

LAND-USE PLANNING AS INTER-ORGANIZATIONAL LEARNING

**RAINE
MÄNTYSALO**

Department of Architecture,
University of Oulu

OULU 2000



RAINE MÄNTYSALO

**LAND-USE PLANNING AS INTER-
ORGANIZATIONAL LEARNING**

Academic Dissertation to be presented with the assent of the Faculty of Technology, University of Oulu, for public discussion in the City Library of Oulu (Auditorium Pakkala-sali), Oulu, on January 19th, 2001, at 12 noon.

OULUN YLIOPISTO, OULU 2000

Copyright © 2000
University of Oulu, 2000

Manuscript received: 24 November 2000
Manuscript accepted: 4 December 2000

Communicated by
Academy Professor Yrjö Engeström
Architect, Doc.Phil. Kimmo Lapintie

ISBN 951-42-5844-4 (URL: <http://herkules.oulu.fi/isbn9514258444/>)

ALSO AVAILABLE IN PRINTED FORMAT

ISBN 951-42-5843-6

ISSN 0355-3213 (URL: <http://herkules.oulu.fi/issn03553213/>)

OULU UNIVERSITY PRESS
OULU 2000

Mäntysalo, Raine, Land-use planning as inter-organizational learning

Department of Architecture, University of Oulu, P.O.Box 4100, FIN-90014 University of Oulu, Finland

2000

Oulu, Finland

(Manuscript received: 24 November 2000)

Abstract

The aim of the study is to reveal the nature of learning in local land-use planning activity and to examine the possibilities for the development of planning as a form of learning activity. The theoretical approach draws on the *pragmatist and dialectical reorientation of systems theory* and the related theory of learning organizations. The traditional, positivist systems approach to land-use planning is considered both to *depoliticize* planning and to make it *unreflective*. Critical theory as a basis of planning theory is also shown to be inadequate. Communicative planning theories that draw on critical theory are rather theories of emancipation in the context of planning than theories of planning *per se*. An alternative systems-theoretical view to land-use planning activity is presented, where critical and constructive aspects as well as ethical and pragmatic aspects are interlinked in the *dialectical dynamics of planning as organizational and inter-organizational learning activity*.

Three subsystems within the system of local land-use planning are identified: *expertise, politics* and *economics*. The subsystems of land-use planning build upon the *basic distinction between legitimate and illegitimate conduct*. For each subsystem, the context of its existence is formed by the interaction of all subsystems. By acting, each subsystem inevitably changes its dialectical relationship to this context. Harmful changes are felt within the subsystem as inner contradictions that interfere with its decision-making activity. If the subsystem is unable to face these contradictions but instead resorts to the use of *pathological power*, they may develop into paralyzing *double bind situations*. The resolution of a double bind situation requires *expansive learning* by the subsystem.

However, there are also contradictions in land-use planning that the subsystems are unable to resolve by expansive learning. Such *inter-systemic contradictions* stem from the dialectical relationship between the overriding requirement of legitimacy on one hand and the basic goals of expert knowledge and economic profit on the other. In the study a hypothesis is formulated, according to which these *basic - and, in the conditions of modern society, permanent - contradictions in local land-use planning require such inter-organizational learning, which enables the creation of planning solutions that provide means for their task-related harmonization, and, in the longer term, contributes to the emergence of a participative planning culture where the contradictions can be handled legitimately, if not resolved*.

Keywords: system, legitimacy, communication, double bind.

Dedicated to my daughter Terhi

Acknowledgements

A young academic researcher depends on various kinds of support from his environment. He needs guidance from more experienced researchers on his field and on research work in general. He needs interested readers for his texts and keen listeners to his seminar presentations, to give his work meaning. He needs a community of researchers to share the good and the bad moments of his life as a researcher. And he naturally needs financial support to make life as a researcher a feasible choice.

I consider myself exceptionally lucky in all these respects. Owing to this, there are several persons to whom I wish to express my gratitude.

I cannot thank enough my two supervisors, professor Kaj Nyman from the University of Oulu, Department of Architecture, and professor Timo Järvillehto from the University of Oulu, Department of Behavioral Sciences. Many of the ideas developed in this book have sprung up in my numerous dialogues with you. I cannot claim credit for producing them, but mine is the responsibility that comes with my presenting them. Kaj, you were much more than a supervisor – a dear friend who was always available when I needed to hear your opinions and advice. Timo, you were not formally appointed as my supervisor, but you were nevertheless willing to supervise my work and share your precious time.

I am also deeply indebted to the reviewers of my thesis, academy professor Yrjö Engeström from the University of Helsinki, Center for Activity Theory and Developmental Work Research, and professor Kimmo Lapintie from the Helsinki University of Technology, Department of Architecture, Laboratory of Urban Design. Thank you for your insightful remarks and constructive criticism on my work.

I would also like to thank the town of Raahe for providing the necessary resources for the participative planning education project that became the object of my case study. I am grateful to all in Raahe who volunteered to take part in the project. Especially I wish to thank town architect Hilka Aaltonen for her invaluable work in managing the education project in Raahe, including the gathering of local participants, informing local press, arranging conference facilities, etc.

I have been fortunate to have an opportunity to participate in two Finnish post-graduate education programs on architecture and built environment. The director of the first, *Post-Graduate Education Programme on Milieu Construction*, 1994-96, was Dr. Anna-Maija Ylimaula, currently professor at the University of Art and Design, Helsinki.

The director of the second, the *National Doctoral Programme of Architecture*, 1995-98, was professor Kaisa Broner-Bauer, University of Oulu, Department of Architecture. I thank you both, not only for your valuable work on arranging extraordinary post-graduate education, but also for your decision to accept me as a student in your programs.

I also wish to thank the fellow members of my research team, which was formed in the beginning of the Post-graduate Education Program on Milieu Construction and was active in 1994-1997. The head of the team was Kaj Nyman, and the other members were Jukka Sihvonen, Lic.Phil., José Valanta, Lic.Phil., Johanna Vilkkuna, Lic.Phil., architect Hilka Lempiäinen and archaeologist Leena Lehtinen. Our cross-disciplinary collaboration made it easier for me to do cross-disciplinary research. Especially Jukka and I have continued to discuss and evaluate each other's research work, for which I am grateful.

I have received many valuable comments from my colleagues, lecturers and fellow researchers on my work at its various stages. I am very thankful to them all. Here are a few of them (not in any particular order): professor Anne Haila, University of Helsinki; professor Jerker Lundequist, Royal Institute of Technology, Stockholm; associate professor Niels Albertsen, Aarhus School of Architecture; professor Aarne Tarumaa, University of Oulu; senior lecturer Anja Allas, University of Oulu; professor Terttu Pakarinen, Tampere University of Technology; director Hilka Lehtonen, Helsinki University of Technology, Centre for Urban and Regional Studies; Anni Vartola, Lic.Sc.; Gareth Griffiths, Lic.Sc.; professor Pauli-Tapani Karjalainen, University of Oulu; Karitta Laitinen, Lic.Sc.; docent Riitta Kuoppamäki, Helsinki University of Technology; professor José Ramírez, Nordregio; architect Vidar Åm; architect Aulis Tynkkynen; architect George Woolston; and Mirja Lievonen, Lic.Sc.

Thanks to all of you at the University of Oulu, Department of Architecture, for your support.

Thanks to Sirkka-Liisa Leinonen for checking my English.

My work has received funding primarily from the Post-Graduate Education Programme on Milieu Construction and the National Doctoral Programme of Architecture. I have also received smaller grants from Jenny and Antti Wihuri Foundation, the Finnish Cultural Foundation and the University of Oulu Urban Design Fund. In total, this financial aid enabled my full-time concentration on research for a period of well over three years. Such a possibility for uninterrupted devotion to research is required if one wishes to write a book like this.

Finally, special thanks to my family, Eva and Terhi, and to my parents, Rainer and Leena, for your untiring support and encouragement.

Toijala, November 13th, 2000

Raine Mäntysalo

Contents

Abstract	
Acknowledgements	
Contents	
Introduction.....	13
What is Land-Use Planning?.....	14
Theoretical Orientation	15
Descriptive/Normative	15
Substantive/Procedural.....	17
Planning and Designing	19
Plan of this Book.....	19

PART I SETTING THE GOAL

1 Framing Systems Theory, Framing Planning Theory.....	25
1.1 Prose and Poetry.....	25
1.2 General Systems Theory Movement	27
1.2.1 Open System	28
1.2.2 Information Theory	29
1.2.3 Feedback	31
1.2.4 Black Box.....	33
1.2.5 Cybernetics	35
1.3 Systems View of Planning.....	35
1.3.1 Faludi's Cybernetic Model of Planning Agencies	35
1.3.2 Main Characteristics	40
1.3.2.1 Systems Rationality.....	40
1.3.2.2 Managing Uncertainty	40
1.3.2.3 Centrally Coordinated Planning of Urban Systems.....	42
1.3.2.4 Managing Management.....	42
1.3.2.5 Planning and Politics.....	45
1.3.2.6 Conclusion	45

1.4 Economic, Administrative, and Political Games	46
1.4.1 Economic Game	46
1.4.2 Administrative Game.....	48
1.4.3 Political Game.....	52
1.5 Critique on Systems Thinking.....	53
1.5.1 Ethical Critique	54
1.5.1.1 Lifeworld and System	54
1.5.1.2 Depoliticizing Planning.....	55
1.5.1.3 Depoliticizing Politics	59
1.5.1.4 Power and Learning Systems	61
1.5.2 Functional Critique	64
1.5.2.1 Individual and Collective Rationality	64
1.5.2.2 Control Relationship	70
1.5.2.3 Explanation and Prediction	74
1.5.2.4 Planning and Learning	75
1.5.3 Conclusion	85
1.6 Framing Cybernetics, Framing Planning	86
1.6.1 Metaphoric Bind and Double Bind	87
1.6.2 Reflective Practice.....	93
1.7 Critique on Critique	97
1.8 Rethinking Learning Organizations	107
1.9 Rethinking Systems Theory	110
1.9.1 Rethinking Information Theory	111
1.9.2 Rethinking Open Systems	111
1.9.3 Rethinking Cybernetics.....	113
1.9.4 Rethinking Game Theory	115
1.10 Between Game and Play in Land-Use Planning.....	116

PART II THE HUMAN SYSTEM

2 The Voluminous and the Conscious	123
2.1 The Voluminous	124
2.1.1 Organism.....	125
2.1.2 Volume and Its Forms.....	126
2.1.3 Perception	129
2.1.4 Aspects and Differences	130
2.1.5 Morphostatic and Morphogenetic Events.....	132
2.1.6 The Past in the Present	134
2.1.7 Cooperation.....	137
2.2 The Conscious.....	139
2.3 Metaphoric Bind	142
2.3.1 Metaphor and Metonymy	143
2.3.2 Nature and Culture	146
2.3.3 Concepts to Contexts.....	147
2.3.4 Creative Planning	150

3 Different Differences.....	155
3.1 Primary and Secondary Process	155
3.2 Russell's Rule.....	156
3.3 Goals, Tools, and Roles.....	159
3.4 Royal Road to Consciousness	162
3.5 Difference, Distinction, Identification and Opposition	162
3.5.1 Difference.....	163
3.5.2 Distinction.....	164
3.5.3 Identification and Opposition.....	169
3.6 Survival, Use and Exchange.....	173
3.6.1 Survival	173
3.6.2 Use	173
3.6.3 Exchange.....	174
3.7 Practice, Theory and the Theorist.....	176

PART III

POLITICAL ACTIVITY AND THE SYSTEM OF LAND-USE PLANNING

4 System of Land-Use Planning.....	183
4.1 Societal System	183
4.2 Political System.....	189
4.2.1 Political System and its Neighbours.....	190
4.2.2 Subsystems of the Political System.....	194
4.2.2.1 Three Attitudes	197
4.2.2.2 Subsystem of Expertise	199
4.2.2.3 Subsystem of Politics	200
4.2.2.4 Subsystem of Economics	204
4.2.3 Reflection and Self-Maintenance	205
4.3 System of Land-Use Planning.....	208
4.3.1 Planning as Expertise	209
4.3.2 Planning as Politics	213
4.3.3 Planning as Economics	218
4.3.3.1 Towards a Market Orientation.....	218
4.3.3.2 Learning from Great Britain.....	221
4.3.3.3 Trend planning	224
4.3.3.4 Leverage Planning.....	228
4.3.3.5 Private Management Planning.....	233
4.3.3.6 Planning in the Face of Globalization	233
4.3.3.7 Conclusion	234
4.3.4 Ecology of Land-Use Planning	236
5 Power, Double Bind and Strength.....	239
5.1 Power	242
5.1.1 Behaviourist Notion of Power.....	243
5.1.2 Explicit and Implicit Power.....	245
5.1.3 Excessive Use of Power	251

5.2 Double Bind	253
5.2.1 Cybernetic Explanation	253
5.2.2 Pathological Power	257
5.3 Double Binds in Land-Use Planning	260
5.3.1 Double Binds in the Politics of Land-Use Planning	262
5.3.2 Double Binds in the Political Expertise of Land-Use Planning	268
5.3.3 Double Binds in the Political Economics of Land-Use Planning	273
5.3.4 Double Binds in the Expertise of Land-Use Planning	277
5.3.5 Double Binds in the Economics of Land-Use Planning	280
5.3.5.1 Exchange of Exchange Versus Use	281
5.3.5.2 Free Market Versus Balanced Market	287
5.3.5.3 Image Versus Reality	291
5.3.6 Conclusion	292
5.4 Strength	295
5.4.1 Public Realm	297
5.4.2 Representation and Democracy	299
5.4.3 Polis	300
5.4.4 Technical and Political Activity	302
5.4.5 Liberation and Freedom	303
5.4.6 Conclusion	304

PART IV REFLECTIVE PRACTICE OF LAND-USE PLANNING

6 Land-Use Planning as Organizational and Inter-Organizational Learning	307
6.1 Levels of Learning	309
6.2 Problem of the Problem	315
6.3 Analysis: From Reactive Cooperation to Reflective Cooperation	323
6.4 Generative Metaphor: From Play to Work	338
6.5 Expansion: From Microcosm to Macrocosm	351
6.6 Reflections on the Summer Theatre Design Task	359
6.7 Legitimate Reflectivity	366
7 Conclusion	369
7.1 Dialectical Systems Theory of Land-Use Planning	369
7.2 Pathological Planning	370
7.3 Organizational Learning in Planning	373
7.4 Inter-Organizational Learning in Planning	374
7.5 Legitimizing Inter-Organizational Learning in Planning	375
7.6 Suggestions for Further Research	375
References	377

Introduction

There are two ways to study land-use planning: you may either focus on the *object* of planning – that is the built environment – or you may focus on the actual *activity* of land-use planning. In this book, I approach land-use planning as a type of human and social activity – more especially as a *reflective activity*. How does reflective learning take place in land-use planning, and how could it be improved? How do different planning practices and theoretically advised planning methods relate to reflectivity? Are there some practices and methods that are more reflective than others? Are there any general characteristics of land-use planning as reflective activity that could be inferred? Should the practice of land-use planning, as organizing/organized socio-political relationships, conceptual understandings and bureaucratic structures be compatible with certain general principles and rules, in order to constitute a learning organization?

Why, then, should land-use planning be a learning organization? We could equally well ask why there should be land-use planning in the first place, because we would not be able to plan our urban lives for long if we did not have the ability to develop our practices and methods of planning. To demand learning skills of land-use planning is simultaneously to value the existence of land-use planning. Learning in land-use planning is equal to maintaining the functionality of land-use planning. By learning and reflecting, the planning organization maintains its ability to respond to changes in its ‘socio-physical’ object environments and also to changes in its own structure. These changes concern not only the ways the participants in planning problematize and plan their urban environments, but also the ways they relate to each other. While they, by planning, organize their urban environments, they simultaneously organize human relationships in the socio-political context of planning activity. The requirements placed on the land-use planning organization are therefore twofold. It has to be able to deal with environmental problems on the one hand and the socio-political problems that arise within itself as it tackles the above problems on the other.

What is Land-Use Planning?

What is planning as a form of human activity? I would like to give the following definition: planning is representing future activities and attempting to organize these activities by arranging their representations. A plan is a representation of organized future activity (see Suchman 1987, ix, 185, 188). Fundamentally, the activity of planning is tied to the very essence of human existence. It is as central to human existence as language. In language we plan. Language itself has developed through ages parallel to our attempts to represent to one another what our own future actions will be and how we wish our counterparts to respond to them. Language enables organized social activity. The basic function of language is to provide a means by which humans plan and thereby fit together their future social activities.¹ As planners, human beings form curious relationships to their environments. They try to distance themselves from their present action environments by making representations of their desired future activities. Still, planning is concrete action in the present and not in the future. What kind of environmental behaviour is the activity of separating oneself from the present environment in the present environment?

If we apply my general definition of planning to *land-use planning*, we can suggest that land-use planning consists of representing the future uses of land and attempting to organize them by arranging their representations. 'Land' can be defined as a 'limited area of the physical environment that is owned by somebody'. In 'land use' this area becomes a means of organized activity. In land-use planning the different uses of land – i.e. the different organized activities in the 'physical environment' – are represented, and these representations are arranged into land-use plans. Land-use planning consists of (1) *fixed categories for different uses of land* (housing, business, traffic, recreation, industry, etc.), (2) *fixed ways of representing them* (graphic and written documents), and (3) *fixed ways of arranging these representations in the planning process* (analyzing, zoning, budgeting, holding meetings, deciding, informing, etc.).

In studying land-use planning theoretically, we are easily trapped in these highly bureaucratized and readily observable features of land use, representations of land use, and planning processes whereby the representations are arranged. Ostensibly, land use, plans and planning activity seem to be linearly related to each other. Plans appear to represent *given* uses of land, planning to arrange land use through a *given* set of representations, and changes made in land use to implement a *given* plan. But if we wish to reach the level of general theory of land-use planning, which is the goal in this book, we need to look beyond these seemingly simple causalities and to develop theoretical tools that are abstract enough to apply contextually to their interdependencies. What I am after is a *systemic explanation* of land-use planning.

A systemic explanation sees inter-relationships and nonlinear interaction where the conventional explanation sees simple linear causalities. *Firstly*, plans not only represent given uses of land. The representation itself is also an activity that gives form to 'land' and 'land use'. Only represented environments and represented actions in the environment are conceivable as 'land properties' and 'land uses'. In representation, we

¹ Section *The Conscious* in Chapter 2.

give form to the objects we represent. *Secondly*, planning activity not only applies given ways of representing land use, but also creates new ways in its processes of framing and solving planning problems. And as ways of representing land use change, the conceptions of how to use land also change. *Finally*, plans are not ‘implemented’; instead planning activities are *acted upon* by various actors (residents, businessmen, politicians, administrators, journalists, etc.). They are acted upon *both* before *and* after the ratification of the plan ‘to be implemented’. Instead of sending only one message: ‘Implement this plan’, the process of planning sends a multitude of messages in its various stages, whose effects on people’s intentional activities in the built environment cannot be controlled. Although planners make their plans for anticipated future environments, they cannot deny the *presence* of their planning activity, which changes people’s behaviour in the present environment.

Theoretical Orientation

My theoretical approach to land-use planning can be articulated by using two general distinctions of scientific orientation: *descriptive/normative* and *substantive/procedural*.

Descriptive/Normative

In descriptive research, one strives to propose claims about reality. ‘Reality’ is not necessarily understood as objective reality; it may equally well be conceived of as intersubjective. In descriptive research, one tries to answer the question of what the research object is like. The research object may be any object or idea that can be framed as an entity through research. Irrespective of whether the studied object is a ‘physical’ object or a set of cultural meanings or psychological experiences, it can be approached scientifically with a descriptive attitude.

Often, though, the descriptive research attitude is associated with positive-empiricist sciences where an ontological separation is made between the researcher’s work and the researched object. Then, the scientific validity of the descriptive claim concerning the object is evaluated to the extent it corresponds with the object itself. The assumption is that we are able, in principle, to look beyond descriptions of our research objects and have access to these objects in their ‘pure’ form. Contrary to this, the standpoint taken in this book is that objects may appear to us only as described objects. Hence, in the last analysis, we can only speak of correspondence between one description and another one, not between reality ‘in itself’ and its given description. (See Huttunen, Kakkori & Heikkinen 1999, 112-17.)

But we should not settle here. Even if we accepted the claim that reality *an sich* evades our observations and discloses itself only in the form of descriptions, the separation between the researcher’s theories and his objects of research may still be retained. We may still approach the descriptions of reality as “pure” and “objective” – as independent and impartial touchstones to our theoretical descriptions. According to Richard J. Bernstein, this is done in early logical positivism and later logical empiricism, where a

sharp distinction is made between observation descriptions and theoretical descriptions. Each has its own language. The language in which we describe phenomena is seen as our basic language, and theoretical language, in turn, is understood as a language in which we explain the descriptions of phenomena. In observation language, we, furthermore, test and confirm hypotheses and theories made in theoretical language. The distinction between the two languages entails that observation language is not affected by changes and developments occurring in theoretical language. (Bernstein 1980, 285.)

By referring to Feyerabend, Bernstein criticizes this view. It is not only false to the actual historical development of scientific inquiry, but it also harbours faulty methodological assumptions. Each theoretical language contains its own observation language, and any observation language, in turn, contains theoretical assumptions. There is thus no observation language that would be relatively independent of a theoretical language and could serve as a basis for testing it. We do not “measure” a proposed scientific theory against a common, constant set of descriptions or observations. What counts as a description or observation from the viewpoint of one theory is different from other theories (despite the seeming use of same key words), and the two sets of descriptions and observations are typically incompatible. (Bernstein 1980, 286.)

Observation descriptions and theoretical descriptions are parts of the *same conceptual system*. It is the *function* of this system to produce descriptions of reality and, further, to classify these descriptions into observation descriptions and theoretical descriptions. In my view, the researcher *creates* a distinction between his research work and the researched object, and through this distinction *both* are given form as objects. The distinction is made in the activity of researching and its usefulness is tied to the success of the research work itself. The distinction is not pre-existing but conditioned by the system of scientific activity.

In this regard, researching is similar to planning. In planning, the planned object and planning work are given form. By making the basic distinction between his planning work and the planned object the planner separates his plans from ‘reality’. But the counterpart thus separated does not acknowledge the distinction. Plans are not outside reality, but inevitably part of it. The separateness of the plans from the planned reality exists merely in the planner’s own mind. Similarly to the activity of researching, the distinction only exists in the activity of planning, not in reality. The object as a ‘signified object’ only exists in the activity whereby it is given form.

Here we approach the *paradox* that constitutes the core of this book. Reality is not ontologically divided, but every epistemology, through its emergence, creates a distinction upon the undivided reality. Epistemologies are paradoxical because they emerge through a division of something that is undividable. They are thus inherently self-contradictory. And being self-contradictory, all epistemologies are false. But on the other hand, the activities wherein epistemologies emerge and are maintained are real, concrete activities. By existing, and being able to exist, epistemologies are true. In my vocabulary an epistemology is *appropriate* if the activity based upon it is able to endure. If this is the case, reality ‘allows the distinction to be made upon it’, although it does not acknowledge it. Plans and the objects they refer to are appropriate if the activity of planning itself is able to survive. Accordingly, scientific claims and their objects are appropriate if the making of science itself is able to survive. (Chapter 3.)

This position does not mean that we should withdraw from being descriptive in our research. All research necessarily has an object of some kind and produces claims concerning that object. In this sense, research always describes something. But I do not mean to draw a conclusion that it is possible to take a position where one can somehow compare to each other the scientific description of a phenomenon and the ‘real’ phenomenon (or an ‘objective’ description of it) itself. The position of this book towards scientific descriptions about ‘real’ phenomena is a *paradoxical* position. Descriptions about reality are paradoxes. But paradoxical descriptions are unavoidable in science – as in planning and everything else where human consciousness is involved. What we can avoid are descriptions that create *inappropriate paradoxes*.

While descriptive research is content with describing the circumstances of reality as observed, or established through observation, *normative* research comprises instructions or demands to improve these circumstances¹. In a sense, normative research takes a meta-level attitude towards descriptive research; it cannot propose what the researched conditions *should be* like without referring to what they actually *are* like. The normative research attitude suits well to planning research. Planning itself is motivated by a need to improve the existing conditions. Planning is normative, and planning research that aims to aid planning work is normative, too. For example, ecological planning research usually shares with ecological planning the normative demand to improve the ecological sustainability of living environments. Research on participative planning, in turn, usually takes the emancipation of planning as its normative axiom. A major tradition in planning research consists of theories whose normative goal is the improvement of rationality (scientific or communicative) in planning.

My approach is normative. As far as the practice of land-use planning is concerned, my normative aim is to improve its reflectivity. In short, I shall investigate *descriptively* how the practices of land-use planning are describable as reflective practices; and *normatively* how their reflectivity could be improved.

Substantive/Procedural

Planning research may focus on the objects of planning, or it may take planning itself as its object. Andreas Faludi has divided planning theories accordingly into two categories: *substantive* and *procedural* planning theories (Faludi 1976, 7-8)². Substantive planning

¹ By making a distinction between descriptive and normative research my intention is not to claim that descriptive research could be totally free from normative implications and assumptions. But as a research attitude descriptive research can be separated from the normative one, in the sense that the researcher may choose whether he *intends* to examine his object of research from an evaluative point of view or not.

² As will be revealed in Chapter 1, Faludi’s categorization has been criticized. A certain planning procedure carries certain power relations, value preferences and epistemic biases, which all influence the formulation of planning contents, tasks and objectives. My intention is neither to claim that the procedure of planning could be viewed independently with no regard to the content of planning. I am merely claiming that it is possible to separate procedural and substantive

theory is concerned with research objects that are similar to the objects planners deal with. As such, it attempts to offer direct aid to planning work. In the case of land-use planning, substantive planning theory either offers *descriptions* of what kind of phenomena and problematics planners encounter when planning built environments or offers *normative instructions* to planners on what kind of built environments they should produce. Ecological planning theory often belongs to the latter category. The object of procedural planning theory is planning itself: its methods, practices, organization, management, etc. Procedural planning theory is focused on either *describing how* planning proceeds or giving *normative instructions* on *how* it should proceed.

Whereas in substantive planning theory the key question is ‘*What?*’, in procedural planning theory one asks ‘*How?*’. In descriptive research the relative key question is: ‘What *is* X like?’, and in normative research: ‘What *should* X *be* like?’. In the context of research on land-use planning, the relative distinctions ‘substantive/procedural’ and ‘descriptive/normative’ can be combined as the horizontal and vertical axes in the following matrix (see Lang 1987, 19):

Table 1. Four possible orientations of land-use planning research based on different combinations of choices between descriptive and normative research on the one hand and substantive and procedural planning theory on the other.

RESEARCH ORIENTATION	SUBSTANTIVE “What?”	PROCEDURAL “How?”
DESCRIPTIVE “What <i>is</i> X like?”	“What <i>is</i> the built environment like?”	“How <i>is</i> land-use planning done?”
NORMATIVE “What <i>should</i> X <i>be</i> like?”	“What <i>should</i> the built environment <i>be</i> like?”	“How <i>should</i> land-use planning <i>be</i> done?”

Theories of participative planning are *procedural-normative* theories, as they offer instructions or demands on *how planning should proceed* in order to be more democratic. Accordingly, planning theories that are concerned with developing more rational or effective planning methods are also procedural-normative. My interest in how the reflectivity of land-use planning practices could be improved makes my planning-theoretical approach procedural-normative, too.

approaches from each other in the sense of stating where the main focus of research lies. As understood here, procedural research on land-use planning is focused on planning activity and the methods and techniques of planning, while substantive research is interested in questions and aspects concerning the built environment *as objectified* in planning activity – not analyzing the processes of objectification themselves.

Planning and Designing

There still remains one pair of concepts that needs to be discussed here: planning and designing. In Anglo-American discussion, the two concepts have usually been distinguished from each other. They also form two separate academic fields, as land-use planners are educated separately from architect-designers. In this tradition, planning is often seen as administrative public sector work, which aims at rationality in organizing functional and economic factors of the environment and society. Designing, in turn, is associated with architects' and industrial designers' creative and artistic form giving. Thus, according to this view, in planning the object is rationally organized, whereas in designing it is moulded into an artistic form. This rough distinction between planning and designing (which I admittedly oversimplified) approaches the familiar distinction between science and art.

In this study, planning and designing are largely treated as synonymous concepts. However, the difference in connection to the scale of the object is retained, so that I rather speak of town and regional planning and building designing, than town and regional designing and building planning. But as forms of human activity planning and designing are not treated as qualitatively different from each other. Planning is not seen as a form of activity that in its essence is less creative and less artistic than designing, and designing, in turn, as a form of activity that by its nature is less rational than planning.

But, in order to arrive at this view of planning and designing as qualitatively similar forms of human activity, we also need to develop an unorthodox conception of rationality and creativity, science and art. My intention is to formulate a conceptual framework where the qualitative distinction between planning and designing disappears. Approaching from the perspective of Finnish language and academic tradition, this may be easier to do, since in Finnish there is only one word '*suunnittelu*' to denote both planning and designing, and in Finnish schools of architecture the same curricula comprise the education of both land-use planning and building designing skills (although the student has freedom to choose where the emphasis lies).

Plan of this Book

As the procedural planning theory developed from the tenets of Herbert Simon's *Administrative Behavior* (1947) to the theoretical stance of the early 1970s, it adopted its scientific methodology from *systems theory*. Planning processes were viewed as systems. Later, this theoretical tradition was severely criticized by planning theorists who mainly relied on Jürgen Habermas's critical theory. They sought to demonstrate the *legitimacy crisis* of systems planning. Critical planning theorists argued that systems-influenced planning theory had depoliticized planning by giving it a seemingly scientific and neutral appearance. My theoretical approach is also critical of the traditional systems view of planning. But it is also my contention that systems theory can be developed to transcend its implicit obstacles. As a general theoretical tool, it does not have to be abandoned. Systems theory itself provides the means to criticize the mental models of planning theory that were derived from the first-generation systems theory. In this book, my

purpose is to present a ‘new-generation’ systems approach to planning theory. This will be done through a pragmatist, activity-, and communication-theoretical reorientation of systems theory and related theory of learning organizations. At the heart of this *reorientation* is a shift from the doctrine of control to the idea of paradox. Instead of seeing systems as ontologically separate from the environments they try to control, systems are seen to create system/environment distinctions within themselves, and thus to exist as inherently divided.

My approach will be delineated in Part I, where I will first introduce and then critically review the traditional systems approach to planning. The critique is classified into two broad categories: *ethical* critique and *functional* critique. The ethical critique mainly relies on the arguments made by critical planning theorists. The functional critique purports to point out, from the advanced systems view, failures that are inherent in the traditional systems view itself, and thereby prevent the systems from attaining their own goals. In conclusion, the positivist systems approach is seen not only to depoliticize public planning, but also to make it *unreflective*.

Critical theory as a basis of planning theory will also be shown to be inadequate in Part I. Critical (or communicative) planning theory is rather a theory of emancipation in the context of planning than a theory of planning *per se*. Because they reject systems theory, critical planning theorists are often reluctant to approach the problems concerning the management and organization of planning. The management of planning is taken as the management of a ‘bureaucracy’, which is seen as the embodiment of organized oppression – the ‘bureaucratization of lifeworld’. Communicative planning theories that lean on critical theory are often not able to go beyond offering ideals of planning dialogue. Unambiguous advice on how this should be done in practice is seldom offered. Habermas’s communicative rationality is based on making and testing claims with reference to a given moral-practical horizon of shared understandings. But the key problem in transcultural and pluralistic planning situations is *how* such a mutual horizon could be found. In its deepest sense, planning consists of shaping shared worlds – and, accordingly, of formulating shared rationalities. Habermas’s critical theory does not address this crucial aspect of planning, but departs from a presumed situation where we already have a shared world and a shared yardstick of rationality.

By relying especially on Alfred North Whitehead’s organismic philosophy, Gregory Bateson’s and Anthony Wilden’s theories of communication systems, Niklas Luhmann’s systems theory of society and Yrjö Engeström’s theory of organizational learning, my purpose is to develop a systems-theoretical view to land-use planning practices, where critical and constructive aspects as well as ethical and pragmatic aspects are interlinked in the dynamics of reflective planning communication. My aim is to transcend the separation between ‘system’ and ‘lifeworld’ (and the corresponding separation of instrumental and communicative rationalities) by approaching planning practices in terms of *inherently dialectical activity systems*. The dialectical nature of planning systems is seen as the source of both the dilemmas of planning and its reflectivity on them. The dialectics of human activity systems is based on the conception of the fundamental dialectical relationship between ontology (undividedness) and epistemology (dividedness). This distinctive approach to human existence and planning activity will be introduced briefly in Part I and developed further in Part II.

Chapter 4 of Part III will offer a theoretical description of the system of land-use planning. As a political system, the system of land-use planning will be shown to be paradoxical. A central function of politics in public planning is to give the latter the appearance of a single, coherent organization. But the actual incoherence in the performance of public planning betrays it to be rather an *ecology of organizations*.

In Chapter 5 I will describe and classify the possible dilemmas the system of land-use planning may face when reflection is absent or prohibited. The chapter will hence voice a normative demand for reflectivity in land-use planning.

In Chapter 6, Part IV, I will describe the quality of reflectivity in land-use planning. With the aid of an illustrative example taken from a recent urban design education project, I will demonstrate land-use planning practices that are reflective and suggest what could be done to improve their reflectivity.

There are two challenges that are usually ignored when studying the reflectivity of planning practices. *Firstly*, the full complexity of reflective learning in planning practice has not been adequately addressed. Most studies concerned with learning in planning, and with learning organizations in general, are content to limit their research to the stage where transcultural teams, in mutual dialogue, reveal basic assumptions and create and criticize new ideas. However, it is often *after* this stage that the most difficult problems for the organization – and, equally, for the study of organizational learning – emerge. The route from a promising new idea to a renewed planning practice is seldom straightforward, but usually confronted by new contradictions, compromises and also new learning.

In connection with this, there is *another*, and perhaps even more demanding challenge to developmental research that focuses on activity systems as multifarious as the system of land-use planning. Land-use planning does not involve only one, but *many* forms of organized activity which collide, compete and are mutually reflective. By conceiving land-use planning rather as an ecology of organizations, we also approach the realm of *inter-organizational learning*. This is an area of developmental research which remains poorly known.

These are the challenges I attempt to tackle.

PART I: SETTING THE GOAL

This part will serve as an introduction to the epistemic framework and related key concepts to be used and developed later in this book. I will here lay down the basic foundations of my theory of planning. My argument will be developed by discussing systems theory and systems-theoretically influenced – as well as systems critical – theories of planning. Through a critical review of these theoretical approaches, I intend to lay down a basis for a new orientation towards systems theory and systems-theoretical planning theory, to state the goals of this study, and to reveal the need for such an approach. No full historical account of related theoretical developments is attempted. Themes and concepts are selected and brought into discussion in the order and profundity seen as proper for the gradual unfolding of my own argument.

1 Framing Systems Theory, Framing Planning Theory

1.1 Prose and Poetry

The purpose of this chapter is to outline the theoretical position of this study in relation to systems theory and communication theory. The perspective in relation to those theories focuses on the realms of interest and theoretical tendencies where the two theories overlap, or even combine to form a unified *theory of communication systems*. In this integrated realm, on the one hand, communication networks are understood as systems, and, on the other hand, systems activities are understood as processes of communication. *A communication system is organized communication that organizes communication*. In the case of human communication systems we may call it *language*.

But the picture would not be complete, if it did not include *activity-theoretical* aspects as well. *Firstly*, the system is not a static organization of relationships; instead it is an *activity* that *organizes* relationships or *maintains* an organization of relationships. *Secondly*, as the systems-theoretically and pragmatically oriented communication theorists claim, *all behaviour is communication* (Shannon & Weaver 1949; Bateson 1987; Wilden 1980; Ruben 1984; Watzlawick et.al. 1967). Activity is communication, and the system consists of such activity that organizes and maintains an organization of activity. It also follows that language is not conceived of as a structure of words. Language consists of activities that organize and maintain organizations of human activity¹. The words and their meanings are constituted and reproduced in language by combinations of activities where certain verbal utterances and certain nonverbal behaviours are linked together². These are contexts of use – called language games by Wittgenstein – that determine the

¹ This definition comes close to Mead's conception of language as a principle of social organization (Mead 1962, 268). Following Mead, Järvillehto concludes that language is social activity where individuals create such mutual organizations – communities – that enable cooperative results (Järvillehto 1995, 124).

² See Wittgenstein's example of a fictitious language used by a builder and his assistant (Wittgenstein 1958, 3).

meanings of words: "Let the *use* of words teach you their meaning" (Wittgenstein 1958, 220 – my emphasis).

It is from this integrated perspective that land-use planning and planning theory will be approached here. Land-use planning is conceived of as a form of activity, and this activity is described and analyzed as a communication system. Planning is organized communication of the uses of built land. But not only that. If we were satisfied with this definition, we would not grasp the full nature of planning. The uses of land, or of the built environment, are not the only objects that land-use planning deals with. In planning, *planning itself* also becomes an object of planning (Faludi 1976, 52). This self-reference, or self-cultivation, is what characterizes planning as a form of activity. *Land-use planning is organized communication about land use that organizes communication about land use – land-use planning that aims at planning both land use and itself.* This dual function of planning is analogous to path-walking. On the one hand, paths direct our walking; on the other hand, it is by walking that paths are made. There are thus two kinds of path-walking: walking that confirms and deepens a given track, and walking that turns off the given track to make a new one. Now compare path-walking to "word-speaking" (including "word-writing" and "word-thinking"). Words both speak and are spoken. Without shared words our mutual communication would be impossible. But where do our shared words come from? – From our mutual communication.

Language in its fullest sense is both *prose* and *poetry*. Language is a *system of naming*. It objectifies things – it creates them as 'things'. The difference between prose and poetry is that the former takes things as they are, whereas the latter creates new things¹. Prose is satisfied with existing objects and therefore also with existing forms of objectification within language. Poetry begins with suffering, i.e. with a feeling of remaining mute with a language that offers no adequate means to express one's emotions. One seeks new things – new means of expression – and in this creative and critical search language itself is made into an object. This does not mean that poetry could approach language from the outside. Language is its own metalanguage (Wilden 1980, 171; Karatani 1995, 62, 74) – it can objectify even itself as a 'thing'. Poetry is activity where language reflects on itself. In poetry, one learns how to be about things differently.

Land-use planning that is able to reflect on given environmental problems, and hence able to problematize its own processes of problem-structuring, is a language that utilizes itself to its fullest potential. Land-use planning as both prose and poetry – as both planning and meta-planning – is not only about the built environment (which would be prose) but, more essentially, *about how it is about the built environment*. As poetry, land-use planning also begins with suffering – with a feeling of being muted by the inadequacy of the language of planning. One seeks new means of expressing one's actions and perceptions in one's use of the built environment. Here planning itself becomes the object of planning; and as one reflects upon it, one learns how to be about land use differently. Land-use planning as prose and poetry is about these two types of things: about land-use issues, and about land-use planning itself. It is concerned simultaneously with both

¹ According to Gregory Bateson, "[p]oetry is not a sort of distorted and decorated prose, but rather prose is poetry which has been stripped down and pinned to a Procrustean bed of logic" (Bateson 1987, 136).

substantial and procedural issues (see Faludi 1976, 3) – the emphasis shifting from issues of one type to issues of another type as the planning process advances.

1.2 General Systems Theory Movement

The "prosaic" goal of land-use planning is to organize the use of the built environment. We may say that the purpose of land-use planning is to make the use of the built environment systematic and to keep it that way. Wouldn't we agree that land-use planning has succeeded when activity in the built environment takes place in an organized manner? Isn't it also true that urban life would not be possible, if people could not adjust their own behaviours to those of others, and if single acts would not combine to make up some kind of system at the collective level? Urban life may well be considered a multi-person system, and the use of urban environments as one aspect of that system. Activity in the urban context may itself be taken as a system on its own terms.¹ As land-use planning is concerned with organizing this activity, it may be understood as a means to steer, or control, this system.

However, the planner is no outsider to this system. Fundamentally, it is his own urban life from which he derives his methods of controlling urban life. He is part of what he controls. Land-use planning itself is part of urban life – an urban activity among other urban activities – but its special feature is its attempt to rise above the rest of the urban life to control it.

The question of how a part of a system can endeavour to control the system was central to a wide range of theorists who worked in diverse fields, from the 1930s to the 1970s, studying organizational management, automata, chemical metabolism, animal and social populations, communication channels, land-use planning, etc. During that period, a host of new theories and disciplines, such as general systems theory, cybernetics, mathematical communication theory, game theory, computer science, management science, operational research and policy analysis, emerged to study problems of self-regulation and organized complexity. This intellectual activity, which can be called the *General Systems Theory Movement* (Fischer 1990, 199-200; Jääskinen 1988, 93), is based on Ludwig von Bertalanffy's theoretical ideas rooted in theoretical biology. Von Bertalanffy set out to formulate a general theory that would define the principles that are valid for "systems" in general (von Bertalanffy 1975, 7). He called this theory "General System Theory". What he defined as "systems" were "complexes of elements standing in interaction" (*ibid.*). Such complexes are encountered in, for example, the capital theory, which deals with populations of "goods", in chemistry and molecular biology, which study the interaction of molecules, atoms, and electrons, in

¹"It should be clear, though, that a town as a physical artefact cannot be regarded meaningfully as a system (except as a perceptual system); it is only when the buildings are occupied by people's activities; when the spaces and channels are filled with flows and movements of people and goods and information; when there is daily and weekly and seasonal change in these activities and flows; when the whole situation ages or changes in longer periods of time – only then is a town usefully to be seen as a system." (Chadwick 1978, 47.)

organization theory, which deals with social interaction and decision-making behaviour of working groups and communities, and in land-use planning, where the planner is faced by numerous forces, motives and needs influencing urban development. Von Bertalanffy's intention was to formulate an abstract, essentially mathematical language that would describe *organized complexity* in general, regardless of the specific natural or social scientific field within which such phenomena are encountered. He blamed classical (natural) science for its inability to deal with organized complexity. Up till then, science had limited itself to describing only unorganized complexity (statistics) or organized simplicity (mechanics) (*ibid.*, 8; see also Wilden 1980, 243). General systems theory was intended as a universal theory – as an analytic framework which was to provide a conceptual apparatus abstract enough to grasp all kinds of "wholes" found in our world. It displayed itself as a science of sciences, or as a "skeleton of science", as Kenneth Boulding called it (Boulding 1975, 21).

1.2.1 Open System

The main interest in general systems theory was focused on systems which are called '*open systems*'. Open systems are defined as systems that exchange matter and energy with their environment. Another reason to criticize classical natural science was its inability to deal with this kind of systems.

"Conventional physics deals only with closed systems, that is, systems which are considered to be isolated from their environment. Thus, physical chemistry tells us about the reactions, their rates, and the chemical equilibria eventually established in a closed vessel where a number of reactants are brought together. Thermodynamics expressly declares that its laws only apply to closed systems. In particular, the second principle of thermodynamics states that, in a closed system, a certain quantity, called entropy, must increase to a maximum, and eventually the process comes to a stop at a state of equilibrium. [...]

However, we find systems which by their very nature and definition are not closed systems. Every living organism is essentially an open system. It maintains itself in a continuous inflow and outflow, building up and breaking down of components, never being so long as it is alive, in a state of chemical and thermodynamic equilibrium, but maintained rather in a so-called steady state. This is the very essence of that fundamental phenomenon of life which is called metabolism, the chemical processes within living cells. What now? Obviously, the conventional formulations of physics are, in principle, inapplicable to the living organism *qua* open system and steady state, and we may well suspect that many characteristics of living systems which are paradoxical in view of the laws of physics, are precisely a consequence of this fact." (Von Bertalanffy 1975, 9.)

The basic distinction made by von Bertalanffy between open and closed systems also opened up new horizons in the study of organizations. It was revealed that classical organization theories considered organizations mostly as closed systems. By treating

them as open systems, one was able to incorporate outer influences in one's analysis. An organization as an open system interacts with its environment. From this basic revelation there was only a short step to the input-output models so popular in later organization and management studies. (Anttiroiko 1993a, 18; Kallio 1993a, 30-43.)

