Einstein worked tirelessly to show precisely how the novel elements of their theory connected to theories before them—the idea of utter rupture felt imposed on the sciences from the outside.

The picture I was working on had these three subcultures, each finite, and each had its own breaks (no magic thread of observation to hold all together). But they were *intercalated*; the breaks at one level were sutured by the continuities at another. The central idea was that the continuity as a whole was formed out of finite bits, one layer of continuity covering breaks in another—the way fibers make up a string or the stones that compose the Great Wall of China.

So far, so good. But here was the rub. If experimentalists really did have different ways of coming to agreement than theorists (as I was arguing)—if the two groups really did have different convictions about the objects in the world (the ontological), how we got knowledge about them (the epistemological), and the laws that governed nature (the nomological), then what could hold these layers together? Instead of making the problem of incommensurability better through intercalation, it was worse. These were just the criteria that had propelled Kuhn and Feyerabend to claim incommensurability between successive theories. Where before there was incommensurability over time (Newton to Einstein), now I had that and worse: incommensurability among strata (subcultures of experiment, theory, instruments) even *within* the Einstein world.

By 1988–1989, I knew how to phrase the problem in a better way: we in science studies knew that practices in science should be studied locally, laboratory by laboratory, but we had continued to speak as if language was global. This mismatch between *local* scientific practices and *global* language practices made an account of change over time and communication across space incoherent. In the fall of 1989, I learned from linguists at the Center for Advanced Studies in the Behavioral Sciences in Stanford about the field of anthropological linguistics—and more particularly about the specialty within it that researched jargons and pidgins in areas of trade and other contact. Here was an example of language treated locally. It avoided both Van Orman Quine's worry that there would be *too many* global translations from one language to another and Kuhn's concern that there was *not even one* adequate translation.

Instead, here was a study of jargons, pidgins, and creoles worked out in specific times and places: in Indonesian prisons, in the trading ports where Europeans swapped goods for fresh food, and on the coasts where wheat was exchanged for fish. Three aspects struck me as immediately applicable: using the model of "natural" interlanguage development, we could see a *local*, *contextual*, and *diachronic* evolution, one that could take, for example, a few words of a jargon, follow it into an activity-specific pidgin, and sometimes even track its evolution into a full-blown creole, sufficiently articulated to allow one to grow up within it.

Here we have a messier constellation of partial and hybrid technical subcultures bound by constantly changing inter-languages, not the neat, universal protocol language and not the tidy, articulated paradigm of individual island empires on which were spoken the pure tongues of Einsteinian or Newtonian.

My original studies involved hybrid techniques used to bind experimentalists, theorists, and instrument makers—in particle physics, what was shared, and what held back? Or how, say, the engineers at DuPont spoke with the theoretical nuclear physicists on the Manhattan Project—or how in the radar labs of MIT, radio engineers managed to forge a common arena of calculational and diagrammatic techniques by which they could communicate with physicists who were familiar with the mathematical physics of classical electrodynamics. Even the pure dominion of algebraic geometry wore its prior hybridity on its sleeve, even if by the mid-twentieth century it stood as the very example of purity.

Over the last years, I have admired how scholars, activists, and regulators have used the idea of the trading zone to explore the ways that fishers and fisheries have hammered out agreements, soil scientists and farmers, and the multiple actors engaged with the future of the Everglades. A striking example of a trading zone, however, is one not drawn from the scholarly literature but instead from a film on the preservation of a particular wetland not far from New York City. Two otherwise warring groups—duck hunters and conservationists—formed common cause around a particular body of land to preserve it from development. Though they disagreed about the overarching philosophical status of land, hunting, and "nature," they found a way to get on with the job of keeping the complex wetland in a state where ducks, plants, and fish could flourish. By putting aside their global concerns, the two groups actually found that they could grapple with the complex economic, regulatory, and ecological structures of this land in the context of fast-moving suburbanization. Was this a full-bore *consensus*? Not at all. Politics, culture, and even class identification were in conflict. Was the outcome a *compromise* between conservationists and hunters? No, here a complex of politics, preservation, and values—here, the value of keeping a wetland system intact—could be hammered out only by thinning the normative description of why it should be done.

The authors whose work appears in this volume use the idea of a trading zone in variety of ways, and it would violate the spirit of the whole enterprise for me to act as some kind of adjudicator. Instead, I have learned from this process of taking up, using, and extending this complex of ideas in the domain of places and plans—in a field already rich with theoretical and pragmatic engagement. I have, in fact, learned a great deal working with this group. Though they overlap, let me oversimplify by indicating three promising lessons one might draw from these studies for the theory of trading zones.