Von Bertalanffy got his first ideas by studying the thermoregulation of warm-blooded animals. These animals are able to maintain the steady state – also known as *homeostasis* – of their body temperature despite changes in the temperature of the environment surrounding them. Homeostatic systems seemed to defy the second principle of thermodynamics, according to which entropy must increase in all irreversible processes. The only steady state possible for such a process was to be the state of maximum entropy, which was also the most probable one. In a closed space, all molecules with different temperatures must eventually conform to a uniform temperature. The state of having, say, all the molecules with a high temperature on one side and the ones with a low temperature on the other is a highly improbable one and cannot remain. However, warm-blooded animals seem to resist such a tendency for as long as they live. Their thermoregulation processes are irreversible, but they still counteract the force of entropy, which would make their body temperature conform to the temperature of their environment. According to von Bertalanffy's theory, warm-blooded animals are *self-regulative* open systems that are able to control their relationship to their environment. Instead of melting into its environment, such a system is able to maintain a *boundary* between itself and its environment and to interact with its environment across that boundary, so as to maintain an inner state that is *different* from the state of its environment. The open system emerges via this basic difference between 'system' and 'environment', and the maintenance of this difference is a process that is improbable and opposite to the process of entropy. In the general systems theory, the term '*negative entropy*' – or, in its shorter form, 'negentropy' – was introduced to denote open systems' avoidance of increasing entropy, now called 'positive entropy'.

1.2.2 Information Theory

A theory closely related to the general systems theory in this respect is Claude Shannon's mathematical theory of communication – usually referred to as *Information Theory* (Shannon & Weaver 1949). The central concept in this theory is *information*. The term 'information' is not used in its usual sense, but as a *principle of coding messages*. It is measured in terms of *binary either/or decisions*. As an example, take the game of Twenty Questions, where one is expected to figure out an object by having one's questions about it answered in the form of either "yes" or "no". The amount of information conveyed in one answer is a decision between two alternatives, such as animal or non-animal. With two questions it is possible to decide for one alternative out of four possibilities – for example, mammal/non-mammal, or flowering plant/non-flowering plant. Three questions permit a decision out of eight possibilities, and so forth. Hence, we can use logarithms to base 2 of the possible answers as a measure of information, the unit being the binary unit or *bit*. The less probable a message is, the more information it contains. A plan which designates an area for housing contains less information than a plan which assigns it for

row houses, because the former allows several alternative types of dwelling-houses to be built and the latter only one. Accordingly, the amount of information of a plan increases as further specifications are included, such as assignment of the area for one-storey row houses, one-storey row houses with a red brick facade, and so on. The logarithmic way of measuring information happens to be similar to that of negative entropy, since entropy is also defined as a logarithm of probability. As positive entropy is a measure of disorder, negative entropy (or information) is a measure of order or organization, which is an improbable state compared to a random distribution. (Von Bertalanffy 1975, 11.) We may also call information a measure of differentiation and positive entropy a measure of non-differentiation¹.

"In this way information theory comes close to the theory of open systems, which may increase in order and organization, or show negative entropy. But negative entropy can be considered a measure of decisions, taken out of equally probable ones, a measure of improbability or information." (Von Bertalanffy 1975, 11-12.)

The application of information-theoretical ideas to the theory of open systems entails that we consider these systems *communication systems*. Then, the exchange of matter and energy between a system and its environment is understood in more abstract terms as an exchange of information. Thus, the open system is conceived to communicate with its environment. In information theory, communication is understood as the transmittance of messages from an information source to a destination through a communication channel. A message is *encoded* into binary digits by a transmitter and then sent via a channel to a receiver, which is an inverse transmitter that *decodes* the transmitted signal back into a message, and hands it over to the destination (see Figure 1).

"In the case of telephony, the channel is a wire, the signal a varying electrical current on the wire; the transmitter is the set of devices (telephone transmitter, etc.) which change the sound pressure of the voice into the varying electrical current. [...] In oral speech, the information source is the brain, the transmitter is the voice mechanism producing the varying sound pressure (the signal) which is transmitted through the air (the channel). [...] When I talk to you, my brain is the information source, yours is the destination; my vocal system is the transmitter, and your ear and associated eighth nerve is the receiver." (Shannon & Weaver 1949, 7.)

The signal is subject to *noise* in the channel, which is a term used to refer to any distortion that interferes with the transmission of a signal from the source to the destination – such as static on a radio, a blinding fog, or blurred, rain-soaked pages of a newspaper. Noise causes decrease in information and an increase in positive entropy.

¹ According to Alfred Kuhn positive entropy in its broadest sense may be construed as loss of differentiation (Kuhn 1975, 117).

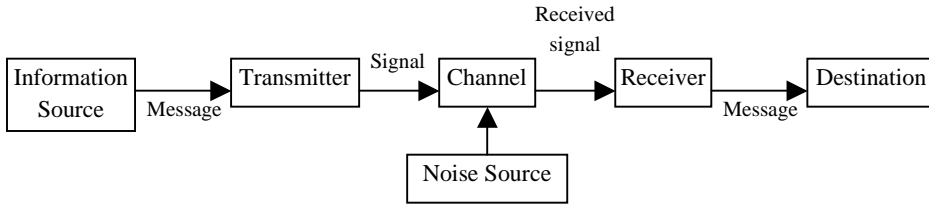


Fig. 1. The Shannon and Weaver model of communication.

1.2.3 Feedback

In studying the behaviour of self-regulative open systems, this linear model is bent into a circular one, where the system and its environment communicate with each other. Together they form a *feedback loop*. The open system "sends a message" to its environment, and the environmental reactions and interferences to that message are "fed back" to the system. The warm-blooded animal's blood temperature can be conceived of as such a message. As the weather becomes colder, "[c]ooling of the blood stimulates certain centers in the brain which "turn on" heat producing mechanisms of the body, and the body temperature is monitored back to the center so that temperature is maintained at a constant level" (von Bertalanffy 1975, 12). The self-regulative system and its environment are considered to share the same code. It is as if the warm-blooded animal asked its environment: "Shall I increase body heating – yes or no?"; and the environment replied with a feedback message decodable as either "yes" or "no". The *goal* of such an animal, in this regard, is to maintain its body temperature at a level suitable for its vital functions. More generally, the goal is to maintain homeostasis. Feedback systems that are able to maintain their homeostasis are *controlled* systems, which means that such a system is able to decode the feedback it receives from its environment. Its feedback loop is a circuit of information. Homeostasis, therefore, is information. It is a realm of coded messages.

Coded feedback is called *negative feedback*. It enables the system to maintain its state of negative entropy. In the presence of negative feedback, a deviation from some point sets in motion an opposite action, which pushes the system back toward that point. The system oscillates around that point within a certain range, where deviations are still correctable with opposite movement. Cooling of the weather is responded to by an increase in body heating, and vice versa. What is understood as *positive feedback* is a condition where one or some of the system's variables is pushed beyond the limit of restoration. (Kuhn 1975, 117.) It is as if the system received responses that are not compatible with its questions – "information without context"¹. For a homeostatic system, such feedback is noise. According to Anthony Wilden, noise is uncoded variety and, in other words, something that is outside the circuit of information (*ibid.*, 11, 112). Positive

¹ One of Wilden's brilliant definitions of noise (Wilden 1980, 11).

feedback pushes the system away from that circuit (i.e. homeostatic stability) towards increasing positive entropy, which for a homeostatic system means death. For a warm-blooded animal, too, there are limits to livable environmental temperature.¹

¹ *Talcott Parsons* was a central figure in applying the theory of self-regulating open systems to sociology. This theoretical and methodological tradition, which was very popular from the late 1940s till the late 1960s, is known in sociology as *structural functionalism*. Parsons emphasized that social organizations (i.e. systems) may endure only by maintaining a stable state. This was possible only if certain needs of these systems – functional necessities – were fulfilled. Parsons identified four of them: *Adaptation*, *Goal Attainment*, *Integration*, and *Latency* (AGIL). What characterizes social systems is that they have shared patterns of values. One functional necessity of such an organization is to maintain those patterns and to manage its internal and external tensions – Latency. Two other functional necessities were based on Parsons's observation that each social system functions in a relationship of give and take with its societal context. It follows that the system has to adapt its goals to this environment in order to reach them. The functional necessities were thereby Adaptation and Goal Attainment. The fourth functional necessity for a social system is to define the relationship between the system and its subsystems and their mutual relationships – Integration. (Heiskala 1994, 90-103; Anttiroiko 1993a, 15-16.)

In Parsons's systems-theoretical analysis of social behaviour, each social system had four subsystems – cultural, social, personality, and organismic. These subsystems correlated with the four functional necessities of the system, so that each subsystem had the fulfilment of one of them as its primary function. Latency, or pattern maintenance, was the primary function of the cultural subsystem, Integration that of the social, Goal Attainment that of the personality, and Adaptation that of the organismic subsystem. The subsystems with their corresponding primary functions were assigned to different hierarchical levels. By drawing on *cybernetics*, Parsons suggested that the subsystems that are high in information and low in energy are the ones that control those that are high in energy and low in information. At the top of this control hierarchy was culture, followed by social group, personality, and organismic subsystems in that order. In this chain of influence, 'control' meant that the values of the cultural subsystem are institutionalized as the structure of the "lower" social subsystem, becoming further internalized in personality subsystems, and steering, finally, the organismic behaviour of an individual. (Heiskala 1994, 90-103; Anttiroiko 1993a, 15-16.)

Parsons applied his general model of social activity to explain societal institutions on the basis of their impact on societal self-maintenance and stability. Then *family* – along with the school system, church, and social groups – is seen as the primary unit of pattern maintenance, carrying on the structure of shared values (Latency). The subsystem in charge of Goal Attainment comprises *politics and administration*, at both central and local levels. Adaptation is the function of the *economic system*, which supplies the different societal units with resources that are necessary for their maintenance. The *legal system* and judicial norms have a central place in the process of Integration. (Heiskala 1994, 97-99; Anttiroiko 1993a, 16.)

Each societal subsystem was surrounded by the environment of other subsystems. Parsons was keenly occupied with the "border maintenance" of subsystems in mutual exchange. All subsystems were considered to be mutually dependent, but their degree of coherence and internal autonomy varied. (Heiskala 1994, 100-01.) According to Parsons, the differentiation of society into subsystems was the result of modernization, which was both a blessing and the biggest problem of the modern world. (*Ibid.*, 89, 106.)

When the systems- and information-theoretical analyses are combined, decodification becomes synonymous to *input* and encodification to *output*. A system maintains interaction with its environment by receiving environmental inputs, which it then transforms into outputs, which cause some environmental consequences that are later fed back to the system as new inputs. A political system, for example, can be described by using this model of interaction. The input consists of the *demands* and *support* applied to the political system by the environment (public, society, interest groups). The political system then transforms this input into *binding decisions*. These decisions bind the administrative component of the system to execute them, thereby producing an output. The consequences of these decisions are then projected back to the system as new demands and support. (Anttiroiko 1993a, 21-22; Kallio 1993a, 40-41.) Municipalities have, accordingly, been described as such political systems (Anttiroiko 1993a, 23; Kallio 1993a, 38-41).

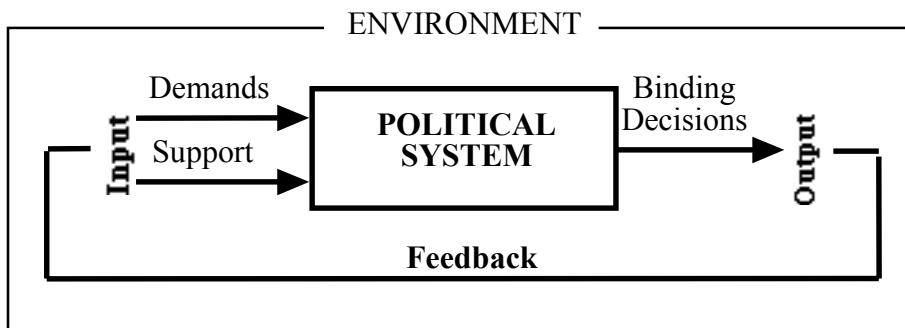


Fig. 2. The political system (according to Anttiroiko 1993a, 22; originally adapted from Easton).

1.2.4 Black Box

The system is defined in terms of its interaction with its environment. The system itself is a "black box": "a system of whose structure we know nothing except that which we can deduce from its behaviour, its input and output characteristics (Chadwick 1978, 43)." The relevance of the black box lies in the difference between what it takes in and what it puts out. In a more detailed analysis, one may discern more elementary components of the system, which themselves are treated as black boxes that stand in mutual interaction and serve as environments to each other. The black box is the elementary unit of analysis, of which we know what it does, but not how it does it (Bateson 1987, 39-40).

In land-use planning, it can be argued, for example, that buildings are black boxes as far as the planner is concerned. According to George Chadwick, "all the planner needs to know about them are certain input-output characteristics (and this does not merely mean

traffic generation, but includes siting requirements and matters of appearance; but the planner ordinarily is not much interested in details of construction or internal planning or plumbing and so on)” (Chadwick 1978, 43). This is a rather obvious example of black boxes in land-use planning, but we may also extend the use of the concept a bit further. Our concepts themselves may also be taken as black boxes, i.e. ”components” which become defined via their mutual interaction within some context (conceptual system), but into which we are not able to penetrate¹. Gregory Bateson uses ‘gravity’ as an example of a black box concept. ‘Gravity’ is a label for a black box of which physicists know what it is supposed to do to masses in space, but not how it does it. Nor are they able or willing to split gravity into further analyzable components. (Bateson 1987, 39-40.) In land-use planning, we analyze urban life using such concepts as ‘housing’, ‘work’, ‘business’, ‘services’, ‘traffic’, ‘play’, ‘farming’, ‘leisure’, etc. We may, of course, discern different *kinds* of housing, work, business, services, etc., but it is essentially those components – localizable by means of zoning – that we use in our guidance of urban development. We analyze and plan urban life in terms of these conceptual black boxes even when we encounter such marginal phenomena as unemployment and working at home. However, the advent of the ”post-industrial era”, with related structural changes in our society and ways of life, has cast a doubt, as to whether this way of categorizing urban life is universally relevant any longer.² On the other hand, when we deal with such concepts as ‘land ownership’ and ‘property rights’³, there are always certain forces to guarantee that they will remain as black boxes and will *not* be penetrated, let alone questioned, by a closer inquiry. Everyone concerned is supposed to have a clear understanding of what land ownership and property rights *make happen* in planning – and that it is *this* that is *all* one needs to know about them; not how or why they do what they do.

We may never be freed from our lot of observing and categorizing our lives in terms of conceptual black boxes. Being filled with black boxes, our consciousness always has a limited understanding of *how* we live our lives. But there is always a possibility for us to increase our understanding by learning to formulate and organize our black boxes differently, and by learning that such a possibility exists.

¹ Chadwick himself recognized that systems may be ”real” or include concepts as their components (*ibid.*, 45-46).

² Christopher Alexander penetrated into some basic conceptual black boxes of urban planning in his article ”*A City is not a Tree*”, by claiming that traditional cities are characterized by the spatial overlapping of their functions, instead of their being separated in space. He therefore criticized urban planners’ and theorists’ conventional way of structuring conceptually the functional units of urban space. (Alexander 1966.)

³ ‘Land ownership’ and ‘property rights’ are interconnected concepts. Property is a set of rights, granted by the government, to control assets. The law of property is, according to Lindblom, perhaps the most fundamental of all political rules. (Lindblom 1977, 24, 127.) We may define land ownership as the rights, privileges and responsibilities to certain behaviours in relation to specified sites that are distributed between people with a specified role designated to the ‘owner’. Land ownership is a social and political contract which people choose to honour and obey in their behaviour.

1.2.5 *Cybernetics*

Cybernetics was introduced by Norbert Wiener to deal centrally with controlled feedback systems¹. It can be said to constitute the theoretical core of the General Systems Theory Movement. Wiener coined the term cybernetics to label the field of research concerned with controlled communication in man-made machines as well as in living organisms and social systems. The word ‘cybernetics’ stems from the Greek word ‘*kubernetes*’, which means ‘mate’, and is supposedly also the root word for ‘governor’ (Wiener 1969, 23). The two central concepts were *control* and *communication* (*ibid.*, 23). For Wiener, controlling the environment was synonymous to resisting the force of positive entropy, which is always there in the environment, threatening to take over the functioning organism or machine. It seems that in the world of Wiener’s cybernetics, one is able to endure only by living in a violent relationship to one’s environment. One maintains one’s homeostasis by giving commands to the environment via the means of communication, and by checking from the feedback received whether one’s commands have been understood and fulfilled. As Wiener said, communication is a fight against entropy (*ibid.*, 24), but this fight is viewed from the perspective of the “governor-system”, which attempts to preserve *its* information by controlling its relationship of communication with its environment.

Largely due to Wiener’s pioneering work on the development of what Wiener called “communication-machines”, cybernetic feedback arrangements are now widely used in modern technology for the stabilization of processes and in goal-seeking, as in radio receivers, self-propelled missiles, anti-aircraft fire-control systems, navigation systems, and other *servo-mechanisms*. The role of cybernetics has also been decisive in the development of the modern computer. Wiener’s central argument was that the behaviours of living animals and servo-mechanisms are quite alike as far as their attempts to control the increase of positive entropy by means of negative feedback are concerned, although their “hardwares” may be quite different (*ibid.*, 10, 33). One of the simplest servo-mechanisms is the *thermostat*. The behaviour of the thermostat can easily be seen as analogous to the thermoregulation of warm-blooded animals, discussed above.

1.3 Systems View of Planning

1.3.1 *Faludi’s Cybernetic Model of Planning Agencies*

The elementary components of a controlled feedback system (living or man-made) are the *receptor* that gauges the existing state and the effect of actions on it (feedback); the *selector* (or controlling apparatus) that decides between alternative responses on the basis of the information received from the receptor; and the *effector* that produces changes in the environment on the basis of the decision received from the controlling apparatus.

¹ Systems that are able to maintain homeostasis by counteracting deviations from their critical variables in conditions of negative feedback.

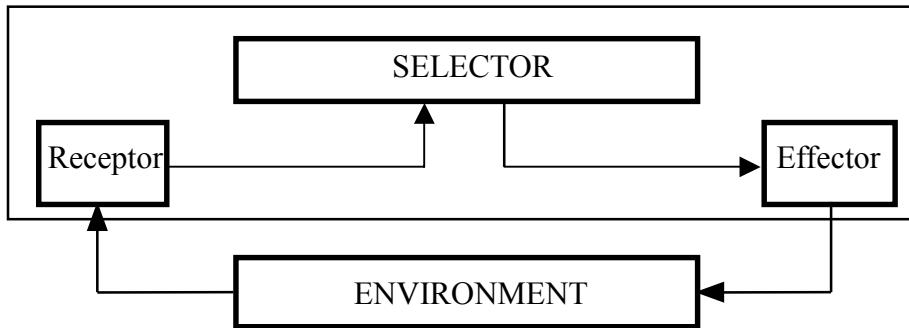


Fig. 3. A controlled feedback system (after Faludi 1976, 61).

Using this basic model of the cybernetic system as his starting point, Andreas Faludi set out to formulate a theoretical model of public planning agencies and simultaneously to adjust it to the organizational structure of British local government town planning departments and committees. According to Faludi, the relevance of cybernetics to planning theory is obvious, since planning is about the exercise of some kind of control (Faludi 1976, 56). In his book *Planning Theory*, his aim was to theorize about planning as a public activity through which society decides and controls its own development in a rational way. For Faludi, planning is "a rational process of thought and action which ultimately aims (as science does) at promoting human growth" (*ibid.*, 25). Following Deutsch, Faludi associates human growth with the application of learning capacity to the increase of a system's openness, the increase of its ability to make effective responses to its environment, and the increase of the range of possible goals (*ibid.*, 40)¹. "[G]rowth as a process refers mainly to learning and creativity, defined as the gaining of insights into the existing order of things, and the transformation of that order into a new one. It is that process by which man creates himself which brings us to reasons for putting forward human growth as the rationale of planning theory" (Faludi 1976, 41). For Faludi, human growth means not only man's mastery over environmental change, but also man's mastery over himself. This entails a sort of second-order control mechanism where one gains self-conscious capacity to control one's own means of controlling the environment. In

¹ Later Faludi reversed his statement of human growth as the *ultimate aim* of planning. In his book that appeared in 1986 he criticized Reade for being overconcerned with learning. "Surely, the main purpose of planning is not to advance knowledge, but to take meaningful action. Learning is a (desirable) side-effect, but not its whole point." (Faludi 1986, 42.) This criticism could as well be pointed at Faludi's own concerns with human growth in *Planning Theory*. According to Chris Argyris it is not learning that organizations produce. "It is individuals acting as agents of organizations who produce the behavior that leads to learning" (Argyris 1993, 8).

planning – which utilizes the cognitive capacities achieved in earlier human growth and, in turn, contributes to further human growth – one is able to re-evaluate and rearrange one's decision criteria in the face of positive feedback. Planning means formulating programmes for action (*ibid.*, 62) – not seeking given goals, but rather *finding* new goals worth seeking, and navigating the system towards more fertile homeostatic plateaus. This process is distinguished from such lower-order feedback systems as the thermostat, which have a fixed goal.

"The greater part of processes going on in the human mind as well as in planning agencies involves changing ends as a result of new information. The thermostat on its own does not exhibit this *learning*. Learning requires an agent who resets the thermostat overnight with his last electricity bill in mind." (*Ibid.*, 61-62.)

When construing a model of such a "learning system" – a system capable of changing its goals (*ibid.*, 60) – Faludi's point of departure was the simple cybernetic system. In order to give this basic model some capacity for formulating programmes and for evaluating alternative preferences against higher criteria, he placed a box called 'memory' in it. For a rational individual, it was described to be that part of the brain which forms representations of the world and uses them for forecasting. (*Ibid.*, 62.) A rational individual, in turn, was analogous to a planning agency (*ibid.*, 62). The memory contained three linked components: 'image', 'programme', and 'goal'. Image was to represent the passive element of human knowledge and programme the active one. These together relate knowledge to the goals pursued by the actor. All three in combination form a technology, which Faludi defines as a system for purposive use of knowledge, and are therefore given the title 'technology-image'. (*Ibid.*, 62-63.) "[T]he technology-image simply describes everything which is involved when a learning system operates on the environment drawing on memory of past experience" (*ibid.*, 63). All in all, this view of the human mind is roughly compatible with the one provided by cognitive psychology. The system is shown schematically in Figure 4.

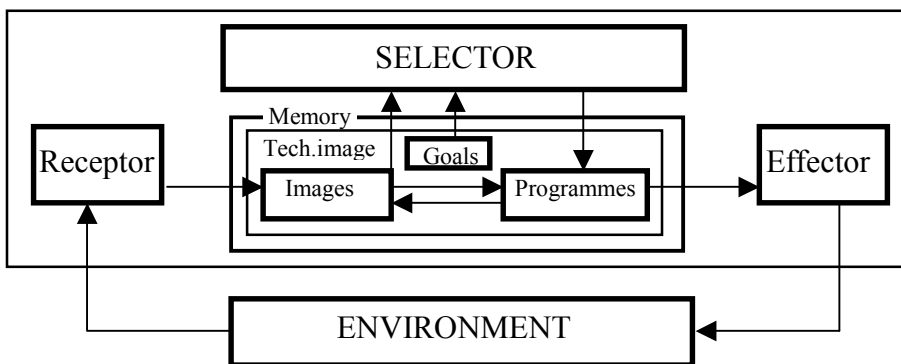


Fig. 4. The technology-image and the memory (after Faludi 1976, 64).

Faludi developed this model further by introducing some extra refinements. The memory was split into two: the active and general memories, each with its own set of images, programmes and goals. A filter was placed before the receptor, representing the "choices concerning the direction of any search for information" (*ibid.*, 66). Another filter was placed after the receptor. "It represents the selectivity with which messages are transmitted from the receptor to the technology-image" (*ibid.*). The filters, in turn, were controlled by the technology-image, and especially its goals elements. (*Ibid.*, 65-67.) How one perceives the environment is therefore determined by one's intentions. 'Self-image' is incorporated into the image component of the active memory – to express a person's self-awareness and to allow him the possibility to alter his role in the social organization (*ibid.*, 68-71). A separate element added to the active memory is the 'future image' (*ibid.*, 73-75). There is also a short-cut straight from the receptor to the effector, bypassing the memory box. It is switched on whenever a person responds automatically to a stimulus. These 'automatic programmes' are deep habits and routines, such as bicycle riding, greeting friends in the street, turning around when one's name is called, etc. (*Ibid.*, 66-68.) The environment, in turn, is seen to consist of variables that are controllable and ones that are not. This distinction corresponds to the distinctions we have already made between negative and positive feedback and between information and noise. The uncontrollable variables of the environment are further divided into 'unknown variables' and 'constraints'. The environment is seen to be neither totally controllable nor completely predictable in its reactions. This brings *uncertainty* to the system's behaviour, which becomes a mixture of control over the environment, adaptation to it, and search for more clues. (*Ibid.*, 71-73.)

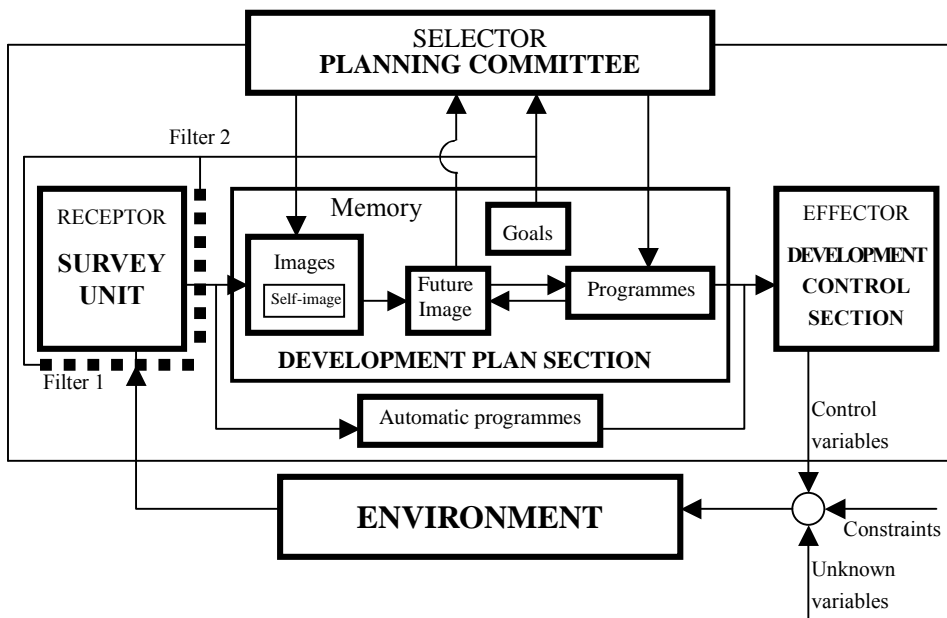


Fig. 5. Faludi's model of planning agencies as applied to British Local Planning Authorities (Faludi 1976, 78).

The model of the human mind as a learning system is now complete and ready to be translated into the model of planning agencies. As Michael J. Thomas observes, for Faludi this is largely an exercise in naming the elements in accordance with standard British local government structures (Thomas 1982, 18). The receptor becomes the *survey unit* which collects information and shifts it over to the development plan section. The *development plan section* represents the technology-image. "It draws on information from surveys, on its own memory, and on the guidelines received from the selector. Most important, it draws on its goals, which are built into it." (Faludi 1976, 77.) The development plan section is responsible for formulating new goals and alternative courses of action to attain the goals, which is the core activity of the planning agency. The selector is the political element of the system, the *planning committee*, which "selects" certain decision alternatives formulated by the development plan section and decides on which course of action to pursue. The *development control section*, which processes the applications for planning permission on the basis of the development plan, represents the effector through which implementation is achieved.

In this model, Faludi's division of roles between planners and politicians is also evident. Drawing on Friend and Jessop's conceptual distinction between 'decision-making' and 'decision-taking', planners are explained to produce rationally argued policy options, and the main task left to the politicians is to "take a decision" between these options. As "decision-makers", the planners thus modify the goals on which the politicians as "decision-takers" decide. (*Ibid.*, 78, 225, 234.) Decision-taking is the final stage of decision-making, where a formal binding decision is taken, committing the agency to a definite course of action. "[T]he role of the political process is that of generating the willingness to take the risks involved in every assumption leading to action" (*ibid.*, 103). Planners' actions are based on rational choices, whereas politicians make political choices. Political choices step in where rationality ends – where, in other words, the realm of controllable environmental development ends. It is for the planner to point out uncertainties through analysis, and for the politician to accept them (*ibid.*, 235-37). According to Faludi, political choices should "supplement analytical knowledge where there is not enough of it to make a final decision" (*ibid.*, 103). Although Faludi speaks for collaboration between politicians and planners even in the process of goal formulation (*ibid.*, 235), it is, nevertheless, the analytical mode of communication possessed by the planners that is given a dominant position in this process, where scientific rationality is offered as the ideal to be strived for. As Faludi himself points out, "politicians need advice and guidance by planners on what ends they *can* pursue with an instrument which the planners alone can use properly. [...] The freedom of politicians to determine the ends pursued by a plan is therefore circumscribed, with planners interpreting to them the nature and the extent of limitations *only within which context* may decisions be taken." (*Ibid.*, 228¹) Faludi criticizes sharply the traditional understanding of the relationship between politicians and planners as "masters and servants", the politicians supposedly being those who determine the ends, and the planners being those who indicate the means for their attainment (*ibid.*, 225-27). He argues that one does not think of ends *per se*, but instead "realistic thinking in terms of ends only occurs in concrete choice situations where reasons must be found for justifying

¹ The latter emphasis is mine.

the selection of one alternative in preference to others" (*ibid.*, 229). Thus, arguments concerning the ends are more likely to arise only *after* choices become apparent (*ibid.*, 230). It is essentially the process of decision-making, not the final stage of decision-taking, where the ends upon which to decide are made.

1.3.2 Main Characteristics

1.3.2.1 Systems Rationality

Certain important notions are put forward in Faludi's cybernetic planning theory, which reflect more general tendencies in planning discussion influenced by systems thinking. *One* is the interpretation of rationality in terms of a system's control over its environment. The better the system controls its environment, the more rational it is said to be. We may call this conception of rationality *systems rationality*. A quotation from Chadwick is illustrative of what is meant by systems rationality and its relationship to planning:

"[S]cientific method, systems theory, cybernetics, may be used as "ideal" rational constructs, not because "the real world is like that", but because we may begin to understand, and to manipulate, the real world through them, just as science leads to technology. Thus a rational theory of planning is helpful, so long as we acknowledge it for what it is: a normative model from which operational theories may be derived." (Chadwick 1978, 365.)

1.3.2.2 Managing Uncertainty

Another important notion made by Faludi is that of *uncertainty*. There are limits to the controllability of the environment, and hence also limits to the system's rationality. These limits are understood as limitations of our information-handling capacity. These limitations follow from humans' "limited channel capacity" and limited memory (Faludi 1976, 105-06). The idea of cognitive limitations in the rationality of decision-making was introduced by Herbert A. Simon, to which we shall return in the next section.

The acknowledgement of uncertainty led planning theorists to develop new planning methods, which aimed at *managing the uncontrollable* in the urban development. According to Chadwick, "[t]he problem is that of *programming*, therefore, not one of design, or of planning *per se*, but of alternative plans being available as time unfolds – an "options-open strategy"" (Chadwick 1978, 399). The traditional blueprint mode of planning¹ was to give way to new forms of strategic and process-oriented planning. Faludi defined *planning strategies* as "approaches which enable a subject to take rational

¹ Faludi defines the blueprint mode of planning as "an approach whereby a planning agency operates a programme thought to attain its objectives with *certainty*" (Faludi 1976, 131 – my emphasis).

decisions precisely by paying due regard to the limitations of his ability to handle large amounts of information” (*ibid.*, 107). Accordingly, his definition of *process planning* was:

”an approach whereby programmes are adapted during their implementation as and when incoming information requires such changes. In process planning, the plan document itself, where this programme is laid down (which is of central importance in blueprint planning – hence its name), becomes far less significant, perhaps even ephemeral, a daily computer printout. Process planning becomes an approach in which strategic information and feedback impinge directly on action, providing signals that lead to incremental adjustments to its direction and intensity.” (*Ibid.*, 132.)

Planning becomes *programming*. The phases of planning and implementing are to be integrated into a single process. Planning thereby assumes an active orientation towards development. (Chadwick 1978, 370-71.) Traditionally, the planners’ powers over development have been negative powers: they can only refuse such development intentions that do not conform to plans. These are powers rather for preventing than for initiating. (Pickvance 1982, 70.) The systems view of planning was determined to change that: “[O]ur plans, indeed, may be ”policies”, especially in the field of social planning – and they may be very well policies also in physical planning, especially where the creation of opportunities for private investment is involved” (Chadwick 1978, 371-72).

It is easier to control incremental change, i.e. change that advances through small steps (*ibid.*, 318). By advancing stepwise and making short-term plans it is possible to develop policy goals as one goes along, and to learn from the immediate outcomes of the former ”steps”. *Incrementalism* pays attention to the *process* of planning and enables the trial and error type of learning. (Sager 1994, 10, 89, 239.)¹ However, Faludi does not define the process mode of planning to involve only a short time span. ”In process planning, any action taken may very well form a consistent part of longer-term, comprehensive policies which are themselves subject to review in the light of new information so that process planning operates simultaneously on several time horizons” (Faludi 1976, 132). Here Faludi refers to a policy-making approach known as ”*mixed-scanning*”, of which he is a keen advocate (*ibid.*, 111-12, 212-13, 266). Faludi describes Amitai Etzioni’s (1967) mixed-scanning shortly as a strategy, which ”involves imposing patterns of information received (making *fundamental* decisions), formulating a programme within this framework (making *bit* decisions), and going back to *changing that framework* whenever one gets stuck on a more detailed level” (*ibid.*, 111-12). By organizing planning hierarchically into two (or more) levels – as in making master and detail plans – it is hoped that the burden of information processing could be eased. Detailed ”scanning” of the environment could be relaxed at the ”higher” level, where more strategic, general and larger-scale decisions are made; and these may be taken as given at the ”lower” level, reducing, accordingly, the need for broad ”scanning” at that level (that is, if no such puzzling phenomena are encountered that do not fit into the framework set at the higher level). A planning agency which has an organizational structure that corresponds to this planning strategy is called *multi-planning agency* in Faludi’s planning theory. It consists of a number of *specialized planning agencies* with an overlapping action space and a

¹ More on incrementalism in the next section.

strategic planning agency coordinating their decision-making and programmes. (*Ibid.*, 207-22.)

1.3.2.3 Centrally Coordinated Planning of Urban Systems

This brings us to the *third* goal of systems-theoretically oriented planning theorists: that of approaching the *urban system as an integrated whole*, where physical locations, infrastructural networks, ecological processes, and social and economic activities are interrelated in complex ways. What is demanded of a planning system is adequate integration between planning departments (land-use planning, social planning, economic planning etc.) in order to grasp the complex urban system as a whole. Urban dynamics as a whole needed to be controlled by centrally coordinated planning in which – as in Faludi's strategic planning agency – the controls of several urban processes are synchronized. This development – as well as the development of process planning methods – culminated in the late 1960s and the early 1970s in the research and experimentation done on *computerized simulation of urban systems*. This project, first begun by Jay Forrester, was hoped to provide dynamic, causally and inter-systemically integrated models for planners to replace the plans, maps and statistics that planners had been used to work with. These old tools of physical planning were blamed for being static or "one-shot", causally unintegrated, partial and simplistic. (Chadwick 1978, 379-80.) In the computerized simulation models the basic "building block" was the feedback loop. "It is because the basic element is the feedback loop that there is sub-system inter-relationship, provision for delays, implications of multiple goals, and a resultant dynamic system" (*ibid.*, 380). These aspects were considered attributes of real urban systems, and the model systems were to simulate them in behavioural terms as closely as possible (*ibid.*). The task was well formulated by Chadwick: "Only systems can provide models for systems." (*Ibid.*, 81.)

1.3.2.4 Managing Management

The *fourth* theme is the idea of the planning system as a *learning system*. The urban systems are perceived to be much more complex than the servo-mechanisms with fixed means of regulating their environment.

"It follows that the situation has little in common with those in which cybernetic processes have been used to guide space vehicles, or similar applications of systems engineering. In such instances, goal-criteria are firmly expressed, quantifiable, and (presumably) achievable, and though their feedback loops may be complex, they are much simpler here than in urban and regional systems; moreover, alternatives are only thought of in terms of system unreliability and malfunction: mechanistic systems will not reset their control criteria from within unless programmed to do so." (*Ibid.*, 399.)

However, it is this capability of resetting the control criteria used that is required of a planning system. It is not enough to recognize the uncertainty of urban dynamics. What is

more, this uncertainty itself is dynamic, so that the *types* of variables recognizable as "control variables" and "uncontrollable variables" will change over time. It is therefore this boundary between the realms of control and uncertainty that *itself* is uncertain. This notion is an important one, which is often ignored in social scientific derivations of systems theory. Chadwick claims that

"[t]he idea of "steering" human activity systems is thus ludicrous; their characteristics are not amenable to this kind of approach. A deeper understanding of cybernetics will show that such a simple servo-mechanism view of urban and regional systems cannot be supported, for "control" in them has to be seen as an *endogeneous* re-setting of the distributed error-function of those systems – a reliance on homeostasis, or rather upon the combination of negative and positive feedback within the system to set new criteria for homeostasis, as a result of information flow from the environment of the system.

It would seem to follow, therefore, that appropriate and relevant models of social systems in a planning context will be derived from models of the human learning process, rather than from servo-mechanism theory – that is, from a consideration of processes where endogenously-derived change is fundamental." (*Ibid.*)

One of the main sources on which Chadwick draws is Donald Schön's (1971) *Beyond The Stable State: Public and Private Learning in a Changing Society*. Schön's theory asserts that society and all its institutions are in continuing processes of transformation, and that what we must do is to learn to understand, guide, influence, and manage these transformations.

"We must make the capacity for undertaking them integral to ourselves and to our institutions, in response to changing situations and requirements; we must invent and develop institutions which are 'learning systems', that is to say, systems capable of bringing about their own continuing transformation" (Schön; quoted in Chadwick 1978, 337).

Following Schön, Chadwick describes learning systems as social or organizational systems that are able to move to quite new trajectories of pattern maintenance when their familiar, stable environment changes to an unfamiliar, unstable one (Chadwick 1978, 339). "Cybernetically, this means an ability to indulge in short periods of positive feedback, whilst shortly reverting to a "homeostatic plateau" or region of continuing negative feedback" (*ibid.*). Learning thus involves feedback of new external data to change the code with which the system interacts with its environment. By recodifying its channels, the learning system is able to incorporate external noise as new information.

Together with Chris Argyris, Schön later developed a more systematic explanation of learning systems. They described the learning system (be it an individual, a group, or an organization) as a *double-loop cybernetic system*. They discerned two distinctive and qualitatively different types of error¹ correction within systems. The "lower" type of error correction was seen as the function of simple "single-loop" cybernetic systems, such as the thermostat. These systems correct their errors without questioning or altering their

¹ With error they meant any mismatch between plan or intention and that which is actually observed to have happened when either is implemented (Argyris 1993, 1).

underlying goals and values. The thermostat is programmed to detect states of "too cold" or "too hot", and to correct the situation by turning the heat on or off. If the thermostat were able to ask itself *why* it was set at +21°C, or *why* it was programmed as it was, then it would be, according to Argyris and Schön, a "double-loop learner". (*Ibid.*, 8.) Single- and double-loop learning are shown diagrammatically in Figure 6.

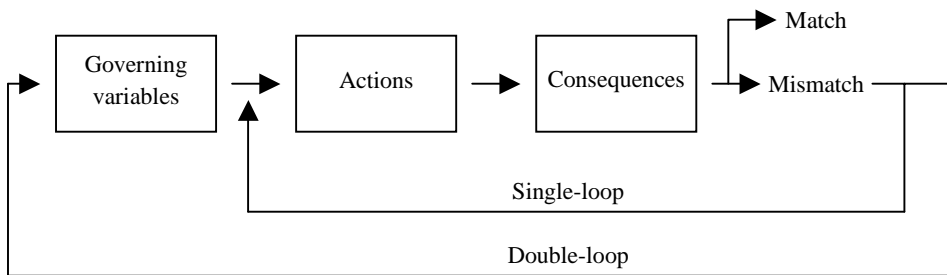


Fig. 6. Single-loop and double-loop learning (after Argyris 1993, 8).

Single-loop learning occurs when matches are created, or when mismatches are corrected by changing actions. Double-loop learning occurs when mismatches are corrected by first examining and altering the governing variables and then the actions. 'Governing variables' are described as the preferred states that individuals strive to "satisfice" when they are acting. (*Ibid.*, 8-9.) In other words, single-loop learning is cybernetic goal-seeking by means of negative feedback (mismatch within the limits of the given code); and double-loop learning has to do with resetting the goal, in a situation where the system is faced with positive feedback (mismatch beyond the limits of the code). When the mismatch is corrected by altering the governing variables, it means – in more conventional systems-theoretical terms – that positive feedback is incorporated into the code as negative feedback by recodifying the system's relationship to its environment.

This insight into learning systems led systems-oriented planning theorists to develop theories of "meta-planning": theories of such planning that has planning itself as its object. Faludi called this kind of planning theories "*procedural theories*", as distinguished from "*substantive theories*". It was the procedural "theories of planning" with which planning theory was to be concerned – not with substantial "theories in planning". Procedural planning theory has to do with problems of understanding and organizing planning activity. For Faludi, its task was to provide guidelines for meta-planning. (Faludi 1976, 3-4, 35.) Faludi used the concept of 'meta-planning' to denote planning that aims at systematically improving planning agencies and their procedures (*ibid.*, 3,11-12) – a task which was clearly meant to be an objective of the 'strategic planning agency'. Chadwick similarly distinguished two levels of planning activity: the level of managing urban systems and the meta-level of managing the organization which attempts to manage these systems (Chadwick 1978, 332).

Learning in this context is employed to guarantee better control of the environment. But if the human capacity for learning is utilized as a means to improve control – and therefore also as a means to increase the system’s power over its environment – some critical questions must be asked: Who is supposed to learn in a planning system as a learning system? Who learns to improve his control over whom? Who are the system and who are the environment? We shall return to these questions later.

1.3.2.5 Planning and Politics

These questions bring us to the *final* point that characterizes the systems view of planning. It has to do with the *relationship between planning and politics*, which planning theorists conceive to be derived from the relationship between control and uncertainty in planning approaching systems rationality. The more analyzable, predictable and manageable the environment is perceived to be, the more there is room for rational policy-making by planners. Accordingly, the more unanalyzable, unpredictable and unmanageable the environment is perceived to be, the more there is room for politics and values to fill the void that remains outside more or less limited factual certainty. In any case, *it is systems rationality which determines, by determining its own limits, the relationship between planning and politics, and the realm of validity for each.*

1.3.2.6 Conclusion

During the 1960s, land-use planning changed more than it had done during the previous one hundred years. It was transformed from a personal craft of elementary urban visions into a highly organized and bureaucratized activity, in the course of which enormous amounts of information were gathered, stored and further manipulated into instruments of environmental control. (Pakarinen 1992a, 24.) Systems-theoretically influenced planning theory provided an idealized model of how such activity should proceed. This model represented planning activity as an on-going cybernetic process of governance, which incorporates systematic procedures for continuously searching out goals, identifying problems, forecasting uncontrollable changes, inventing and evaluating alternative strategies, stimulating development, statistically monitoring those conditions of the public and of systems that are judged to be germane, feeding back information to the simulation and decision channels to allow correction of errors – all this in a coordinated system of public management.

”In this endeavour the insight provided by general systems theory, information theory, and cybernetics – all inter-related, each calling upon and in turn shedding light upon the others – is remarkable: here is a means of ordering man’s view of his place in Nature, and furthermore of altering his place in that Nature, to his own advantage” (Chadwick 1978, 81).

This enthusiasm of Chadwick’s has long ago faded, but in the 1960s and the early 1970s, the General Systems Theory Movement provided great strength to planning theory. This

strength was to last as long as economic growth and the hegemony of modern science provided a stable societal and cultural context for its planning instructions and positivistic descriptions of reality. By the mid-1970s, this stability was lost, as was also the controllability of urban development as well as the controllability of scientific development. This turn of the tide cast into oblivion many of the theoretical assets concealed in systems-influenced planning theory, and was to result in disbelief in planning theory at large (Pakarinen 1992a, 29-30). It was, after all, *control* upon which it was built.

Nevertheless, systems theory has continued to prosper in the realm of *decision theory*, albeit not without severe critique from Marxists and critical theorists. A major theoretical impact on decision theory has been provided by yet another branch of the General Systems Theory Movement: *Game Theory*.

1.4 Economic, Administrative, and Political Games

1.4.1 *Economic Game*

Decision theory deals with situations in which one or more actors must make choices between given alternatives. These may be choices between alternative courses of action, objects to possess, amounts of money to pay, stories to believe, etc. (Rapoport 1989, 1.) Formal and normative decision theory is typically studied in the context of economics, especially microeconomics, and in the context of management science (*ibid.*, viii). For the past few decades, these disciplines have been enriched by *Game Theory*. Game theory was formulated by the mathematician John von Neumann, and developed together with the economist Oskar Morgenstern to apply to rational economic agents. Their work was published in the classic *The Theory of Games and Economic Behaviour* in 1944. Game-theoretical decision theory is the most thoroughly developed branch of normative decision theory. It poses questions of how people *ought* to behave in given decision situations in order to arrive at *rational choices*. (Rapoport 1989, 1-7.)

Game theory is based on the idea of treating as games the choice situations that involve two or more individuals with conflicting interests. The actors (or groups) are treated as players and the consequences of their choices as payoffs. Each player has a set of well-defined choices, or strategies, to choose from. The payoff from each strategy depends on the strategies chosen by the other players. Each combination of choices of play leads to an end-state (win, draw, or lose), which finishes the game. A specified payoff corresponds to each of the possible end-states. Game theory is concerned with determining the rational choices to make in such games. A rational choice is defined as one that leads to the biggest possible payoff for a player surrounded by other players who attempt at equally rational choices.

Game-theoretical rationality is akin to systems rationality. Systems rationality was defined above as a system's ability to control its environment. Likewise, game-theoretical rationality consists of a player's ability to control his environment of other players. The player's goal is to optimize his payoff, and he tries to control the other players by

choosing a superior strategy, since the latter's optimization strategies are not in accordance with his, and potentially threaten to cut his payoff. More generally, *in a game all players play against their loss of control*. As in cybernetics, one's relationship towards one's environment is assumed to be intrinsically violent.¹

This view of decision-making behaviour constitutes an actor, which we shall call the *economic man*. The economic man is a rational individual that optimizes self-interest through strategic action. (Kangas 1994, 63, 66-67.) The theory of rational choice conceives of actors (individual or collective) as "islands" that are isolated from their social contexts². Game theory offers abstracted mathematical models of situations where such "islands" meet, collide and combine into coalitions. These situations are not social situations, because the attitudes of these players towards each other are described as purely instrumental. The meaning of the situation is given to each player beforehand in the form of optimum payoff. One player's goal determines the meanings of both his own and other players' choices in terms of their utility value for the goal. If everyone else plays rationally, then each alternative choice open for a given player is ranked according to how close to the goal it leads. The choices made in the game are a matter of mathematical calculation. The calculation shows whether one should team up with certain other players or whether, and how much, one should compromise.

There are many reasons to criticize the game-theoretical model of decision situations. We shall discuss some of these later in this chapter, but it is necessary to raise one here. This criticism applies to the control/uncertainty discussion we had above.

In the context of normative decision theory, game theory is criticized for the inflexibility of its applicability requirements. The abstract mathematical machinery of game theory is unforgiving to the uncertainties and the lack of information that usually characterize real decision situations. The possible outcomes and related payoffs must be known in advance and also given in utilities. Moreover, each player must be assumed to know the utilities that every player assigns to every outcome. At least the player must be able to state precisely the utilities he himself associates with each possible outcome. (Rapoport 1989, 407.)³ One is therefore allowed to decide rationally only in a situation where perfect knowledge of possible strategies and their outcomes and other actors' motives is at hand. "This situation is hardly ever encountered outside the laboratory, where it is deliberately constructed" (Rapoport 1989, 407).

¹ This does not mean that in game theory the players *must* play against each other in all circumstances. They may choose to cooperate, but such a choice is acknowledged as rational only if the cooperating players' powers outweigh each other, so that neither is able to control the other – or if two players may gain more by teaming up against a third one.

² A quotation from Anatol Rapoport is illustrative of what is meant by the notion of a rational actor as an "island" in this context: "[A] 'rational' actor is frequently defined as one who seeks to maximize his own utility (or expected utility) without regard for the utilities of others. That is to say, the 'rational actor', in the light of this definition, derives neither satisfaction nor chagrin from the gains or losses of the other: he is neither benevolent nor malevolent." (Rapoport 1989, 291.) See also Kangas 1994, 65-66.

³ Underlying these preconditions there is an assumption of a coherent human being, generally held in economic theory. This assumption rejects the possibility that a single actor might be torn with conflicting preferences and with uncertainty of their order of precedence (Kangas 1994, 69-70).

Especially when we move from simple economic transactions to decision-making and planning in the public sphere, uncertainty increases to completely new dimensions. The knowledge needed to formulate problems and corresponding decision alternatives is inadequate. So is also the knowledge of possible outcomes, as the implementation of decisions always takes place in unique conditions involving a large number of actors not involved in the decision situation. Herbert A. Simon concluded that decision-making in the sphere of public administration needed a new type of actor: *the administrative man*.

1.4.2 Administrative Game

According to Simon, "good" administration means behaviour that is adjusted to the given ends; equally "good" business is economic behaviour that, by carefully calculating, attempts to produce profit. Therefore, Simon considers the theory of rational choice to be relevant for the public management theory, too (Simon 1979, 101). The difference, according to Simon, is that the economic man assumes that perfect information for "optimization" is available, whereas the administrative man assumes that only limited information is available. The administrative man takes recourse to *satisficing* through strategic action. Whereas optimizing involves searching for *all* possible strategies that satisfy all requirements, and then identifying the one that satisfies them optimally, satisficing is "satisfied" with by identifying *one* strategy that fulfils them sufficiently (*ibid.*, 26; March & Simon 1967, 169). 'Satisficing' is a concept Simon uses to describe administrators' rational behaviour in the face of uncertainty. The goal of the administrative man is to act rationally from the perspective of his position in the decision hierarchy of his public organization where his vision and attention are both organizationally¹ and cognitively limited.

For both the economic and the administrative man, rationality is essentially the same. The difference is that the administrative man recognizes that he cannot behave as rationally as the economic man. His rationality is not perfect, but *bounded*². Although the rationality of the administrator's behaviour is still conditioned by the lack of valuable information and by limited programming capabilities, there are still more and less rational choices to be made.

For the administrator, too, the ends are given. The structure of his organization forms a hierarchy of means and ends. In this hierarchy, each decision-making level with a

¹ According to Simon, an organization influences the perception and behaviour of an individual member by applying stable and standardized expectations to his behaviour among other members and by focusing his attention to a certain "stimulus environment". One's education, the communication channels provided, and one's position in the division of roles, in the hierarchy of authority, and in the chain of decisions – all affect one's ability to gather and handle information in an organization. (Simon 1979, 135-37.)

² Behind this claim there is a more general observation of the limited cognitive capacities of human beings as organisms that, according to March and Simon, are capable of evoking and executing relatively well-defined programs but only of limited complexity (March & Simon 1967, 171). See also Simon 1979, 142.

corresponding organizational unit forms an end in relation to the level below it and a means in relation to the level above it (Simon 1979, 101-02; March & Simon 1967, 194-97). Thus, a decision made at a given level serves as a context for the next lower level, within which a means to implement the decision is chosen. This means is a set of instructions which itself forms a context for the next level down the hierarchy, within which further more specified means of implementation are chosen. The top-level decision-makers constitute a management group that is responsible for the maintenance of the organization's stability or "life" (Simon 1979, 153, 157). The "highest" end is therefore the continuation of organized public administration. The organization becomes a rational hierarchy of rational means. Each administrator chooses rational means for rational means without any one of them asking the ultimate question "For what?". As Fischer points out, "the administrative perspective itself determines *the* definition of organization" (Fischer 1990, 274).

Both the economic and the administrative man are rational calculators; therefore neither of them is a social actor. In both cases, rationality is a matter of technical analyzing and deciding between alternative decision outcomes – irrespective of whether the goal was based on individual self-interest or "public interest" – the use and distribution of public resources for the public good. The public good is derived via an empirical analysis of social, economic and ecological conditions, with the needs of the public defined by the analytic framework itself. For Simon, the value system is given and therefore not open for public debate. Much like the economic man, the administrative man poses himself the question: "Given this particular value system (utilities assigned to outcomes), when should *I* stop scanning for possible decision alternatives and how should *I* decide among them in order to behave rationally?"

According to Frank Fischer this notion of decision behaviour *depoliticizes* public decision-making. The understanding of society as a system where people consciously organize their practices through politics is virtually absent. (*Ibid.*, 209.)

"Whereas in politics the organization of society is the most basic concern, the systems perspective largely takes the social system for granted. Indeed, it appears as a relatively fixed "natural" phenomenon with an ontological status of its own. Social and political change does occur in this natural system, but it is largely understood to be the function of the internal adjustments of system parts. In this respect, component subsystems (vis-à-vis the system itself) are the primary focus of analysis. As such, emphasis is on means and functions rather than on ends per se. Systems ends, traditionally the stuff of politics, are derived from technical/organizational requirements. If they are not apparent – or given – they are identified by systems experts.

Systems theory thus attempts to short-circuit the basic political task of securing consensus and legitimation. It does this by supplying the political agenda with what would appear to be a higher form of legitimation, the legitimation accorded to a "natural process". (*Ibid.*)

Public administration as satisficing can be conceived as a *game against Nature*. Nature in this context is understood as anything that disturbs decision-making and implementation by the public organization "from the outside". It may be, for example, *missing*

information of the planned environment that is too complex; it may also be considered as *positive feedback* by the public that chooses to oppose the decisions and plans; it may be treated as *noise* in the information channels of the public organization; it may potentially lead to a *systems overload* with a consequent undecidedness. This is how social and political life, involving ways of living, public participation, personal differences and political crises, becomes "naturalized".

To conceive public administration as a game against Nature is a way of incorporating uncertainty into the game-theoretical model of decision-making. Nature plays against the public administrator by sending unexpected (positive) feedback on his policy choices. The administrator is not able to gain full and comprehensive understanding of his object, and he is therefore not in full control of it. Control has to be won at each decision step by constructing *strategies*. By 'strategy' Simon means a chain of successive decisions, each decision being a choice for implementation between those alternative behaviours available at each moment (Simon 1979, 105). In strategic planning, the future is conceived of as a tree of decisions, where each decision opens up alternative future consequences that call for further decisions, and so on. Each anticipated chain of decisions involves a strategy. When "Nature makes its choice", the administrator reacts by choosing one of those alternative moves that his strategy offers. (Wiener 1969, 184-85; Rapoport 1989, 78-81; Chadwick 1978, 314-15.) In the case of "physical nature", Nature does not 'really' make choices, but since the administrator does not know in advance what the state of nature is or will be, he can imagine Nature "choosing" a particular branch of the tree at each decision node. The "socio-political nature" obviously makes deliberate choices, but it is methodologically treated as Nature and hence seen to cause environmental disturbances in the advancement of the scientific method.

Charles E. Lindblom's method of *incremental analysis* comes close to Simon's method of satisficing¹. Lindblom shares with Simon the conception that in public management rationality must be "bounded". The public administrator cannot afford to check every detail of the policy problem – he does not have enough time and resources to do that; and even if he had, there are still sources of important information that would remain beyond his reach. Furthermore, the future outcomes of each policy hold in store numerous factors that cannot be known beforehand. The problem is intellectually too complex and necessarily has to be simplified. Lindblom suggests that the administrator should concentrate in his analysis on those aspects of each problem, which entail changes to the prevailing policy. Many of the related values and possible consequences can be ignored, as the administrator chooses to rely heavily on the past experience of small policy steps in order to predict the consequences of similar steps extended into the future (Lindblom 1979, 79-80). The method is therefore conservative; the administrator defines policy problems and makes relative decisions by adapting the existing policy to the changing circumstances – by adding increments "at the margin" (Lindblom 1959, 82-84).

Lindblom presents his method as an alternative to the traditional theory of policy analysis, calling his own approach the "branch method" and the latter the "root method" (*ibid.*, 81). The branch method continually builds up on the present situation, step-by-step and by small degrees, while the root method – which Lindblom also calls the "synoptic method" – starts from the fundamentals on each new occasion, building on the past only

¹ Lindblom himself notices the similarity in Lindblom 1959, 80. See also Chadwick 1978, 324.

as experience is embodied into a theory, and being always prepared to start from the very beginning (*ibid.*; Lindblom 1965, 137-38). Like the economic man, decision-makers who utilize the synoptic method seek to achieve a high degree of synopsis or comprehensiveness of view. (Lindblom 1965, 137-38.) "To adopt the term [synoptic] is to assume that a problem is solved by understanding it. Understanding requires a comprehensiveness of information and analysis." (*Ibid.*)¹ Lindblom, on the contrary, argues that the policy analyst can, and often should, "muddle through" in policy making *without* understanding the problems he faces.

"If coin tossing can settle some problems better than can futile attempts at analysis of an unanalyzable (or futile attempts at analysis when information is wholly lacking), then it is not surprising that various forms of social interaction can sometimes handle problems better than analysis can when analysis at best is grossly incomplete. Understanding a social problem is not always necessary for its amelioration – a simple fact still widely overlooked." (Lindblom 1979, 524-25.)

It seems that we have here gone far from the rationality requirements that the economic man placed on himself, and even from those Simon placed on his administrative man. But the difference is not so great as it seems. We are still moving along the same control/uncertainty continuum, only approaching the uncertainty end of that continuum. Accordingly, Lindblom's conception of rationality is essentially the same as it has been all along in our inquiries of systems- and game-theoretical rationality. By juxtaposing his "branch method" with the "root method", Lindblom appears to be describing a remarkably novel approach, though actually "he is describing the same tree", as Camille Cates put it. "Both models are rational, linear approaches to decision making." (Cates 1979, 528.) Lindblom only affords even fewer opportunities for the public administrator to behave rationally than Simon does. The reason why he conceives of public decision-making as less controllable is that he adds *politics* and the *pluralism of values* to his decision-making system. The rational administrator is only one of the numerous "partisans" that take part in decision situations, and the values they attach to conceivable outcomes are seldom known with certainty. Because there is much uncertainty and therefore a lack of opportunities to derive rationally the "correct" courses of action, there is also much room for "unscientific" values and claims based on them² – and their appearance and acknowledgement further increases the uncertainty of decision-making.

Public decision-making is hereby politicized, but it is my intention to state in the following that, in the form provided by Lindblom, it is still describable as a game – as were the strategies of economic optimizing and administrative satisficing.

¹ Faludi treats Lindblom's 'synoptic method' as a combination of rational-comprehensive planning and blueprint planning. Faludi defines rational-comprehensive planning as an approach "whereby the programmes put forward for evaluation cover the available action space and where the action space has itself been derived from an exhaustive definition of the problem to be solved." (Faludi 1976, 155.) (See Faludi's definition of blueprint planning above.) While Faludi sees the comprehensiveness of analysis as an ideal worth striving for, he acknowledges the impossibility of this task: "all analysis is piecemeal" (*ibid.*, 168; Faludi 1986, 107).

² See the above discussion of the relationship between planning and politics in connection to Faludi's planning theory.

1.4.3 Political Game

Lindblom's theory involves two areas of concern: incremental analysis and *incremental politics*¹. The first of these we have already discussed. Now we shall concentrate on the latter, which is also called "partisan mutual adjustment" by Lindblom (1965). Whereas incremental analysis is offered as a method for dealing with the professional problems of public management, incremental politics 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 partisan mutual adjustment, each new decision is adapted to the status quo of the former decisions (*ibid.*, 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 manager'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 complete 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. (*Ibid.*, 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*²: a solution which is to the advantage of some and a loss to none (Lindblom 1965, 210). Lindblom assumes that it would be easier to reach consensus and compromise on decisions that are "small". A minority group may agree to be overruled, if it is promised a compensation in the next decision-making process addressing the next small increment (*ibid.*, 268-69).

Lindblom's theory belongs to the broad liberalist tradition of political theories. This tradition treats politics as power games between interests that have been "privatized" by interest groups that do not seek to share their understandings. Decisions are arrived at according to the power relations between the interest groups (Friedmann 1987, 331-32). 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 man, which is based on the assumption that human individuals exist apart or

¹ The concepts of incremental analysis and incremental politics have often been combined under the single heading of incrementalism. 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 "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" (*Ibid.*, 194). See also Rapoport 1989, 152.

independently of their social relationships – as "islands" (see Bernstein 1986, 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. Political behaviour is like market behaviour, making with a similar logic the allocative choices which are removed from the market. Politics comes close to a rational construct where "utilities" are exchanged at the margin. The closer the game of political wins and losses comes to economic games, the more *technical* and calculable by "political economists" it becomes. Presumably, the "political utilities" can be calculated in advance by expert forecasters – before elections, for example. (Friedmann 1987, 331-32.) If so, John Friedmann asks:

"[W]hy not dispense altogether with a politics that is unpredictable and expensive, and substitute for it an expert judgment of the balance of individual utilities at the margin? Losers would be compensated according to the criterion of the Pareto optimum; winners would get whatever they wanted. And so we are [...] at the paradoxical position [...]: a state unconstrained by politics and in the hands of those for whom technical reason is infinitely superior to the passions of political life." (*Ibid.*, 332.)

The "political man", like the economic man and the administrative man, becomes a technical calculator in the game-theoretical and decision-theoretical conception of social interaction. Mutual interaction as a game is fundamentally *asocial* interaction. The political and the economic opponent, as well as the administrator's unanalyzable "opponent" of societal complexity, become Nature – counterforces that interfere with one's strategic goal-seeking.

1.5 Critique on Systems Thinking

The critique on sociological and organization-theoretical, as well as planning-theoretical, applications of systems theory can be classified into two broad categories: *ethical* critique and *functional* critique. Both of them have to do with the technization of public life, but they focus on different aspects. The first – ethical critique – attempts to dismiss systems and strategic guidance of public organizations on moral grounds. Systems thinking is accused of turning the public realm into a control mechanism that is to be managed and administered from above. It hinders democracy and therefore *depoliticizes* the handling of public affairs. The system's needs are given as centralized societal control becomes the justification of itself. As the goal of systems rational management is to preserve the "life" of the organization, it will be systems rationality itself that becomes the primary goal, because it is systems rationality that defines the organizations and is expected to give them their "life". Simon's administrative man is a *depoliticized manager of public affairs*. On the other hand, Lindblom's "political man" *depoliticizes politics* by presenting politics as a game, where interest groups attempt to win their political opponents by means of strategic action. The method of incremental politics does not encourage the interest groups to search for a public realm, since ends and values are designated to their own "watchdogs".

The second type of critique purports to point out the inherent failures in systems thinking that prevent the systems from attaining their own goals. (1) The self-regarded

players finally lose, because their game conception of their social contexts is too narrow. (2) Control of the environment fails, because the cybernetic understanding of system-environment relationships is inadequate. (3) Even if we were able to explain how the urban system behaves, we would still have very limited capacities to predict its behaviour in the future. (4) Planning systems as learning systems are able to adapt to specific problematic situations, but they are not able to reflect on themselves in dilemmas that concern the planning practice as a whole. In conclusion, the technization of societal life not only depoliticizes it, but also makes it *unreflective*.

A large portion of the usual functional critique on systems theory is directed against its quantitative models of societies and organizations, which it treats as macro-scale self-regulating, unhistorical homeostats. But, as we have already seen, systems theory itself has passed on from this archaic phase of social cybernetics. By bringing forth the more elegant model of social organizations as *learning systems*, systems theorists themselves now claim that *there are no homeostatic social systems to begin with*. The critique presented here will therefore not center on the faults of the social homeostat model, but will, instead, make critical remarks on the learning system model. It will be shown that learning systems rely on a too narrowly defined concept of learning, which makes them unreflective and, at the same time, instruments of power – since learning is incorporated to serve the organization's given goals and respective power structure, in its attempts to adapt to changing environmental conditions. Control (or 'management' – its more sophisticated name) is therefore ethically wrong and, being unreflective, also impractical.

I shall suggest later in this chapter that these ethical and functional criticisms can be integrated and reflected by approaching systems thinking and systems learning from the perspective of pragmatism and dialectical thought.

1.5.1 Ethical Critique

Much of the ethical and emancipatory critique on systems-theoretically based social planning and decision-making comes from leftist thinkers. Especially powerful are the attacks made by critical theorists by building upon Jürgen Habermas's theory of communicative action.

1.5.1.1 Lifeworld and System

Habermas's theory of communicative action (Habermas 1984, 1987) offers a description of society as dialectics between "lifeworld" and "system". Lifeworld is the domain of undominated communication where mutual understanding is sought. It is the realm of cultural production and reproduction of use values. What Habermas understands as the "system" are the media of power and money. These media are the "subsystems" of lifeworld that have emerged from the lifeworld and dominate it as an environment. "The rationalization of the lifeworld makes possible the emergence and growth of subsystems whose independent imperatives turn back destructively upon the lifeworld itself" (Habermas 1987, 186). Money and power exert "strategic action" – action that is oriented

instrumentally towards self-regarded success instead of being oriented towards mutual understanding. Habermas sees mutual understanding as the basic function of language. But mutual consensus is no longer decisive in the formal administrative and economic organizations of our modern capitalistic society that rely on the coordinating mechanisms of power and money. According to Habermas, the media of power and money are "delinguistified" (*ibid.*, 154), because they coordinate actions without attempting at mutual understanding. In lifeworldly social action consensus is the coordinating medium, but in the world controlled by the subsystems this consensus is replaced by coordination of actions achieved by producing symbolic generalizations of positive and negative sanctions. (*Ibid.*, 281, 310-11.) The media of power and money encode purposive-rational dealings, having calculable value, and make it possible to exert generalized strategic influence on the decisions of other participants without becoming vulnerable to the risks of linguistic communication (*ibid.*, 277-81). But these steering media fail to operate in the lifeworldly domains of cultural reproduction, social integration and socialization that constitute the linguistic and cultural basis of our society (*ibid.*, 267, 322). Having *abstracted* the products of these domains, power and money continuously *distort* communicative action in the lifeworld (*ibid.*, 187, 322). These subsystems attempt to "colonize" the lifeworld by their processes of bureaucratization and commodification, but they are dependent on individual skills and motivations and on mass loyalty – e.g. the accomplishments of the symbolic reproduction of the lifeworld.

1.5.1.2 Depoliticizing Planning

On the basis of Habermas's theory, John Forester has made a theoretical analysis of the political-economic means of distorting communicative action in public planning. The systems-rational and strategic modes of communicating in public planning – by those administratively and economically powerful – consider public participation the *environment* from which feedback is received and over which *control* is to be gained. Forester calls this control "systematic misinformation". It is the political-economic system's management of "who knows what" in the circulation of planning communication. (Forester 1989, 27-47.) "As Steven Lukes argues, systematic misinformation is rooted in the political-economic structures that define who initiates and who reacts, who invokes authority or expertise and who is mystified or defers, who appeals to trust and who chooses to trust or be sceptical, and who defines agendas of need and who is thus defined" (*ibid.*, 35).

Some misinformation is inevitable. Our highly differentiated society depends on various kinds of expertise, including the expertise of planners. Planning expertise means that planners are able, better than the others, to determine the context of planning work.

"For instance, planners shape not only documents but also participation: who is contacted, who participates in informal design-review meetings, who persuades whom by which options for project development. Planners do so not only by shaping which facts certain citizens may have, but also by shaping the trust and expectations of those citizens. Planners organize cooperation, or acquiescence, in addition to data and sketches. They are often not authoritative problem-solvers, as stereotypical engineers

may be, but, instead, they are organizers (or disorganizers) of public attention: selectively shaping attention to options for action, particular costs and benefits, or particular arguments for and against proposals. A key source of the planner's power to exert such influence is the *control of information*." (*Ibid.*, 28, my emphasis).

This power to manage planning communication is necessary for our society. Our society relies on the planner to use this power in order to guide us towards such discoveries that enable us to deal collectively with the social and urban problems we currently face. Needs have to be shaped, agendas drawn up, decisions made. All this demands expert knowledge. The key issue, then, is not whether the planner has power or not, but *how* he chooses to use this power. His power is *political power*, because it is power to influence the handling of public affairs¹. "[B]y choosing to address or ignore the exercise of political power in the planning process, planners can make that process more democratic or less, more technocratic or less, still more dominated by the established wielders of power or less so" (Forester 1989, 28). To work as a rational calculator of the system's needs is therefore also a political choice, by which the planner depoliticizes the context of planning communication, whether he is aware of doing so or not (*ibid.*, 27-47).

For Frank Fischer, systems theory represents the metatheory of technocratic thinking (Fischer 1990, 203). Systems theory provides an apolitical language for public management and policy analysis – such as the language of cost-benefit analysis (*ibid.*, 208). Systems thinking attempts to turn organizations into technostuctures, i.e. technical-rational constructs that at their different levels reach decisions for given goals on the basis of empirical analysis. For Fischer, the source of the problem is this "given-ness" of system needs (*ibid.*, 210).

"Administrative scientists and managerial decision makers are directed to focus their attention on verifiable "factual propositions" about means for achieving mandated ends. Organizational analysts thus function largely to calculate the costs and benefits of alternative means for achieving the organization's goals. The goals themselves, specified by the organization's owners or derived from legislative policy, are ruled to be beyond the purview of organizational science. As a result, the substantive or value-laden dimensions of organizational decision-making are largely denigrated. In the end, such significant realities as competing motivations or administrative situations, or conflicting goals and objectives are reduced to irrational interruptions that impede the methodological requirements of "efficient" decision-making." (*Ibid.*, 272-73.)

According to Fischer, the mainstream systems-theoretical organization theory offers a partial picture of the structure of the organization. It defines the technical rationality of decision behaviour as the goal of the organization and thus leaves the "irrational" behaviours off the agenda. Using the guise of value neutrality, the administrative

¹ I'd like to add that it is political power of the second order, because it is power to decide what is political and what is not – which is the other side of having power to decide what is technical and what is not. By claiming certain public affairs to be matters of technical expertise, the planner uses his power to narrow down the context of politics. On the other hand, by revealing that there are matters of value that need to be taken into public consideration in an ostensibly technical problem, the planner serves to widen the context of politics.

techniques direct attention away from both the social origins and the political implications of the organization's goals. They narrow down, and at the same time structure, the field of inquiry and thereby give a partial description of organizational reality. (*Ibid.*, 273-74.) "Mainstream organizational theory, as a result, provides ideological support for the elite administrative planners at the expense of other existing interests and needs in the organization. In this respect, theory programmatically embodies the interests, values, and objectives of the professional managerial stratum and the corporate economic form that it serves." (*Ibid.*, 274.) Fischer holds that the scientific argumentation of choices for alternative ways of life can never be fully enlightened or altogether impartial; they characteristically take the form of ideological debate in the real world of political conflict (*ibid.*, 271).

In relation to this criticism, Forester claims that planners are not only faced with problems of uncertainty but also with problems of *ambiguity*. The lack of information of the planned object in its present and some future state, and the lack of time and resources for the rational programming of planning work, are matters that belong to the technical dimension of planning. This is the dimension which we have already associated with the concept of uncertainty. But there is also the political dimension that concerns the *legitimacy of the ends and means of planning*. Ambiguity is part of the political dimension. Facing uncertainty, the planner is in need for more information; facing ambiguity, he is in need of practical judgment. Uncertainty is characteristic of problems that emerge in professional inquiry. There is a lack of adequate information: "What will happen "out there"?; Will a strategy work?" In the political conflict between values and interests one is often forced to consider one's relationship to the others "in here". Whereas uncertainty concerns questions about the *content* produced by the systems-rational method, ambiguity has to do with questions about the *context* of systems rationality itself. Legitimacy is at stake: How to justify the proposed choices?; "What to use as the standard of what works?" (Forester 1993, 9, 88-90; see also Sotarauta 1996, 129.)

"That an event will take place may be uncertain but not ambiguous; a pun is ambiguous but not uncertain. Questions of purpose and intent, or ethical and political choice, of obligation and responsibility, of the proper interpretation of meaning – these are issues of ambiguity; we look not for certainty but for justification [...] Questions of scientific and technical results, of systems performance or the prediction of consequences – these are primarily issues of certainty and uncertainty; we look for evidence, not for interpretations of precedent." (Forester 1989, 89.)

Uncertainty and ambiguity call for different kinds of practical responses. According to Forester, it is necessary that the planner distinguishes between these two types of planning problems from each other.

"[I]n administrative and planning contexts, questions of ambiguity (what do they really *want*?) are likely to be reduced to those of uncertainty (shall we devise a questionnaire to see what they really *do want*?). The resulting call for more information (and perhaps more information-processing equipment) may then only further obscure the political and social judgments that must inevitably be made. If this argument is half-right, then

the reduction of ambiguity to uncertainty may have subtle and perverse depoliticizing effects.” (Forester 1993, 9.)

By mistaking normative problems for matters of assumed scientific control and uncertainty, the planners narrow down the opportunities for political judgment (*ibid.*, 89). They thereby “internalize” into the system the problems that specifically threaten the existence of the system. Systems rationality, too, needs to be politically legitimated. Questions of the legitimacy of systems rational planning address the goal of planning – demanding meanings and purposes behind systems rational measures other than systems rationality itself. Planning approaching systems rationality carries certain inherent value preferences and power relations that it is unable to address by itself. Facing ambiguity, the planner either has to step out from the context of systems rationality and to re-evaluate it critically – or the planner may try to transform this ambiguity into a problem of control.

These criticisms together reflect the broader interest of critical theorists in the *substantive* aspects of organization theory and planning theory. Their interest is focused especially on the political and economic context wherein planning and administrative processes take place. Faludi, who introduced to planning theory the dichotomy between procedural and substantive theory, suggested that the procedural planning theory serves as an envelope to substantive theory, rather than vice versa (Faludi 1976, 7-8). Critical theorists attempt to reverse this argument: *it is modern capitalism that serves as an envelope for planning procedures*. It is argued that general planning theories, like Faludi’s, decontextualize themselves from their societal conditions, and therefore only serve as instruments for the prevalence of those conditions. For Faludi, “[a] planning agency is simply an organizational unit specialized for the formulation of programmes designed to solve problems in the most effective way” (*ibid.*, 84). For critical theorists, Faludi’s planning theory does not represent an attempt to transform society into something more responsive to human needs, but rather a technology which will be used to reproduce the present political-economic power structure, albeit in a more efficient form (Thomas 1982, 21). According to Thomas, Faludi’s procedural planning theory fits neatly, in ideological terms, into the structural niche which planning occupies in the industrial market economies (*ibid.*, 25). The theory is primarily concerned with means rather than ends (*ibid.*, 13). According to Thomas, procedural theorists

“postulate general theories of planning which seek to establish the existence of a distinctive type of thought and action without reference to any particular object which this distinctive form may be associated with in the real world. Consequently, the procedural theory is essentially ‘contentless’ in that it specifies thinking and acting procedures but does not investigate what is the content of these.” (*Ibid.*, 13-14.)

Faludi focuses on streamlining the planning process with the rationality of means in mind. As Thomas points out, he does not start his analysis from the view of planning as politically legitimated public activity carried out by the state (*ibid.*, 15). The major source of legitimacy is provided by systems rationality – which politics only complements. The political process is substantially replaced by rational planning and argumentation as the principal means through which people communicate about the problems of their urban life. “[Y]et it is a technical language dedicated not to maximizing the communication

between people, but rather to maximizing their control over the environment" (*ibid.*, 21). *What becomes the end is the process of rationalizing the means.* These means may very well be the means of political-economic oppression, since the planning system does not regard this oppression as an end in itself. Its ends are black boxes. Thomas concludes: "By elaborating the technology of planning in a non-critical way, while at the same time giving planning a central position as a mode of social communication, Faludi contributes to the attempts to depoliticize politics as well as planning" (*ibid.*, 25).

1.5.1.3 Depoliticizing Politics

In this context, Hannah Arendt's critique of mainstream political theory is noteworthy. Following Arendt, it may be deduced that, in the modern world, not only the administrative handling of public affairs is technicized but their *political* handling as well. For Arendt, the essence of political activity is that it constitutes a shared world - a public domain. She criticizes modern political thought for having a narrow interpretation of action. It conceives action merely as a *means* to attain a given *end*. Therefore, action in modern political thought is substituted for by a focus on ends. (Arendt 1958, 228-30.) The realm of politics is seen to appear when different interest groups compete for the realization of their ends, as not all ends can be realized at the same time. As the ends are prior to the means (i.e. "justify" them), the political realm becomes an arena of mutual use of force, secrecy, and misinformation. The process of decision-making is seen as counterproductive to the attainment of the ends, and the ends themselves are already formulated *before* entering the political realm. If an interest group is powerful, it may be that the only thing it loses during the decision-making process is time wasted in the formalities of "democracy". A less influential interest group may have to proceed with only a partial acknowledgement of its end, and the purposes of an even less empowered group may be turned down altogether. Anyway, from the perspective of all these interest groups, the political decision-making process is seen as a bargaining procedure which unavoidably brings inefficiency to the instrumental materialization of the given group's end. Hence, democracy comes to be signified as an opposite to efficiency. It is assumed that democracy serves to inhibit the exercise of arbitrary power with the inevitable cost of loss in efficiency. Efficiency means, simply, the choice of the shortest way or the cheapest means in the pursuit of a given end (Simon 1979, 56). The more powerful and tactically clever an interest group is, the more efficiently it gets rid of the realm of politics on its path towards the desired end. The modern emphasis on the efficient attainment of given ends leads to the instrumentalization of politics. Meaningful communication about ends is held by minor interest groups behind closed doors outside the political realm, and the political realm itself (which could otherwise be seen as having potentialities to enrich that communication) is reduced to power-mediated play between the already established ends. Therefore, there is no public realm, no mutual questioning of ends and no search for shared meanings. Politics is "privatized" and, at the same time, technicized by defining it negatively from the standpoint of efficiency.

The question of efficiency can be posed only in relation to given purposes. Rationality means the efficient attainment of a given goal. Democratic decision-making *is* inefficient,

if it is understood as a political struggle between given values and ideologies. If, on the other hand, we understood political activity as a mutual search for purpose, we would be talking about activity that *transcends* the efficiency criterion. To call such activity inefficient would be a confusion between different levels of meaningful action.

This privatization of the public realm can also be discerned in Lindblom's incremental politics, evidenced in the notion of interest groups as "watchdogs" for their values. We may safely regard incrementalism as the main *political theory* of planning within the tradition of systems thinking. It is also associated with the American tradition of pragmatist political theory, to which the policy of incremental self-repairing improvements, also known as 'ameliorism', fitted naturally.

Tore Sager accuses incremental politics of presenting too narrow a conception of planning communication. It provides a method of settling disputes without having to attempt at dialogue (which Sager, following Habermas, defines as "undominated communication"). In incremental politics, mutual agreement on planning decisions is not necessary; instead, it provides a method to guarantee that decisions are made *despite* the lack of agreement. It therefore encourages bargaining and compromising between interests. Still, it does not guarantee a fair fight between them. (Sager 1994, 7, 14, 20, 73.) Sager's description of such a process is "collective opportunism" (*ibid.*, 180; see also Forester 1993, 87).

The possible narrowness of political communication is not the only criticizable issue in the politics of incrementalism. It also carries an inherent tendency towards *corporatism*. 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. 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, 387; Cates 1979, 528; Sager 1994, 160; Möttönen 1997, 178.) In Lindblom's theory, 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, 210) – "everyone" meaning those who are included as partisans. Self-interest also means *no interest* in bringing in new partisans to the decision-making process. 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 toward corporatism.” (Lindblom 1979, 523. See also Lindblom 1977, 228.)

While giving in to his critics, Lindblom is here implying that it is, after all, not so much his method of political decision-making that his critics object, but the pluralism of values upon which he has built his theory. It is clear, however, that the critique presented above does not foster anti-pluralist intentions. On the contrary, it gives us a basis to claim that *Lindblom’s theory is not pluralistic enough*. True pluralism is not the same as a variety of single-valued groups put together. Instead, *it means the possibility of groups finding a plurality of values in themselves when they come together*. By technicizing pluralism, Lindblom’s method prevents the emergence of the public realm.

1.5.1.4 Power and Learning Systems

Not even the theory of *learning systems* escapes the critique of critical theorists. The theories of learning systems and learning organizations were developed within the broad scientific tradition of *Organization Development* (Friedmann 1987, 56-57). Organization Development is a spin-off of *Scientific Management*, which developed after 1945 mainly to serve large private corporations. Chris Argyris, Donald Schön, Peter Senge and others moved the field gradually away from profit as the sole criterion of management, and brought forth humanistic values and the motive of psychological self-development. (See *ibid.*) Organization Development approached systems-theoretical thinking from the perspective of American pragmatism (James, Peirce, Dewey, Mead).

There are objectives in Organization Development research that are likened to those of Habermas’s critical social science (Fischer 1990, 365; see also Huttunen, Kakkori & Heikkinen 1999, 126). There is the shared emphasis on the crucial importance of dialogue for social practice. Accordingly, the conception of knowledge as historically and socially situated is shared. According to Habermas, a claim is accepted as a true claim if its validity is intersubjectively agreed upon by the community to which the claim is directed. The Organization Development tradition works with a process concept of knowledge: knowledge is not pre-existing in libraries, in agency documents, in computer files, or in the expert’s “head”; it is rather *designed* by small task-oriented groups of both experts and clients. Knowledge is the product of a *social learning process*, which has brought mutual understanding of a problematic situation and simultaneously provided means to alter that situation. Knowledge is bound to specific real-life contexts and to problems and goals that are relevant in those contexts. What is generalizable is not knowledge itself, but the collective learning processes that generate knowledge. Problems are examined from the perspective of actors actually engaged in practice; it is the practice itself that poses the puzzles to be solved. Research attitude and dialogue become aspects of an ongoing practice. There is a difference compared to Habermas, who holds a more analytical position towards the processes of knowledge formation. Actors are assumed to withdraw

from action to evaluate mutually the claims, initiatives, suggestions and demands they make to each other in an undominated speech situation. In Habermas's theory, there is a connection between acting and reflecting, but these are not brought together in a single process of *reflection-in-action* (Schön 1983, 49-69), as the proponents of Organization Development suggest.

At the first glance, Organization Development seems like a welcome complement to critical theory. Due to its client-orientedness, it harmonizes with the emancipatory principle of critical theory. At the same time, it goes further in joining theory and practice and in synthesizing normative and empirical research. It is oriented towards the actual production of practice, not merely aiming to define the normative principles the practice should meet. Whereas critical theory offers social learning and dialogue as a well-reasoned and ethical plea, the field of Organization Development goes further and provides a *methodology* for them. Still, the field of Organization Development as a whole is rejected by critical theorists. And the reason is clear: it is, after all, *organizations* that are developed. What should be concerned with the maintenance of communicative action has been harnessed in the service of "system maintenance". According to Forester, OD theorists formulate our problems of planning and administration as the organization of learning, and thereby bypass important questions of politics and power (Forester 1993, 58).

"[T]he literature of "learning organizations" teaches us that in a turbulent environment, organizations must be adaptive, flexible, continually testing, "error-correcting," and innovating. Still, the "learning theorists" leave unasked the basic political questions: what ends ought these organizations to serve and who ought to learn what?" (*Ibid.*, 53-54.)

Forester does not deny from our organizations the need to be "error-correcting" – but then we should remember to ask: "What sorts of judgments will determine error, undesirable activity, and who will have the power, with what accountability, to make these judgments?" (*ibid.*, 54). Ignoring these questions "we are left with the struggle only for organizational survival and self-perpetuation; we are asked to keep the organizations we now have, whether or not "might makes right," and only then, if at all, are we to ask what we ought to keep them for" (*ibid.*). The ideology of OD is focused on small-group and inter-group relations, and these are expected to change as individuals learn and change their behaviour. John Friedmann sees a threat in forming small task-oriented learning teams. They are easily blinded to larger organizational issues, because these issues make up the context of their own existence, giving them their form and purpose. Especially power, which is central to how these groups are actually put together, may remain "behind the backs" of the group members. (Friedmann 1987, 216.)

The critique is continued by Fischer:

"[C]ollaborative techniques have mainly been adapted for use in the bureaucratic context of managerial and organizational research. It is now, in fact, a technique and ideology advanced in significant part by management consultants. In the texts on the subject one can today scarcely find mention of the word *democracy*. Instead, its practitioners speak of "participative management" and tout its use as a technique for

making bureaucratic organizations more responsive to change. In short, the objectives of democratization have disappeared.” (Fischer 1990, 365.)

According to Friedmann, Organization Development is “primarily a science for board rooms” (Friedmann 1987, 216). Its therapeutic program is mainly addressed to managerial elites, who tend to overlook power in their organizations, because they themselves are the ones that possess it. The matter is quite different for those who remain outside the executive chambers and council rooms – whether white- and blue-collar workers or the less well-to-do citizens, who frequently experience the deprivating effects of power. (*Ibid.*)

The ‘learning system’ as an instrument of organizational power is particularly obvious in Faludi’s model of planning agencies. First, Faludi placed the function of learning into the ‘memory-box’, which was one of the components of his learning system (see Figure 4). When the learning system was identified with planning agencies, learning became the function of the development plan section (see Figure 5). It is therefore the planners *inside* the development plan section that are expected to learn and grow as human beings. And what they learn is better control of their environment, including not only the built environment and those who inhabit it, but also the other units within the planning agency – the planning committee, the survey unit and the development control section. The primary role of this environment is to provide feedback information for the planners who process it with the aim of learning to control their environment better. Learning thus becomes an instrument in the planners’ quest for power.

The key issue in examining any learning system from the perspective of power is the basic definition of the system and the freedom allowed for learning to interfere with the definition chosen. As we have seen, the relationship between a system and its environment is a power relationship, where the system aspires to gain control over its environment. In the learning systems we have so far discussed, the function of learning has been to provide means for the adaptation of the system to its environment. The homeostatic systems are not able to adapt to changing environmental conditions – but learning systems are, because of their capacity to learn to recodify themselves, so that a new plateau of stability can be reached when the former plateau, due to environmental change, has ceased to provide stable conditions. Adaptation means the maintenance of life in changing environmental conditions. But what life? A life based on power. By adapting to its environment, the system actually improves its control over the environment. A learning system is therefore a more efficient control system than the homeostatic system. When we talk about social organizations as learning systems, the crucial questions are: “Who belong to the organization?”; “Can everyone be included in a planning agency, for example?”; “Are those outside it mere objects of control to whom learning means nothing else than the assurance that they will remain as such objects?”

How could learning be an instrument of emancipation and democracy in planning or in any other form of organized public activity? Such learning would have to reach the levels of role definition within the organization. It would have to bring under critical consideration the norms, habits and preassumptions that have to do with identifying roles and membership and are reproduced in everyday organizational practice. Then, learning would reach an adequate depth for the *possible redefinition of system-environment boundaries at the level of human relationships. Only when learning brings awareness of*

the possibility of such changes (and already initiates them because of reaching awareness) does it promote democracy. Most importantly, it leads to changes in social attitudes, revealed in such self-reflective questions as: "Could *I* be one of the planners, or decision-makers?"; Should *they* be included in this planning process?"; "Am *I* the right person to judge this?"; "Why are *they* complaining about the plan?"; "Why didn't anyone complain about the plan?"

If we wish to continue on a systems-theoretical basis *with* the aim of emancipation, our understanding of systems that can learn must be developed. We cannot settle with the 'adaptive system model', if adaptation is taken to mean a change in internal structure as a response to a change in external structure. Learning has to reach further than that. It has to include a change in the more basic structure – the structure that determines something as internal and something else as external. It means, therefore, a change in the boundary by which the system itself is constituted. But still, learning always arrives at a boundary of *some* kind. This means that *we cannot ignore the fact that there are, and will be, power relationships in our society and in our organizations.* But by reflective learning we can change them. *The learning system that we are after is a system that maintains the ability to redefine its system-environment boundaries.*

What is the system one hopes to preserve in the context of land-use planning activity? Is it our ability to plan our urban lives, or is it a given planning agency? When the latter is the case, there is indeed reason enough to criticize on ethical grounds the *use* of systems theory. But is there reason enough to abandon systems theory itself?

My aim is to develop an alternative systems-theoretical approach to land-use planning that bases the concept of 'land-use planning system' on planning activity as the existential constituent of urban life itself. The survival of this system, therefore, concerns the very survival of urban life. Land-use planning as an 'agency' emerges within that system, but the system cannot be reduced to the agency. The agency forms a part of the system, standing in a dialectical relationship to the latter. The potency of systems approach is dramatically altered when we reformulate it conceptually to address the dialectical interplay between a given agency on one hand, and planning activity as a human capacity enabling urban life on the other. We will return to this issue later in this chapter.

1.5.2 Functional Critique

1.5.2.1 Individual and Collective Rationality

In game theory a 'rational' actor is frequently defined as one who seeks to maximize his 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 an economic system) the pursuit of self-interest by individual actors leads to optimal conditions for all (Pareto optimum). However, there are social situations where strategies based on individual success cannot be rational. A simple example is a full theatre that has caught fire. If everyone rushed directly to the exits without regard to the others, the exits would be blocked immediately and most of the

people would not survive. Another example is the exploitation of unrenovable or slowly renewable natural resources. The pursuit of individual success is rational only if there are few individuals in this pursuit. It depends on the total number of exploiters in a given population whether exploitation of nature is rational or not. When the number of exploiters exceeds a certain threshold, the strain on natural resources becomes too heavy. This results in erosion and both the exploiters and the non-exploiters lose. (Rapoport 1989, 270-72.)