13.1 Trading Space for Place

The studies in this volume show clearly that places are not just reassigned; they are actually produced by the process of thin coordination. Take, for example, the production of parking spaces in the old Spanish Quarters of that Laura Lieto follows in Chap. 9. The micro-sites—those seven or so square meters singled out in the twenty-first century for an automobile—quite obviously did not exist for that purpose back in the fifteenth century grid layout of the city. Instead, as the author puts it, these "recesses in the sidewalks, or small spaces in front of the entrance of abandoned or underutilized ground-floor rooms opening onto the street" came to have a new, contested, and valued significance in recent years. Carved out of other spaces by a confrontation of forces, these newly articulated bits of land gained a power of their own. Here converged: an economically deprived people who lived adjacent to the street space in question, a population's urgent need for parking, the municipality's failure to provide public transportation, a sometimes violent surveillance of the proprietary "owners" of the space, and an utterly acquiescent police force.

Did a common set of values, symbols, and meanings define and preserve these new micro-parking spaces?—not at all. Here was a thinly picked-out coordination that produced spaces of a geometry and location that had never before been identified as a place, as such. Or take Helena Leino's (Chap. 7) examination of Pispala Ridge, a 19th older wooden workers' district built as each settler found best, now host to artists, writers, and musicians. Interestingly, what picks out this place are concerns that oscillate in scale—local residents, to be sure, but aided in their production of their position by a German facilitator, alongside alliances with other wooden villages elsewhere in the country. Even the attribute "wooden village" re-individuates the object in question: now it is not just "Pispala Ridge" but an instance of this species. Politicians want to see to governance, some residents to viable development, and others to recreation or preservation—all themes that are local, national, and European. If the participants had waited until they all agreed on the ultimate significance of "preservation" or "underdeveloped," if they had demanded total clarity about the relation of governmental planning and local deliberation, and if any of a myriad fundamentals had had to be cleared up, everyone would have grown old and died before action could take place. A thinness of exchange—this time among (sub) cultures of different scales—produces a new place out of a site.

In Chap. 8, Daniela De Leo applies the trading zone approach to an extreme case of nonconsensual cultures in conflictual coordination in Bagheria and Villabate, Sicily. Here, civil society is far from the deliberative, participatory model of Pispala; in Bagheria and Villabate, the Mafia looms large, corruption is rife, and the city governments are barely functional. And yet, two projects emerged with success—the modification of plans for an outsize mall and the successful management of a program to remake the facades of many buildings. Key to these developments was not a wholesale dismantling of the Mafia in Sicily—obviously—but also not a retreat into isolated islands with no coordination. Instead, De Leo shows how *non-spatial* interventions actually permitted the (re) creation of these spaces. These included quite temporal (rather than spatial local coordination), speedier evaluation of permits to build, more transparent responses as to why a permit was rejected and what had to be done for it to be approved, amnesty for earlier illegal construction and the involvement of groups not previously addressed: women and young people. All these agreed-upon, "thin" accords were more than mere technicalities. By expanding the public, by rendering regulations more transparent and timely, relations of trust and identification could advance. Thinness of accord can well involve crucial issues of value and symbolic meaning. Thinness of accord can produce much more than the specification of a pipe diameter.

Valeria Fedeli (Chap. 3) takes the trading zone one step further: not in the production of the parking space, wooden village, or mall but to the spatialization of the planning process itself. Here was the production of what one might call a "space of spaces"—a single gathering point where the ten plans would stand in juxtaposition. Her case study includes Milan and Paris; on the French side, she follows the call for ten teams to imagine a new plan for the greater Parisian area—"Grand Pari(s) de l'agglomeration parisienne," a planning enterprise that was explicitly *not* political in the narrow sense of governance. Instead, the ten teams concentrated on objectives

(like sustainable development)—and presented their results in March 2009 at an exhibit in the renewed *Citè de l'Architecture* (to be followed by another phase on specific sites at the "Atelier International Du Grand Paris"). Here one has an iterated trading production of space: first, the trading zone implicit in each of the ten plans, with all their tensions and coordinations; and second, the exhibitions themselves which made a space out of the juxtaposed, necessarily imagined future spaces. Perhaps one should describe this production of space as a recursive trading zone: from individual plans, to the March 2009 exhibit of ten plans, to the future Atelier revising and extending to the original plans, and eventually to the interlanguage constructed out of the Atelier results.