These situations are called *social traps*. What characterizes social traps are circumstances where the value of a strategy – for both the collective and each of its individual members – depends on how many actors use it. There are strategies that become progressively more costly to all users as the number of individuals using it increases. Social traps are situations where strategies that are based on individual success cannot be rational, but where only such strategies that are based on *collective rationality* can be rational. Accordingly, the value of such strategies increases progressively, as the number of those using it increases. The larger the number of players who cooperate, the better off everyone is – cooperators and non-cooperators alike. The fewer the persons who cooperate, the worse off everyone is. This is evident in *Prisoner's Dilemma*, the best known case of social traps. (*Ibid.*)

In Prisoner's Dilemma, two people have committed a crime and have later been caught by the police. The police cross-examines them in separate cells. Each of the prisoners is promised separately that if he squeals his partner, he gets off scot-free, while his partner takes the rap. If either one squeals, while the other remains silent, the squealer skips out, but his accomplice gets the slammer of 16 years. If both keep quiet, they get the sentence of three years. If both prisoners rat on each other, they both get nine years. Here 'not talking' is a cooperative strategy, and 'squealing' is a non-cooperative strategy. There is a strong temptation to choose the latter strategy. Each of the prisoners figures out, in his solitude, that he is better off if he squeals, since if his partner does not, he gets out free. And even if his partner did squeal, he would get a sentence much shorter than he would, if he kept silent and his partner squealed. Both of the prisoners end up squealing and wind up in jail for nine years. If both had chosen the cooperative strategy, they would have got only three years each. (See, for example, Kangas 1994, 70-72; von Herten 1993, 50-52; Kauffman 1995, 217-19.)

Social traps are dilemmatic games that are based on the conceptual split between individual and collective rationality (or individual interest and collective interest) (Rapoport 1989, 293). *Rationality bifurcates when the system is inappropriately identified*. The social trap is a consequence of inappropriately created system-environment boundaries that lead individuals (or groups) to recognize such strategies as rational that bear disastrous consequences to them. For the self-regarded actors, social traps are *double binds* – situations where activity is blocked¹. For actors caught in a social

¹ Double binds are situations where there are no alternatives left (Bateson 1987, 335). As one of the examples to illustrate it, Bateson describes a Zen Buddhist lesson between the Zen master and his pupil. The Zen master holds a stick over the pupil's head and says fiercely: "If you say this stick is real, I will strike you with it; if you say this stick is not real, I will strike you with it; if you don't say anything, I will strike you with it." The pupil might break out of this dilemma by reaching up and taking the stick away from the master. (*Ibid.*, 208.) According to Wilden, industrial capitalism

trap there are no rational alternatives left: those deemed irrational are rejected, and those chosen turn out to be irrational, too. This double bind is resolved once the non-cooperating actors reach an awareness of a larger social system to which their destinies are tied – and through that understanding create a new strategy that is based on their mutual cooperation. The bifurcation of rationality and the respective dilemma vanishes as soon as collective rationality is seen as the basis of rational decision-making (Rapoport 1989, 293).

The economic man who maximizes self-interest is self-destructive. The pursuit of immediate utility may lead to major losses further ahead. There are situations where it is rational to act against one's own immediate success and conform to social obligations. In the longer run, morality pays! Morality is based on rational contracts between people that guarantee mutual benefit to all parties. It is sensible to be moral.¹ *Morality has to do with habits of avoiding social traps*². As Rapoport points out, much of civilized life reflects these habits (Rapoport 1989, 271).

"Doing one's 'civic duty' is essentially that. In a democracy, most people entitled to vote in elections do so, in spite of the fact that each individual is aware that his or her vote will almost certainly make no difference in the result of a national election and that therefore it is in his or her individual interest not to take the trouble to vote. That people do vote shows that they are aware of their civic duty; for if everyone, following his individual interest, refrained from voting, democratic decisions could not be made. Aside from this, people vote for candidates of their choice, because they feel that they should act as they would want others to act. If they want their candidate elected, this means they want others to vote as they do, and this desire is expressed in the act of voting. The same applies to many forms of 'civilized' behaviour – refraining from littering, from jostling in crowds, from petty stealing (even if it seems possible to steal with impunity), and so on." (*Ibid.*)

How can a change from non-cooperative strategies to cooperative strategies be initiated, when the latter are more rational in the long run? A critical factor is the awareness among individuals of the social trap that awaits ahead if social interaction is continued on the basis of individual rationality. For example, a person may attempt to adopt a more nature-friendly lifestyle upon learning that, by continuing with his present lifestyle, he will contribute to future ecological disasters. For many, this awareness alone is not a sufficient incentive for a change. The individual must also be aware that he cannot escape the social trap without changing his ways. He must be aware that his self-centered strategy will bear severe counterproductive consequences to *him*, or to something which is meaningful to him. The central problem in the ecological turn of our society is the awareness that it is *not we* who will face the ecological catastrophe, but the abstract 'future generations'. But even if there were a future social trap that would fall on *us*, and even if we were *aware* of

is in a global double bind: if it stops producing for the sake of producing, it will destroy itself; if it goes on producing it will destroy us all (Wilden 1980, 394).

¹ Kangas 1994, 67. Kimmo Lapintie regards morality as a tool in social cooperation (Lapintie 1993, 126-27).

² Notice the etymological connection between 'morals' and 'habit': the latin root of 'morals', '*mores*', means 'custom', 'manners'.

it, there would naturally still be those who would rather choose individually rational strategies and explain away their actions as insignificant on the collective scale.

When shifts from individual to collective rationality are explained, the so-called *continuous games* are used as models. The games traditionally studied in game theory have not been continuous; instead they have had a specific beginning and a specific ending. The scheme of such finite games is as follows: the players, foreign to each other, arrive at the playground from nowhere, start the game whose rules and payoffs are known, make a finite number of moves, finish the game, distribute the payoffs to each other according to the outcome, and then leave the playground without ever meeting again. These games are notably compatible with the concept of individual rationality. For a single two-person game of Prisoner's Dilemma, too, the non-cooperative strategy of defect-defect is rational, because it is much more stable than the cooperate-cooperate strategy. In a single game, neither of the players have experience of what strategy the other player would prefer. The risk of cooperating and then receiving the maximum sentence is too high. But if the game of Prisoner's Dilemma is played repeatedly, cooperative strategies tend to emerge. Then there will be an opportunity for mutual learning by way of confidence-building or retaliatory play. One of the most stable retaliatory cooperative strategies is 'tit for tat'. Here each player cooperates unless the other defects. In that case, the first player defects in the next game, tit for tat, and then resumes to cooperate. (Kauffman 1995, 219; von Herten 1993, 50-52, 60; Kangas 1994, 79-83.)

In iterative games, cooperation has been shown to be a dominant strategy (Kangas 1994, 81). In a purely calculative sense, it would be essential for the emergence of cooperation that the players did not know how many times the game is iterated. If the number of games were known in advance, it would always pay to cheat in the last game. And once the players have figured out this fact, then the same would also apply to the penultimate game, and so on. The winner would be the one who cheats first, and the game would deteriorate into bluff and deception. (Von Herten 1993, 60.) However, human beings are not cold calculators. In the "real games" of our world, we enact social relationships and deepen them in our successive meetings. As the players become mutually socialized, the probability of their cooperation increases accordingly. Our everyday life seems to bear witness of this. It is easier to cheat a stranger than someone who you know and who belongs to the same community. It is also more likely that I cooperate with you if I know by experience that you are a trustworthy person. (Kangas 1994, 81.)

An individually rational economic man maximizes his profit in one game, but does not take into account how his transactions with the other players shape mutual trust and respect. He does not consider how his economic success in one game determines the social conditions for his economic success in the next game, where he may meet the same co-players again. For example, we may conceive of local land-use planning practice as an iterative planning game, where the local planners and analysts, councillors, representatives of resident groups and local associations, major rentiers and developers meet each other frequently in successive planning projects. Incrementalist planning can be understood as a continuous planning game, which consists of successive "games" of short-term or project-based planning. Although the planning problems change, it is often the same interest groups, politicians and officials that concern themselves with them.

What was the result of *this* planning project? Who gained and who lost? How was the decision reached – by openness or secrecy, by guiding or misguiding attention, by persuading or forcing agreement? These are *sociological* questions that determine, in part, the *economic* distribution of the profit in planning projects yet to come. By making rational choices, you shape the social attitudes towards yourself. The more you cheat in this game, the more likely you will be cheated yourself in the next. The imaginary asocial economic man may keep re-entering the imaginary market of other economic men for as long as he has capital to invest, but he is not made to last in a *continuous social practice*.

We may extend this argument to concern the administrative man and the political man as well. As we saw above, they are equally asocial as the economic man. Like the economic man, these, too, utilize individually rationalistic strategies, the administrative man trying to outwit the Nature of the uncontrollable behaviours of his object environment (social and physical), the political man trying to strike the best possible bargain with the "watchdogs for other values". In a very deep sense, these are all economic men – they are only after different utilities: one seeking for money, the other for knowledge, and the third for favourable decisions.

In a continuous planning game, there are always participants who only visit the game and then leave the scene – such as one-time developers. Then, there is a strong temptation to make as much immediate profit as possible, since one does not remain in the planning game to face the consequences. A controversial private project that is objected by the residents or violates the existing plan may have been pulled through the decision-making process by force – for example, by resorting to bribery or secrecy, by utilizing legal loopholes, or by using the public sector's economic dependence on the developer and the back-up investors as a means of extortion. The developer does not have to worry about the increased antipathy among the residents, whose complaints it did not hear, or among the public sector officials and politicians who feel exploited, since their future cooperation is not needed. For the one-time developer, there are no future projects in sight that should receive an approval in the public planning and decision-making process – that is, the approval of those it has mistreated. The more there are one-time visitors in the continuous planning game, the greater is the probability that non-cooperative strategies are chosen by the players.

But on the other hand, it is essential that the continuous planning game remains open for one-time visitors, too, despite the risk that these may choose to free-ride at the expense of others. The other alternative would be even worse: a closed game for an insider group of long-term interest holders. The result would be a planning corporation that probably would, sooner or later, develop its own self-regarded strategies that would exploit the rest of the urban community that is fenced out. Another misplaced boundary.

Economics, administration and politics are all involved in an on-going *social* practice of land-use planning. I would like to assert that in none of these contexts of planning – economics, administration and politics – can activity be based solely on individually rationalistic strategies without leading the context in question into a social trap. In the handling of economic issues, this would mean that the exclusive pursuit of maximum profit without sensitivity to other concerns would finally lead to a social trap, where the social conditions would no longer enable further profit-making. In the handling of administrative issues, this would mean that treating citizens solely as the 'environment' from which to gather feedback information, without ever attempting at dialogue *with*

them, would lead administrative activity into a social trap where such methods are no longer accepted. In the handling of political issues, this would mean that if matters of value judgment are treated solely in terms of political oppositions and value trading between interest groups, the politics of land-use planning would end up in a social trap, where it would lose the social support necessary for the continuation of such political behaviour. (Chapters 4 and 5.) Actually, however, in all these contexts activity is never purely non-cooperative or cooperative, but a mixture of both. On the other hand, there is a reason to ask whether the system of land-use planning is so solidly anchored in the institutional structure of our society that the system is protected from the *ultimate* social traps, thereby allowing much more non-cooperative economic, administrative and political behaviour than is functionally and, at the same time, morally justifiable. Are we here dealing with a system that is societally guaranteed against collapse and can therefore safely continue non-cooperative strategic action even when it is clearly evident to all that such behaviour is irrational? We shall return to this question later in this chapter.

Only if we develop our game-theoretical thinking to include continuous games and collective rationality, can land-use planning activity be explained by game-theoretical models. Even then, however, the applicability of the game concept would be limited. One limitation is evident when we try to use the concept in planning theory: the *given-ness of game strategies*. Chadwick already noticed that game theory by itself "does not formulate *new* courses of action. These have to be derived exogeneously, although, when derived, they can be included, if we can assess the appropriate outcome probabilities." (Chadwick 1978, 315.) The normative decision theory is concerned with how the decision-maker should choose among *given* alternatives in order to make a rational choice. For this task, game theory provides a fine methodology. Its success in management theory and economic theory is understandable to the extent that these are concerned with administrative or economic "decision-taking", in Friend's and Jessop's sense. But planning theory is concerned with a broader picture of "decision-making"; its main concern is how to proceed from problematic situations to situations where we are able to decide. Especially in land-use planning, the planning problems seldom display themselves as unambiguous choices. The problem, in fact, is the lack of choices. According to Rittel and Webber, planning problems are "wicked problems": the formulation of the problem *is* the problem (Rittel & Webber 1973, 160-61; see Chapter 6). Hence, the crux of the matter is the formulation of alternatives – rather than choosing between them, as the preferable choice often becomes quite evident as soon as the alternatives have been formulated. It thus demands a great deal of transcultural constructive dialogue aided by analysis and design work – in short, planning – to reach an awareness of *what* the problem *is*, *what can* be done about it, and, finally, *what we* (and *they*) *want* to do about it. The largest part of that work consists of such creative and critical activities that, by their nature, are foreign to game-theoretical explanations. To describe them, I shall later use the concept of '*play*', instead.

The concept of continuous games already necessitates a shift to a broader explanatory apparatus. As we have seen, continuous games enable mutual learning between the players. This learning involves the possibility to create and reformulate strategies as the game goes along. However, not even the theory of continuous games can describe how new strategies and changes in the existing strategies come about.

1.5.2.2 Control Relationship

Human communication has a multi-layered structure: we enact mutual relationships while we speak about objects (Chapter 3). Communication is a profoundly social process where we modify the social terms in which we may speak about and instrumentally objectify our reality. This also applies to planning communication: in planning we not only produce instrumental results but also reproduce social and political relationships (Forester 1989, 71). Planners, analysts, and public administrators shape attention and move the boundaries of social inclusion and exclusion through their linguistic activity of asking questions. No act of communication is mere "talk", but a realization of social relationships that is meaningful as an event in itself – before denotation. (See Forester 1993, 49; Fisher & Ury 1983, 36.) "How questions are asked will often be taken to represent planners' and analysts' stances towards others; a seemingly formal question may be taken as a rejection, rather than an encouragement, of citizen participation or agency cooperation" (Forester 1993, 50). The strategic actor is not above the social realm which he tries to steer. By putting himself above other people, he cannot detach himself from them; he only modifies his relationship towards them, who, consequently, will also modify their relationships towards him. The social context in which we instrumentalize is preserved or altered by our acts of instrumentalizing. The rules of our game are changed by our playing the game.¹

Looking beyond a single game, we are faced with the puzzle of how the rules change. Accordingly, if we observe the behaviour of a human social system for a longer period, we come to witness the breakdown of the existing stability, and then the sudden emergence of a new kind of stability. The strategic actor – the economic, the administrative, or the political man – is an integral part of these complex causalities. His control endures for only as long as the given stability endures. He may use power (which is precisely his ability to control his environment) in his pursuit to preserve the given stability, but his power can only be directed towards the given objects, given goods and given roles constituted in social interaction. What is beyond his power is the effect of his own use of power on that interaction. This means that he cannot control the effects of his own actions on the mutual production and reproduction of social meanings. The social learning processes, whereby we learn to objectify our reality differently, cannot be controlled. The empowered members of a community can direct their power only to the objects formed in these processes of objectification. By giving commands, one cannot derive true results, but only indicators of these results – shells that appear to stand for their content (Järvilehto 1996, 28).

The systems-influenced planning theorists – like systems theorists in general – understood poorly the complexity of the control relationship. The ontological distinction between the system and the environment was taken for granted, and it was mostly a matter of engineering skill to bring the separate environment under the control of the system. Most of the systems theorists did not recognize that *it was the aspiration to*

¹ Already Wiener noticed that human processes resemble games whose rules have a tendency to change in time (Wiener 1969, 177).

*control that itself created the distinction between the system and the environment*¹. But this was not an ontological distinction – merely an epistemological one (Wilden 1980, 166, 221). The distinction does not exist before we decide to make that distinction. Both sides of the distinction – system and environment – appear along with the appearance of their distinction. The epistemological distinction that displays itself as a control relationship has emerged from the ontological continuum and is a part of that continuum. The imaginary system controls the imaginary environment, but it does not control the reality of which it is a part. The control system cannot step above the system-environment relationship to control that relationship, because it is itself a product of that relationship.

Chadwick said that only systems can provide models for systems. But Chadwick forgot that the issue is not so simple when the model system is meant to interfere with the modelled system. The paradox is that the model system cannot model its own interaction with the modelled system. How people reflect on a simulation is beyond simulation – or if that reflection were already simulated, people would then reflect on that. This dilemma is evident in Jay Forrester's and others' dynamic simulation models of urban systems: they run their course – dynamically, of course – and the urban reality runs its own. As time goes by, the reality diverges increasingly from the model, because it *reflects* on it.

Curiously, the dynamic simulation models of urban development were *static* in a very critical way. Forrester's (1969) computer-programmed city model had dozens of variables standing in nonlinear relationships towards each other. The model was assumed to simulate the succession of the real urban processes it represented. It was able to "make history": its feedback processes never exactly returned to the same equilibrium point.

"But while the elements can change, the links are assumed to interrelate those elements in an unchanging way: the game plays out, but the rules endure. When run over long periods, the models therefore either tend to damp out their fluctuations, reaching some eternal state, or, on the other hand, they blow up or collapse in a frightening manner. Radical new policies can be inserted into these models, but until the model will accept progressive changes in the linkage rules, innovations will always seem, in the long run, either to die out or to destroy us. Since they do not predict how motives and decision rules change as the situation changes – and this is our saving

¹ Peter Senge gives an example of a person filling a glass with water as a system. It can be claimed that the person controls the filling of the glass, as he watches the water level in the glass rise and adjusts the faucet position accordingly to slow the flow of water. But we might as well argue that the filling of the glass controls the actions of the person. (Senge 1994, 74-78.) In conventional thinking "I am filling the glass with water", which, in systems terms, means that 'I' am the control system, and the faucet, the flow of water and the glass are the controlled environment. When, instead, "I-filling-a glass-with-water" is seen as the system of which 'I', as well as the faucet, the water flow and the glass are parts, neither 'I', nor any other part of this system can be said to be in control. Following Bateson (1987), this system is a circuit of difference where transforms of difference move in a cycle from one part of the system to the next. Difference in the water level of the glass is transformed into a difference in the person's hand motion, which is transformed into a difference in the faucet position, which is transformed into a difference in the flow of water, which is transformed into a difference in the water level, etc.

human capacity for learning – these models are better at short-term than long-range prediction.” (Lynch 1981, 339.)

“The metaphor used is at heart a mechanical one: the world is a vast machine, made up of distinct, unchanging links between them. The machine works by repeated fits, like a complicated steam engine going through its cycles. It is difficult to say just what blinders this metaphor imposes but one wonders uneasily if the city is really like a giant aeroplane.” (*Ibid.*, 338.)

The relationship between the model maker and the modelled urban life is problematic. The model maker is part of the community he observes. Therefore, he, like the rest of the community, will learn over time to objectify his reality differently. For the model maker, some variables of his model will lose their relevance and other relevant variables will emerge, and he will learn to view critically the structural principles that determine their interrelationships. The relationship between the model-maker and the modelled object also works in the other direction. The model is a part of the modelled world. The community also learns from the model's predictions and reacts to them. Therefore, the model itself contributes to the changing of the societal rules it is expected to represent.

The plan is not really separate from the planned area. It is merely our control attitude that makes us relate to it as separate. The continuous relationship between the plan and the planned area – irrespective of the planner's control aspirations – causes various unwanted nonlinearities in the process of implementation¹. Nonlinearities already follow from the public announcement of planning intentions for a given area. The environment (meaning those who are affected by the suggested or anticipated changes in the area) reacts to the announcement. It is a new element in the environment and therefore already a change in it. Paradoxically, plans also work against themselves. The plan is an estimation of the future state of the place where it is to be implemented. People tend to react to its simulated state of affairs as if they were already there, and some unintended causalities are therefore let loose already before anything "real" is done (see, for example, Sager 1994, 122-25). Plans are cancelled because spontaneously arising interest groups start aggressive campaigns against the environmental changes suggested in them. Real estate business moves to the outskirts of the planned area, where land values are not fixed, still keeping close to the developing area. New possibilities for profit-making suddenly emerge as new urban planning activities shake the equilibrium of the land market. In fact, there is no fixed threshold from planning to its implementation. The plan

¹ 'Implementation' itself is a concept that reveals our desire to make a controlled division between the plan and the planned area: first a plan of an area is to be made, then it is to be 'implemented' in the area. Moreover, the concept 'implementation' refers to an inappropriate understanding of the activity that follows plan-making as some kind of a preprogrammed mechanism. As Lucy Suchman suggests, a more proper way to conceive of the significance of plans in relation to planned activity is to view plans as resources for action, rather than seeing them as control structures (Suchman 1987, 52, 185). Suchman regards plans as representations or abstractions over action whose function "is not to serve as specifications for the local interactions, but rather to orient or position us in a way that will allow us, through local interactions, to exploit some contingencies of our environment and to avoid others" (*ibid.*, 188 – see also Engeström 1995, 38).

is already reacted upon during, and sometimes even before, its own making. Planning intentions trigger preparative and speculative business transactions on the corresponding land market and change the economic and social meaning of the area in question. The planning not only precedes making, it *is* making. Planning, defining and deciding of what is a place and what could be made of it, is already the making of that place. The object of planning does not wait in an "ice-box" for its plan to be finished. The object is in progress largely because its planning is in progress. Being a static document, the plan cannot adapt to unanticipated future consequences that are caused, in part, by its own production. Things that turn out not the way they should, work against planning – but, paradoxically, this is precisely what makes us plan.

The theorists of systems planning acknowledged that the environment was not entirely controllable by planning. To deal with the "unknown variables" of the environment, they developed more flexible methods of strategic and process planning. What they did not acknowledge, however, was the *profound uncertainty of the whole control relationship*. The question, therefore, is not just whether the planner has enough information to formulate rational "commands" concerning his partly unknown environment, but whether his messages are taken as "commands" in the first place. The point is not only that the planner cannot control the environment – he cannot even control his own actions. Throughout the process of planning and planning discussions, his actions lead to unintended responses. The reason is not only the planner's lack of information of the planned environment (social and physical), but the lack of information of the *relationship* between the planner and the planned environment. And the paradox is that *you cannot really get any information about a relationship without transforming it into an object* – into an *environment* that no longer has the form of a relationship. *Information is the formation of the environment*. Control is based on that information; thus its object is the environment, not the basic system-environment relationship.

Systems-influenced planning theories had an excessively optimistic view of the role of planning in the guidance of social and urban development. In hindsight, this optimism is easy to explain away by claiming that the theories of systems planning were developed at a time when the societal conditions were supportive of public sector planning. The societal conditions have since changed: to economic instability after the oil crisis, to postmodernism that eroded the status of everything scientific, including planning, to the awakening of the civil society that brought new groups into the formal political arena and created new informal political arenas, and to postindustrialism that reorganized industry and working life. By using the language of systems theory, these societal changes could be described as enhanced instabilities of the environment – as uncertainties that necessarily make societal management and planning a lot more difficult than during the 1960s, the "golden age" of stable economic growth, stable modernism, the stable political Other, and stable mass industry. This argument is well-grounded and acceptable, but, again, it is not actually an argument against systems planning. It rather asserts that, in our turbulent posmodern and postindustrial society, *any* planning method would be weak; *even* the methods of systems planning that already had got rid of the rigidity of rational-comprehensive and blueprint planning and were able to absorb uncertainties into themselves.

However, there are also factors in systems-theoretical planning theory that gave rise to false optimism in the controlling powers of planning. We already discussed one of these

factors in the previous subsection, where we recognized the irrationality of strategies based on individual rationality in continuous planning practices. In this subsection, we have acknowledged the imaginary character of control, since the control relationship itself – between the plan and the planned area, for example – is beyond control. Next, we shall elaborate on yet another factor: the positivist association of predictive powers with explanatory powers.

1.5.2.3 Explanation and Prediction

In classical science, explanation self-evidently led to prediction. Newton's theory of gravity both explained and predicted the movements of masses. The fact that the theory was able to predict phenomena was considered as proof that it could explain them. In principle, the universe as a clockwork becomes predictable once you have explained the laws that determine its operations. Probably the first to seriously shatter this worldview was Charles Darwin. His theory of evolution also broke up the close union between explanation and prediction. Darwin's theory explains, but only poorly predicts, the evolution of species. Still, this loss of predictive power is no indication of a weakness of explanatory power. The split between explanation and prediction is highlighted in chaos theory. Chaos theorists cannot predict the long-term behaviour of chaotic systems. (Kauffman 1995, 16-17.) Again, this implies no failure in their ability to explain and understand. Rather, the theory explains *why* it cannot predict: "Indeed, if we were confident we knew the equations governing a chaotic system, we would be confident we understood its behaviour, including our *incapacity to predict* in detail its long-term behaviour" (*ibid.*, 17 – my emphasis).

A key concept in this regard is the 'butterfly effect'. In the constantly unstable system of global climate a tiny change in air currents may lead to grand climatological changes that no one can forecast. As chaos theorists say: "A swing of butterfly's wings in China may affect the air currents in such a way that a hurricane in New York will result after six months." (See Gleick 1990, 18.) Ilya Prigogine speaks of "order through fluctuations" in describing similar sensitivity to initial conditions in social systems (Prigogine & Stengers 1995, 206). Fluctuation means a system's oscillation between states of equilibrium and states that are far from equilibrium. In the farther regions of instability, minor changes in the system's initial circumstances become decisive to its outcomes. When a social system has become unstable, changes in the behaviour of individuals or small groups may generate rapidly expanding social microcosms that make the system change its own structure. In a crisis situation, an organization may learn to organize itself differently by adopting and applying a new unorthodox model of organizational behaviour that was initiated by a few marginal actors in the organization. From this individual-social fluctuation, a new social order emerges. (Chapter 6.)

"From the physicist's point of view, this involves a distinction between states of the system in which all individual initiative is doomed to insignificance on the one hand, and on the other, bifurcation regions in which an individual, an idea, or a new behavior can upset the global state. Even in those regions, amplification obviously does not occur with just any individual, idea, or behavior, but only with those that are

”dangerous” – that is, those that can exploit to their advantage the nonlinear relations guaranteeing the stability of the preceding regime. Thus we are led to conclude that *the same* nonlinearities may produce an order out of the chaos of elementary processes and still, under different circumstances, be responsible for the destruction of this same order, eventually producing a new coherence beyond another bifurcation.” (Prigogine & Stengers 1995, 206.)

It is precisely these processes of *social learning* that make our social systems unpredictable. There are no rigid rules in our social reality for outlining our problems and identifying ourselves and our tools in our mutual efforts to solve them. Instead, our social reality is constantly evolving; sometimes through abrupt ”quantum jumps”, more often through small contributions that fuel gradual social change – behind the guise of seemingly stagnant social and societal institutions.

The theorists of the General Systems Theory Movement were still too fascinated with the traditional idea of connecting predictive power with explanatory power. The general approach to prediction was that the development of systems could not be predicted in detail, due to their oscillatory character, but it was nonetheless assumed that their global behaviour could be predicted, more or less, once it was figured out how the interrelationships of their components operated. This belief was shared by planning theorists, too, although they acknowledged that they were dealing with urban systems that consisted of ”higher-order cybernetic loops” and were thus more complex. Although it was not expected that the long-term development of urban systems could be predicted, planners still had a firm belief that their long-term development could be *managed*. For Jay Forrester, it was a matter of grasping the fundamental structural causes that interact and direct the growth and movement of populations, industries and housing in urban areas. Management was then largely a task of influencing these causes ”from within”: manipulating their mutual weights in order to redirect the causal processes of urban development towards the desired long-term consequences. (Forrester 1969, 118-29.) Here, too, a capacity for long-term prediction is considered a reward for arriving at a correct explanation of the system.

Chaos theory proposes a different approach. It offers a possibility to formulate theories of urban systems that are explanatory but *not* predictive. Then, a weakness in their predictive power would not be an indicator of a weakness in their explanatory power. In the study of any complex system, it is crucial that we do not mistake the capacity to explain for a capacity to predict. Keeping this in mind, we may recognize the limits of our theoretical tools and be careful not to associate them with such predictive powers that simply cannot be deduced.

1.5.2.4 *Planning and Learning*

Synoptic planners believed they had the knowledge of all the variables necessary to make long-term city plans. Their mistake was to believe that the rules of urban life would remain the same throughout the process of the implementation of the city plan. They ignored the pervasive human quality: *the ability to learn*. Cultures evolve and change their values and conceptions, and technology creates new opportunities (and exhausts old

ones). Synoptic planners also forgot that their long-term plans are never simply implemented, but are used in many ways and for many purposes in the modern differentiated society. In political and economic games, it may serve the interests of some players not to implement a plan. And there is also the question of comprehensibility. Only those who possess the cultural-linguistic capacities to comprehend the plan can consciously attempt to implement it.

Planners have been forced to give up the illusion that long-term goals could be fixed beforehand. One way around this setback has been to increase the flexibility of long-term plans so that they enable alternative routes from certain bifurcative decision points towards alternative long-term goals (see, for example, Sager 1994, 224-25; Chadwick 1978, 169-71). This form of *strategic planning* corresponds to Simon's theory of administrative behaviour. However, the construction of such strategies is, at best, only a partial improvement, because it cannot take the factor of learning fully into account, either. With the possible exception of the elementary trial-and-error type of learning, learning always involves the act of *creation*, the appearance of something that did not exist before. In learning, *new alternatives emerge*. One cannot anticipate the creation of a new alternative goal without creating it first.

Incrementalism (as a combination of incremental analysis and incremental politics) has another strategy: the giving up of long-term strategies altogether. By making separate short-term plans incrementally, one hopes to gain better results in responding to the changing environmental needs. This has a certain logic: the urban process is easier to follow when it is divided into a sequence of several tiny projects and not handled as one big project – whether synoptically rigid or strategically flexible. Instead of having directive visions of the future, one rather moves away from the ills of the present (Lindblom 1965, 147; 1979, 517). Following this simple logic – thinking small and constantly reacting to feedback – incrementalists argue that urban planners manage without any theoretical understanding of the planning system (Lindblom 1979, 524-25; Goodin & Waldner 1979, 1; Sager 1994, 178). "Whereas the ordinary decision maker who is confronted with new data feels obliged to try to understand it, the incrementalist needs only to react to it" (Goodin & Waldner 1979, 3). It is true that, as a method, incrementalist planning is able to react to the consequences of learning in the community. However, such planning does not learn from its own reactions. If the planner or analyst does not like the results of his plan or policy, he simply tries something else (*ibid.*, 2-3). Goodin and Waldner call this "unreflective reaction" and "muddling through black boxes" (*ibid.*, 2). Etzioni cites Boulding, who comments that, according to this approach, "we do stagger through history like a drunk, putting one disjointed incremental foot after another" (Etzioni 1967, 387).

As in synoptic and strategic planning, the broad context of decision-making is taken as given in incrementalist planning. The former two are appropriate to technical problem-solving in the welfarist project of predicting and distributing material growth through zoning. Synoptic and strategic planning cannot address the questions of how values are formed and how social realities change. They represent codified paradigms of practice embodied as "know-how". They can serve in the realization of the given "what for" and "what should be" in planning, but they cannot serve us when we try to expose and address these questions while we plan. (See Forester 1993, 39.) "Why is *this* a problem?" "What makes this (and not that) a valid source of knowledge?" "Are there other values

that should be considered?" "Why are we using this technique of representing (i.e. giving form to) problems and their solutions?" In synoptic and strategic planning, the administrative planning expertise is the unquestioned social context of solving problems. In incrementalism, *politics* becomes such a context.

Incremental politics is a decision-making technique that by itself is unable to add qualitatively new viewpoints to the planning process. Rather the opposite seems to be the case. It is an adversary process between interest groups and their competing values, where agreement is sought through compromise. Instead of trying to create new approaches to problems and value-combining solutions, on which to build consensus, each group is expected to give up something. Camille Cates calls this a "lose-lose game". (Cates 1979, 528.) Incrementalism is a method of bringing together partial interests in making decisions on small plans. But that is just about all there is in the method. Interests are merely brought together; the criteria for coordinating decisions can be developed *ad hoc* for each individual problem, and coordination is rather arbitrary than reasoned (Lindblom 1965, 183, 187-88). Interests are presumed to remain partial, and no learning between them is expected to take place. As Sager noted above, one does not need to attempt dialogue in order to arrive at collectively binding decisions. Lindblom's partisans do not bother to find out each other's motives and reasonings, but only seek agreement on the disputed matter. But this agreement is not based on mutual understanding; it is merely a trivial deal in the give-and-take of values. Like bargainers, the partisans do not ask *why* their counterpart is ready to strike a bargain when mutual agreement is found. (*Ibid.*, 207-08.) The approach is essentially economic: why someone "buys a political commodity" is no more interesting than why someone buys an economic commodity in the market. What matters is what one can profit from the transaction.

Lindblom is not concerned with the quality of the decisions made; he worries only about how publicly managed organizations can be aided to reach *any* decisions in a pluralistic society (see Sager 1994, 16). As one decision is only a small increment, no big harm is assumed to be done. But this assumption does not take into account the butterfly effect. Small steps may lead the existing policy to critical "far from equilibrium" situations, where one additional increment can throw the system into an unforeseen activity-blocking dilemma (see Goodin & Waldner 1979, 6-7). In land-use planning, such critical situations may have to do, for example, with the limits of the ecological sustainability of the planned area and with the limits of the capacity of public service and infrastructure networks. Accordingly, critical thresholds may also be overstepped in view of citizens' tolerance: one incremental plan too many may be carried through in secrecy and without citizen involvement, or one historical building too many may be demolished. A serious defect in incrementalist thinking is the assumption that short term-decisions, as implemented, bear only short-term consequences, from which the decision-makers can learn in order to correct their further decision-making. Jay Forrester already warned us of urban policies that may show positive signs in the short run, but may have severe counterproductive results in the long run. According to Forrester, a characteristic of our complex social systems, such as urban areas, is that actions that appear to alleviate difficulties actually often produce trouble (Forrester 1969, 107, 123; see also Senge 1994,

57-67)¹. As the trouble deepens, incrementalist logic instructs us to intensify the treatment which, according to our immediate experiences, appears effective. This develops into a vicious cycle that drives the system harder and harder against the crisis limit (Forrester 1969, 123). Lindblom himself observes: "Important changes in policy and in the political system often come about quite indirectly and as a surprise to many participants in the system. [...] Incremental changes add up; often more happens than meets the eye." (Lindblom 1979, 521.) Due to its unreflectivity, incrementalism is not suited to rapidly changing conditions or to changes in policy direction. Rittel and Webber point out that if a problem is attacked only at the incremental level, success of the resolution may result in making things worse, because it may become more difficult to deal with the contextual effects of the problem: "Marginal improvement does not guarantee overall improvement" (Rittel & Webber 1973, 165; see also Forrester 1969, 112). Lindblom himself admits this: "On the grand issues, partisan mutual adjustment is weak or absent" (Lindblom 1979, 523). John Forester also says: "[W]e do not want to increment our way to hell" (Forester 1993, 53). Amitai Etzioni's critique is similar:

"[I]ncrementalism would tend to neglect basic societal innovations, as it focuses on the short run and seeks no more than limited variations from past policies. While an accumulation of small steps could lead to a significant change, there is nothing in this approach to guide the accumulation." (Etzioni 1967, 387.)

What Etzioni offers as a solution is a "third approach" between the synoptic and incrementalist approaches. He calls it "mixed-scanning". (Etzioni 1967.) In mixed-scanning, it is essential to make a distinction between fundamental and incremental decisions (*ibid.*, 389).

"Fundamental decisions are made by exploring the main alternatives the actor sees in view of his conception of goals, but – unlike what rationalism [synopsis] would indicate – details and specifications are omitted so that an overview is feasible. Incremental decisions are made but within the contexts set by fundamental decisions (and fundamental reviews)." (*Ibid.*, 389-90.)

Etzioni argues that mixed-scanning makes it possible to combine synoptic and incrementalist approaches and to use each to overcome the particular shortcomings of the other: "[I]ncrementalism reduces the unrealistic aspects of rationalism by limiting the details required in fundamental decisions, and contextualizing rationalism helps to overcome the conservative slant of incrementalism by exploring longer-run alternatives" (*ibid.*, 390). It is easy to make a connection between Etzioni's idea of mixed-scanning between long-term and short-term decisions on one hand, and contemporary land-use

¹ A frequently quoted example is the massive urban programs undertaken in the 1960s to build low-income housing and to improve job skills in the decrepit inner cities in the USA. Many of these cities were in a worse situation in the 1970s, despite the great amounts of government aid. One reason was that low-income people migrated from rural areas to the cities that had the best aid programs. Eventually, the new housing areas became overcrowded and the job training programs were swamped with applicants. Meanwhile, the city's tax base eroded, leaving more people trapped in economically derelict areas. (Forrester 1969, 69; Prigogine & Stengers 1985, 203; Senge 1994, 58-59.)

planning that combines large-scale master planning and small-scale detail planning on the other. The master plans display the undetailed structural principles of zoning city growth in the long-term and instruct the goal-setting of short-run detail plans.

At the first glance, it seems that Etzioni is not adding much to what Simon already proposed as the principle of strategic decision-making in public organizations. The higher – i.e. the broader or more managerial – decisions in the organization's hierarchy become the ends for the lower – the more detailed or executive – decisions. There is, however, one important addition that Etzioni made. To the general top-down hierarchy between big and small decisions he included the possibility of a *reverse influence*: if, at the local or sectional level, such unanticipated phenomena are encountered that do not fit into the master plan, and thus inhibit the implementation of its guidelines, the local or sectional agency then reports of these difficulties "up" to the central planning agency, asking the latter to modify its guidelines respectively. Thus, the incremental decision level does not merely implement fundamental decisions but, in problematic situations, also *initiates* the making of new fundamental decisions. Similar reciprocity is also seen to characterize the interaction between the levels of land-use planning. There is no top-down hierarchy between the levels of master planning, detail planning, and planning for individual building projects. These levels of planning affect each other *in both directions* (Faludi 1976, 213; Pakarinen 1992b, 124; Fassbinder 1996, 72-73).

Etzioni's method is thus a developed form of strategic planning. In problematic situations of implementation, it has a clear advantage compared to Simon's method of strategic decision-making: mixed-scanning allows one not only to change from one alternative route of implementation to another within a given policy that is thus flexible – it also allows *adaptation* of the policy itself.

But how to identify a fundamental or incremental decision? (See Cates 1979, 529.) In land-use planning, it is commonplace that decisions that were intended as big ones may turn out to be small ones, and vice versa. The size of the planning scale does not indicate the significance of the plan. In many cases, the broad goals of the master plans have become outdated long before the date for those goals (Pakarinen 1992a, 108). Instead of directing operative decisions in the long term, the role of strategic plans in local political decision-making is often rather to camouflage the reality of political behaviour that performs incrementally¹. On the other hand, it is sometimes the small projects that turn out to be decisive for the later large-scale urban development. One project may induce, by accident, a vision for the city, or even for the larger urban region (Fassbinder 1996, 73). This seems to have happened especially in cities' image improvement campaigns. As the cities' competition of foreign investment, new enterprises, residents and tourists intensifies, much emphasis is laid on the "small things": local annual festivals and events, environmental landmarks and specifics of local history, education and business, with which cities seek to differentiate themselves from each other. A small decision may also turn out to be a big one when a single project reveals unanticipated burdens that threaten the implementation of the existing strategy. As an example, consider a spontaneous private initiative to build a large sports hall. The local government accepts the project, provides a site in a suitably central place and makes the needed changes in the detail plan on the condition that the funding for the project is organized privately. Let us assume that,

¹ See subsection *Double Binds in the Politics of Land-Use Planning* in Chapter 5.

afterwards, halfway through the construction process of the sports hall, the respective private development corporation undergoes a severe fiscal crisis or goes bankrupt. The local government saves the project with a large unbudgeted investment, at the expense of major budgetary postponements and reductions in the realization of the planned long-run development of other areas. This means that the sports hall project, as it later turned out, put into jeopardy the whole long-term strategy of the city's development.¹ It is not only seemingly small deviations of the existing plan that may jeopardize the implementation of the plan. Even small changes in the order of implementation may have fatal consequences for the success of the entire plan. This was the case in the implementation of the traffic plan for the central parts of Aalborg, Denmark. As Bent Flyvbjerg's detailed account shows, small changes in the order of implementation had a domino effect, raising enormous difficulties in the implementation of many parts of the traffic plan (Flyvbjerg 1998, 181).

The chaos theory puts an end to the gospel of control. The planners drift with what they objectify in the stream of social and societal change, having only limited capacities to anticipate which of the small local water currents are the first signals of a waterfall ahead, or whether the turmoil of the current rapids will be damped down by the calm sea behind the next bend. As Cates concludes:

"The search for the big decision is a wild goose chase. Whether a decision is big or little, whether big decisions come less frequently than little decisions, whether one big decision is equal to several little decisions – these questions all miss the point.

The point is: How can decision-making be improved?

And that is the fatal flaw of incrementalism – how do you "muddle" better?

What needs to be added to the rational approaches to problem solving is not *more* rationality – like the scientific method proposes – or less rationality – like muddling through proposes. What is needed is something *other* than rationality." (Cates 1979, 529.)

Planning theorists have linked the method of mixed-scanning with the idea of planning systems as *learning systems*. Let us now look into the theory behind learning systems more closely. Argyris and Schön made a basic distinction between two types of organizational learning. The first – single-loop learning – draws on previous experiences, routinized patterns of behaviour, and fixed thought models and preoccupations, while the second – double-loop learning – is a type of organizational learning that involves creativity, experimentation and critique of the existing habits of both thinking and acting. Learning systems are said to comprise both of these learning types (see Figure 6). This qualitative categorization of the modes of learning seems reasonable. It is based on Gregory Bateson's theory of learning where learning processes are hierarchically classified according to their qualitative differences in error correction (see Chapter 6).

¹ A similar real life example from Lahti, Finland, is given in Vesala 1994.

It also correlates with the distinction that John Dewey made between two possible interpretations of the term '*experience*' – in his classical book *How We Think*, of which the first edition appeared already in 1910.

“Experience is not a rigid and closed thing; it is vital, and hence growing. When dominated by the past, by custom and routine, it is often opposed to the reasonable and thoughtful. But experience also includes the reflection that sets us free from the limiting influences of sense, appetite, and tradition. Experience may welcome and assimilate all that the most exact and penetrating thought discovers.” (Dewey 1960, 201-02.)

According to Dewey, experience as the kind of action that is heavily influenced by past, refers to the *empirical* attitude of mind, whereas experience involving reflection refers to the *experimental* attitude of mind (*ibid.*). We may hence make a difference between *empirical learning* and *experimental learning*. The first relies heavily on past experience and lessons learnt from past choices and judgments, while the second involves active making and testing of hypotheses in search for new action possibilities. (Engeström 1995, 82-84.)

Trial and error is a basic form of empirical learning (Bateson 1987, 273-74, Engeström 1995, 83). Such learning is achieved in incrementalism: if the outcome of a given policy direction is unsatisfactory, then a new direction is tried. Accordingly, in Simon's strategic decision-making, errors are corrected by simply choosing another of the alternative means of implementing a higher end. The thought model that guides the actor's behaviour in trial and error learning remains "behind his back" and does not surface as an object to be elaborated consciously. New choices are tried within a given context that determines the alternatives available. Similarly, the given broad guidelines of planning are "behind the back" of the incrementalist planner who recourses to making changes "at the margin" – and "behind the back" of Simon's administrative man whose context of decision-making is determined at a higher decision-making level.

Experimental learning, instead, involves reinterpretation of the given task. The learner is not satisfied with the given "correct" solution, but tries to reach a theoretical understanding of the practical problem and tries to develop the theory into a conceptual tool by means of which the problem and other similar problems could be solved. He does not only ask *How?* but also *Why?* (Engeström 1995, 82-84.) Such reinterpretation of given tasks may be seen to take place in mixed-scanning, where the broad guidelines of planning are reconsidered when their implementation in incremental planning runs into problems.

But, according to Engeström, even this categorization of learning into the habitual trial and error based type, on one hand, and the type involving conscious elaboration of theoretical tools, on the other, is too simple. Both of them take the task or problem of their concern as *given*. The first attempts to attain the given goal by the practical means readily available, while the second "adapts" its practice, by developing it theoretically, in order to attain the goal that is essentially the same as in the first case. (*Ibid.*, 84-85.) In mixed-scanning, the primary task is to merge short- and long-term goals in such a way that the key elements of short-term crises can be strategically integrated into the framework of long-term planning. It is a method of incorporating crises into the system

without having to penetrate the premises of that system and to question them. (Fischer 1990, 208.)