13.2 Limits of Trade

One of the features of physics that is most striking is that theories very frequently carry over to other theories in particular limits. Einstein's general relativity yields his special theory in the limit where acceleration is small; the special theory of relativity produces a version of Newtonian theory when velocities are small compared with the speed of light; Newton's gravitational theory produces Galileo's laws of fall if one strays not too far from the surface of the earth. In the spirit, though not the letter of such correspondence, it has been productive to explore what happens in various limits of the trading zone—what happens if the trading subcultures are roughly equal in power? What happens if they are maximally unequal? What would it look like if the shared domain was as minimal as possible—or as wide as a discipline?

It is in this spirit that I have been intrigued by Star and Griesemer's (1989) important reflections on boundary objects—objects that are part of two worlds of activity, but are nonetheless recognizable as carrying enough of their own weight for us to consider them individuated. These can be understood as a double-limit of a trading zone. First, the boundary object tends to be static—not changing in time. Second, the boundary object is a thing—an archeological artifact, a bacterium, or, here, perhaps a bridge—a language game stripped down to a designating noun, without the rules of combination that we use in a full-up language. If a creole has enough linguistic flexibility to grow up in (including metaphor and more elaborate metalinguistic utterances), a pidgin is a restricted, more functional exchange language, and a jargon, a highly restricted set of utterances, the boundary object is the limiting case: "hammer," "ladder," or "bridge." On this reading, there is no clash between trading zones/trading languages and boundary objects; the latter is a limit case of the former.

There are other limits, too. Simon Schaffer and Bruno Latour have, in different ways, studied the reimposition of a whole system of work, a laboratory, for example, transported or replicated on other shores. Schaffer (1991) calls this a "multiplication of context"—and there are very interesting cases where one sees the process at work, for example, in highly unequal colonial moments, where people, equipment,

procedures, and materials are reestablished in the conquered territory. This too is a form of limit—the limit of power being (almost) entirely one-sided: a colonial observatory sent from Greenwich or Paris to map a conquered territory. On the other extreme would be a relation of almost complete equality: one might think here of the string theorists in tough argument and coordination with the algebraic geometers, disagreeing about fundamentals (what constitutes a proof, e.g., or what properties an acceptable theoretical object should have). Nonetheless, the two groups found themselves agreeing on a tiny bit of theory-territory: a number that counted the curves on a surface that both, for very different reasons, desperately needed to assess. What became a major trading zone with joint university appointments, conferences, and myriad publications began as an accord about a single number.

Collins, Evans, and Gorman have, very productively, extended this kind of reasoning in their two-by-two matrix in which the vertical direction grades power from cooperation to coercion and the horizontal axis marks similarity of the groups from homonogeneous to heterogeneous. I find the chapters included here (Chaps. 4, 5, 6, interalia) to probe other limit cases—this is important because as we push on the number and variety of actors, their authority, and their modes of interaction, we advance understanding of what a trading zone is and where it can be useful.

Relevant here are Raine Mäntysalo and Vesa Kanninen (Chap. 4), who address the relation between trading zone and boundary object, as they develop and further articulate the highly influential Kuopio model that reenvisions the city as composed not as isolated geographical pieces but as three overlapping zones (pedestrian, public transport, and automobile). In their formulation, the trading zone functions on two levels: in the relation of the zones to one another through physical points of interaction (such as the Särkisilta Bridge which allows only buses, bicycles, and pedestrians and so shapes the connectivity of those Kuopio zones) *and* in the planning process itself. That the trading zone occurs on this second (planning level) is explicit—in their words, "when studying interaction between land use and transportation planners, we are dealing with two autonomous disciplines in a relatively balanced relationship. They are autonomous with their own elaborate 'worlds' of conceptualizing, analysing and modelling their planning object, yet mutually dependent in their need to exchange information and contribute mutually to the production of feasible urban and regional plans." This doubling of trading zone structure between object and analysis is a crucial democratizing move; it brings the planners into the same discourse that they are encouraging citizens to engage in as they participate in the planning process.

Mäntysalo and Vesa Kanninen raise a further question about locality: do the actors engaging in a trading zone themselves have to be local to the interaction? I would say this. As we saw in the case of Pispala Ridge, the interaction is local, but the categories and groupings were not. Ideas of "nature conservation," "economic underdevelopment," and even "wooden villages" are not local—but their point of contact was. In physics, such delocalization is ever more the case. After all, the 3,000 or so physicists involved in the discovery of the Higgs Boson "at CERN" most surely will never meet in one place. They represent laboratories from all over the world, their work more frequently joined by email, Skype, file sharing, electronic

and bulletin boards than by town meetings the old fashion way. The categories of their analysis draw on 500 years of physics—not to speak of cryogenic, structural, electronic, and computer engineering. But, at the end of the day, this immense group must come to accord and say either "yes we have seen the Higgs Boson at 125 GeV" or not.