However, there is also *another* type of learning, namely learning that takes place *without* a definite problem situation or given task. There are also learning situations where the learner begins to question the meaningfulness of the task given and asks himself why the problems with which he is preoccupied are what they are. The members of an organization may end up in a situation where they become overly stressed and exhausted by their daily obligations. They may then end up asking themselves and each other such questions as: "Why do we have to keep adapting all the time?" A planner may ask, for example: "Why is it that our strategic plans never hold? Is it just because, time and again, individual strategies become outdated in the face of sudden environmental changes? Or can the reason be found from a more general level – from a lack of commitment, hidden goals or information gaps in our organization that make our strategies unmanageable to begin with?" Such questioning is the beginning of the type of learning that problematizes the way problems are defined and tasks given in practice. In such learning, the current problem is only an initiator of much broader and deeper research into the practice, where one may discern certain recurring patterns of behaviour that lead the system to similar problems again and again. It is therefore a change – not merely in task-specific preoccupations and conceptualizations – but a change in its basic orientation towards its activity environment, which determines how its activity contexts are constituted into problems to be solved. (Engeström 1995, 84-88.)

Bateson's hierarchy of learning levels included the level corresponding to this type of learning – above two lower ones that were analogous to Dewey's empirical learning and experimental learning. He named such learning *Learning III*. Trial-and-error-based learning was labelled Learning I, and Learning II was *learning to learn* – learning which leads to improvement of Learning I¹. Argyris' and Schön's single-loop and double-loop learning correspond roughly to Bateson's Learning I and Learning II, but their theory does not involve Learning III, not at least in its full extent (Engeström 1995, 86). Therefore, their theory of organizational learning does not describe adequately how organizations should deal with the pathologies that grow from immediate problem situations and are a consequence of a long historical process of contradictory handlings and aspirations. Such pathologies are called *double binds* (Bateson 1987, 206; Engeström 1995, 90). In order to deal with them, the organization in question needs the capacity to reflect on its own practice. Such capacity is only provided by the kind of learning that reaches Level III². It involves grasping theoretically the forces and causalities that more or less together constitute the pathologies of practice behind the regular handling of affairs within the organization – behind the formulation and distribution of tasks, behind the use

¹ In its earlier stages, Bateson's theory of learning comprised only the two lower levels, Learning I and Learning II, which he called "proto-learning" and "deutero-learning" (Bateson 1987, 166-67; 292-93). Later, he systematized his theory and included further levels, both above and below proto-learning and deutero-learning. See Chapter 6.

² David A. Kolb's theory of experimental learning includes "integrative learning" that is based on "third-order feedback" (Kolb 1984, 156-60, 224-28), but the theory does not involve a description of whether and how such learning would contribute to the resolution of the type of dilemmas that have a double bind character.

of modelling techniques, behind the formation of social attitudes, and behind the employment of rules and norms. This theoretical understanding of organizational practice enables the creation of such basic theoretical tools that provide the "springboard" for the methodological leap the organization has to take to transcend its double bind. Here we talk about *organizational activity emerging from itself and framing itself by means of expansive restructuring in Learning III*. (Chapter 6.)

In abstract systems-theoretical terms, this process can be described by using Anthony Wilden's concept of '*morphogenesis*'. For Wilden, morphogenesis means a system's emergence as a *metasystem* in a situation where the disturbances to which it is subjected go beyond a certain threshold and can no longer be controlled by the context of norms available to it¹. The control which takes place within a given context (goal) is what Wilden calls *first-order negative feedback*. When stability is no longer restorable by means of first-order negative feedback, the ensuing exponential amplification of deviations can be controlled only by *second-order negative feedback*, which means the *system's emergence as its own metasystem* (Wilden 1980, 373-75). This kind of openness affords the system the capability to redefine its basic system-environment boundary and, therefore, the ability to reset the norms by which to decide what to consider as the "inside" and the "outside" of the system.

Bateson's theory implies a causal relationship between lower-order and higher-order learning: by shifting to higher-order learning, the organism tries to deal with the contradictions and double binds it faces in lower-order learning. But no such causalities between learning types are found in Argyris's and Schön's theory of organizational learning. Engeström criticizes their theory for offering no explanation of whether single-loop and double-loop learning are connected and mutually influential and how. They seem to be separated by an unbridgeable gap. The shift from one mode of learning to another seems to rely on borrowed consultation. (Engeström 1995, 86.)

This methodological disconnection between the levels of learning is much more evident in Faludi's and Chadwick's ideas of planning systems as learning systems. Both of them made a difference between 'planning' and 'meta-planning' (or between 'management of urban systems' and 'management of management'). Planning systems expected to be capable of reaching both were described as higher-order cybernetic systems. Planning itself is learning – but it could be claimed that in meta-planning, which focuses on organizing the planning work itself, one reaches a higher level of learning in relation to "mere" planning. This is the level of "resetting the thermostat". Planning would therefore correlate with single-loop learning and meta-planning with double-loop learning. So far so good. But, in reference to Etzioni's mixed-scanning, *Faludi and Chadwick attempt to identify these levels with levels of organizational hierarchy*. Then, the 'strategic planning agency' becomes accountable for double-loop learning, and the sectional or incremental planning agencies are to resort to routine measures that achieve only single-loop learning. This reflects the general conception held in systems-related

¹ Wilden's use of the term '*morphogenesis*' differs from its general use by other systems theorists, who usually follow Maruyama's definition of the term and use it in reference to deviation-amplifying processes via positive feedback (Kim 1975, 211-12). Faludi and Chadwick use the concept in Maruyama's sense (Faludi 1976, 47; Chadwick 1978, 58). In this book, the Wildenian definition of morphogenesis is used.

management theory of central management as the "brain" of the organization (Fischer 1990, 205). The organization becomes a *system of control over control*. Lower-order learning is attempted at within the operational sub-organizations, in order to gain control of the environment, while higher-order learning is reserved to the management level. It is employed for the control of these sub-organizations, so that, by coordinating them, it could improve their control of the environment.

This is where the theory of planning systems as learning systems goes wrong. It is based on the profound misunderstanding of learning as a "commodity" that could be exchanged and transferred from the executive level to the worker level. Learning is not something an individual has done to himself or does to someone else. It is not the transmittance of something already known from one person to another.¹ Learning has to do with self-discovery and self-transcendence – the *morphogenesis of self*. The double binds in planning (see Chapter 5) cannot be dealt with by the procedure of reporting to the strategic planning level the problems encountered at the sectional level, and afterwards receiving new instructions from the strategic level to correct the situation. They require learning at Level III to an adequate extent *throughout* the organization and reflective discoveries among the personnel, both executives and workers, in various parts of the organization (Engeström 1995, 87, 93, 98-101, 124). Moreover, it is often problems inherent in the hierarchical structure of the planning organization itself that require reflection. Attempts to correct these problems by utilizing the existing chain of command are self-contradictory and thus only serve to make them more critical. It follows that *the hierarchy of learning levels has nothing to do with the formal hierarchical structure of the organization*. No higher levels of learning pre-exist in the organization, and no one can be assigned to perform the "job" of such learning. Higher-order learning emerges within the organization as a whole as its various members reflect – and further initiate cooperative reflection – on the recurring contradictions that they encounter in practice (see Senge 1994, 142).

This does not imply that no management of the organization is needed – certainly not. But the management level needs to redefine its relationship to the rest of the organization. The power it possesses has a special function in organizational Learning III – not as an instrument of control but as an instrument in removing structural obstacles that would hinder the appearance of dialogue and creativity², and also as an instrument in shaping attention and providing initiatives with a specific view³ to the whole of the organization.

¹ This poor understanding of the nature of learning among systems theorists is closely connected to their concept of information as messages sent and received through a channel. In order to improve our understanding of learning without giving up systems theory, we need to redefine our concept of information. This, however, cannot be done without redefining a bunch of other interconnected key concepts of systems theory (such as open system, closed system, environment, control, code, and feedback) and without reviewing critically their systems-philosophical implications. I shall attempt to do this in the latter part of this chapter.

² "[T]he only way to promote creativity is to permit it" (von Herten 1993, 119).

³ Not the only possible view, and not the "correct" one, but a view of the whole with a specific form that is influenced by the functional role of the management in the organization. I agree with Simon in that the main function of the management is to "keep the organization alive". But I do not agree with his definition of the organization.

We can define the role of the planner accordingly in terms of participative planning and the planner's relationship to the other participants. Here we may recall what Forester already said above of the role of the planner as the organizer of public attention. This necessarily involves directing public attention and therefore control, but this is not the point. The point is that the planner hereby aids to raise and mobilize public attention as a force that may make a difference in the planning practice.

Still, we are in need of a theory of a truly reflective land-use planning system; a system that can navigate itself through its own phases of morphogenesis, maintaining its ability to transcend its own pathological contexts.

1.5.3 Conclusion

In this section, we have discussed the two types of critique of systems theory and systems-theoretical planning. The first criticizes the undemocratic nature of systems-theoretical methods in the coordination of social organizations (local land-use planning being one such organization), while the second criticizes the dysfunctionality of these methods. Land-use planning as a form of social control is attacked in the first case on ethical grounds, while in the second case it is accused of failing with the very realization of social control itself.

The second type of critique is more interesting, and, as I believe, more severe, because it strikes to the heart of planning as a forum of social control and strategic action. Not only is it unethical to control centrally other people's lives, or to maximize self-interest in economic, political and administrative games, but – what is even more serious – you cannot succeed with it anyway. Planning as centralized control or opportunistic bargaining is impractical. Any organization theory that takes the organization's ends as given and concentrates only on a rational search for respective means may be ethically criticizable – as the organization's ends are not brought under a democratic and critical observation *within* the organization, but given "from above". But it is *functionally criticizable*, too, if we accept the view of organizations as *reflective systems* that, by their nature, evolve and constantly produce inner tensions between the existing ends and the emerging alternative ends. The tensions within the organization will eventually paralyze it, if its own program does not allow it to reflect on its own ends. This brings democracy into a new light. If understood in Arendt's sense as the appearance of a public realm where meaningful communication about the organization's ends is possible – and not as a political game of power – democracy becomes functionally indispensable, in order to carry the organization through phases of severe instability. The effort to aid the organization in its attempt to transcend the social trap or double bind it is caught in is a practical *and* a moral thing to do. The full realization of the fragile and illusory character of control and strategic action in planning entails that democracy, as an inbuilt possibility of self-reflection, is practically essential to land-use planning. Without it, land-use planning will not survive. Here we are not talking about the survival of the "planning bureaucracy", but the survival of land-use planning as a form of social environmental activity that both is organized and organizes itself. Nothing less than the survival of urban life itself is at stake here. Ethics and praxis are not two separate things. When ethics is

understood in Anthony Wilden's sense as the "ongoing critique of systems" (Wilden 1980, 263), it becomes part of reflective practice (Chapter 3). That which is able to live is practical and that which preserves life is ethical. Reflection, enabled by true democracy, is needed whenever planning loses control – which it did not have in the first place.

My main task here has been to reveal the *double bind of the traditional systems view of planning*. This double bind is accentuated in the contradictions inherent in the systems-theoretical concept of control. But I am also confident that *systems theory and systems-oriented planning theory can be developed to transcend this double bind*. In order to do this, we will have to look again at the basic ideas of systems thinking. These ideas are presented in a clarified form in *cybernetics*.

1.6 Framing Cybernetics, Framing Planning

What does the above critique have to say about cybernetics in relation to planning? Should we now discard cybernetics as a false doctrine? No – it should be *framed*. This is how science develops: the new scientific paradigm does not discard the former paradigm but, rather, *frames* the scope of its relevance (see Järvillehto 1995, 32; 1994, 201; Bohm & Peat 1992, 41-45; Wilden 1980, 111-12). The theory of four-dimensional space framed the relevance of the theory of three-dimensional space, and the Sun-centered worldview framed the relevance of the Earth-centered worldview. For an architect designing a house, it is still relevant to think of space as consisting of three dimensions, although for an astronomer such a conception of space is inappropriate. As Galilei knew, the Sun does not rotate around the Earth, but our everyday perceptions still confirm as appropriate the notion of the Sun *rising* from the east and *setting* to the west. The theory of three-dimensional space and the theory of the Earth as the centre of the universe are not *a priori* right or wrong, but have been shown by later scientific development to be valid in a certain limited context (human scale), and to lose their validity beyond that context (astronomical scale). (Järvillehto 1995, 31-32.) Accordingly, the cybernetic theory of control systems is not *a priori* right or wrong. There are systems that are able to maintain stability in their environment under a certain predefined range of situations. Beyond that range, however, stability is lost. For such a system, there is a certain frame within which it is still appropriate to consider it as a control system. Cybernetic control as a model of planning is still relevant *in some situations*. By its nature, planning attempts to control future. It tries to organize future activities beforehand. But like a thermostat, it is not separate from the environment it attempts to control.

According to Fischer, "a key task for those interested in redirecting the managerial and policy sciences toward democratic ends must begin with the intellectual reconstruction of their methodologies" (Fischer 1990, 211). For Fischer, this reconstruction means resorting to critical theory. My aim, instead, is to reconstruct systems theory itself. I shall begin this work by returning to the *thermostat system* which I now shall approach from a new angle.

1.6.1 Metaphoric Bind and Double Bind

One possible conception of the thermostat system is to approach it as a part of a larger system of interacting factors affecting the room temperature. The thermostat attempts to emerge above the rest of the system and refuses to recognize its own position as a part of that system. The thermostat system is a *paradox*, because no part of a system can rise above the rest of the system without creating a logical paradox – a confusion between logical types (Chapter 3). But, within a certain range of situations, narrower or wider, this paradox *works*. Notwithstanding its logically paradoxical character, the system is able to exist. Should we throw away our thermostats, now that they have been shown not to be control systems after all? No, because they work. In principle, the same goes for planning, too. Planning creates a paradox, because it attempts to control environmental activity by refusing its own character as environmental activity itself. The plan is a part of the environment which it is supposed to steer. *Planning is a form of activity that attempts to change the context wherein it has emerged, by transforming its context into its object.* No plan has ever been ‘implemented’ – instead they are *acted upon*. But should we give up planning? No, because all of us agree that it is better to face our complex and uncertain future by planning it beforehand than by not planning it. Who would begin a North Pole expedition spontaneously, without trying to figure out beforehand what could happen during that voyage, and without making preparations for the needs and problems one expects to encounter? Of course, anything *unforeseen* may take place during such a voyage, but that does not downgrade the importance of preparing for that which is cognitively and practically foreseeable. This example¹ does not implicate the meaninglessness of planning; it only highlights its contingencies. The future is beyond our control, but we can – and we should – still prepare for it as best we can.

Niklas Luhmann defines ‘paradox’ as the representation of the system within the system (Luhmann 1990, 18) (see Figure 7). The system produces paradoxes when it produces representations of itself. But these paradoxes work, if the system is able to organize and steer itself by using these representations. A representation that produces a “working” (activity-enabling) paradox is here called ‘metaphor’². A paradox that works creates a metaphoric bind between that which represents and that which is represented, and reproduces and reaffirms this bind in succeeding activity situations.

¹ Taken from Lundequist 1995, 48.

² According to Wilden, a metaphor is “both a statement in a ‘language’ and a statement in a ‘metalanguage’ about [...] relationships in a ‘referent language’ from which it emerged and with which it coexists” (Wilden 1980, 173). Hans-Georg Gadamer holds that the nature of language is fundamentally metaphoric. The metaphor is a universal – both linguistic and logical – generative principle. Metaphor as a stylistic device is only a rhetorical form of this principle. (Gadamer 1979, 390.)

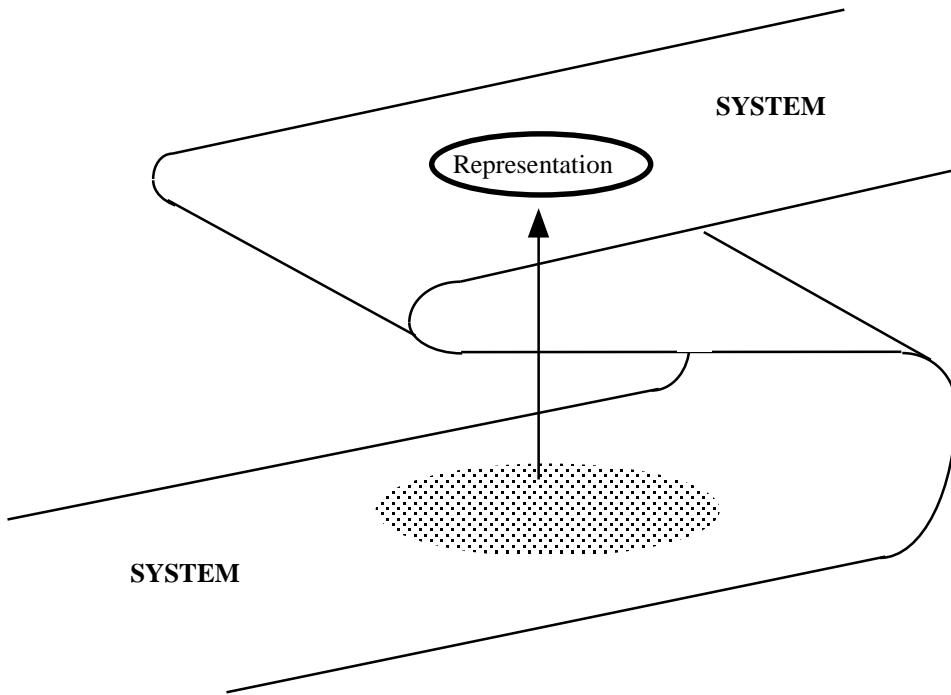


Fig. 7. A system that represents itself.

Land-use planning is a form of urban life that produces representations (plans) of itself. When planning is found useful as a form of human activity, it becomes a paradox that works. It is then able to fulfil its dual function of *both acting in and deciding for* the built environment. There is a metaphoric bind between these two aspects of planning activity (Chapter 2). In a metaphoric bind, *deciding for* is not contradictory to *acting in*, but becomes a metaphor of it. That one is able to plan future activities beforehand does not mean that one controls these activities. It only means that one's planning reveals a representative (metaphoric) quality. Only if this representative quality is reached and preserved is one able to organize future activities properly with one's preparative planning. This is not a magic trick by which the planner is expected to unveil future uncertainties and knowledge gaps relevant to his plans; he would still be roaming in the dark. But the planning system must become a representation of its context in this regard, too. Future uncertainties and knowledge gaps have to be met with adequate flexibility and reflectivity of the planning system.

The crucial difference between the cybernetic system and the planning system is that the cybernetic system is preprogrammed, whereas the planning system does not have to be. The former is not able to free itself from its program, whereas the latter possesses such abilities. When the cybernetic system receives unprogrammed messages from its

environment, it either stops or goes erratic. The thermostat switches the heating on or off according to differences in room temperature that alternate around a predefined target temperature (e.g. +21°C). These are preprogrammed, or *coded*, differences, to which the thermostat-system is sensitive. Coded differences are differences that the system is able to transform into its own distinctions. But there are also unprogrammed, or *uncoded*, differences, such as exceptionally cold outdoor temperatures during the wintertime, which may outweigh the capacity of the heating apparatus and hence make it unable to restore the room temperature to the target level. In the summertime, it is commonplace that the room temperature rises well above the target level, although the heating is shut off. Then we need extra means to cool our indoor climate: we need to open our windows or use an electric fan. Other examples of uncoded differences are mechanical damage (due to vandalism or wearing) to the thermostat, to the heating apparatus, to the rest of the heating equipment, or to the room that would disable the system. When the thermostat meets such uncoded differences, it loses the homeostasis of room temperature; and when these differences are recurrent or permanent, the system either loses its goal (as in the case of permanent changes in outdoor climate) or breaks down (as in the case of severe mechanical damage).

The thermostat system is not able to restore its goal as long as the differences in its environment remain uncoded. That would entail *recodification* of the system, which is beyond the choices of the thermostat, or any other cybernetic servo-mechanism. Recodification in this case could mean such extra measures as using the window or the fan for extra cooling, increasing the heating power, or repairing the damaged components of the system. Recodification means *framing* of the old code. The limits of the former code have been encountered. It has become evident that the thermostat works by itself, not universally, but *under certain conditions*. In this sense, there is no turning back. The code needs corrections or further elaboration. Even in the case of repairing simple mechanical damage, such as fixing a hole in the heating water pipe, the result would not be the restoration of the system as it were. The *code* would no longer be the same. From now on, the "fixing of the hole" is included in the code, in addition to the given heating on/off decisions of the thermostat and the given heating capacity. When our corrections are introduced into the thermostat system, the new code of the system can be described as a *meta-code* in reference to its former code. The meta-code corrects the system by offering it new choices and, at the same time, by framing the relevance of its former choice criterion.

What characterizes planning is its ability to recodify itself. The code of planning is the given *technique* of planning – given means of surveying, given conceptions and evaluations of environmental problems and needs, given norms of planning procedure, given groups that are included, given means of communicating and arranging meetings, etc. The uncoded differences in planning are the situations where the given technique of planning becomes an obstacle to itself; situations where planning loses its goal.

But what is the goal?

When I am designing a house, is it not the house that is the goal of my design work? As surprising as it may sound, my claim is that the ultimate goal of designing a house is not the house, nor the fulfilment of some needs provided by the house. The ultimate goal of designing a house is the *ability to design a house*. Our ability to design houses means the maintenance and cultivation of the activities whereby we form and organize

representations of our reality in such a way that such organized activities as building a house and dwelling in it become possible. Pens and pencils, sketch papers, written documents, computer programs, negotiations, building materials and techniques, biological, geological, climatic and morphological properties of the site and landscape, experiences and understandings of family life, of dwelling activities, of beauty, etc. are organized in the design activity into networks of means and ends. This ability to organize reality into such interconnected representations is not something that exists separately from our design activities. It is implicit in each design activity – like path-walking is implicit in each act of walking on a path. The ultimate goal of walking on a path to a destination is not the destination, but *the maintenance of path walking as a form of activity within which something is formed as a destination* (the end of the path), *something is formed as a means to find it* (the path), *and something is formed as a means to reach it* (walking). The goal, therefore, is not what is objectified as an end, but *the maintenance of the activity of objectifying reality into means and ends*. Designing-a-house objectifies itself into the means of designing, and into the end of house. The ultimate goal of each design activity is to guarantee the continuity of designing as a practice.

We may say that the result of design activity – the finished house with its utilities – testifies of the success of the goal maintenance of designing. If the house meets our expectations, designing has reached its goal. Designing a house has hereby been shown to be a meaningful form of human behaviour. When the design activity has been successful, the house becomes a coded difference in the system of ‘designing-a-house’. The code which determines the house as an end and designing as a means has been confirmed by a design activity that allows itself to be codified in such a way. But if the drawings of the house were too fuzzy to instruct the builders, or if the finished house collapsed or if it proved to be unfit for dwelling, the architect’s ability to design houses would be questioned. These setbacks are examples of differences that are not coded in the architect’s system of designing-a-house. In the face of uncoded differences, design activity is prohibited. Then designing becomes an obstacle to itself, because it cannot encode the differences that take place around it. It cannot react.

What is the goal of land-use planning? There are such potential candidates as “public interest”, “social harmony”, or “order in the built environment”.

What is the ultimate goal of the thermostat? The following answers could be given: “Room temperature at level +21°C”, “To regulate room temperature”, or “To make heating on/off decisions”. The first answer describes a state of affairs in the syntax of *noun*, while the second and the third are in the *verbal* form – that is, they describe activities. The first answer is analogous, by its form, to such goal definitions of land-use planning as “public interest”, “social harmony” and “order in the built environment”. They, too, are stated in the form of a noun. “To regulate room temperature” as a goal would be analogous, by its form, to such a land-use planning goal as “to regulate land use”. Accordingly, “to make heating on/off decisions” is analogous to the goal “to make decisions on land use”. The first goal of the thermostat, in the form of a noun, refers to a given temperature level, and this goal is actually dissociated from what the thermostat itself does. The second and the third – “to regulate room temperature”, and “to make heating on/off decisions” – refer exactly to what the thermostat does. These latter goals are *self-referential*: the thermostat attempts to continue doing what it is doing. If the room

temperature remained strictly at the temperature level of +21°C without a slightest oscillation, there would be nothing to do for the thermostat, nothing to regulate¹. The thermostat would become useless. This imaginary situation of no temperature oscillation is, actually, an uncoded difference, because the thermostat is not codified to deal with an environment of no temperature difference. The same goes for other uncoded differences, too: the result is that the thermostat loses its ability to function. The situation of "no difference in room temperature" is akin to situations of "too much difference". In the latter case, the heating remains either *on* or *off*, but as the room temperature never crosses the level of +21°C, the thermostat never gets a chance to make its heating on/off decisions. "Room temperature at level +21°C" cannot be the goal of the thermostat, because the realization of this goal would define a situation where no thermostat is needed. Precisely because room temperatures do *not* remain at +21°C, we need thermostats. The goal of the thermostat is to continue doing what it does: the regulation of room temperature by making heating on/off decisions. In other words, its goal is to act in its environment of coded differences.

Imagine a city plan that would achieve the goal of "public interest", "social harmony", or "order in the built environment" for good. This plan would render city planning useless once and for all. No planning would be needed thereafter. A fine goal for a city planner, indeed, but it does not belong to the world where the activity of urban planning, and the need for such activity, has emerged. Obviously, we live in urban environments where "public interest", "social harmony", or "order in the built environment" are never completely fulfilled – and the meanings we ascribe to those concepts and our ways of evaluating them, keep changing. Is it not precisely *our ability to plan* – and not any definite product of planning – that is our last resort in such an imperfect and changing world?

The ultimate goal of land-use planning is not "public interest", "social harmony", or "order in the built environment". These are *ends* with which land-use planning may represent itself, but the *goal* is the maintenance of land-use planning activity itself. "To regulate land use by making decisions on it" is what land-use planning actually does, and it is therefore also a better definition of its goal. The goal takes the form of a verb.

Land-use planning is able to make decisions on land use in an environment of coded differences in land use. *But land-use planning is frequently faced with uncoded differences*: interests and values collide; adequate knowledge is missing or prohibited; future outcomes are uncertain; different conceptualizations and specialized languages cause misinterpretations, mutual trust and respect is lacking... Without an ability to repair and elaborate its code (i.e. planning technique) planning activity would be prohibited. It would run into conflicts, where it loses its ability to regulate land use and loses its ability to make decisions on it. There would no longer be a metaphoric bind between *deciding for* and *acting in* the built environment – instead there would be a *double bind* between them (Chapter 5). A double bind is a paradox that has ceased to work. When a metaphoric bind changes into a double bind, the activity-producing paradox turns into an activity-prohibiting paradox. Planning as a paradox that has blocked itself is activity that has lost its ability to maintain its dual function of both *continuous acting in* the built environment

¹ This is a state of absolute equilibrium, which for a living system corresponds to death (Kauffman 1995, 52).

and *discontinuous deciding* for the built environment. Planning activity that is "stuck" in an environment of uncoded land-use differences is in a double bind, as is the thermostat that is "stuck" in an environment of uncoded temperature differences.

Within the context of coded differences, the heating on/off decisions (distinctions) of the thermostat are able to represent the differences in room temperature. These conditions involve a metaphoric bind between the decisions of the thermostat and the differences in room temperature. This metaphoric bind means that the thermostat is able to maintain the *boundary* between its own decisions on one hand and temperature differences on the other. This boundary is used by the thermostat to differentiate itself from its environment (differences in room temperature). Its ability to make decisions means an ability to maintain itself as *distinct from* the environment *for* which it makes its decisions. When differences in room temperature extend beyond the coded region, this ability is lost – which means that the thermostat system's distinctiveness from its environment will vanish, too. The thermostat system loses its ability to function when it loses its ability to maintain the boundary by which the decisions of the thermostat reproduce themselves as metaphors of room temperature differences.

In his theory of schizophrenia, Gregory Bateson uses the concept of double bind to describe a schizophrenic person's confusion in distinguishing between metaphoric and literal communication. The schizophrenic takes literally the messages that are intended to be taken metaphorically, and he is not able to describe his problems directly, but only indirectly by using stories. It is the task of the psychiatrist to make the metaphoric connection between the patient's story and his problem, so that the story becomes readable as a description of the problem. The schizophrenic patient has lost the code (boundary) by which to decide between metaphoric and literal messages. Without this ability, he is often faced with contradictory messages. (Bateson 1987, 194-227.)

The metaphoric bind between deciding for and acting in the built environment means that land-use planning is able to maintain the boundary between deciding for and acting in. By being able to make decisions on land use, planning reproduces its decisions as metaphors of urban activity. Planning is caught in a double bind when it loses its ability to distinguish between these two aspects of planning: planning as the making of metaphoric decisions on urban activity and planning as a form of urban activity itself. Differences in planning activity and decisions on land use become confused. Decisions do not lead to the intended differences in land use, and differences in planning lead to differences in land use, although they are not intended as decisions. As we noted earlier, planning already alters social meanings and economic land values before it reaches a decision to alter them. Community groups line up to object to the plans even before planning has been properly started, and mere preliminary surveying triggers speculations on land value. It follows that planning may end up in such a political controversy that it loses its ability to make decisions, or it may produce decisions for such a built environment that is no longer there, but has already been made different by the activity of planning itself. (Chapter 5.)

Activities in planning that cause major differences may pretend not to be decisions, and activities that do not make much difference may pretend to be major decisions. We have already discussed the political role of the seemingly technical methods of systems management and planning and the relative insignificance of politics in the *making* of decisions. This could be described as a political double bind, where the administrative

work itself determines the ends, although it displays itself as a search for means. The ultimate *value* given to systems rationality projects itself as "value neutrality". In local land-use planning, this leads to confusion between ends and means and between the relative roles between politicians and planners. Councillors have to pretend they are making decisions on land use and accepting responsibilities for them, while they are troubled with their true inability to affect decisions, and often with their inability even to comprehend what it is that they appear to be deciding. (Chapter 5.)

1.6.2 Reflective Practice

The code of the thermostat is simple: it has only one on/off decision to make over and over again. Its ability to continue making that decision proves the metaphoric quality of its code¹. When this ability is lost, the code loses its metaphoric quality and the thermostat system is caught in a double bind. But when we are talking about metaphoric binds and double binds in reference to planning, the focus is not on single decisions but on whole *practices of decision-making*. *The code of planning is the technique of making decisions*.

A technique is a product of Learning II: one has learnt *how to make decisions*. Learning II serves as a context for Learning I – for the making of single decisions. Learning I consists of learning on the basis of trial and error in finding an alternative that works – that is, learning to make single decisions that are metaphoric. Learning II is the affirmation of such choices by generalizing and categorizing choice situations according to choices that work in them. Then a certain *class* of choices comes to stand for a certain *class* of situations: "In this kind of situations this strategy works." (Bateson 1987, 274.) A technique is, in fact, a layered structure of overlapping decisions. Learning II gradually evolves through a succession of acts of Learning I. By making decisions, one gradually learns how to make decisions. Certain decisions are made recurrently and thereby become self-evident "facts" of the world. These make up the context for the making of further decisions, which again serve as self-evident contexts for the making of new sets of decisions, etc. There is some similarity here to Simon's view of organizations as hierarchies of decision-making, as the more general decisions become the contexts for more detailed decisions. The technique is essentially based on an economy of thought, where the more basic and ordinary decisions are no longer made consciously (see *ibid.*, 136-37). They become the "tacit knowledge" on which to base one's conscious decisions. How to approach a resident in a town hall meeting; what kind of data and what kind of people to regard as valid sources of knowledge for each kind of problem; how to use your knowledge to convince others; how to visualize your task to yourself and to others; how to categorize formal and informal planning procedures and how to behave in each instance – these are all examples of recurrent decisions no longer consciously made in

¹ The metaphoric quality of a code refers to the representativeness of its distinctions in relation to the continuum of differences from where the code and its distinctions have emerged. When the code has a metaphoric quality, there is a metaphoric bind between the code and that which it has transformed into its form.

planning practice. Instead, such decisions are unconsciously taken as given contexts, which enable each current choice situation, on which consciousness is freed to decide. Contextual decisions are no longer recognized as 'decisions' but adopt the character of differences. The either/or boundaries merge into a more-less continuum, onto which new boundaries are drawn. (Chapter 2.)

Each technique is formed onto its "root metaphors". Richard Harvey Brown uses the concept 'root metaphor' to refer to implicit preassumptions of what kind of things constitute the world, of how they function and are mutually related, and of how one may know about them. The root metaphor is the frame of how the world is. (Aro 1994, 56.) But we do not see its frame-ness; through this frame we see the world. Engeström considers practices as activity systems that have historically evolved upon their basic theoretical concepts – "germ cells". While the activity system evolves, it develops various phenomena and proceedings which are seemingly adjacent. Their nature as interconnected derivations of the germ cell is hidden from the members of the activity system, who carry out their daily routines and are occupied with their current concerns. (Engeström 1995, 100-01.) Both of these concepts – 'root metaphor', and 'germ cell' – are here called basic decisions or distinctions, which may or may not have a metaphoric character. In the early evolution of an activity system, its basic decisions have a firmly metaphoric character. This character enables the continuous recurrence of these decisions and thus their contextualization as the framework of the activity system. However, as the activity system develops, it opens up new possibilities for human action and necessarily expands into new unanticipated realms (Järvillehto 1995, 31-33). Its relationships to other neighbouring activity systems also change, partly because of the changes it itself initiates, partly because of the changes initiated by other activity systems. This causes tensions within the activity system. The reality of the activity system changes so that its contextual framework for current decision-making no longer "fits with it" appropriately. The framework now loses its metaphoric quality. The system slowly shifts to making decisions for a world that is no longer there. It works on what appear to be its problems and makes decisions that appear to solve them – but these seem to make either no difference or differences that contradict the intentions. The result is a double bind situation where the activity system no longer knows how to make decisions.

The basic distinction between ends and means and between the respective roles of politicians and planners as masters and servants can be traced to the early development of bureaucracies (Faludi 1976, 225). The political double bind of planning is conceivable as a misfit of this distinction between roles with current reality. When dealing with complex planning problems that are formulated by using the scientific method, these traditional role identifications lead to confusions, where the "new masters" (planners) keep appearing as servants, and the "new servants" (politicians) keep appearing as masters. Behind regulative planning practices, we may recognize some basic systems-theoretical distinctions, which were discussed in the above sections. The basic idea is the concept of cybernetic control. Other context-forming ideas behind regulative planning are economic growth and the natural-scientific concept of man. In all these respects, regulative planning fell into trouble in the 1970s. Left-wing social scientists questioned its theoretical and ethical basis, citizens refused to be treated as quantifiable objects of planning, and due to economic depression, there was not much urban development to regulate. Regulative planning was thus caught in a double bind situation. (Chapter 5.)

The functionality of any organization entails that its decisions work (i.e. are metaphoric). The quality of its more general decisions is naturally more crucial than the quality of its detailed decisions. The former constitute the context for the latter. If the context does not work, then the decisions that rely on it cannot work, either. You cannot make relevant choices when your context has only irrelevant ones to offer. You cannot build good incremental decisions on a bad policy. But in a double bind situation, the "policy" in question is no explicit strategy, which you could easily pinpoint as a source of your problems in implementation. The "policy" which we are talking about is *organizational culture*. It is a much more ambiguous and complex set of interacting, mutually influencing and contradicting roles, rules and tools that constitute the "way things are done" in the organization. Just because there seems to be no specific cause to your recurring dilemmas, your situation is a double bind situation.

In order to transcend its double bind, the organization needs both theoretical and artistic capacities. The members of the organization need to make theoretical research into their activity and to expose its basic decisions that are no longer valid. The framedness of these decisions needs to be exposed. The members of the organization are required to look deeper into their world and to reveal its frame – not as a fact of the world but as a *decision* to see the world suitable to certain historical conditions that no longer are there. This itself involves creativity. Research into activity is necessarily a creative reinterpretation, which does not allow all the practical knowledge that now resides in the organization to be cleared away. This practical knowledge *itself* provides the context for the re-examination of its own preassumptions. Seeing the frame already involves the act of framing: the frame 'as frame' is seen through a new frame. By this critical and creative work, the organization creates new metaphoric binds to its reality, thus enabling it to examine critically its double bind, and simultaneously enabling it to create tentative springboards for overcoming the double bind. These springboards are metaphors that function as theoretical tools for a clearer understanding of the systemic nature of the organization's dilemma, and simultaneously provide opportunities for the practical handling of this dilemma. Profound structural changes need to be made within the organization, if it is to transcend its double bind, and the necessity and purpose of these changes has to be adequately internalized by the personnel. What is needed is a change in organizational culture. Strategic changes are authorized from above, but a cultural change cannot be authorized – it comes from within. This type of learning is Learning III: the organization reflects on its ways of decision-making.

This is by no means an easy task. What is especially hard is the open questioning of people's role identifications and the concurrent critiques of the validity of knowledge they have to offer, the quality of their work, their ways of handling crisis situations, their attitudes towards each other, etc. Learning at level III necessarily poses threats to personalities within the organization. Personalities are closely tied to the organizational practice that provides an environment of self-identification for its members. For many people, it is their social relationships at work that determine their self-image. We easily confuse our jobs with our identities (Senge 1994, 18). A school master often acts like a school master even at home.

There are always people who are not able or willing to take part in this collective reflecting on organizational activity. For some, it may be personally or cognitively too demanding. And some others may object to it because of its implications for their own

future position in the organization – a possible increase in duties, a demand for new professional education, lowered status, etc. On the other hand, even when the motivation to change is high, organizational Learning III can hardly ever reach such profundity that all the intertwined discrepancies – in the division of roles, in the structure of rules, in the methods and thought models applied – could be cleared. The relicts of the former activity will then clash unexpectedly with the renewed activity. In the worst cases, the renewed activity is merely “installed” into the existing organizational framework without affecting its contextual structure.

This seems to have happened in the application of EIA (Environmental Impact Assessment) in Finnish local land-use planning work. The profound changes in the organization of planning communication, suggested by the ideology underlying EIA, frequently collide with the communication mode of regulative planning that still forms its context. Participative evaluation of the environmental impacts of plans becomes a mere “node” in the familiar routine of circulating expert reports, which still determines how the evaluation process develops. By treating this participation as a separate administrative procedure and as a specific knowledge source, the existing planning system “files” it into itself. (See Väättäinen 1995.) This cannot be considered an example of organizational Learning III in planning.

Similarly, Kimmo Lapintie suggests, after examining the argumentation around a Finnish ecological planning competition¹, that the “ecological turn” in Finnish environmental planning seems rather to be an uninterrupted continuum of the prevailing planning models. The old models are merely given new interpretations in terms of ‘ecology’. (Lapintie 1996, 197.) As Senge warns, we may fool ourselves by believing that we have “learned” something just because we have new concepts to use, although our behaviour is completely unchanged (Senge 1994, 202). If learning is truly reflective, it eventually results in concrete changes in practice, not just making a “turn” in how the actors describe their practice.

Whether we consider a case of organizational change an example of Learning III or not is a matter of degree anyway. Organizational Learning III is always imperfect, constrained by power struggles and marked by the friction of uneven development (Engeström 1995, 94, 149). A reflection on a double bind itself carries a seed for a future double bind that requires further reflectivity. Each metaphoric bind that we use to dispose of a double bind is itself a potential double bind – suitable for certain environmental conditions but not able to guarantee that they remain². Again, the activity will expand, evolve to new realms, and face changes in its relationships to the neighbouring activity systems. Sooner or later the initial ideas will be applied to such new unanticipated problem situations where they are no longer applicable. The evolutionary spiral of activity completes its cycle in a new double bind situation – a situation that is quite unlike the former double bind situations in its content, but similar to them in its lack of form.

¹ Viikki ecological housing area in Helsinki, 1994-95.

² Every act of metaphoric representation is an operation in its own right “and like every other operation proceeds blindly. Even the most reflexive of observers does not see what he does not see; he uses a distinction that at the moment of use he cannot distinguish (for to do so he would have to make use of a further distinction for which the same is true). The operation of observing cannot observe itself but only what it distinguishes as operation.” (Luhmann 1990, 106-07.)

What we need is not just one act of reflection within an organizational practice, but *a reflective practice: a practice that is able to maintain reflectivity on itself*. Learning III, in its full significance, means exactly that: *learning to reflect*.

In Chapter 6, I shall discuss, *descriptively*, how the practice of land-use planning is describable as learning activity and, *normatively*, how learning in land-use planning could be improved.

1.7 Critique on Critique

In the above section *Critique on Systems Thinking* and its subsection *Ethical Critique*, I presented briefly the main theses of communicative planning theory in the tradition of critical theory¹. In this connection, I recalled the central arguments that communicative planning theorists have made in their critique on systems theory and systems-rational planning. In this section I shall reveal the dilemmas within the communicative planning theory itself that stem from its problematic orientation to systems theory and prevent it from functioning as a fully enabling theory for practices of participative planning. However, I am *not* claiming that systems theory and systems-influenced planning theory should not be criticized. The criticism by communicative planning theorists is essential and should not be reversed. I am merely suggesting that this criticism should be differently formulated if it is to be incorporated into a theory of participative planning that is truly proactive and methodologically sound. Thus, my aim is not to dismiss the critical theorists' critique on systems influenced planning theory but to reveal the need for the reformulation of this critique into a more constructive one.

In this section, I shall provide opportunities for an alternative method of conceptualizing participative planning practices theoretically. This method is based on a *dialectical reorientation of systems theory*. Habermas already applied dialectical thought to systems theory in his theory of society. But whereas Habermas construed his theory as a dialectics between systems theory and phenomenology, my aim is to find dialectical dynamics from within systems theory itself. The conception of land-use planning practices as dialectical systems gives us the theoretical means to grasp the tensions between participation and bureaucracy, cooperation and control, communicating and silencing that characterize participative planning practices. It is my contention that such a theory would thus be more descriptive and pragmatically oriented than communicative planning theory in the Habermasian tradition, which is more or less stuck in its determinations of ideal participation, cooperation and communication.

Rather superficially, the critical theorists have often linked the socio-economic derivations of systems sciences with the technocratic project of macro-scale social engineering on one hand and self-centered strategic action on the other, without recognizing its full potential – especially in learning theory. Many critical planning theorists – including Forester (1989, 1993); Fischer (1990); Healey (1992, 1995); and

¹ With the notion of 'critical theory' I refer particularly to the theoretical work of Habermas, as does Forester in his book *Critical Theory, Public Policy, and Planning Practice* (Forester 1993, 163).

Sager (1994) – seem to view systems theory through the lenses provided by Habermas. But as I see it, Habermas's view of systems theory is biased.

As we saw earlier, Habermas frames systems theory by treating the control systems of power and money as subsystems of a larger "lifeworld system", on which they depend. Systems theory is framed by using *phenomenology*, *action theory*¹ and *argumentation theory*, upon which Habermas's pragmatics of communicative action is based. But although Habermas hereby critically frames the positivist systems theory, he does not seek to restructure it. For Habermas it is still an adequate theory to describe the type of rationality that is decisive in politics and economics. Habermas calls this rationality *instrumental rationality* – a concept which is a reformulation of Weber's purposive rationality but also comprises systems rationality. Habermas's communicative action, on the other hand, is based on another type of rationality: *communicative rationality*. It is based on seeking agreement in social interaction by making and testing claims of the shared world in reference to *three practical criteria*: propositional truth, normative rightness, and subjective truthfulness². But what happens *in between* the two rationalities? How does the *dialectics* between them actually work? Habermas alternates from one rationality to the other, but does not actually analyze their *interplay*, i.e. *how* communicative and strategic actions intertwine to produce and reproduce forms of social and societally institutionalized behaviour.

This dualism can be bridged by following the implications of Spinoza, Whitehead, Bateson, Wilden, Prigogine, Bohm, Luhmann and Engeström towards a new kind of *pragmatist systems thinking*. Systems theory can be developed to integrate phenomenological, action-theoretical and rhetorical perspectives into itself. It is thus possible to formulate a unified theory of society that merges micro- and macrosocietal levels, action and structure, cooperation and control, use value and exchange value in the *dynamics of language*. Systems theory is hereby developed *to frame itself* by replacing the doctrine of control with the more recent idea of a paradox. With the idea of paradox, we may grasp the "dialectics" itself, not just the separate ends of the dialectical relationship between "system" and "lifeworld". Systems theory frames systems rationality when it transcends the limits of cybernetic systems (lower- or higher-order) to examine *morphogenetic systems* – systems that recurrently adjust to changes in their reality by framing themselves (Chapters 2 and 6). With the concept of morphogenetic system, we move from the dialectics between "system" and "lifeworld" to the *dialectics between system and metasystem*. This dialectics is not a combination of two rationalities – it is the dialectics itself that is the "rationality" of the morphogenetic system.

The metasystem is the "public domain" of Learning III (Chapter 5), where the morphogenetic system seeks to reformulate its goals and relative problem definitions. Here the concept 'public domain' – which is familiar to us from ancient Greek political philosophy and Hannah Arendt's (1958) reinterpretation of it – is linked to the concept of 'Learning III'. Learning III means a capacity for self-critique and self-transcendence. Self-critique and self-transcendence can take place only if one is able to transcend one's

¹ Especially Austin's speech act theory and Arendt's theory of political action.