What exactly is shared in the trading zone? This is an essential question that both Claudio Calvaresi and Linda Cossa (Chap. 6) and Maarit Kahila-Tani (Chap. 5) explore. For the former, the focus is on the Neighborhood Laboratory in the Ponte Lambro (a marginalized area of Milan), where they follow the construction of locally shared management and social relations (e.g., procedures for admission to the housing complex) as well as physical or technical elements. The conjoint social and physical dimensions are more than a physical object—they become, in the long run, a way of life, a lived, not artificial, language game. Crucial is the imbrication of these elements with one another. As Calvaresi and Cossa write, "integration … matters, more than participation. The latter is a condition to pursue the former. The integrated dimension of the urban policy … changes the policy design process: no more a pure technical process, but rather a social learning process, where the different actors exchange knowledge, a potential for innovation. That is exactly the scope of a trading zone." I agree completely. Their swift disposal of "participation" as an end in itself parallels my view that sociologists of science have spoken too easily, too loosely about "collaboration" or "symbiosis." Such locutions are useless—the question is *who* brings *what* to the table and how are the parts integrated?

Integration gets worked out in what at first glance might appear to be a technical apparatus, SoftGIS, but which (as Kahila-Tani shows) soon becomes more: a toolkit to create a zone of exchange. She also wants to examine the limit cases of trading zones and does so very productively. One place where I found the example highly illuminating was in her thinking about the interface—after all, this is *precisely* how one would describe a trading zone written into software. Maarit Kahila-Tani's analysis captures the problem. Insofar as the interface was seen as one-way, as what the anthropological linguists call "out-talk" (a native speaker regularizing speech so as to make it accessible for nonnative speakers or children), it is at the very limit of *non*reciprocity in a trading zone. What is needed is clear: more feedback from the intended users in formulating this interface. Here too is an important contribution to the trading zone in a planning context—an explicitly *normative* use of the trading zone that encourages the expert group to build its tools incorporating attention to the patterns of use that the non-planners bring to the table.

13.3 Complexity and the Trading Zone

In different ways, three authors point to the complexity that planners face; all are important. Alessandro Balducci (Chap. 2) points to the heterogeneity of actors implicated in a major urban planning exercise, Jonna Kangasoja (Chap. 11) recognizes the heterogeneity of modes of application of the concept of a

trading zone and aims to set its register as a "sensitizing concept" rather than a "definitive" one, and finally, Vesa Kanninen, Pia Bäcklund, and Raine Mäntysalo rightly want to point out that there are political situations so heterogeneous that no exchange is possible.

Alessandro Balducci begins with his own experience in the planning process for Milan and the surrounding province, noting that this was a situation marked by a complexity on many levels, not least that it involved a myriad of actors (groups) and no central or even clearly defined decentralized line of authority. Some groups appeared and disappeared, even the process itself was in debate—but above all, the commitments of the participants clashed to such a degree that it seemed nothing could move forward.

To take one of Balducci's vivid examples of an impasse, it seems that the President wanted a road (the long-sought Pedemonta motorway) to demonstrate authority and gain votes. Planners, working with grassroots organizations, designers, as well as local and regional authorities wanted a greenway (the Northern Green Dorsal). Green design and Presidential self-interest—looking for a *consensus* seemed a fool's errand, and, at the same time, there was no governing authority that could command the dissensus to conform to a plan from above. In a way, the very complexity of the situation may have made the task of finding a zone of exchange easier—in the end, the planners managed to join presidential, regional, and local concerns through a plan to make a green road—valued differently by the different stakeholders, but valued by enough of them to free funds and achieve a resolution. Road engineers, urban planners, landscape architects, and grassroots groups all joined, but did so without legal command, fundamental consensus, or a technical compromise. As Balducci puts it: "Without convincing each other we had developed an inter-language and had identified a boundary object which allowed us and him each to pursue our different strategies with a common project."