² Habermas 1984, 75. Here Habermas builds on Parsons, who saw culture as consisting of three respective dimensions – factual, moral, and expressive – and who also worked on the theory of validity claims (Heiskala 1994, 94).

given identity-in-reference-to-other-identities and to let the unobjectified subject-among-other-subjects appear from within one's self. Learning III is a profoundly social activity where the boundaries of factuality, morality and identity are both critically framed and creatively played with. Therefore the "domain" of Learning III is a "public" domain. In Learning III, one expands one's social sphere by differentiating one's ways of thinking and acting and thus exceeding the limits of the epistemic community to which one's earlier modes of thinking and acting were "privatized" (Chapter 6).

Because of their rejective attitude towards systems theory, critical theorists are often reluctant to approach problems concerning public management and organization dynamics constructively. These issues are placed on the "system" side. Public management is taken as the management of a "bureaucracy", which is seen as the embodiment of organized oppression – the "bureaucratization of lifeworld". On the other hand, unconstrained participation is seen as necessary for the legitimacy of societal decision-making. But participation has an inherent tendency to organize, and hence to constrain, itself. What is organized participation if not a bureaucracy? To address the issue of participation without addressing the organization of participation is half-hearted, if not outright irresponsible, theoretical work.¹ Critical theorists speak for participation against bureaucracy without critically recognizing the bureaucratization inherent in participation itself. For example, in a relatively short time, resident associations have developed from *ad hoc* civic movements into well-organized interest groups that have found their institutionalized positions in the local political systems. The following quotation from Niklas Luhmann is illustrative:

"Organizations are social systems that produce decisions with the help of decisions. Therefore the strengthening of the possibilities of participation within organizations amounts to an increase of decisions. More decisions are necessary if decisions are shifted to committees where those affected or their representatives have to decide whether they want to agree with a decision or not. Such committees have to be prepared, both regarding the subject matter as well as tactically. The decision process is reflexive. Everyone has to decide how one wants to decide. Most of all, this reflexive decision process has to be discussed in advance. In this way the reflexivity of deciding is shifted to a third level. One has to decide about how a representative ought to decide about decisions." (*Ibid.*, 223.)

This process has a striking correspondence with normal behaviour in bureaucracies. According to Luhmann "[t]he normal bureaucratic process constantly makes decisions about decisions. Decisions are made possible or impeded by decisions. Or if one cannot decide about this decision, then it is deferred by decision." (*Ibid.*) Luhmann argues that this is precisely how one behaves in the participative procedure, too (*ibid.*, 223-24). "Like a puppet within a puppet, participation develops into an organization within an organization, into a bureaucracy within a bureaucracy. The result can be condemned as bureaucracy and praised as participation. This double evaluation has an immobilizing effect: one affirms in principle what one condemns in execution." (*Ibid.*, 224.) With this last remark, Luhmann actually describes the double bind of participation that critical

¹ See Luhmann's critique (1990, 223).

theory produces: because you want to participate, you must avoid bureaucracies; and because participation itself gets bureaucratized, you have to avoid participation.

Every communicative planner knows that 'systems overload' is a real problem in participative planning – not just a phrase that some systems technocrats rhetorically use as an excuse to prevent democratic conduct. While Frank Fischer is sceptical of such notions, he nevertheless admits the problem (without using the concept 'systems overload') in the expert-client relationships:

"When participative research projects fail, the problem most commonly stems from a misbegotten belief – namely, that participation assigns equal weight to all opinions and, worse, that everyone can talk at will (if not all at once). Under these conditions, participative research opens up a cacophony of miscommunication that easily degenerates into vituperative namecalling. In the absence of a well-structured model of expert-client discourse, including rules of evidence and evaluation criteria, participative research can be a formula for trouble. To avoid its premature failure, and to avert disillusionment among both experts and clients in the process, it is essential that the ground rules of the alternative model, procedural as well as methodological, be carefully worked out." (Fischer 1990, 377.)

Critical theorists often mistake the structural problems of a participative organization for ideological problems. They offer hopes of democratic liberation in such organizational contexts where these hopes may be structurally impossible to fulfil (Luhmann 1990, 223). When structure is identified with domination, liberation means the same as "unstructuring". John Forester distinguishes between "socially necessary" and "socially unnecessary" distortions of communication processes. The fundamental difference between the two often goes unrecognized, with the consequence of mistaking for domination the distortions of discourses that are inevitable. (Forester 1993, 159; 1989, 33-35, 41-43; see also Fischler 1995, 17.) Our situation becomes unbearable if our conceptions lead us to condemn as domination the forms of strategic and coordinated action that are unavoidable and ubiquitous in our social relations. These confusions lead to the divorce of ethics and praxis. Social justice is pursued at the price of practical handling of common affairs. *We become equally paralyzed*. Forester defends Habermas by arguing that Habermas does not claim that perfectly undistorted communication would be achievable (Forester 1993, 168). "Habermas has no illusions [...]. Rather, he contrasts unnecessary, systematic distortion with what might be called necessary and justifiable, or legitimate, distortion. The former manifests domination; the latter manifests legitimate authority." (*Ibid.*) We may agree on this distinction – but then we also need theoretical tools to enable us to make that distinction in our planning practices. Although Habermas's communicative rationality may seem too utopian a construct to use as such a tool, Forester has indeed succeeded in developing it into an analytical framework in the context of planning practices, by which to distinguish unnecessary distortions from the necessary ones in planning communications (Forester 1989, 27-47).

Communicative planning theories that lean on critical theory are often not able to go much further from offering ideals of planning dialogue. Clear advice on how this should be done in practice is seldom offered. Without any theoretical conceptualizations of how to program planning processes and how to organize individual planning situations, the communicative planner soon stumbles into a 'systems overload'. Communicative

planning theories that apply Habermas's theory willingly present themselves as "metatheories", "ideal constructs", or theories that concentrate only on the philosophical and epistemological questions of participative planning, leaving in each case the theoretical handling of the *true pragmatics* of communicative planning "for later". However the basic problem is the conceptual and methodological leap one has to take when moving from the socio-philosophical determinations of undominated speech to the developmental research of the "impure" practice of planning communication. The theory does not provide means for the researcher to approach the planning practice "from within" it; instead the practice is viewed "from the outside", i.e. from the perspective of an "ideal speech situation", where the practice is displayed in the light of "systematic distortions" of communication. The concept of "ideal speech situation" is not offered as a real possibility, but as a "yardstick" with which to measure the real planning situations that always lag more or less behind it (Forester 1993, Sager 1994). But what is the use of such a yardstick in the *making* of planning situations? As John Forester comments: "Critical theory does not solve these problems, but it poses them powerfully for us" (Forester 1993, 4). It reveals "negatively" some aspects of structural domination in planning communication, but it lacks "positive" constructive capacity. Critical theory is used in the *protection* of the ethical quality of planning practice (*ibid.*, 78-81), but not in the actual *production* of planning practice. According to Markku Sotarauta, the thoughts of such planning theorists as Forester and Healey offer an ideological disposition towards communicative planning but they do not give it a concrete form (Sotarauta 1996, 296). "How to move forward, now that we have reached an awareness of the undemocratic and unethical nature of our ways of planning and decision-making? What would be a more democratic way to organize our planning work, when ideal speech situations are not a real possibility?" These questions await to be answered. Patsy Healey's contribution to the procedural issues of communicative planning is given in the form of a "checklist"¹. Again, the point of departure is less to develop communicative planning methodology itself, but rather to point out decisive questions to enable democratic inclusiveness of planning strategies as they develop: "When you do what you do, remember *this*." Healey comments on her own approach: "[I]t offers less a specific process and more a set of questions to help political communities invent their own processes. It represents an ideal to strive for." (*Ibid.*, 66.)

¹ According to Healey, a political community contemplating a strategic planning initiative should ask itself the following five questions:

1. "WHERE is discussion to take place, in what forums and arenas; how are community members to get access to it?
2. In what STYLE will discussion take place? What styles will most likely be able to "open out" discussion to enable the diversity of "languages" among community members to find expression?
3. How can the jumble of issues, arguments, claims for attention and ideas about what to do which arise in discussion be SORTED OUT?
4. How can a strategy be created that becomes a NEW DISCOURSE about how spatial and environmental change in urban regions could be managed?
5. How can a political community get to AGREE on a strategy, and maintain that argument over time while continually subjecting it to CRITIQUE?" (Healey 1995, 53-54.)

Thus we find ourselves at one end of the dialectical relationship between "system" and "lifeworld", looking critically at the other end. There are two rationalities – the instrumental and the communicative – that are brought together in this dialectical relationship. But what is this relationship? Is it rational itself? According to Forester, the instrumental and communicative aspects of planning practice are inseparable and not mutually exclusive. While we "get something done" we simultaneously enact social relationships; we give each other promises or make threats. We never simply use tools, but always also express our attitudes towards each other. We listen, we silence, we speak out, we mystify. We make both *content-related* and *context-related* claims: *how this is done* also means *how you become involved* (or do not become) in it. (Forester 1993, 25-26, 71-73.) But how can we move forward from criticizing the how–something–gets–done? How to move into "being more democratic – and still getting something done"? We need to address the very interplay between instrumental and communicative rationalities¹.

The questions raised in the critical tradition of planning theory are crucial, and they are undoubtedly questions that also arise in planning practice. In this sense, the theory is pragmatic: it speaks for the practitioners. But for a practising planner it is mostly a tool for analyzing and evaluating the situations where the planner already is engaged; it does not guide the actual creation of planning situations. Therefore, it is rather a re-active than a pro-active theory. Although critical theory speaks for dialogue and social learning, it can address them only passively. Critical planning theorists deduce what planners should do in order to allow social learning to take place, instead of investigating what actually *takes place* in social learning. Habermas defines explicitly the processes of lifeworld reproduction, but "[h]e does little, though, sociologically, to assess *how* these processes work, how worldviews, allegiances, identities are elaborated, routinized, established, or altered" (Forester 1993, 126). According to Forester, "that is the central issue to be addressed in any concrete analysis of political struggle, policy debate, political conflict, or social movement – and this explains part of the difficulty, to this date, of applying Habermas's work directly and concretely to political conflicts" (*ibid.*). Are not the questions that begin with the word 'How', after all, the most essential ones in any pragmatist study? When studying social learning, we cannot escape the question of how the lifeworld changes.

¹ Tore Sager suggests a planning method where instrumentally and communicatively rational modes of planning form two separate, yet intertwined subprocesses:

"The one should support efficiency where the other accentuates reliability, and vice versa. The subprocesses should be run parallel in order to complement each other and allow planners to unite them when special tasks require so. For instance, the solution to a planning problem may be found by discussion or by analytic technique. The communicative and sometimes unruly and conflictful citizen participation process may run parallel, yet somewhat unintegrated, with the technical experts' more streamlined analytic approach to problem-solving. The simultaneous use of both subprocesses provides a form of constructive redundancy. The planner can resort to one of the subprocesses when it comes to tasks where the other is weak. Seen in the perspective of flexibility and redundancy, there is clearly a case for communication *and* calculation in planning; it is not a matter of either/or." (Sager 1994, 235.)

Habermas's theory with its rationality apparatus leads us to observe analytically the created new, not the creation of the new itself. Critical theory is too "scientific" to handle the question of creativity¹ – it is a captive of its two rationalities. Can the true essence of planning activity really be found from rationality – communicative or instrumental? Is planning merely a form of rational debate, or a rational means to a given end, or an alternation between the two? Are we here offered an adequate description of what the planner actually does when he plans? Is communicative planning – as communicatively rational making and testing of claims on planning issues – really planning at all, or is it just communication about planning? In communicatively rational planning, the participants are expected to make claims about something and to appeal to something that *already is* there, but where does planning step in? Are we not here reducing planning to a form of reasoned speaking and decision-making and neglecting its potential in *world-making*?² Rationality, whether communicative or instrumental, is concerned with the validity or effectiveness of a set of actions in reference to a given criterion or end. Such rationality does not address the type of communication that has to do with more fundamental processes of shaping criteria or ends. Habermas's communicative rationality is based on making and testing claims in reference to a given moral-practical horizon of shared understandings. But the key problem in transcultural and pluralistic planning situations is *how* such a mutual horizon could be found. In its deepest sense, planning is the shaping of shared worlds – and, accordingly, the formulation of shared rationalities. Habermas's critical theory does not address this crucial aspect of planning, but starts from a situation where we already have a shared world and a shared yardstick of rationality. As Kojin Karatani argues, Habermas's communicatively rational dialogue is not genuine dialogue because, as Karatani points out, the participants already have shared rules. For Karatani, shared rules are the outcome of dialogue, not its point of departure. (Karatani 1995, 153.)

I expect planning theory to provide answers to the basic question "What is planning?" (see Ramírez 1995a, 2). Critical planning theory is not really seeking answers to this question. Its main objective is democracy in the social, political and economic situations of planning. But even emancipatory planning is not only about counteracting the different ways in which power is used in planning – such as misguiding attention; false representation of one's intentions, holding back or mystifying important knowledge, and manipulating procedure, e.g. when, where and by whom issues are raised and linked together. We cannot escape the fact that in emancipatory planning, too, we are still *making plans*. Critical planning theory does not actually provide a methodology of how to counteract power *in* planning.

By analyzing the possibilities and pathologies that are involved in the dialectics between the instrumental and the communicative attitude, the practice of planning can be

¹ Undoubtedly, there are those who would claim that it is not for science to study creativity. But if we accepted this, should we not also give up studying planning – or at least admit that science can capture only the aspects of planning that are not connected with creativity. Scientific planning theory is a possibility only, if we broaden the limits of science to include research on creativity.

² As we will see in Chapter 6, Forester indeed addresses this basic property of planning activity with his concept 'designing as making sense together' (Forester 1989). But this idea is rather an offspring of Schön's theory of reflective action than Habermas's theory of communicative action.

approached theoretically. There are aspects in the instrumental attitude that necessarily narrow down the freedom of communication. Instrumentality is about *making decisions* of "what this is about" – and, hence also unavoidably, "whom this concerns". But, of course, without the making of decisions, no initiatives would be made, no planning problems would be defined, and no meetings would be organized and held. The instrumental attitude is essential for the determination of both the procedure and the substance of planning. It is about *moving on* in planning. The crux of the matter is not whether planning communication is instrumentally bound, but whether communicative planning is capable of *binding itself* – whether it is capable of finding mutually acceptable and practical ways of structuring the *how*, *what* and *who* of planning. It is not enough that communicative planning "comments" on instrumentality – it needs to find instrumentality from within itself. The "system" is not the problem, but its departure from the "lifeworld" is. It is not that we should not be strategic; we just should not lose our ability to reflect on our strategies. We need strategies, but when we lose our readiness to *both* criticize them *and* create new ones, we enslave ourselves to be their objects.

Why should *mutual understanding* be the primary purpose of planning, as critical planning theorists claim? What can be *done* with mutual understanding? Where does it lead us? As I see it, the purpose of planning is the ability to cope with complex social problems. Planning problems are social in the sense that they affect a large number of people from different walks of life, but also in the sense that acting upon them demands social action and commitment. Moreover, they are often complex in the sense that their proper understanding requires cooperative action that transcends subcultural contexts of meaning. It follows from the nature of these problems that mutual understanding becomes a necessary prerequisite for successful planning. It is also necessary in order to gain transcultural commitment and support behind the making of such binding decisions that are influential enough to make a difference in our social reality. Hence, mutual understanding becomes a constitutive element of our coping with complex social problems. It would be delusive for our comprehension of such planning activity to try to determine whether it were communicatively or instrumentally rational. The instrumental search for means is always present in our approach to a problematic situation. But due to the complexity of the situation, the search must often be extended to focus on ends, too. What is needed, then, is an ability to frame whole frameworks of ends and means in such planning that reaches the quality of transcultural dialogue. But the dialogue is still motivated by the initial search for means, although acknowledging that one needs to find *meanings* first (or perhaps simultaneously). The basic effort is to mutually orient ourselves to our problematic situation, so that we can formulate plans of coordinated action on it. Rather than mutual understanding *per se*, the issue is how mutual understanding advances our coping with our problematic public affairs. To cope with a planning problem is not the same as to get a planning project done. It means that we get done with the problem, for now – whatever we may decide to do with the project. The instrumentality of mutual understanding lies in such shared orientation to our world that enables us to make decisions.

Grasping theoretically the creative and productive aspects of communicative planning has usually meant sidestepping from critical theory. Donald Schön's (1983) theory of reflective professional action has been considered by critical planning theorists as one promising theoretical source in approaching these matters (see Forester 1989, Fischer

1990, Sager 1994). But with Schön's theory systems theory also creeps in again, only in a revised, pragmatist form. But not even Schön will take us very far, because he is primarily concerned with individual reflection rather than organizational reflection. The very reason why Schön's ideas are accepted may be that his main work *The Reflective Practitioner* (1983) is concerned with how individual professionals learn, not with how organizations learn. His theory hence does not raise problematic organization-theoretical questions. At the organizational level, we can still see the old "trap" of contrasting participation to bureaucracy. Then, organizational learning soon takes the meaning of improvement in the domination of participation. However, the problem of how participative organizations can and should develop themselves does not fade away by not addressing it. We are already addressing it, anyway, when we observe individual learning. As Senge argues, learning that changes mental models cannot be done alone. "It can occur only within a community of learners" (Senge 1994, xv). There is no dividing line between individual and organizational learning (Engeström 1987, 158-61). There is an organizational side to every individual learning act. Individuals learn in organizations, and organizational development is triggered by the learning acts of its individual members¹ – and through organizational development the settings for individual learning change.

Indeed, an organization should be able to critically question its own goals, but there is a limit to such questioning. The ultimate goal of self-maintenance is beyond any organizational reflection. If nothing else is retained in a learning process of an organization, the existence of the organization is – because learning itself is a form of existing. An individual local politician may learn something of himself that leads him to "self-destroy" his own career *as a politician*, but you cannot expect local politics to learn to self-destroy. As long as there is local public life, there is also politics – and planning.

What are politics and planning as forms of social activity? Are they not also organizations that, in Simon's sense, consist of decision-making processes (Simon 1979, 9) and, in Luhmann's sense, make decisions about decisions? When we talk about development in this context, do we also talk about the development of a bureaucracy or of participation – or could there be a middle road: *organized/organizing participation*?

Think of the democratic bureaucracy not as a "system" that necessarily "colonizes" participation, but as a potential *metaphor* of participation. As Luhmann has pointed out, a bureaucracy makes decisions about decisions. A democratic bureaucracy plans participation through participation. It therefore has a dual function: it is both *participating* and *about participating* – as planning is both acting and about acting. Its primary goal is to maintain the *boundary* between these two functions. This boundary is a *metaphoric bind*, which enables the paradoxical coexistence of both the system of participation and the subsystem of deciding for participation. Bureaucracy turns into a 'bureaucracy' in the negative sense, when this metaphoric bind changes into a *double bind*. Then the planners of participation are opposed to participants, and – being participants themselves – they are in an ontological sense opposed also to themselves. Colonization would hence not be an inevitable condition of the dialectics between bureaucracy and participation, but it could be used to denote the possibly poor quality of this dialectics. Furthermore, the task for social learning would also be defined differently.

¹ "Organizations learn through individuals acting as agents for them" (Argyris 1993).

The task would not be to liberate participation from the oppression of bureaucracy, but to *free bureaucracy from its self-oppression*. This is primarily not an ethical question, but a pragmatic question. The self-maintenance of democratic bureaucracy as a goal overrides the goal of equal voice to everyone. Could this be right? It is, if the self-maintenance of bureaucracy is understood as the self-maintenance of participation as a metaphor of itself. Decision-makers cause problems when they forget that their decision-making is metaphorically bound to the system for which their decisions are made. The participative system allows itself to be controlled, if this control displays adequate metaphoric quality. The poorer such quality, the less well the bureaucracy works.

Have we thus disposed of ethical considerations? On the contrary. *It is for ethics to decide how poor a performance is good enough*. Local governments and other public bureaucracies are hardly ever faced with ultimate "life or death" double binds. The law guarantees that a new council will be elected irrespective of whether the voting percentage was 80 or 40. The law legitimates the councillors as representatives of the public, and it also therefore legitimates their decisions irrespective of what was decided and how. The law legitimates the publicity of a certain land-use planning procedure where the plans are publicly displayed after certain phases, the "parties concerned" are heard, citizens' "official" remarks and complaints are "officially" handled, and finally, the plan is legally validated by the decisions of the council and possibly other public organizations. The planning procedure runs its course irrespective of whether the true quality and quantity of participation was high or low. "A zoning by-law, for example, can specify a time by which a planning board is to hold a public hearing, but it usually will not tell a planner how much information to give a developer or a neighbor, when to hold informal meetings with either or both, how to do it, just whom to invite, or how to negotiate with either party" (Forester 1987, 304). The law ensures that the system of public bureaucracy will roll on – though not necessarily smoothly – even in a situation where it is evident to all that its behaviours represent a badly distorted picture of democracy, publicity and legitimacy. The public bureaucracy may thus keep reproducing poor metaphoric quality of its own legitimacy without falling into a paralyzing double bind. It is then not for law, but for ethics to demand improvement of the practice, as the practical reasons are not acute enough to force the decision-makers to improve their performance. What is practical is also ethical, but what is merely legal is usually not totally impractical, either.

Ethics is therefore essential for the reflectivity of the democratic bureaucracies whose survival is more often guaranteed by law than by their ability to reflect on themselves. Social learning is an ethico-practical process by which the democratic bureaucracy increases both the functionality and the legitimacy of its own performance. It increases its ability to make decisions that are metaphoric of the community for which they are made. The maintenance of this metaphoric bind is the practical goal of the bureaucracy. The task for ethics is to observe, through critical participation, the quality of this bind and to trigger processes of self-critique whenever decision-making loses the quality of *ethical legitimacy* (even though still retaining *legal legitimacy*). Ethical participation is therefore a form of participation that evaluates and criticizes the way participation is being bureaucratized. Ethical participation points out potential, if not acute, double binds of the bureaucracy, and makes demands for its development. In a social learning process this ethical critique is combined with creativity. The result is poetry where participation learns

to bureaucratize itself differently. A reflective participative organization is organized/organizing participation.

What about land-use planning as a reflective participative organization of this kind? It would be participative planning that is bureaucratized, but at the same time possesses capabilities to de-bureaucratize itself by utilizing the full potential of participative planning as a social learning process. By re-creating their social reality, the participants in planning learn how to be about the built environment differently. The question is never merely about the built environment *per se* – it is also about how communication about the built environment is institutionalized and de-institutionalized in the social organization of land-use planning practice.

1.8 Rethinking Learning Organizations

It is clear that the theory of learning organizations needs developing. In the scientific field of Organization Development, the approach of social engineering, typical of previous systems-theoretical thinking, is still too near. Meaningful social action becomes too technicized, and social learning is employed to correct errors of the system without asking "for what?". In democratic organizations, this has a depoliticizing effect. Political activity becomes technicized when the political organization is not sensitive to the critical questioning of its own goals. Furthermore, such questioning is needed in the functional sense, too, when the organization is faced with severe crises that require major changes in organizational culture.

The theory needs developing in at least the following respects:

1. The group dynamics of organizational learning needs to be elaborated. In this regard, Yrjö Engeström's work (1987, 1995) has opened a new path. Organizational learning is not equal to the learning of many individuals put together (Engeström 1997). Nor is learning a "wisdom commodity" that an executive could spread around in his organization, after having first received it himself during a one-week crash course. When we study the dynamics of organizational learning, we find that there is curious "friction" in organizational development. This friction does not only hinder the expansion and application of individual ideas, but also directs the process towards new unanticipated forms of social activity. We also find that, in the processes of individual-social learning, learning and power are not mutually exclusive. The socialization processes of learning do not take place in the absence of power. Furthermore, in these processes, power is not only a limiting force, but a *structuring* force as well. Thus, power is an integral part of the dynamics of social learning. It may hinder the social expansion of initial individual learning, but it may also direct it in such a way that socially different learning results compared to what was the first individual idea.

2. The concept of organization needs to be redefined. Organization is not the same as the boxes and arrows on the organization chart. Nor is it just a "staff" with a hierarchy of command and a division of roles, surrounded by subcontractors and clients. The idea of an organization cannot be found from its material properties, such as personnel, buildings, archives, and computers – nor can it be found from its

abstract rules and regulations. The organization consists of these things, too, but more fundamentally it is *organized/organizing communication that continuously produces and reproduces its own forms of collective behaviour, where actions, tools, roles, ends and means interact and find their meaning, signification, and identity*. This is how we shall define *language*, too, in Chapter 3.

3. The goal of social learning needs to be redefined. The goal is not to "adapt" an organization to altered circumstances – not if social learning is understood as a "means" and the organization as an "end", to separate these two instrumentally from each other. Social learning is both an end and a means at the same time. Basically, learning is a form of activity that has the continuity of activity as its objective. The goal of social learning is the organization's existence, and learning itself is an embodiment of that existence. Social learning is a form of social activity that is primarily motivated by the correction of double binds that hinder and paralyze the social activity system (Engeström 1987, 1995). Through this function, social learning seeks to reveal the *impractical* nature of control over social activity instead of attacking it on moral grounds only. Attempts to gain or maintain professional, political or economic control of the planning process are shown to be self-contradictory, and their critique will *primarily* be based on this revelation rather than on considerations of equity.

As an example, take the age-old determination of real-estate investors and rentiers to "liberate"¹ the real-estate market from public planning. Such attempts may be deemed socially unjustifiable, because the exclusion of public planning from the real-estate market would also deny the "public" its right to affect urban change. But it can also be shown as *impractical* for the investors themselves. Real-estate interests, too, need a regulatory body to protect the market against overdevelopment (Fainstein 1996, 177). The consequences of the liberated real-estate business are observable in our cities as an oversupply of office space, now threatening the future stability of urban regeneration (*ibid.*). The assumption here is that the private investors' and rentiers' attitudes toward public planning are more likely to change when it is revealed that planning has a supportive role for the balanced functioning of the real-estate market – a less likely reason would be investors' and rentiers' "bad conscience" for trying to shift the decision-making on land-use issues to themselves. Accordingly, it is assumed that the most powerful counterforce against the extended use of economic power lies in the double bind situations that the empowered actors may bring to themselves. When economic power is dismissed only on moral grounds, one fails to tap into the systemic pathologies within economic power itself. According to Lindblom, the grand critiques of capitalism are imprecise. They hurry us on to an evaluation and skimp the clarification of just how market systems work. (Lindblom 1977, 76.)

When it can be shown that control of participation is, first of all, impractical for the controller itself, we approach the formulation of democracy as a potentiality for social learning that is also emancipatory. After all, it is not democracy that is the primary goal of planning practice, but the *continuous existence of a planning practice*, the achievement of which entails democracy.

¹ Meaning the removal of economic power from the public sphere to the private sphere.

4. Referring to the last point, although social learning is not characteristically instrumental itself, it is usually also used instrumentally. In the dynamics of social learning, learning as morphogenetic reformulation of goals, and learning as instrumental means to preserve the existing goals, merge together. Especially in the political context, the theory of organizational learning needs to be able to differentiate between the two. In addition to asking what the learning process changed in the organization, it has to ask what remained the same. Social learning changes the power relationships within the organization, and some actors are therefore likely to approach it instrumentally, to gain more power or to preserve the power they possess. Then the crucial question is *why* someone supports or rejects a certain idea, or *why* someone emphasizes certain problems or directs attention to certain issues. How is learning used in the organization? Will it serve political emancipation, or will it become a means for the ruling class or the managerial elite to "adapt" the existing forms of organized domination to the altered circumstances? The theory of organizational learning cannot escape the issue of ethics, and in this sense it has to be a "critical theory". The critical questions center on what is actually renewed in the learning process of an organization and what remains as given – and why.

5. In examining such activity contexts as local land-use planning, we need to extend our vision from organizational learning to *inter-organizational learning*. In land-use planning, there is not only one, but *many* forms of organized/organizing communication interacting, colliding, competing, and also mutually learning. If we observed the municipality from the materialistic¹ perspective, for example, we would perceive it as an unambiguous set of objects. We would find only one city hall, only one set of rules, and only one role for each person. This perspective would lead us to conclude that the municipality is a single organization. But the *interactionist perspective* does not observe the municipality this way. The interactionist view does not define the organization as an unambiguous set of objects, but as a system of relationships. The objects are not there first, but the *relationships* that constitute the objects *as* objects. Thus we are no longer talking about only one city hall, or only one set of rules, or only one role for each person. The city hall becomes *one* object in one system, and *another* object in another system. The "same" set of rules is used differently in one system compared to the other, and a person *becomes* and *is* a different role as a member of this organization compared to his role in that organization. We do not start our analysis by recognizing councillors, planners, interest groups, land-owners, residents, voters, laymen and consumers, but by recognizing *systemic productions and reproductions of activity contexts where actors come to identify each other and themselves as* councillors, planners, interest groups, etc.² There is *one* municipality and there are *other* municipalities that "geographically" occupy the same place. The municipality

¹ Here the term 'materialism' is used as generally understood in the philosophy of science, as a concept closely related to 'atomism'. It should not be confused with Marx's "active" materialism (see Bernstein 1980, 42-43).

² According to Anttiroiko we will never understand the essence of municipal administration, if we do not address the question of how subjects are made (Anttiroiko 1993b, 126).

is one thing as a part of the activity contexts that belong to politics, another thing as a part of economics, and yet another thing as a part of administrative and professional expertise.

Bearing these remarks in mind, I shall outline, in Chapter 6, a theory of land-use planning as social learning activity, by using an illustrative example taken from a recent urban design education project.

1.9 Rethinking Systems Theory

In this study, systems theory will be approached from the viewpoint of the *pragmatist* paradigm rather than the positivist one. Also, systems and their relationships are conceptualized on the ontological basis of *monism* (Spinoza, Leibniz, Whitehead) rather than Cartesian dualism. The two main theses of the General Systems Theory Movement are here accepted, namely the *hierarchy of systems* and the *universalism of systems*.

The first thesis assumes that systems are hierarchically ordered. The universe is a system that consists of subsystems, which again comprise their own subsystems, and so on. The system is higher in the hierarchy than its subsystem. Accordingly, for each system there is an ecosystem that exceeds it in hierarchy. This hierarchy means, in short, that the survival of a system depends on the ecosystem of which it forms a part; its survival does not rely on its individual subsystem. An individual human being depends on the society to which he belongs, and our societies depend on nature – but the survival of nature is not dependent on the existence of our societies, and each society outlives its individual members. (Wilden 1980, 171, 238-39 – see Chapter 3.)

However, the second thesis of the universalism of systems is not readily accepted here. We need to examine it further. The thesis claims that there are certain principles that are valid for structures of relationships in general, regardless of whether these structures are found in biological metabolism, animal thermoregulation, chemical reactions, celestial mechanics, stock market, or organizational behaviour¹. It follows that we may observe them as systems: different kinds of human, living, and even non-living systems share the same quality of being ‘systems’. This sounds very much like a positivist manifesto – a Grand Narrative that falls prey to postmodernist cynicism. And it would be so, if we declared that we could, in principle, derive the universal principles that constitute the systems of our universe. Positivism places a firm faith in knowledge: the facts are there to be gathered, if only our methods of gathering are accurate enough. But in this study we take a different position in relation to our knowledge. What happens in our gathering of facts is that we create a paradox. What is then our knowledge? Can we *know* the facts? When we “know” the facts, we represent them with conceptual metaphors. Metaphors are paradoxes that enable activity. Knowledge is a paradox that enables the activity of *thinking*. Activity comes first, and then comes knowledge, as a metaphor that is conditioned by the survival of activity. Descartes placed thought before being: “I think, therefore I am.” Pragmatism and monism would turn this hierarchy upside down: “There

¹ A claim strongly supported by recent findings in the study of complexity (see Gleick 1990, Prigogine & Stengers 1985, Bohm & Peat 1992, Kauffman 1995).

‘is’, therefore there is ‘thinking’, and therefore there is ‘me’.” ‘Facts’ are metaphors themselves – so are ‘systems’, too. There is everything to say about the world, but everything we say is only *about* the world, and therefore *not* the world itself¹ – and still *saying* belongs to the world. Metaphors are the products of our attitude of *distancing* ourselves from the world *within* the world. (Chapter 3.) Now, we cannot offer the universalism of systems as the ultimate reality of the world. What we can do is to offer it as a metaphor that hopefully enables our thinking of the world². Accordingly, in this study the consideration of land-use planning *as a system* is a metaphor that is assumed to enable our thinking of land-use planning activity. It has worked for me this far.

1.9.1 Rethinking Information Theory

Many of the concepts generated by the General Systems Theory Movement are here given new definitions. In the case of *Information Theory*, the idea of information as an object is abandoned. No more is information seen as “messages”, which are simply transmitted from the source to the receiver through a “channel”. In his cognition, the receiver does not passively “register” the source’s already structured information, but actively structures his perceptions himself. He *creates meanings, gives form to his perceptions, becomes in-formed through his own creative action*. Individuals create their meanings by engaging in social cooperation. Therefore, their meanings are not idiosyncratic. In this sense there are no “receivers” of information, and information is not something one can transmit to another. The source is not “outside” the receiver sending messages. Instead, the source is understood to form a part of the receiver’s perceptual and conceptual world, and there is therefore no “channel” between them. It also follows that there is no such “noise”, either, that would disrupt information as it supposedly travels through the channel (for example the telephone wire). Information is not a moving “object”, and noise is not an obstacle situated in the channel. But although we here abandon the idea of the channel (and hence the existential separation between the source and the receiver), the concepts of information and noise are still useful to retain. We shall return to them shortly.

1.9.2 Rethinking Open Systems

Accordingly, the idea of the *system* as “open” to its environment, and therefore as separate from it, is abandoned. But in order to go further with our argument, we need to

¹ “[A] word always signifies what it is not”, (Wilden 1980, 248).

² But systems are not mere abstractions, either. Just because we conceptualize our reality as consisting of systems (or organizations), we behave accordingly, and thus cause such processes in our reality that would not have taken place, if not guided by such thought models. (See Anttiroiko 1993b, 130-31.) A metaphor is *in between* abstraction and concrete reality. It is an abstraction that enables organized activity in the concrete reality, which again is transformable into the abstraction thus used.

develop our concept of environment. Part of what, until now, has been referred to as *environment* will hereafter be associated with the concept of *ecosystem*. In short, *the environment is a coded ecosystem, and the system is that which codifies its ecosystem and thereby makes the latter its environment*. The system's environment is a unique *modality* of its ecosystem (see Spinoza 1994, Whitehead 1946). Following Alfred N. Whitehead's (1946) thinking, we may state that the system's environment is the system's "prehesive unification" of its ecosystem. The cybernetic system emerges from its ecosystem by making a system-environment distinction. The system determines its environment by its own sensitivity. The system's environment consists of those codified differences that the system is able to recognize. *The system is the activity of codification*. The system is not "open" to what it cannot codify; in this sense it is a "closed system". But the system is not self-sufficient, either. It is also a part of the ecosystem from which it emerged by creating itself – by creating a new form of codification within the ecosystem. It is the processes of differentiation within the ecosystem from which the systems emerge; and different systems are different differentiations of the same ecosystem. The same ecosystem thus differentiates into different environments. (Chapter 4.) In Luhmann's theory of modern society, the ecosystem is the society; and in the processes of modernization this ecosystem has differentiated itself into such "function systems" as politics, economics, law, science, and religion. Each function system provides its own mode of codifying the society-ecosystem. (See Luhmann 1990¹.)

If we assume that the system is a part of the ecosystem which it codifies, we may infer that there must also be other changes taking place in the ecosystem than the ones codified as the system's distinctions. These uncoded changes in the ecosystem force the system, from time to time, to recodify itself. The "openness" of the system, in this regard, means both its necessity and ability to recodify itself (Wilden 1980, 143; Kuhn 1975, 117). Morphogenetic systems are open systems, because they possess this ability, i.e. they are able to self-differentiate. In other words, they are able to differentiate their environments. Cybernetic systems, instead, are closed systems². They lack the capability to recodify themselves, and they therefore break down in the face of uncoded variety.

The concepts of information and noise are here redefined to denote the state and changes in a system's codification activity. In short, information is a system's activity of codifying its ecosystem, and noise is uncoded variety that disables this activity (Wilden 1980, xxix, 11, 112, 137-38, 399, 402). Noise, in other words, implies a decrease in a system's ability to codify its ecosystem into its environment. Following Wilden, it is not an environmental intrusion, but a product of the tension between the various subsystems or levels of the historical ecosystem (*ibid.*, 402). Similarly to these concepts, also the key concepts of systems theory – 'system', 'environment', 'open system', 'closed system' – are also retained here, but given new meanings. (Chapter 2.)

¹ Luhmann adopts from Parsons the general approach to modernity as a process where the society differentiates into its functionally differentiated subsystems. We will return to Luhmann's theory in Chapter 4.

² Bateson treats cybernetic systems as closed loops, networks or "units of mind", where transformations of differences are causally ordered (Bateson 1987, 490).

1.9.3 Rethinking Cybernetics

In the case of *Cybernetics*, its feedback devices are overheated beyond the point of returning back to homeostasis, as we did with the thermostat above. We have examined what happens to these control systems, when they lose control. At the same time we have extended the use of cybernetics as a theory beyond the realm, which it was originally intended to describe and explain. In order to do this, we had to frame cybernetics by redefining some of its key concepts. But even when we approach theoretically those extreme, far-from-homeostasis situations, there is no need to abandon cybernetics. As we give up the idea of dualistic separateness between the system and the environment, we also give up the idea of the cybernetic system as a control system. The system does not meet the ecosystem at the same level; instead there is a discontinuous leap from one level to the other. The paradox of this system–ecosystem relationship is that the system represents this relationship to itself as a one-level continuous relationship between itself and its environment. *The cybernetic system is a paradox*. It aspires to control its environment, but what is formed as its ‘environment’ is only its own representation of its ecosystem, while the ecosystem remains uncontrolled (not necessarily unstable) at the hierarchically higher level. The thermostat, the iconic device of cybernetics, does not control the room temperature; instead it may be seen as representing the differences in room temperature by its *heating on/off distinctions*. The system itself is a part of what it represents. Therefore, the system is subject to what it treats as its environment, and not vice versa.

But the concept of control still remains an important one. The human cognitive systems are not existentially separate from their ecosystems, but continuously attempt to establish their illusory separateness from their environments, and thereby their illusory control of their environments. The separateness of system and environment and the concept of control system are therefore not taken as the point of departure in the sense of Cartesian dualism. Instead they are paradoxes that are produced by the “movement of difference” (see Derrida 1988, 16-17). “*Cogito, ergo sum*” is not the ultimate axiom, but a “product” of the self-differentiating universe. “Feedback” is also such a paradox of a system that has produced its distinctiveness from itself. Feedback is not received from the environment, but a difference in the ecosystem is transformed into a system/environment distinction (see Figure 8). This discontinuous transformation is information (Wilden 1980, 174, 222, 247; Bateson 1987, 315). The transform of difference is the activity by which the system maintains or cultivates its system/environment boundary. The essence of the system is this boundary. The system survives for as long as it is able to transform events that take place in the world into information perceptions. Transforming is the same as *in-forming*; it is the maintenance of the system–environment boundary by which the system reproduces its “*in-side*” and “*out-side*”. With noise we mean such events that the system is not able to transform. Noise means becoming less differentiated. It is the opposite to information. Noise is a reduction in a system’s activity, in other words, a reduction in boundary-forming. The ultimate goal of the system is to maintain its boundary-forming activity, i.e. the activity of in-forming.

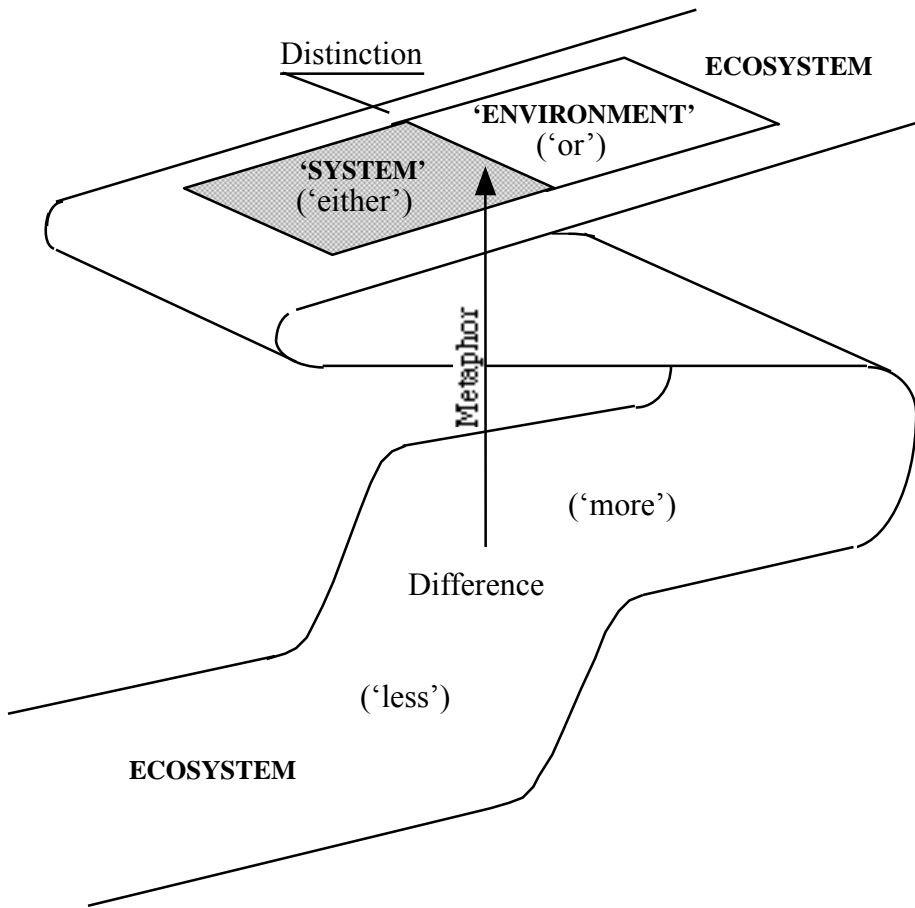


Fig. 8. The metaphoric transformation of an ecosystemic difference into a system/environment distinction within the ecosystem. (For the concepts 'more', 'less', 'either' and 'or', see Chapter 3.)

Homeostatic oscillation is only a simplified model of one form of boundary-maintaining activity. If we wish to understand human systems, we need much more complex models. Here, we meet unstable morphogenetic systems that are constantly creating new boundaries within themselves. These systems self-differentiate in order to maintain their most basic difference, e.g. the difference from the ecosystem that constitutes their existence. According to Luhmann, the function system of science is based on the boundary between truth and falsity (Luhmann 1990, 174-76, 232). By this boundary, science differentiates itself from its society-ecosystem. Science is the society-ecosystem transformed into true/false distinctions. In principle, it is analogous to a thermostat which transforms its own ecosystem into "hot/cold" distinctions. Science is about constituting

and maintaining the realm where truths are separated from falsities, and where science itself becomes signified as the system of truths against the environment of falsities. In the course of the development of science new truths are revealed and old truths become falsities. Science would be a "homeostatic system" if that which once was true would always be true. By changing its determinations of what is to be considered as true knowledge, it displays its morphogenetic quality. But this does not run counter to Luhmann's basic claim that science endures by making true/false distinctions. By changing its determinations of truth and falsity, science is able to continue deciding between them in new circumstances where old truths are no longer valid. The end of science would come only if truth no longer had any meaning in society.

In such an imaginary society, all claims about reality would be equally valid (or invalid), and nobody would be interested in choosing between claims in terms of truth or accuracy. The same goes for scientific knowledge of land-use planning issues, too. The "science" of land-use planning will endure as long as we make true/false decisions between claims concerning our urban environment and claims concerning the problems, needs and expectations of our urban life.

Cybernetic thinking and cybernetic concepts should not be abandoned. Such concepts as 'goal', 'control', 'difference', 'stability', and 'code' are not restricted to thinking in terms of homeostats or servo-mechanisms – not if we think of them as boundaries themselves, such as goal/loss of goal, controlled/uncontrolled, differentiated/undifferentiated, stable/unstable, and coded/uncoded.

1.9.4 Rethinking Game Theory

The same applies to *Game Theory*, too. To use the game metaphor in the description of different realms of societal activity – such as economics, politics and administration – does not mean that we are restricted to thinking of them as opportunistic, antagonistic, strategic, and rule-bound games. We do not have to conceive human relationships only as oppositional, be it opposition between competing firms or interest groups, opposition between positions in organizational hierarchy, or opposition between correct and incorrect, moral and immoral behaviour. The game metaphor, like all metaphors, is a boundary. Economics, politics and administration are not *a priori* games, but assume in certain situations (and lose in some others) such properties that they are describable as games. Therefore, our perspective goes beyond observing economics, politics and administration as games where players (including the "Nature player") play against each other. The production and reproduction of game properties in economics, politics and administration are conditioned by their society ecosystem. The focus, therefore, is on the movement between the existence and non-existence of the economic, political and administrative games. Hereby we also observe the movement between the existence and non-existence of such oppositional boundaries that belong to opportunism, antagonism, non-cooperative strategic action, and rule-bound behaviour. Intentions, emotions and behaviours flow between opportunism and altruism, antagonism and empathy, individual and collective, strategic and spontaneous, rule-bound and rule-free. Play *against* and play *with* are not mutually exclusive alternatives, but stand in a dialectical both-and

relationship. Different social situations engender different social attitudes that may be describable as more play against and less play with, or vice versa. The game is potentially, but not inevitably, there as a description or as an organizing idea of situated social activity.

1.10 Between Game and Play in Land-Use Planning

Local land-use planning activity is here conceived of as a system that consists of *three subsystems*: planning *expertise*, planning *politics*, and planning *economics* (Chapter 4). Each of these subsystems maintains itself by reproducing its boundary (system-environment distinction). For each subsystem these basic boundaries are:

- administrative or professional expertise/non-expertise (expertise),
- majority/minority (politics);
- profit/non-profit (economics).

The subsystems can be treated as games, when these boundaries are kept fixed. There are hence fixed ways of gaining administrative knowledge, reaching majorities behind decision proposals, and finding sources of profit; concerning those issues in the context of land-use planning that have become professional, political or economic matters. Accordingly, people are given fixed roles in these administrative, political, and economic planning games along such main role boundaries as

- professional/layman, public manager/worker, our/their department;
- representative/represented, chairman/board, our/their party (our/their interest group);
- producer/consumer (supplier/buyer), private manager (owner)/worker, our/their firm.

The land-use planning system, as a whole, is a public body and therefore rests on a basis of *legitimacy*. As we have seen, there are two kinds of legitimacy: *legal* and *ethical* legitimacy. The distinction *legal/illegal* attempts to represent the movement of the difference between *more and less ethical* – which is also closely related to *more and less practical*. The two aspects of legitimacy, law and ethics, can be integrated into one *dialectical concept of legitimacy, which refers to the metaphoric bind between the legal/illegal distinction and differences in ethics*. Decisions between what is legal and what is illegal are legitimate when they correspond to our understandings of right and wrong.

The games of land-use planning mostly base their legitimacy on the *legal/illegal distinction*. In the administrative game, planners' choices are legitimated by the legal authority derived from their public office, and by the laws and norms that determine the correct planning procedures and binding factors to be taken into account. In the political game, politicians legitimize their decisions by their position as legally or officially elected representatives and by the laws and norms that ensure the official validity of meetings and the decisions they produce. The economic game relies on property rights and laws on commerce.

Because all of these games have to do with the handling of public affairs, they also have to legitimize themselves on the basis of their *representativeness of the public*. Each game has its own specific way of representing the public. For the administrative game, the notion of '*public interest*' fulfils this function. Public interest, in turn, legitimizes the scientific method and the experts who use it. Public interest is offered as a scientific concept, which can be derived only by using the allegedly impartial and value-free scientific method. In the political game, the matter of representativeness is dealt with formally by *electing representatives* of the public. The role of a councillor resides on the formal legitimization procedure of public election, by which the councillor becomes signified as a representative of the public. In the economic game, the pursuit of private profit is claimed to represent the public good by appealing to the '*invisible hand*'. The free market of private economic actors is said to self-organize into results that provide collective economic wealth. Hence, because the pursuit of private good is explained to contribute, in its own mysterious way, to the public good, it is therefore also taken to represent the latter. What is simultaneously taken as the highest end of decision-making is economic growth. (See Logan & Molotch 1996.)

The game metaphor breaks down in situations where action in terms of fixed boundaries is no longer possible. When the system tries to redefine its own boundaries, the game dissolves into *play*. Whereas game is goal-seeking activity, i.e. activity that has a given goal, play is the "pure" activity of *seeking* – activity that has no beginning and no end (Wilden 1980, 399 – see Chapters 2 and 6). Play in land-use planning is necessary when one or some of the administrative, political or economic games has lost its legitimacy. It means that there is a loss in the ability of the land-use planning system to make legitimate decisions on land-use planning issues. The metaphoric bind of legitimacy turns into a double bind. What is wrong is made legal, and what is right is made illegal. Private interests are pursued in the name of public good. Referring to our three subsystems of land-use planning, we speak of three types of illegitimacy: *illegitimate expertise*, *illegitimate majority*, and *illegitimate profit*.

In the administrative planning game, expertise becomes illegitimate when a professional planner's arguments or choices are questioned by laymen and/or other professionals, and the planner is not able to justify his choices – i.e. appeal to the values of those who are affected by them. Professional values cannot survive if they only refer to professionalism itself and have no correspondence to other cultural values. The planner loses the legitimacy of his actions when he appears to act technically as an expert administrator of a programme, while he is revealed to be making political value choices in the modification of this programme. The planner may restore the legitimacy of his actions when he exposes the political nature of his choices and thereby makes these choices publicly accountable.

The game of planning politics becomes illegitimate when planning decisions are made on the basis of an illegitimate majority. The political majority may become illegitimate in the following situations:

- the difference in size between the majority and the minority is too small;
- the majority opinion in the council does not correspond to the most generally held opinions in the community;
- the council bases its decision on the "public opinion", when the "public opinion" is merely an illusory product of politics and media – a forced boundary between people's thoughts;
- due to pressure (party discipline, authority of the chairmen) or manipulation of binary voting sequences on numerous decision alternatives (see Rapoport 1989, 252-69), councillors or board members vote against their own values and opinions, which leads to forced majorities behind decision proposals;
- political struggles lead to inappropriate boundaries between decision alternatives. Decision-makers find themselves in a situation where they have to choose either one or the other alternative when it is against their common sense to drop either of them. By putting "our" proposal against "their" proposal, the political game can find only a partial solution in relation to such consensual search that could derive benefit from valuable properties that *both* of the proposals have.

These are all situations where political majority decisions fail to represent the attitudes within society. Politics fails to fulfil its basic function: the representation of the public will. This failure is not always a result of poor politics, but also, increasingly, a consequence of the fragmentation of our postmodern society: there are no majorities to represent any more (Ryynänen 1996, 125; Mannermaa 1993, 131).

Finally, land-use planning as an economic game loses its legitimacy when it is shown to produce profit for some at the expense of collective economic welfare in the community, or when it attempts to treat public planning issues as trade secrets. As professional and political values, economic values survive as long as they are in harmony with the other cultural values. There has to be a wider acceptance of the appropriateness and primacy of cost-benefit analysis, for example, in structuring a planning problem and the relative means and ends. When should property rights be allowed to outweigh other rights is a question that relies on legitimacy. To some extent, this question is answered by law. But even laws need to be changed, when they lose their *ethical* legitimacy.

Play in land-use planning is here called *political activity*, largely in reference to Hannah Arendt's (1958) idea of political action as the inherently unpredictable public realm of free citizens (Chapter 5). Political activity is distinguished from *politics*, which is here reserved to indicate political activity as a fixed game (see Carse 1986, 39). Politics is irrational (inefficient), while political activity frames rationality. Local land-use planning as play brings forth the ancient idea of local community as a *polis* (city-state). Polis is the space of mutual appearance. To appear mutually is to share reality. Without a shared reality meaningful communication is not possible. The political game – as well as the administrative and the economic games – loses its legitimacy, when its values cease to be mutually apparent within the community. It becomes a privatized reality, or an epistemic community of politics. *The movement between game and play in land-use planning is the movement between technical and political planning activity. Technical planning expertise* is "privatized" planning, where professional planners treat other participants as an environment of laymen and heretics under their strategic control; in

technical planning politics, politicians, accordingly, attempt to control their own environment of voters or political opponents; and finally, in *technical planning economics*, suppliers of estates (investors and developers) try to control their environment of buyers and competitors. But political activity, on the contrary, seeks to create a public realm. It seeks to share the realities of expertise, politics, and economics.

I do not share the pessimism¹ of Luhmann, who claims that modern society is so differentiated that the public realm has become an impossibility (Luhmann 1990, 32, 220-21). My assertion is that, at least *situationally*, we may cross the boundaries of such differentiated subsystems as expertise, politics, and economics. This does not mean that we could turn back the time and "restore" the coherence our society had before it differentiated into separate function systems. As Luhmann claims, after modernization, the society is no longer observable *as a whole* within society. No function system, not even the political system, can represent the modern society and thereby act as its centre. (*Ibid.*, 220-21 – see Chapter 4.) Hence, in modern conditions, the public realm cannot assume a position where it could truly represent the whole of society. But at times people, approaching each other from the contexts of different function systems, may come to understand each other's epistemic understandings and view them together. This means that a planner, for example, is not necessarily bound to perceive and conceptualize a planning problem from his own professional perspective only, but may learn to perceive it from the political and economic perspectives, too. The shift in perspective enables one to view critically the preconceptions and social attitudes that have become fixed in one's own epistemic game. For the planner, this means situated reflection on the basic distinctions of professional knowledge/ignorance, public/private interest, professional/layman, etc. that constitute the context of his practice. Play in political activity means that one is even able to *play with distinctions*, take them out of their separate epistemic contexts, and create new metaphoric combinations between them. In a dialogical play, new inter-systemic connections are made by creating new inter-systemic distinctions. The paradox of this process is that, for each subsystem, this inter-systemic expansion is not achieved by dedifferentiation, but by further differentiation, where the subsystem emerges as its own metasystem. The public realm is the transculturally shared ability to view different differentiations of society together – as they are actualized and thematized in the handling of a problematic social situation – and the ability to bring these differentiations into a mutual dialogue. The public realm is not readily there; instead it is *created situationally* by the reflective political activity of actors entering the realm from different epistemic perspectives.

Unlike Habermas's lifeworld, the public realm, as here presented, is itself a *product of a social learning process* and not a given horizon of preconceptions and everyday understandings. What makes planning communication so problematic is that such a shared horizon is missing and has to be constructed during the course of planning. It also follows that this process cannot be rational, because shared validity criteria are missing. Each subsystem – planning expertise, planning politics and planning economics – has its own validity criteria: its own methodology of constructing problems, finding solutions, and judging alternatives. The boundaries between these criteria are discontinuous, and there is no overriding criterion that could embrace them all. *This* is the inevitable

¹ If we may call it that.

condition of modernity. As there is no transcultural rationality to be found, we must put our hope in *creativity*. Through creative planning we may find situated solutions where the demands of different criteria are met simultaneously. It enables us to find consensus despite the fact that we lack consensual rationality. A planning decision may be found illegitimate not because it violates some general public values, but because it is inconsistent with the value criteria it purports to fulfil, or because it harmonizes with one value criterion but is inconsistent with the other criteria that are considered relevant. For example, a majority decision may turn out to be only an appearance of a majority decision, or a majority decision may be shown to have poor quality from the professional or economic perspective. In both cases, consensus is lacking. In transcultural planning situations, where different intentions and aspirations cannot be combined to aim at a single and unambiguous end, the legitimacy of conduct seems to depend on its inner coherence in view of its purpose, and on its capability to tolerate and adjust to the coexistence of other kinds of conduct that aim at other purposes.

Play is political activity where the professional, political and economic reasonings are mutually revealed and where, at the same time, the rules for each game (administrative, political and economic) are critically and creatively redefined. When these games dissolve into fluent play, they may seek to restore the legitimacy they have lost. This is why such play is called political activity: *political activity is a search for legitimacy*.

Political activity is thus also *ethical activity*. Here we are not interested in defining the *content* of ethical activity. We are not even interested in defining the content of legitimacy. *Law* is about substances, first of all about legal persons: the legal rights and responsibilities of citizens and social institutions, and penalties for violators of law. It is difficult to define the factors that constitute legitimate conduct – it is much easier to recognize illegitimate conduct. Similarly, we do not notice the metaphoric bind between our ideas and actions, but we would recognize the loss of it – the double bind. *Ethics is a form of activity, which has to do with critical awareness of a loss of legitimacy in our organized social activities, and with creative reorganizing of these activities in search for more legitimacy*.

PART II: THE HUMAN SYSTEM

The purpose of this part is to provide the epistemological basis for my theoretical approach to learning and reflectivity in land-use planning. As the outlines of my systems-, activity- and communication-theoretical approach to planning theory and its relation to other respective planning theories was clarified in Part I, it is now time to look deeper into that approach. The basic theoretical framework for observing planning systems will be formulated by discussing the processes of objectification, role formation, routinization and reflection, and by describing the communicative relationships of presence and representation, cooperation and control, use and exchange in social activity systems. In Chapter 3, this framework will be developed into a hypothesis of human language as a layered structure of different levels of communication. In Part III, it will be used for a systematic theoretical description of land-use planning activity.

2 The Voluminous and the Conscious

In this chapter, I will present my theoretical approach to the human organism as a bodily and conscious being. My view stems from Benedict (Baruch) Spinoza's monism and from Alfred North Whitehead's organismic philosophy, which largely builds on Spinoza's world view. There are five axioms in my approach. *Firstly*, there is only one substance, *Nature*. *Secondly*, Nature is a conglomeration of all its *modalities* or, to use Whitehead's concept, a conglomeration of all its *organisms*. In my vocabulary 'modality' and 'organism' are largely synonymous to 'system'. In many instances, the concept Nature could be replaced with the concept '*ecosystem*', although these concepts are not identical. A system is a modality of its ecosystem. Nature is the ecosystem of ecosystems. *Thirdly*, Nature, with all its systems and ecosystems, is constantly *evolving*. *Fourthly*, man is but one of Nature's modalities. In short, this means that there is no ontological separation between man and man's environment. Together they constitute a man-environment system that is *the form of Nature characteristic of man*. *Fifthly*, man is a system that achieves *consciousness* of itself, i.e. is a system that produces representations of itself. This is a crucial property that makes the human system unique among the systems of Nature.

This chapter consists of three main sections, *The Voluminous*, *The Conscious* and *The Metaphoric Bind*. In *The Voluminous* I will present an abstract theoretical description of what is meant, structurally and logically, by organism and Nature. The argument then proceeds to defining aspect, perception, memory, knowledge, habit, cooperation and emotion as properties of a system as a living organism. In *The Conscious*, I will clarify what is meant by consciousness, how it is formed, and how it operates. At this stage we will arrive at a description of the human organism as a system that has an ability to represent itself and is thereby able to form *social systems* – i.e. systems of mutual cooperation with distributed tasks between human beings. Finally, in *The Metaphoric Bind* I will describe the interplay between the voluminous and conscious properties of human existence in relation to the formulation and habituation of conceptualized activity. I will also suggest that this interplay reaches its highest intensity in *creative planning*.

2.1 The Voluminous

'Activity' and '*relationship*' are the two concepts that are most difficult to conceive of through language. Language transforms activities and relationships into frozen objectifications. Language *is* activity and relationships – but activity and relationships in the form of *representing*. This representing provides frozen objectifications as representations of activities and relationships. Activity and relationships reside beyond the transformative processes of language. All attempts to describe them are paradoxical, because the descriptions can be made only by using static objectifications. In this section, I will try to describe the indescribable and explain the unexplainable. The task is paradoxical, but this does not mean that it would be useless.

The assumption is that activities and relationships are the "stuff" that organisms are made of. The abstractions 'activity' and 'relationship', with their differing referential horizons, are the two separate tools with which we attempt to approach conceptually something that is originally a single phenomenon. *Being is being in a relationship*. The organism is composed of its relationships to its environment. It exists by continuously organizing these relationships.

In his classic book *Mind, Self, and Society* (1962, orig. 1934), G.H. Mead proposes that each living organism has a certain active *attitude* to its environment and defines its environment through that attitude. The organism is sensitized to the environmental stimuli that set its responses free. (Mead 1962, 128.) Here, the meaning of the concept 'stimulus', which is familiar from behaviourist psychology, turns upside down: the organism is not seen as a passive receiver of environmental stimuli, but is rather understood as an active form-giver to the stimuli that are relevant to its existence and survival. We could postulate that each animal or species has a certain kind of environment to which it is sensitive – but I would like to go even further than that. The sensitivity of an organism should not be seen as a "bridge" that connects the organism and the environment, but in the bridge itself both the organism and its environment are given form. To give a better formulation, the environment is given form in this sensitivity, and the organism is the activity of form-giving. For an organism, nothing exists beyond its sensitivity, no environment that could be perceived. Each organism, or species at another level, can be understood as the maintenance and evolution of a specifically organized environment. As the organism dies, the process of organizing the environment ends. The extinction of a species can be approached as the disappearance of a certain species-specific environment, which also poses a threat to the existence of other species-specific environments. Here, Nature loses one of its modalities.

Man, like other organisms, has its own species-specific environment. In the form-giving and maintenance of this environment consciousness is not directly involved. Instead, consciousness should be seen as a "second-order structure". In the formation of consciousness, man's species-specific environment becomes aware of itself. A conscious human being objectifies his own species-specific existence. In this chapter, an analytical distinction will be made between man's species-specific environment and the 'objectified environment'. This section will focus on the former, and the next section on the latter. I am not claiming that this distinction between man's "pre-conscious" and conscious environment exists in any other form than as an analytic construct. The species-specific

environment and its conscious objectifications are intertwined in complex ways. The ways in which we objectify our environment become habituated over time and thereby "sink" below the level of consciousness and begin to direct our unconscious perception. On the other hand, even infants before the awakening of their consciousness relate to built and "object-filled" environments – environments that are largely shaped by conscious beings.

2.1.1 *Organism*

In the tradition of Spinoza's monism, reality is not seen as consisting of material substances. Instead, activity is seen as the fundamental characteristic of reality. There is only one substance, Nature. Nature is creative. According to Whitehead, a profound mistake of modern science has been the presumption of the material character of the universe. This "*materialism*" comprises the idea that each particle of the universe can be given a specific location in space and time. Each particle would thus occupy certain finite coordinates in space and a certain finite duration on the axis of time. In order to define a particle, one only has to point at these unambiguous coordinates, without having to refer to other coordinates in space and time. (Whitehead 1946, 72.) Newton's world was built of absolute space and absolute time, where different material substances were to be given their "simple locations"¹ in the Cartesian coordinate system. By summing up successive time units, one determined how long each substance occupied given coordinates in space. Classical physics is based on observations and calculations of movements of objects that are thus definable. Whitehead holds that this image of the material universe was maintained even in Einstein's theory of relativity (*ibid.*). Now it was no longer possible on the cosmic scale to divide space and time into their own absolutes. Instead, they were unified in a single four-dimensional and topologically curved coordinate system. But in this new coordinate system, too, each material substance could be given a definite and finite location. According to Whitehead, it was only the emergence of *quantum physics* that posed an inescapable challenge to the natural science of redefining the material quality of the universe.

Quantum physics leads us to a hypothesis that the ultimate elements of matter are *vibratory* in their essence. Matter is to be understood as a periodic system that exists and is observable by means of the periodic recurrence of certain aspects (*ibid.*, 47). Without recurrence, knowledge would be impossible, since there would be nothing to refer to in our past experience. Without some regularity of recurrence, measurement would be impossible. Whitehead maintains that, among the primary elements of nature, as apprehended in our immediate experience, there is no element whatsoever which possesses the character of simple location in space-time (*ibid.*, 72). He asks instead, what the ingredients of this vibratory matter are. To be more correct, he asks what constitutes

¹ "To say that a bit of matter has simple location means that, in expressing its spatio-temporal relations, it is adequate to state that it is where it is, in a definite finite region of space, and throughout a definite finite duration of time, apart from any essential reference of the relations of that bit of matter to other regions of space and to other durations of time" (*ibid.*).

the vibratory *organism*. The concept of matter "with its appearance of undifferentiated endurance" must be abandoned, since what is left as the ultimate essence beneath the existing phenomena is vibration, i.e. activity.

Whitehead holds that the thought model of "materialism" is unable to incorporate evolution within itself. Physical endurance is to be seen as a process where a certain character is continuously transmitted through a historical route of events. This character belongs to the whole route and to each event on that route. It is not material – such as matter or electricity – that endures, but *structures of activity*. (*Ibid.*, 134-36.)

"This is the exact property of material. If it has existed for ten minutes, it has existed during every minute of the ten minutes, and during every second of every minute. Only if you take material to be fundamental, this property of endurance is an arbitrary fact at the base of the order of nature; but if you take *organism* to be fundamental, this property is the result of evolution." (*Ibid.*, 136.)

A theory which regards change as movements of particles is unable to explain how new shapes and aspects of matter are created.

Whitehead replaces the concept of matter with his concept of organism (*ibid.*, 241). It is worth noticing that his concept of organism is not confined to denote organisms of the living nature only – or, in other words, structures that have cells as their basic constituents. "The organisms of biology include as ingredients the smaller organisms of physics [...]" (*ibid.*, 129). Whitehead's concept of organism includes, furthermore, the concept of the interaction of organisms (*ibid.*, 130). Whitehead does not make a fundamental distinction between living and non-living nature. The universe consists of mutually organizing events and it is thus thoroughly active.

In quantum physics, an entity is identified and defined in terms of its effects on the entities that surround it. This goes for the observer as an entity, too: the observer is identified in the changes his observations cause in the observed phenomena. It is not the entities "themselves" that count, but their aspects in other entities. (*Ibid.*, 190.) This is also the position of "bootstrap" physicists, according to whom a particle is completely defined by the set of interactions in which it takes part (Thom 1980, 321). In order to define an entity in abstract terms, Whitehead does not direct his attention to the entity "in itself", but rather to its environment, determining the entity as the mode by which its environment is moulded by it. As an alternative philosophy of modern science, this approach can be called "*interactionism*" in contrast to "materialism" (see Sheldrake 1988, 211).

2.1.2 Volume and Its Forms

Organisms act in four-dimensional space-time. According to Timo Järvilehto, one cannot locate an organism¹ in any specific region in space and time. Space and time are the dimensions of the organism. (Järvilehto 1995, 138.) Organisms are not *in* space and time, instead they *give form* to space and time.

¹ Organism-environment system in Järvilehto's terminology (Järvilehto 1999).

Whitehead has derived three basic characters of space-time:

1. The *separative* character. Things are *separated* by space and by time.
 2. The *prehensive* character. Things are *together* in space and time.
 3. The *modal* character. Each thing is given a unique *form* in space and time.
- (Whitehead 1946, 80.)

*Volume*¹ is the most concrete characteristic of space. If we were to acknowledge the separative character of space only, we would end up in endless reduction of volume into its subvolumes, approaching the situation where what is left is a mere set of non-voluminous points. A building as a multiplicity of points is a construct of logical imagination. The prehensive character of space is the prerequisite of the existence of different volumes. No volume in space exists independently of other volumes, but comes to exist through other volumes. (Whitehead 1946, 80-82.)

Let us assume that there are three volumes in space, A, B and C. Both volume B and the volume C have a certain aspect in relation to volume A. This means that the volumes B and C are defined from the standpoint of A as certain aspects of A. Let us call these aspects b(A) and c(A). Accordingly, A has a certain aspect a(B) from the standpoint of B, and another, different aspect a(C) from the standpoint of C. A has a different relationship to C than to B, so from the standpoint of C, it has a different aspect compared to that from the standpoint of B. Between two volumes, A and B, there is hence not only one relationship (A—B), but *two*, $A \rightarrow B$ and $A \leftarrow B$. There is one relationship between A and B that is determined from the standpoint of A and another relationship between A and B that is determined from the standpoint of B. The first relationship is the aspect that B has for A, that is b(A), while the second is the aspect that A has for B, a(B). A simple example could be the relationships between a flower and a bee. The flower as an aspect of the bee is "food for larvae"; the bee as an aspect of the flower is a "distributor of pollen" (see Figure 9).

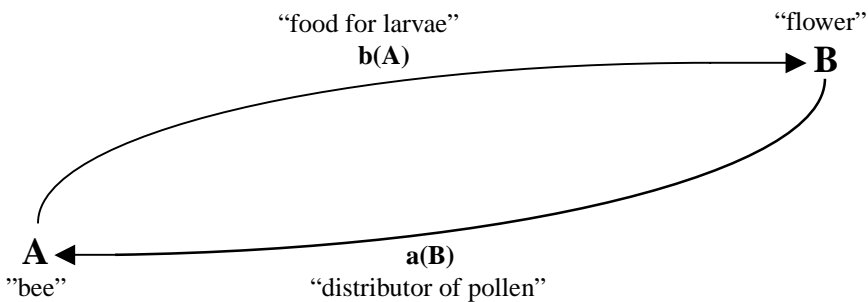


Fig. 9. The relationships between A ("bee") and B ("flower") where each becomes an aspect of the other, b(A) ("food for larvae") and a(B) ("distributor of pollen").

¹ Corresponds, as a concept, to the 'attribute of *extension*' in Spinoza's *Ethics*.

In the "universe" of three volumes – A, B and C – volume A is an organization of the aspects $b(A)$ and $c(A)$, which are determined by A's relationship to the surrounding volumes B and C. Volume A is formed from the aspects $b(A)$ and $c(A)$ without being a sum of them. Volume A derives its essence from the mode by which A *organizes* $b(A)$ and $c(A)$ into a whole, $b(A)-c(A)$.¹ B's aspect from the standpoint of A is the *mode* by which B becomes a part of the composition of volume A. A as a voluminous entity is the prehensive unification of each aspect that A's environment has for A. (Whitehead 1946, 80-82.) "The shape of a volume is the formula from which the totality of its aspects can be derived" (*ibid.*, 81)."

The volumes A, B and C, as composites of the aspects they derive from each other, can be illustrated as in Figure 10.

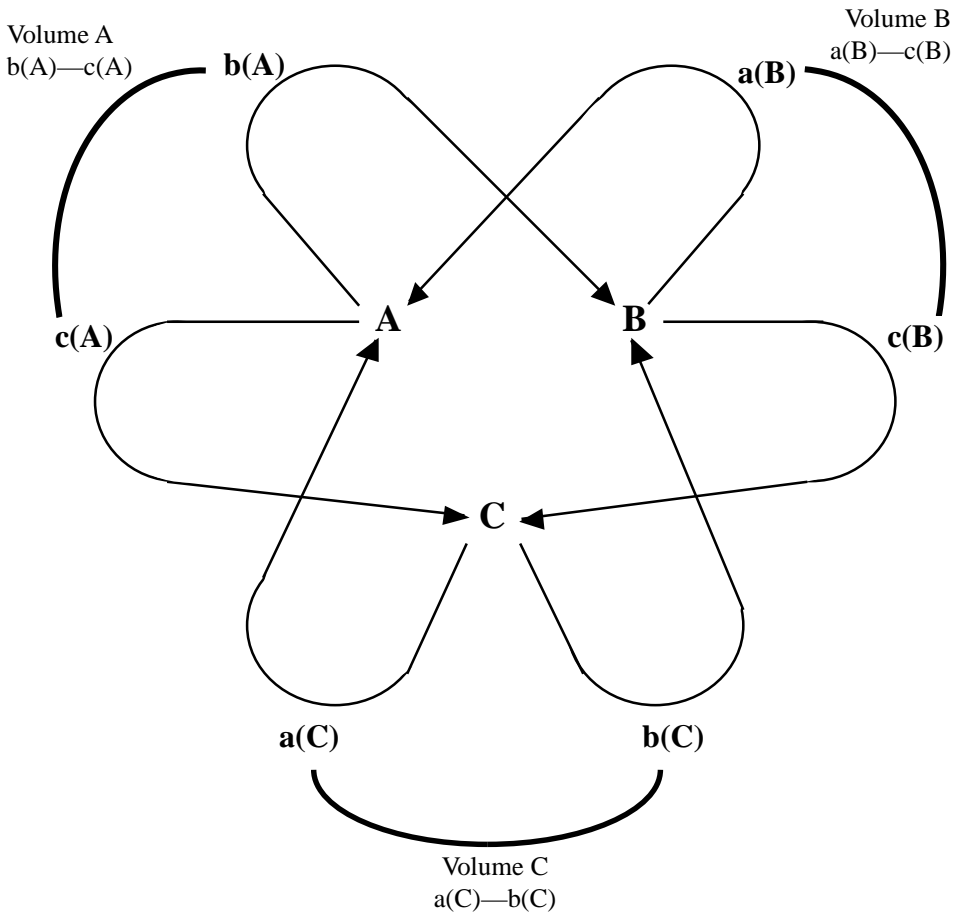


Fig. 10. The "universe" of three volumes: A, B and C.

¹ "A system is distinguished from its parts by its organization. It is not an aggregate" (Wilden 1980, 202).

By *modus*, or form, Spinoza meant the unification of particles (Spinoza 1994, 100). Particles, in turn, are separate from each other only by their form (*ibid.*, 58). For Spinoza the universe revealed itself in forms that are shaped from each other; forms that become building blocks to each other. Here, form is understood as the activity of an organism whereby the environment becomes organized into aspects of the organism.

The volumes of space do not have an existence independent of other volumes. They become entities only in the whole that surrounds them. They cannot be detached from their environment without destroying their essence. Whitehead follows Leibniz by stating that "every volume mirrors in itself every other volume in space" (Whitehead 1946, 81). The mode by which B becomes A's aspect is the form by which A is mirrored in B. The bee is mirrored in the flower as the food which the bee carries to its larvae. In order to determine a volume, we need to approach it both atomistically and holistically. The atomistic approach enables us to identify a volume from its environment. But without a holistic view, we could not describe it, because it is a fundamentally active entity that can only be described via its relationships to its environment. In a sense, we have to look away from it, into the "mirrors of its environment" that reflect it.

Above, we have concerned ourselves only with the *spatial* relationships between volumes, but the same principles apply to their relationships in *time*, too. Volumes occupy space *and* time. Therefore, a single organizing event that takes place at a certain moment mirrors all the other events that have taken place at other moments in the past and in the future. A duration in time mirrors other durations. (*Ibid.*, 80-82.) "In a certain sense everything is everywhere at all times. For every location involves an aspect of itself in every other location. Thus every spatio-temporal standpoint mirrors the world." (*Ibid.*, 113-14.) Form is the construction of space-time.

What is man's environment? The human being as an organism gives form to its environment through his activities. Man's environment is an organization of environmental aspects that enables man's existence, and it is man's environmental existence that creates this organization. For example, what are the aspects of air that enable man's existence? These aspects involve a chemical composition that enables the metabolism of breathing, a pressure that maintains the structural coherence of man's organs and wave motions that enable man to see things and hear sounds. Man's environment, moreover, has suitable light conditions that create the rhythm of days and nights, food that satisfies man's need for energy and can be processed by man's digestive organs, hard ground, gravity, contours and shapes of the "physical" environment that fit to man's bodily structure, motorics and dimensions. Man's environment also involves features that smell, taste, and are tactile according to man's respective sense organs. In more general terms, man's environment is the environment that enables man's sensorimotoric activities. Man's environment is man's form.

2.1.3 Perception

Our connection to our world concretizes in our perceptions. This connection may or may not involve consciousness (*ibid.*, 114). Perception is an act whereby the environment is organized into perceived aspects. For a perceiving organism, everything perceived and

perceivable constitutes the environment. There is no separation between the inside and the outside of an organism. Instead, we could say that everything is "outside". For a song-bird that has no self-consciousness, even its own singing becomes an environmental aspect – it becomes a stimulus to which the bird responds by singing more. Birds have an inclination to sing to themselves; babies, correspondingly, have a tendency to talk to themselves. (Mead 1962, 61-65.) Following Whitehead's line of thought, the perception of an environmental volume is the mode by which this volume becomes a part of the structural composition of the perceiver. Perception is the experience of prehensive unification. The unity which we experience in our act of perception is the form of this act. If *green* were the perceived aspect, green would not be located simply at A, where it is being perceived, nor in B, where the aspect is perceived as being located, "but it is present at A with the mode of location in B" (Whitehead 1946, 88). Mead continues:

"Color, for instance, may be conceived of as arising in relationship to an organism that has an organ of vision. In that case, there is a certain environment that belongs to a certain form and arises in relationship to that form. [...] On this view the characters do not belong to organisms as such but only in the relationship of the organism to its environment. They are characteristics of objects in the environment of the form." (Mead 1962, 329-30.)

Järvillehto holds that all man's perceptions have to do with the intermingling of man and the environment, their systemic cooperation which results in perception. In perception, man's nervous system is continuously shaped to determine and interlock with its environment, depending on what man needs and what kind of results his actions are to produce. Perception is therefore activity of a system that the organism and its environment together constitute. In this activity the nervous system, together with the environment, is organized into activity systems that enable the utilization of certain parts of the environment. It is these parts that one "perceives". (Järvillehto 1995, 106.)

It is not decisively the sensoric and motoric organs that determine an organism's perception of its environment, but the organism's *intentional activities* (*ibid.*). The organism's existence is purposive activity whereby the organism attempts to maintain its abilities to act in its environment. This purpose gives direction to the organism's perceptions. (*Ibid.*, 219, 222.) Thus, the process of perception begins even already before the stimulus. If the process had no direction, nothing would be perceived.

2.1.4 Aspects and Differences

In acts of perception events of the environment are shaped into *aspects*. The environment "in itself" does not have any aspects – it has aspects only in its relation to the perceiving organism. Air has different aspects with different meanings as a part of the activity-system of a sparrow than as a part of our own activity system. An oxygen atom has different aspects as a part of a water molecule than as a part of an ozone molecule. Aspects are the events of the environment which the organism is capable of perceiving. To be more accurate, it is not the aspects as such that are perceived but *differences in these aspects*. The environment as a network of interlinked aspects provides the context

within which an organism's acts of perception take place. The organism acts within that network, and what the organism perceives are differences in its structure. An aspect is a relationship: something is mirrored in something else, or the events of the universe become individualized as modes of different creatures. Each aspect is determined within an organism as a certain environmental relation in relation to other aspect relations that together constitute the organism's intentional activity. The organism cannot perceive the relations of which it is constituted. It is not possible for a part of a whole to observe the whole itself. It is therefore not the aspect-relations that are perceived. What is perceived are differences in these relations and in how they are organized. Only that can be perceived which has *meaning* for the organism's survival. There are no meaningless differences in the aspects of the environment. It is differences in the organism's ability to act that are perceived.

Järvilehto sees the universe as consisting of one basic substance which is organized into different systems. Similarly, Whitehead conceives the universe as an interlocking complex of prehensive unifications¹. Each prehensive unification comprises the reality of the whole universe. It is a process where the complex universe is unified into a modality of the organism. Therefore, in a sense, the whole Nature is concealed in each single organism. (Whitehead 1946, 90.) In this sense, each organism is a closed system (see Järvilehto 1995, 69). The universe is enclosed within an organism, but only as modified into aspects and differences that characterise its activity. The universe of A, B and C appears within the organism A as $b(A) - c(A)$. The universe appears within A as one of its modalities, but not in its totality, which would involve all the modalities $b(A) - c(A)$, $a(B) - c(B)$, and $a(C) - b(C)$. From one standpoint to the universe, everything is included but the other standpoints. This is how both sameness and difference, both togetherness and separateness, both inclusion and exclusion take place simultaneously without contradiction. In each organism the same is organized differently, and the organisms are separated by their different ways of being together, and everything of an organism is included in other organisms except the way it includes other organisms into itself.

In principle, there is nothing in the universe to which an organism does not have a relationship. However, the relationships themselves, and the ways in which they are organized, are subject to change. As Järvilehto remarks, before the invention of the aeroplane, air did not have the same aspects for us as it now has (*ibid.*, 65). Aspects are not found, they emerge. The emergence of a new aspect can be understood as a structural change in the environment relationships of the organism, which offers the organism new possibilities for action. This does not mean that a new part of the environment would be added to the activity system; instead it means that the activity system organizes in a new way the environment to which it is already related. A new aspect emerges as a result of changes in the existing aspects. When a new aspect emerges, a change takes place in the *form* of the organism, not in the sum of its components. Form can be defined as a *structure according to which the organism is sensitized to its environment*. Take the cell membrane which forms its environment by being sensitized to molecules that are useful for the metabolism of the cell. A change in the form of the cell membrane implies a change in how it selects its environment.

¹ These prehensive unifications are indeed acts of perception. Here, the concept of perception is not limited to apply to those organisms only that have developed specific sense organs.

2.1.5 *Morphostatic and Morphogenetic Events*

Following Whitehead, an organism can be defined as an organization of its relationships to its environment¹. As an organism, A is activity where B and C are organized in the way characteristic of A, into the form $b(A) \rightarrow c(A)$. The basis of each organism lies in the events where the environment becomes organized into certain forms. With the concept 'event', Whitehead refers to the process of prehensive unification: "An event is the grasping into unity of a pattern of aspects" (Whitehead 1946, 149). It mirrors other events both in space and in time.

"An event has contemporaries. This means that an event mirrors within itself the modes of its contemporaries as a display of immediate achievement. An event has a past. This means that an event mirrors within itself the modes of its predecessors as memories which are fused to its own content. An event has a future. This means that an event mirrors within itself such aspects as the future throws back onto the present, or, in other words, as the present has determined concerning the future. Thus an event has anticipation [...]." (*Ibid.*, 91.)

An event organizes aspects of other events – and, conversely, it becomes itself organized as an aspect of these other events. It thus has both an intrinsic reality and an extrinsic reality, the former being the event in its own prehension – $b(A) \rightarrow c(A)$ – and the latter the event as determined in the prehension of other events – $a(B) \rightarrow c(B)$ and $b(C) \rightarrow a(C)$. (*Ibid.*, 129-30.)

To put it simply, the activity of an organism can be classified into two types of events. The first type consists of the events that maintain the existing form of an organism, and the second type of the events that generate a new form. Using Wilden's definition of the two key systems-theoretical concepts 'morphostasis' (see Wilden 1980, 355, 368-73) and 'morphogenesis'², the events that maintain an existing form could be called *morphostatic events*, and the events that generate a new form *morphogenetic (morphogenic) events*. In morphogenesis, an organism differentiates itself in such a way that new environmental aspects are created. Morphogenesis is thus an event where new aspects emerge. According to Wilden, morphogenesis involves an unanticipated and higher-order change in the 'formula' of the organism. Morphogenesis means a shift in the state of the organism towards a qualitatively new field of stability, which the organism attains by increasing the differentiation of its form. By adding new levels of differentiation on top of the former levels, morphogenesis leads towards higher orders of organization. (Wilden 1980, 363.) For a species, morphostasis would mean the maintenance of its genotype and thereby the succession of the central characteristics of its species-specific environment from one generation to another. Morphogenesis, in turn, would mean a change in the

¹ Chester A. Lawson comes close to Whitehead when he states that "[i]n a very real sense the organism is an organized concentration of the matter and energy of the environment that exists only by virtue of its organization" (Lawson 1975, 81).

² In the concept 'morphogenesis' are combined two Greek concepts: '*morphe*' ('form'), and '*genesis*' ('birth', 'coming into being'). Etymologically morphogenesis thus refers to the origination of form.

genotype that would improve the chances of survival of the species through generation of new aspects in the form of the species-specific environment. In certain circumstances, such as severe climatological changes, the functional abilities of a species can be restored only through morphogenetic reorganization of the species-specific environment. The species, or an organism, has to redirect its sensitivity, since the aspects determined by its prevailing sensitivity no longer provide adequate means of survival.

Morphostasis is based on an economy of perception. The maintenance of a form implies a predisposition to a set of responses without active perception of stimuli. An architect, for example, does not have to pay attention to the logic of descriptive geometry, which he uses to represent his object of design to himself. The architect has already acquired the *form* of descriptive representation. Through the acquisition of form, the environment expands and differentiates. When an architectural student learns to use descriptive geometry as a tool for designing buildings, his abilities to function in the environment expand. For the student, this modelling technique of interlinked horizontal, vertical and axonometric projections with fixed scales provides a new ability to design built space remotely, without having to work on the actual site. The architectural student's environment expands and differentiates to give form to this "modelling world", where observable differences in the built environment are transformed to a set of specific figures and symbols to be made on the drawing board. Descriptive geometry is the *code* of this transformation. The modelling world is not an abstract world. It involves very real office and studio rooms, pencils, sketch papers, computers, tables, chairs, books, catalogues, etc. Modelling is concrete activity where descriptive geometry is used to represent something concrete (the built environment) with something else that is also concrete (architectural office equipment). This skill of *abstracting*, necessary for designing buildings from a distance, is a new extension in the environment of the architectural student. The student's environment expands towards the concrete world of architectural practice. Having learned the method of descriptive representation, the student is able to focus his attention on the design problems *as* represented, instead of having to pay much attention to the use of the method itself. The more the descriptive construction of design objects is practised, the less this construction work produces perceptions – as long as the limits of this type of representation are not encountered.

The acquisition of the skill of descriptive modelling is a structural "leap", whereby the architectural student reaches new domains in the world of designing. He no longer has difficulties with visualizing his design object through descriptive projections, but he is already "there" in the world of descriptive visualization, manipulating the object by means of drawing projections on sketch paper. The student's design activity has thereby reached a new level of organization. The acquired skill itself becomes a stable, or morphostatic, form, and the utilization of this skill does not require much attention. It becomes a fixed context that provides a foundation for more highly organized design activities. The acquisition of new action possibilities means that perception is freed to focus on new aspects. The aspects involved in the acquired skill or the mastered technique constitute a "platform" on which the organism can "climb" to explore new scenes that were previously beyond its reach. Onto a stable form, a new form can be construed. As Bateson notes, "[i]t would appear in learning, when the solution of the given problem has been passed on to habit, the stochastic or exploratory mechanisms are set free for the solution of other problems[...]" (Bateson 1987, 257). The form stabilizes

only gradually. There is no specific design project that an architectural student could point out as *the* project where he learned to master the technique of descriptive modelling.

2.1.6 The Past in the Present

For Whitehead, endurance means the iteration of an organization of aspects in successive events. In a succession of events, the unification of the whole repeats itself, so that the former event of unification enters into the next event as the latter's aspect. (Whitehead 1946, 128.) We may postulate, for example, that as an architect construes descriptive projections of his design object, his earlier operations of descriptive modelling in his previous design projects enter into his current modelling process as the latter's aspects. His current skills in descriptive modelling are based on the iteration of this method in former design tasks. The past experience is actualized in the present ability to act. This iteration of events is not an unchanging process. The environment of a given event in a succession is necessarily different to some degree from the environment of the preceding event, since the preceding event adds itself into the next one as an aspect of the latter's environment. Every time a designer construes descriptive projections of his design object, he adds a new experience to his context of descriptive modelling and becomes a bit more apt to function in this environment. There is no absolute permanence; instead in a chain of succeeding events, gradual evolution always takes place. From time to time, this evolution runs into certain critical situations – structural states – where new possibilities for action and development may be opened up for the organism.

A man's present act of perception is mirrored in his and his ancestors' past acts of perception. It is also mirrored in the future acts of perception that are influenced by it. The environment is organized into differences in the aspects perceivable by the organism. The environment as such an organization in time and space comprises all the differences perceived and to be perceived that are relevant for the organism's current purposive activity. An entity in the environment is perceivable only if this perception somehow resembles or corresponds to what the organism and/or its ancestors have perceived in the past. "The past must be found in the present world" (Mead 1962, 116). The organism in its present form is mirrored in its environment – but, besides that, it is also mirrored in its history of experiences and evolution. The differences in the environmental aspects are perceived through all the differences perceived in the past that are actualized in the present act of perception. Rupert Sheldrake sees the activity of each organism as influenced by "morphic self-resonance": the present state of the organism resonates the past states similar to it – the most similar being the past states of the organism itself (Sheldrake 1988, 132). "All organisms are dynamic structures that are continuously recreating themselves under the influence of their own past states" (*ibid.*, 133).

Through its perceptions an organism reproduces its species-specific environment and also contributes to the future evolution of this environment. Sheldrake's concept of 'morphic field' is conceivable in this way as a species-specific (and, in the case of human beings, also cultural) environment that evolves as the species (and culture) evolves. When the evolution of a species is understood as a gradual modification of its species-specific

environment – its morphic field – we approach the Lamarckian explanation of the evolution of species. Lamarck believed that the "acquired" characteristics – such as learned and habitual patterns of behaviour – could be inherited and passed on from one generation to another in the evolution of a species¹. In general terms, learning is an event in the life of an organism where the organism's relations to its environment change, so that new possibilities to act open up. Through its learning, the organism changes, but not in isolation from its environment. It is the organism's activity in the environment that changes, which means that the environment also changes. If the genes stay the same but the life conditions provided by the environment change, the organisms of a species either die or develop new activity patterns through their learning. It may well be that the environment, changed by the learned new activity pattern, is the "mediator" that passes this activity pattern on to the next generations. (Järvilehto 1995, 35-38.)