Jonna Kangasoja has in mind another kind of complexity: she is interested parsing the kind of thing the trading zone concept is. Back in the bad old days of a rather doctrinal logical empiricism, texts on theories used to speak about the hypothetical-deductive model in which a theory stood as a universally intelligible object that, with specification of a local circumstance or conditions, issued in a series of deductions that could be tested. This misses so much about the actual practice of science that one hardly knows how to begin, and for the last 50 years or so, a more subtle picture has been emerging. For a start, concepts are not fixed by necessary and sufficient conditions—already Wittgenstein made it clear that even "number" and "game" have no such properties. Instead, concepts work like a chain of partially overlapping or family resemblances. Theories, which include concepts, are even more subtle in the way they move—Newton's or Maxwell's or Darwin's theories shift emphasis, add and drop concepts, and redefine their domain of applicability.

All this is very well known, of course, but it is all too easy, especially given the theory hunger of the interpretive social sciences, to act as if our concepts are indeed "definitive," articulated outside time, place, and pragmatic field. It is against this rigidifying tendency that Kangasoja (building on Blumer) is working. I am entirely on their side. Concepts (and objects) are quasi-stable configurations of practices,

sometimes theoretical, sometimes material, and sometimes a hybrid of the two. But they are not frozen even in the highest reaches of abstract mathematics, let alone on the ground, in our grasp of cities, streets, and transport. Indeed, as Jonna Kangasoja says, "objects draw actors together, as well as mobilize considerable resources. The objects embody meaning and moral commitments of what is important and valuable, what should or ought to happen." Indeed, I am glad that this piece is in the volume, for it is against everything I believe to want the trading zone to be treated like a universal, transhistorical machine for "solving" any problem in planning (or anywhere else). Instead, as Kangasoja suggests, the idea of the trading zone is to push us to ask questions—when we hear "participation" we have to push back: "Who participates?" "With what means?" "What is to be coordinated?" "What regularities emerge in the process of coordination?" "Does the coordination stagnate, eviscerate, or expand?" (Not every jargon becomes a pidgin and morphs into a fully formed creole). If we can put aside the "obvious" drive to come to agreement through command, consensus, or compromise, that would be good. If we can allow that a very partial, thin, nonetheless aesthetic, political, and ethical content can emerge, that would be a great good thing.

This takes me to a final consideration. Any theoretical account without limits of applicability must be vacuous. One cannot use special relativity near the horizon of a black hole, and one cannot use classical physics for systems much smaller than a billionth of a meter. Those restrictions are more than signs that say *ne plus ultra*—they also tell us something about what the theories *are*. In several of the essays here, authors have productively begun to probe horizons of where the trading zone can function.

Vesa Kanninen, Pia Bäcklund, and Raine Mäntysalo (Chap. 10) discuss the limitations of the trading zone when political conflict comes to loggerheads. An example: residents of *the Kruununhaka district in downtown Helsinki* wanted elevators—conservation ordinances forbade alteration of the historical stairwells, and the suggestion that the inhabitants strap elevators on the outside of their building or run them through their apartments met with (understandable) resistance. This, Kanninen, Bäcklund, and Mäntysalo rightly point out, is *not* a communication problem. It is a clash of incompatible objectives. Wanting a trading zone is not a promise one will exist—you can want a number greater than five and less than two, but that does not make one exist.

In science too, the desire for a trading zone has, in important cases, also proven impossible. Albert Einstein wanted to find a theory that would join electromagnetism to gravity and spent, fruitlessly, more than two decades on the task; no one since then has been able to do what he could not. In the eighteenth century, dazzled by the success of Newton's gravitational theory, chemists wanted to join Sir Isaac's inverse power laws to chemistry to create a new account of matter. It failed then, since, and now. Doctors wanted a science of the body based on classical physics—iatromechanics—it died. There simply is no doubt that the trading zone is not a passe-partout to every closed door. On this point, I quite agree with Kanninen, Bäcklund, and Mäntysalo. I agree on a further point: as Mäntysalo and others point out elsewhere in this volume, the trading zone frequently involves the coordination

of action and belief, material dispositions of space, and equipment with (local, even provisional) concord about beliefs.

I am less sure that we can sharply separate applicability from inapplicability of the trading zone into the bins of descriptive (where the trading zone works) and normative accounts (where it fails). In restricted cases—like the SoftGIS interface, a normative application seems quite plausible as a way to get feedback from the user groups in a way that makes a (restricted) normative trading zone plausible. But one of the urgent questions raised by this volume is that we need a better understanding of when we might plausibly expect a trading zone to work—and when not. Because, as this exceptional group of theoretical/practical planners has shown, the trading zone is a tool for work, not magical medicine.

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