In this context, it is interesting to hypothesize whether the built environment has had a role in the evolution of man. The building of habitats is a skill that humans have learned, but, on the other hand, this skill was originally learned so long ago that changes in man's genotype have probably occurred thereafter. For 10 000 generations humans and their ancestors have arranged their relationships to their environments by building. This particular relationship to the environment may have favoured certain changes in man's genotype and hindered others, while man's cultural habits of building have developed further through social learning. Kaj Nyman argues that it is fully imaginable that, to some extent, our ways to build our habitats may even be genetically coded. Hence, we would possess certain instinctive intentions as regards our living in the built environment. (Nyman 1989, 132-33; 1998a, 82-83.)

Järvilehto rejects the idea that past phenomena could be situated in history so that they could be given an "objective" description independently of how we observe and record them. Our history actualizes in us in different ways with respect to how we can find cues from our past that help our present and future-oriented activity. Our past changes as we move from one situation to the next in our present world. The past receives new meanings as we face new situations that demand new responses from us. By selecting and modifying the past experiences that are relevant from the viewpoint of the present situation, we are able to perceive this situation as meaningful. What we consider important in our present world is revealed by the ways in which we select things from our past. (Järvilehto 1995, 35-38.) The present is mirrored in our past because the past reappears to us only through the aspects that are meaningful from the viewpoint of our present aspirations. Past events become modified as aspects of the present event. History in itself does not exist; there are only modes of past events as organized in present events. Nor is history a "closed case": insofar as events may receive an unlimited variety of forms, the variety of forms past events receive as aspects of the present ones is unlimited, too.

What is here called '*memory*' is the way the past of an organism becomes organized into aspects of its present activity. Memory is the maintenance of form. It is an organism's fixed relationship to its past – not a storage located somewhere in the brain (*ibid.*, 118; Sheldrake 1988, 197). The historical development of a species or an

¹ This view is strongly opposed by the neo-Darwinians, but Darwin himself took the inheritance of acquired characteristics for granted (Leakey in Darwin 1980, 17; Sheldrake 1988, 140).

individual organism is also the formation of memory (Järvilehto 1995, 42, 118)¹. Memory is formed in, for example, the process of learning the method of descriptive modelling. Memory can be understood as the structure of an organism – if ‘structure’ means the organized capabilities for action that are formed over time and provide the basis for the organism’s present activity. The structure of the human eye, for example, illustrates the memory of our species concerning the kind of visual sensations (sharpness and width of vision, sense of depth, sensitivity to light and colours, etc.) that have been essential for the survival of our species. The ways in which an organism “grasps a hold” on its present environment – the ways in which the present environment is organized into aspects that enable the organism’s existence – are determined through its memory. Memory provides a framework onto which present activity may be organized. Activity itself involves remembering, since perception, for example, is possible only by reproducing and reorganizing the memory structure. Remembering is not about moving back in time, but about moving forward on the basis of what one has experienced before (Järvilehto 1995, 36)². When speaking of our conscious efforts to recollect our past experiences, we should perhaps use the concept *rememoration* rather than ‘memory’³.

Here, structure should not be treated as separate from activity, since the structure we are dealing with is actually the structure of activity. The structure of activity has to do with organized relationships between individual actions. Another name for this is *habit*. A habit is concretized in present actions that reproduce and reorganize the underlying structure of activity. *Habit is knowledge*. Knowledge can be defined as the way (habit) of the organism to organize the elements of its environment into aspects that enable its existence⁴. The formation of memory and knowledge is the formation of a habit of organizing the environment in activity. Using Whitehead’s concepts, we may conceive of habit as direction-giving influence that past (in time) and environing (in space) events of prehensive unification have on a given event. In the first place, we could not speak of wholes that are materialized into organisms if events did not have a bearing on each other and did not thereby constitute habits. Existence is a habit of being. Hence, the formation of memory/knowledge/habit would mean the formation of an organism. Depending on the viewpoint and scale of observation chosen, we may view individual molecules, cells,

¹ According to Sheldrake, the morphic field of a species is conceivable as “pooled memory” (Sheldrake 1988, 108).

² Bateson sees memory as a characteristic of all cybernetic systems. Memory reveals itself in the influence the past differences of the cybernetic system have on its present differences. If past activities had no bearing on present activities, memory would not be involved. (Bateson 1987, 316.) See Chapter 5.

³ Wilden makes a distinction between ‘rememoration’ and ‘memory’, associating the former with digital communication and the latter with analog communication (Wilden 1980, 193). See also Sheldrake 1988, 203.

⁴ Järvilehto defines knowledge as the form or way of an organism’s existence (Järvilehto 1995, 118). For Mead those responses of an organism are “intelligent” that maintain or advance its interests or the interest of the species to which it belongs. “Intelligence is, then, the function of the relation of the form [=organism] and its environment” (Mead 1962, 328). Wilden considers knowledge to be mostly analog: “Only the divine power of abstraction is digital” (Wilden 1980, 166).

plants, animals, species, and even cultures as organisms. A water molecule is an organism that has a specific habit of unifying hydrogen and oxygen; the solar system is an organism that has a certain habit of organizing heavenly bodies. "[H]abits may be inherent in the nature of all living organisms, in the nature of chrystals, molecules, and atoms, and indeed the entire cosmos" (Sheldrake 1988, 1).

2.1.7 Cooperation

Organisms are not alone in the environment. As individualized modalities of Nature, they *environ* each other. According to Mead, the activity of each living organism has a social character – even in the case of the most elementary organisms – since each organism depends on other organisms as it carries out its life process. All living organisms constitute a complex of social interrelations/interactions. (Mead 1962, 227-28.) This complex becomes a specifically formed environment from the standpoint of each organism. Organisms are made of iterating and gradually evolving events. Events do not take place separately, but coexist as neighbours and constituents of each other. As an organism acts, it organizes the acts of other organisms in a characteristic way. The universe is shared insofar as there are events taking place within it that affect the lives of numerous organisms – but the universe is also individualized insofar as each organism grasps these events in a unique fashion and thereby, through its own activity, gives them a unique form. One may postulate that the phenomenon of an event is a generalizable, objective fact, but the characteristics of a given event are always individualized in relation to the specific organism taking part in it. An act of perception as an event takes place objectively. It is not subjective in the sense of being an isolated experience that takes place in one's "head" – rather, it is an event where the objective modality of Nature displays itself. An individual experience is a mode of occurrence in space-time. (See Whitehead 1946, 109-15.) In the universe of A, B and C, it is a generalizable fact that A does something, but what A's act *means* is not generalizable. From the standpoint of B it means a(B), and from the standpoint of C it means a(C). The fact that A acts initiates action by B and C, too, which, in turn, initiates further action by A. As Wilden states, "causes cause causes to cause causes" (Wilden 1980, 39). In Nature all events become individualized – but, on the other hand, nothing happens merely individually. All events are social, inter-organismic. This is what Whitehead means when he makes the ostensibly contradictory claim that space-time both unifies and separates. The fact that I change means that others change, too.

The activity of an organism is "fueled" by activities of other organisms. A single organism cannot determine the enviring events from which it structures its own activity. These events may either enhance or hinder its own existence. The organism is able to act when it is able to use the events that take place around it to support its own survival. To reach this ability is a fundamental goal of each organism. Spinoza calls this goal '*appetite*'. Appetite is the essence of each creature. It is action with the goal of survival. In Spinoza's philosophy, appetite is nourished by the passion of *joy*, and hampered by the passion of *sorrow* (Spinoza 1994, 184). Appetite could be defined as an organism's attempt to organize its environment – or its attempt to become a mode of

Nature. Success in this is joy, the sensation of unification, and failure is sorrow, the fragmentation of existence. Borrowing information-theoretical concepts, joy becomes synonymous to information and sorrow to noise. *Emotions* are aroused at the turning points of an organism's existence, where its life chances may be either increased or decreased. Positive emotions are aroused whenever the organism is able to generate a new form whereby its environment expands and becomes more organized and differentiated. Negative emotions, in turn, are associated with situations where activity is blocked, choices are narrowed down, and the form of the organism declines to a less developed phase. (Järvilehto 1995, 98.) The vital condition of each organism is that it is able to form a relationship that enhances its abilities to act in its environment – the environment, however, being beyond its control. Its life is this relationship.

For Whitehead, the concept of organism includes the concept of interaction between organisms, since a single organism is ultimately nothing else than a life process of grasping into unity the life processes of other organisms (Whitehead 1946, 129-30). Accordingly, the life process of this organism receives various aspects in the unification processes of its neighbouring organisms. The organism creates its own environment, but it cannot accomplish this by itself. It has to take part in a "society of cooperating organisms" – where it can relate to events in its environment so that these events contribute to its own goal of survival, and where its own actions may, in turn, become supportive for the endurance of the events on which its survival depends (*ibid.*, 140). An organism gives form to the aspects of its environment from its own standpoint, but it has to formulate these aspects in such a way that its own membership in the society of interacting organisms becomes possible. Paradoxically, *only as a part of a larger ecosystem of inter-organismic cooperation is it able to become a whole system*. As Wilden postulates, "nature selects the survival of the ecosystem, at all its levels, not the survival of the individual" (Wilden 1980, 218).

"[T]he concept of survival must be one which considers the unit of survival to be 'organism-plus-environment' (including other organisms). In other words, since the organism (or system) which destroys its environment necessarily destroys itself, what must survive is not *either* the 'organism' *or* the 'environment', but *both* subsystem *and* context." (*Ibid.*, 116.)

"Those organisms are successful which modify their environments so as to assist each other", says Whitehead (1946, 256). By distributing the pollen of certain flowers while gathering honey, bees assist these flowers. The mutual cooperation between these organisms evolves so that they help each other by helping themselves.

The existence of an organism is threatened in circumstances where its survival depends on certain events that take place in its environment but the organism is not able to integrate these events as aspects that would contribute to its structure of activity. Here, in other words, a certain environmental relationship is essential to the organism, but this relationship is modified in such a way that it becomes detrimental to the organism. The organism is caught in a double bind situation, where the given environmental relationship becomes both a prerequisite and a threat to its survival. An example is the light-seeking moth that is faced with a candle burning in darkness. From the standpoint of the moth, fire has the aspect of a light source that is to be approached. For the moth, light needs to be reached, but if it is reached, the moth gets burned.

Another example, from another level, could be the cooperation between an architect and a client in a situation where the architect asks the client to comment on his design. Clients who are not experienced or professionally trained to view architectural drawings often have notable difficulties in comprehending them. Architectural drawings contain symbols of objects and materials that the client is not able to recognize; the level of abstraction and the rules for deciding what kind of objects and issues are to be included in the drawing and what are to be left out are partly unknown to him; and, most importantly, the client is poorly equipped to use the descriptive-geometrical projections as a tool for his spatial imagination. As a result, the architectural drawings may not have such aspects for the client that would enable him to instruct and guide the architect – who has been hired to design a house that would meet the client's desires and needs. The client aspires to influence the design of his own house but the design process, and especially the architectural drawings it produces, does not have such aspects that for him are adequate for this purpose.

In order to maintain its ability to function, the organism has to reorganize its detrimental environmental relationship. The relationship would thus receive new aspects from the standpoint of the organism – aspects that would enhance its existence. Organisms restore their ability to cooperate by reorienting their sensitivity to each other. One possibility to enhance the opportunities for meaningful cooperation between the architect and the client is to develop such techniques of architectural representation that involve aspects already familiar to the client from other contexts. Hilkka Lehtonen suggests the use of representation techniques that would resemble the more conventional techniques of representing landscapes and spatial objects visually. For example, as a means to convey his ideas to the client, the architect might use perspective drawings that are pertinent to the client's everyday perceptions. (Lehtonen 1994, 27-28, 213.) In this respect, the recent developments in 3D visualization in the field of computer-aided design are quite promising.

2.2 The Conscious

Consciousness is reflective knowledge of the world as a system of interrelationships where a human organism is not merely mirrored in other organisms but also knows that this is the case. An individual's consciousness of himself is based on his observations of his own impacts on the aspects of his environment. He can thus observe himself by observing his relevance to his environment. (Whitehead 1946, 184-85.) This implies that the individual is able to tell the difference between those changes in his environment that are caused by him and those changes that are caused by others. In a sense, he has to "step out" of his relationship to his environment. A conscious individual assumes a position where he observes his environment relationship "from the outside". In reality, such a position cannot be taken, but the mechanism of transforming perceived differences into *distinctions* through consciousness enables one to adopt such a paradoxical attitude. The individual observes his environmental action and, through this observation makes a distinction between his 'self' as an acting subject on one hand and the object of his action

on the other (Järvillehto 1995, 126)¹. 'Me' emerges through the other. At the same instant, 'you' emerges through 'me'. Consciousness, therefore, affords the possibility to make a distinction between 'you' and 'me'. (Järvillehto 1995, 131; Mead 1962, 194-95.)

A human being's personality is the point of convergence of all his social relationships (Järvillehto 1995, 132). Each individual in his own unique way reflects his social environment. As a personality, each individual is formed from the specific standpoint through which his social environment is modified as an organization of aspects that determine his personal characteristics. He becomes a mode of the social cooperation in which he takes part. (Mead 1962, 201-02; see also Leontjev 1977, 143, 187.) As Lee Thayer argues, "To be human is to be in social context" (Thayer 1975, 239).

"Because no human enters his social world pre-formed for existence in it but must be in-formed into it, what he knows and the ways in which he knows have no reality apart from his relations with his fellows. For the individual human, social reality is a process, the process by which the social utility of what he is capable of expressing and comprehending is created, confirmed, and assessed in continuous transactions with his fellows.

One need not, therefore, postulate a separate "need" for social order, or endow human societies with a teleology of their own. What is at stake is not human society as such, but individual human existence." (*Ibid.*)

A human being conceives himself as he perceives himself being described by others (Järvillehto 1995, 132). Humans react to each other's gestures, as other animal species do – but since man knows that his own gestures are mirrored in the responses of his fellow men, he may construe his own self-image through those responses. He relates to himself as – in his experience and expectations – others relate to him. According to Mead, he becomes a self insofar as he can take the attitude of another and act towards himself as others act (Mead 1962, 171). Self as an object to oneself is therefore a social construct (*ibid.*, 140). This consciousness of self gives one the opportunity to anticipate other peoples' responses to one's own actions, and to take into account these anticipated reactions already in the formulation of one's own actions. The anticipated response of one's social environment is thus embedded in one's initiative.

This is the basic condition for our capacity to cooperate in an organized manner. We are able to anticipate the consequences of our own actions, and thus able to shape our approach to our fellow men in order to receive the kind of reactions we hope for as responses to our initiatives (Mead 1962, 69-74, 254-55). Unlike other animals, we are not bound to immediate reactive activity in relation to changing circumstances. We are able to delay our responses and able to evaluate self-critically the role of our own actions in how the social cooperative process develops (*ibid.*, 254)². Through his consciousness, an individual is able to approach and analyze conceptually the cooperative system of which he is a part. This, combined with the experiences he gets in the system, gives him the

¹ "An act of distinction between elements in analog continuum is also a distinction between 'self' and 'environment'" (Wilden 1980, 174).

² According to Mead, delayed response belongs to reflective conduct, whereas non-reflective conduct is always immediate (*ibid.*, 117).

competence to learn to adjust his intentions and actions in relation to other counterparts in the system, so that the system produces outcomes that are close to what he has anticipated. The more complex the cooperative system is, the harder it is for a single actor to manipulate it. In any case, the real complexity of one's social context can never be adequately grasped by the impressions of one's consciousness. One's individual aspirations in relation to one's social environment emerge – as does one's individuality itself – in the context of social cooperation.

According to Järvillehto, consciousness emerged when the forms of human cooperation evolved to a stage where it became necessary for individuals to anticipate each other's responses and to report to each other their aims (Järvillehto 1995, 107). *Homo Sapiens* developed a capacity for mutual communication, whereby individuals were able to communicate to each other and to themselves¹ their intentions, so that tasks could be distributed between people and combined to form complex cooperative organizations. The emergence of consciousness was a solution to our desire to gain such more advanced results that required an increase in the complexity of social cooperation. Humans created a means to describe to one another what their responses to gestures will be, and thus became able to distance themselves from the immediacy of these gestures and responses. This means is *language*. (Mead 1962, 122.) Linguistic descriptions of activity – concepts – enabled *planning*: activities and their estimated consequences could be discussed, arranged and evaluated by using concepts before they were actually carried out.² By organizing descriptions of activity into plans, where each individual had a task assigned to him, people were able to jointly strive for higher collective ends.

Through consciousness the human organism observes itself. Our activities can become objects of our conscious observation only via perceptions that our activities produce. We cannot be conscious of what it is that we are doing; our consciousness can only focus on the perceivable outcomes of our actions. Therefore, our consciousness of our own activity is merely our consciousness of the perceivable changes that result from our activity; it cannot grasp the phenomenon of activity itself. (Mead 1962, 22, 27, 94-95, 203; see also Leontjev 1977, 121-22.) What I mean with perceivable changes are *differences* in the aspects of our environment. Differences are perceivable changes following action in the possibilities for further action. They are peaks, or turning points, in the continuum of activity where further activity – and, in the ultimate analysis, survival – is made either easier or harder.³ Therefore, they have emotional content, arousing either positive or negative emotions. Moving from a smaller apartment to a bigger apartment, or moving from one neighbourhood or city to another, is a difference that changes the possibilities for dwelling and everyday living in general. A change from standing to sitting is a

¹ According to Mead, consciousness in communication entails that the actor, while he communicates to others, simultaneously also communicates to himself (Mead 1962, 81).

² Ramírez understands consciousness as a capacity that enables one to objectify and develop one's activity (Ramírez 1995b, 64) For Mead, thinking is pointing out a thing before acting (Mead 1962, 93).

³ Here the concept 'difference' is used in a similar meaning as Järvillehto's concept '*result*' (Järvillehto 1995, 25, 136, 217). The concept is also associated with the meaning it receives in (especially Bateson's) cybernetics as a change in the state of a goal-seeking system – when 'goal' is understood as the system's ability to act, or survival (Chapter 1).

difference in one's possibilities for action. Learning the technique of descriptive modelling is a difference that changes the possibilities for architectural designing.

Consciousness can only be gained of differences that are socially shared and further conceptualized. We can think of an apartment, a neighbourhood, a city, a chair, or the technique of descriptive modelling only in terms of a socially shared concept (see Mead 1962, 146-47). In other words, our consciousness is limited to those descriptions of activity that our language provides. Only such differences in environmental aspects that are communicable through language can become objects of conscious observation. Language, however, is a continuously evolving system.

Even the objects of our most private thoughts are tied to the social context of our language. Thinking itself, however, is action. Therefore we cannot truly comprehend how we think because we can think of thinking only in terms of socially shared descriptions which transform the activity of thinking into a frozen objectification called 'thinking'. Language, too, is basically activity, and as such a mystery to us. Language does not consist of mere descriptions of activity; it also involves the processes where these descriptions are created (*ibid.*, 78). As Ramírez argues, language is activity which creates that network of concepts which we call 'language' (Ramírez 1995b, 22). Language is not just 'descriptions' – it is *to describe*¹.

2.3 Metaphoric Bind

The activity of describing, or the formation of a concept, can be understood as an event where two differences in aspects are joined together *metaphorically*, so that one difference is turned into a metaphoric description of the other difference. Concepts are metaphoric relationships between differences. To become conscious of a difference is to create a metaphor. In design work, perceivable differences in the aspects of architectural sketches are related metaphorically to perceivable differences in the built environment. The sketches thereby become descriptions, or representations, of the built environment.

As an activity, sketching is never just *about* the built environment. Sketching produces perceivable differences in itself – *before* our consciousness forms the metaphoric relationship between the sketches and the built environment. Perception as a process is totally unconscious, and consciousness only scans what has already been perceived (Bateson 1987, 438). The generation of lines and figures in the process of sketching produces perceptions that are also beyond the control of our consciousness. The process of sketching is therefore unpredictable. It inevitably produces such new differences for cognition that are not preprogrammed in the objectives consciously set for the design process. The designer is continuously surprised by his own drawing. In fact, this is what happens in all *activity* of designing and planning whereby the designer or planner moulds the aspects of his environment. The architect-designer's environment is, at the same time, *both* an unconscious environment of differences in sketching *and* a consciously formed

¹ "Om kunskapen är 'att förstå', är språket 'att uttrycka', inte själva uttrycket" (Ramírez 1995b, 40). "Orden är egentligen inte språket, utan språkets uttrycksredskap, och de språkliga uttrycken är ett resultat av denna aktivitet" (Ramírez 1995c, 53).

metaphor of differences in the built environment. Design work can be understood as a process where these two levels of the designer's environment meet, thereby establishing dialogical relationships between unconscious perceptions of differences and conscious metaphors of differences. Schön's description of designing as reflective conversation with the situation is illustrative (Schön 1983, 76-104). Design work, where unconscious intuition is combined with conscious analysis, is an activity that is able to reveal such new horizons for activity that were not imaginable at the beginning of the design process.

2.3.1 *Metaphor and Metonymy*

Language is the formulation and use of concepts in the organization of cooperation and in the maintenance of organized cooperation. Concepts enable us to organize activities. By using concepts, we may take into consideration environmental differences that are not immediately present. Concepts *re-present* absent differences by associating them metaphorically with present differences¹. Concepts are used to retrieve absent differences by seeing certain present differences *as if they were* those absent differences. 'As if' implies simultaneously both admittance and denial. A concept establishes a relationship where the absent is re-presented without actually being present. This is what I call the *metaphoric bind*: a concept re-presents what it is not. The present difference is transformed into a tool for observing the absent difference; and there is a possibility to reveal the character of the first as a "mere" tool for observing without equating it with the thing observed. For example, an architect can design a building, knowing that his design is not the building.

"Lower" animals are not able to make this distinction². For a Pavlovian dog that has been taught to connect the sound of a buzzer with the subsequent appearance of meat powder, the sound of the buzzer is not a metaphor of food. For the dog, the sound of the buzzer has simply become a difference that it associates with subsequent appearance of food. Through repeated conditioning, the dog has learned that the sound of the buzzer is almost as reliable a sign of the appearance of meat powder as is its smell. Therefore, it starts to salivate upon hearing the sound, before the appearance of food. But this does not mean that the sound of the buzzer would be a metaphor of food for the dog. Only if it could make a *distinction* between the sound and the food would these two be related metaphorically. By salivating upon hearing the buzzer the dog demonstrates behaviour where the cognition that the sound of the buzzer is *not* the food is lacking. By observing the dog's behaviour we may infer that it does not have a concept of food, and, accordingly, a concept for the sound of the buzzer.

Therefore, a sufficient requirement for the existence of a concept is not that we associate a present difference with an absent difference – as the Pavlovian dog does by

¹ In place of 'concept', Mead uses the term '*symbol*': "[Symbols] are given portions of experience which point to, indicate, or represent other portions of experience not directly present or given at the time when, and in the situation in which, any one of them is thus present (or is immediately experienced)" (Mead 1962, 122).

² According to Bateson, 'not' belongs to human communication only (Bateson 1987, 54-55).

associating the present sound of the buzzer with the not-yet-present appearance of meat powder. What is required in addition is an *ability to make a distinction* between the two; an ability to state that the present difference is *not* the absent difference. Thus a concept simultaneously both is and is not its object. The design both is and is not the building. Consciousness emerged with the advent of ‘not’ (see Wilden 1980, 122, 186). Consciousness punctuates activity by relating present and absent differences and by transforming these relations into *distinctions*. Consciousness is therefore discontinuous, while activity itself is continuous (Järvilehto 1995, 107, 219). (Chapter 3.)

By associating the buzzer with the meat powder, the Pavlovian dog, however, communicates in a mode that comes close to human communication. This communication mode comprises the first of the two mechanisms required in the digitalization of communication – which, according to Wilden, is the necessary condition for language (Wilden 1980, 173). These mechanisms are *metonymy* and *metaphor* (*ibid.*, 28-29; Ramírez 1995b, 85-90; Ramírez 1995c, 45-50)¹. For the Pavlovian dog, the sound of the buzzer becomes a *metonymic sign* of the subsequent appearance of meat powder (Ramírez 1995c, 46). It is the mechanism of metonymy that forms the relationship between an absent and a present difference. The sound of the buzzer *re-presents* the meat powder; it signifies the absence *and* the presence of the food – just as for a child the thumb signifies the absence and the presence of the breast (see Wilden 1980, 172). The metonymic association provides continuity between the absent and the present – “the primordial discovery of the analog difference between presence and absence” (*ibid.*). In human communication, this difference is further elevated to a level of digital communication by transforming it into a distinction (*ibid.*, 447). “It is the elevation of the *absence of the goal*, which is concrete, to *negated presence*, which is abstract, that distinguishes human communication from animal communication” (*ibid.*, 431). The metonymic relationship offers a possibility for *metacommunication*² where the present difference becomes a commentary, or a message, about the absent difference.

¹ Metaphor and metonymy as the two poles of language were originally introduced in Roman Jakobson’s theory of communication.

Bateson has related the concepts ‘metaphor’ and ‘simile’ similarly to the way I am here relating ‘metonymy’ and ‘metaphor’ (see Bateson 1987, 56, 190-91, 205-06). What Bateson means with ‘simile’ thus corresponds to what I call ‘metaphor’, and Bateson’s use of the word ‘metaphor’ corresponds to my use of the word ‘metonymy’. Hereby I am following Wilden, who has developed Bateson’s communication-theoretical views further, and, with his introduction of the concept ‘distinction’, has managed to arrive at a more precise definition of the concept ‘metaphor’ in relation to its systemic function.

² Metacommunication is communication about communication. It is a message that frames another message (or other messages), by defining the context against which this message is supposed to derive its meaning. (See Bateson 1987, 186-89). Examples of metacommunicative messages are: “I was telling the truth!”; “I am not speaking to you as your employer, but as your friend”; “I love you”. Every concept metacommunicates that which it re-presents. The use of a concept is communication by which a chosen event or difference is isolated and transformed into an object. *An object is framed communication*. The specific property of language is that it can talk about itself; i.e. it can metacommunicate (Wilden 1980, 171).

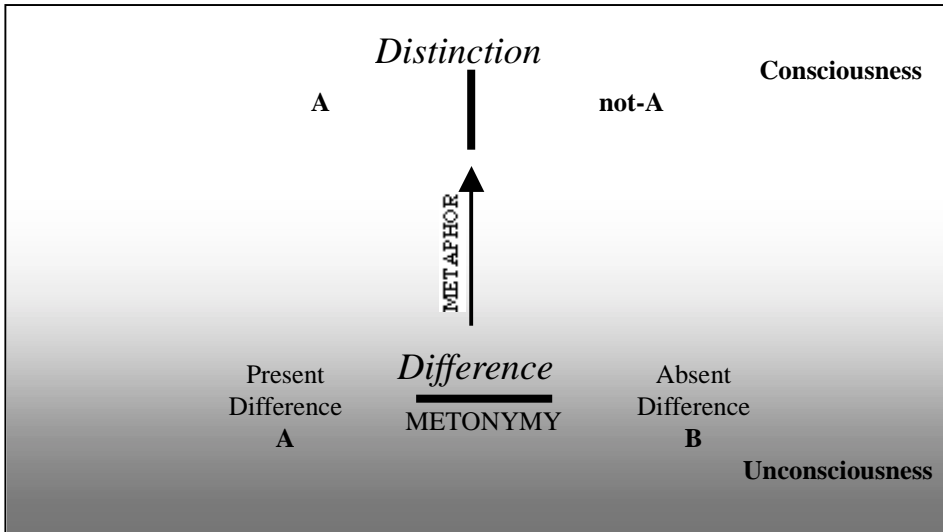


Fig. 11. Metonymy and metaphor. Metaphor is the operation of transforming the metonymic difference between present A and absent B into a distinction between A and not-A.

When the metonymic sign is integrated into a more complex level of metacommunication, it becomes a *metaphor*. It becomes a distinction: the sign of *not present*. (Wilden 1980, 172-74.) The distinction creates a *boundary* between the absent and present differences. This boundary is 'not'. It is a condition for the ability to distinguish elements in the continuum of differences from the continuum itself. (*Ibid.*, 122.) With the mechanism of metonymy we are able to relate the absent differences with those that are present, but it is the further elaboration of this mechanism into a mechanism of metaphor that enables us to objectify the absent differences.

In his *Theory of Play and Fantasy*, Bateson suggests that the emergence of metacommunication in animal play provides a methodological insight into the genesis of digital language – i.e. the type of language that is characteristic of human communication. Furthermore, the concept of metacommunication enables us to distinguish animal communication from human language. Animal play – such as that which Bateson observed among monkeys in Fleishacker Zoo in San Francisco, 1952 – may produce intermediate communication processes where primordial metacommunication may take place. Bateson saw young monkeys interact as if they were engaged in a combat, although it was evident for the monkeys that this interaction as a whole was "not combat". According to Bateson, the monkeys were able to metacommunicate to each other what their interaction was about by stating: "This is play". He concluded that *nips*, instead of *bites*, were the communication acts with which the monkeys defined the context of their interaction as play. (Bateson 1987, 177-93.) According to Wilden, the nip emerges from the bite as a *metonymic sign* that signifies *both* the absence *and* the presence of the bite; but it is then integrated into a higher level of communication, as a *metaphor* that re-presents the bite which it is *not*. (Wilden 1980, 172-74.)

An environmental difference can become an object of conscious observation only through the use of another difference (Ramírez 1995b, 17; Derrida 1988, 34). We can become conscious of the voluminous differences in our environment only by transforming them into concepts. Concepts are objectifications of differences; portions of concrete experience *pulled apart*¹ from the continuum of concrete activity. In order to examine a portion of my concrete experience, I have to put another portion of my concrete experience into a metaphoric relation with it. The first is then examined through this relationship. Through his making of architectural drawings, the architect examines his object of design – the building. Architectural drawings are not buildings. You cannot dwell in a sketch paper or blueprint. Yet, in his design work the architect does not design drawings, but buildings. The designing of buildings by the making of architectural drawings is made possible by the metonymic continuum between differences in drawing and differences in building and dwelling.

2.3.2 *Nature and Culture*

According to Wilden, "the significance of 'something which stands for something it is and is not' is crucial to the understanding of [...] the emergence of culture from nature (and their coexistence)" (Wilden 1980, 248). Culture is that which is and is not Nature. In other words, *culture is a metaphor of Nature*. Culture is that domain of Nature where Nature creates metaphoric representations of itself and thereby its distinctiveness of itself. In systems-theoretical terms, culture is a subsystem of the nature-ecosystem which transforms the latter into its environment. Culture thus creates a paradox: being a subsystem of Nature, it is at a lower logical level² than Nature, but it treats the latter as if it were at the same level – as if Nature were an environment-system surrounding the culture-system.³

Consciousness involves referential networks of concepts that are formed by metaphoric uses of differences in concrete experience. The foundation for the development of consciousness is in the unconscious, where concrete differences are metonymically associated to one another. Culture is the system of metaphoric uses of the aspects of voluminous Nature (man's species-specific environment). These socially shared uses constitute the *cultural environment*. Cultural environment distinguishes itself from the species-specific environment. This separation does not have a voluminous character. It is quite unlike the separation of farmland from uncultivated land, for example. Nothing voluminous can be separated from the continuum of voluminous space-time. Farms, cities, buildings, architectural drawings, and chairs are all voluminous, and as such they are formed into aspects and their differences in our species-specific environment-relationships. However, we have no consciousness of what these aspects and

¹ Lat. *abstrahere*='to pull apart'.

² Logical levels are explained in the next chapter.

³ "Symbolic exchange is the elevation of the information processes of nature, by emergence, to another level of organization. It is both derived from nature and entirely 'nonnatural'. (Wilden 1980, 249.)

their differences are because, through our consciousness, they are transformed into concepts – ‘farm’, ‘city’, ‘building’, ‘architectural drawing’, and ‘chair’ – that belong to our non-voluminous cultural environment. The cultural environment consists of shared uses of voluminous Nature where a specific system of concepts is produced and reproduced. As a specific system of concepts, the cultural environment has its own boundaries, but these boundaries are not “geographical”.

Different cultural environments are separated from one another by their different metaphoric uses of the species-specific environment. But, on the other hand, the different cultures are unified by the same voluminous Nature of which they all are subsystems. Therefore, the different cultures are also connected to each other. The aspects of man’s species-specific environment unite even the members of cultures that are most remote from each other. These shared aspects enable mutual communication between cultures. Although this communication may be very rudimentary at first, it nevertheless enables a mutual search for shared metaphoric uses of the shared species-specific environment – which means the formulation of shared consciousness. Nature is species-specific, culture is culture-specific.

Cultural environments further differentiate into *subcultural environments*. These include the subcultures of *professions*. Each profession has developed and continuously develops highly organized metaphoric uses to those domains of environment where its members act and focus their attention. These metaphoric uses and the concepts they produce are largely hidden from other subcultural groups. Different subcultures generate different social behaviours and thereby different conceptual (sub)systems. Architectural drawings are “less culture” to the “laymen” than to architect-professionals. In other words, architects associate architectural drawings with numerous highly developed metaphoric uses, whereas laymen are able to associate them with only a few elementary uses. The use of architectural drawings is thus much more differentiated conceptually for architects than for laymen. Therefore, architects also have greater control over the conceptual use of their drawings.

Local communities can also be considered subcultures with regard to the metaphoric use of the aspects that belong to the local “socio-physical” environment. The members of a local community are, more or less, joined together as a subculture that shares concepts in reference to local history, social relations, meaningful places of the built environment, etc.

2.3.3 Concepts to Contexts

Concepts are both metaphoric and metonymic uses of environmental differences. A concept receives a stable form through repetition of the metaphoric use that originally gave rise to it. This repetition leads to habituation; the associations between present and absent differences that underlie metaphoric use become routinized. In architectural drawings, for example, certain lines, textures, figures, and colours become self-evident representations of certain types of objects, materials, spatial entities, properties and uses of the built environment. In land-use planning, it becomes self-evident to see urban areas and urban life in general as a plateau of clear-cut zones where given land uses (housing,

business, industry, recreation, traffic, etc.) and given rights of possession and use are distributed to citizens and various organizations. In this process of routinization, the distinctiveness between that which re-presents and that which is represented becomes less and less obvious. The metaphoric "layer" of the relationship of representation becomes thinner and gives more weight to the metonymic "layer" at its base. The relationship gradually assumes a character similar to the conditioned reflex of Pavlov's dog. Without hesitation, one associates the appearance of one difference with another, absent difference – as was the case with the dog's reflex of salivation. Thus, habituation means that concepts become "naturalized". By becoming metonymic, the relationships of representation also become unconscious. When concepts are used unconsciously, there is a continuity between absent and present differences. Although activity involves conceptually formed relations, it is not interrupted by distinctions. This is what happens in habituation, and this is also what is required in the learning of a technique. For example, skilled use of the technique of descriptive representation requires that one becomes habituated in ignoring the distinction between descriptive models and modelled phenomena. The skill of designing buildings through descriptive representations requires that.

In Chapter 1, techniques were described as layered hierarchies of decisions, where the more general and more recurring decisions become self-evident decision contexts, which provide the premises within which more specific decisions are made. The contextual decisions become habituated and are no longer consciously made, and consciousness is thereby freed to focus on further decision-making in the direction pointed by contextual decisions. Thus the technique gradually becomes more differentiated and activity more and more complex. The contextual decisions lose their character as metaphoric distinctions; they become metonymic differences on top of which new metaphoric distinctions are made (Figure 12).

One's activity becomes more organized, but the degree of conscious deliberation involved in this activity is not necessarily increased. According to Bateson,

"[c]onsciousness, for obvious mechanical reasons, must always be limited to a rather small fraction of mental process. If useful at all, it must therefore be husbanded. The unconsciousness associated with habit is an economy both of thought and of consciousness. [...] Similarly with skill, the fact of skill indicates the presence of large unconscious components in the performance." (Bateson 1987, 136-37.)

The mechanism of consciousness resembles the classic physicists' approach "*ceteris paribus*" – "all other variables remaining constant" (see March & Simon 1967, 169-70, 190). Similarly to physicists, who are able to calculate changes in only one or two variables at a time, consciousness can concentrate on only a few decisions. Calculations can only be made within the context of unchanging variables – which is analogous to decisions that can be made only within the context of decisions already made and taken for granted.

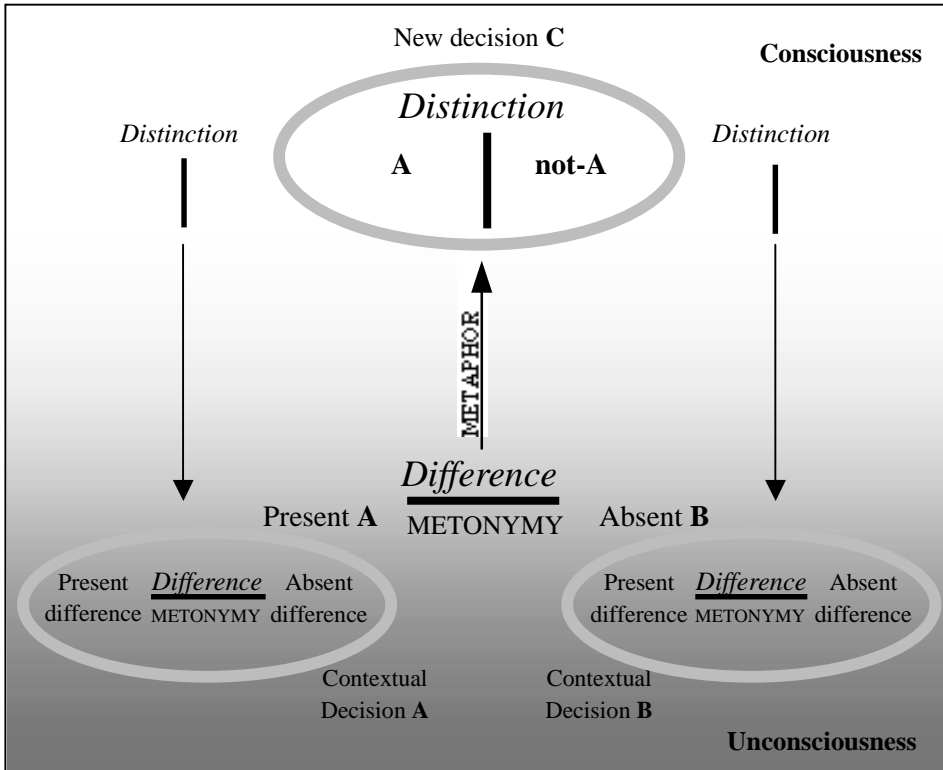


Fig. 12. Decisions on top of decisions. As the making of certain decisions (A and B) becomes routinized, these decisions become contextual and assume the character of differences. These differences are then linked together by creating a new metonymic relation of difference between them (both A and B), which is further transformed into a new metaphoric distinction; decision C between either A or not-A.

In the hierarchy of decisions, concepts are nested within concepts. Concepts become contexts for the emergence of new concepts at higher levels of organization. In principle, we are able to regain consciousness of all those concepts that, in our organized activities, have become contextualized and unconscious. But this becomes increasingly more difficult as we try to examine the deeper levels of our activity. Concepts that are involved in our most deep-seated habits are the hardest to observe consciously. These include the concepts upon which we base our self-images. Therefore, those obstacles we face that counter the associations between experiences that we most habitually make, are also the hardest to tackle.

Such obstacles are encountered in double bind situations. *In a double bind, a concept is what it cannot re-present.* The concept is used habitually, and it therefore does not involve the making of a conscious distinction – but it still leads to a prohibition of

activity. The concept is used in a metonymic sense, although it cannot create a relationship between present and absent differences that would enable activity. It therefore creates a false sense of continuity. When such a concept is deep-seated, it paralyzes the whole activity system that is organized upon it. But, due to this deep-seatedness, reflection on the concept may be extremely difficult. Reflection would entail *metacommunication*. Metacommunication is possible only if one is capable of examining the concept consciously. In such an examination the metaphoric character of the concept is exposed and, at the same time, its inappropriateness as a metaphor is revealed. Here the discontinuity that is experienced in activity finally generates an appropriate distinction: the concept is *not* what it cannot re-present. (See Chapter 5.)

2.3.4 Creative Planning

A large part of the everyday use of our language is unconscious, which means that we use our concepts metonymically. But the ability to rise above the unconscious and metonymic level is a crucial property of our language. It is *this* property that makes human language distinct from the communication modes of other animals. If we did not have that property, we would not be able to reorganize our ways of life. We would be helpless in the face of a double bind situation – but, then again, it is also fair to say that *because* we have our consciousness and metaphoric communication, we end up in these situations over and over again. Human language is both its own curse and salvation¹.

Our capability to conduct organized activity means that we are able to foretell the consequences of our present actions. Thus, for example, an architect is able to predict the reaction of his client to his design proposal, and he is able to predict what the accepted design is going to look like as a finished building. There is a causal continuity between the present action and the subsequent action. By repetition one habituates into this causality, and the link between the action and its expected consequence becomes metonymic. For an architect whose expectations have become habitual, a design proposal with certain properties *is* the client's reaction these properties re-present, and the accepted design *is* the finished building it re-presents.

When our actions lead to unexpected consequences, our capability to conduct organized activity decreases. Activity becomes discontinuous, and the metonymic links between the present actions and their habitually expected consequences become weaker. The client reacts unexpectedly to the architect's design proposal. The finished building looks different from what the architect expected, although built according to the design; or the builders deviated from his design; or the accepted design was not built. Experiences of discontinuity in our activity lead to revelations that our concepts are *not* what they re-present. A design proposal with certain properties *is not* the client's reaction these properties re-present; the accepted design *is not* the finished building it re-presents.

Concepts are not adjacent to activity, although they produce abstractions which enable our *attitude of observing*, as if the observer were separate from the object of his

¹ As Stuart Kauffman says: "We all do the best we can but will eventually be hustled offstage by some unanticipated consequences of our own best efforts" (Kauffman 1995, 15).

observation. On the contrary, concepts are inherent components of activity. If they were to lose this position, they would lose their coherence. Concepts are founded on metonymic relationships. The metonymic association between the present and subsequent actions, is not an intellectually derived relationship, but a relationship that is *acted out* in concrete activity. Thus, there is activity underlying each concept. Concepts as *both* metonymies *and* metaphors are abstractions which enable organized activity. Concepts may function as abstractions only if the continuity of organized activity is preserved. Without the simultaneous joining of the absent to the present in unconscious activity, the consciously derived abstraction would be alienated from its object of signification.

For example, when it becomes more commonplace that architectural design work does not lead to subsequent building, there will probably be a crisis where the concept of architectural designing breaks down. But this does not mean that the activity of architectural designing as such would necessarily be broken down. In the field of "paper architecture" Daniel Libeskind and others have practised the designing of architectural projects that are not supposed to be built. The disconnection between architectural designing and building means that the *concept* of architectural designing *as* preparation for the future building of architecture is broken down. Such a concept is based on the metonymic association between present designing and absent building, but, since this relationship is not confirmed in action, the concept breaks down. Paper architecture involves a different concept of architectural designing. This concept has abandoned the metonymic association between designing and building.

When a concept that directs our activity breaks down, we are forced to analyze the activity situation in which we are engaged. We try to find out why the consequences of our actions do not meet our expectations; why the realization of one difference does not lead to the subsequent appearance of another difference, as we have been used to expect. This analysis usually obliges us to approach the puzzling phenomena we experience by seeking behind their apparent features their historical root (Engeström 1995, 100-01). The broken concept may reside as a context-defining factor "beneath" layers of other concepts added on top of it. We try to gain awareness of this concept as a germ cell, whose fundamental metonymic relationship gives direction to the organization of further concepts and present activity. 'Architectural designing as preparation for the future building of architecture' is an example of such a basic concept that gives meaning and purpose to the whole practice of architectural designing and building. If our analysis fails and we are not able to identify the critical concept, we may have to abandon the activity context in question. As a result, our environment is reduced, as it no longer provides such a wide range of possibilities for action as it used to.

But a different consequence may also follow. The breakdown of a concept may eventually lead to an expansion of the environment. What is required is that one succeeds in restructuring the problematic activity context. The inappropriate context-defining concept has to be revealed through critical analysis – but that alone is not sufficient. We also need to create new metonymic associations between the differences in our environment – metonymies that would open up new action possibilities in our dilemmatic situation. This cannot be a task for conscious analysis, since it cannot create new forms of activity – it can only examine activity already created and perceived. In fact, the creation of new forms of activity cannot be a task at all, in the sense of a given end. Such a search is rather based on *appetite*, on the goal of survival. It is not motivated by a conscious

purpose, but by the existential appetite for action. New forms of activity can be created by acting only. I call this search *play*. It may acquire different forms, such as one's freely associative dialogue with another person, with a book, or with one's own writing; a composer's improvising play with a musical instrument; or an architect's seemingly random sketching.¹

The broken concept provides a starting-point for this creative search, but it does not determine its direction. On the contrary, it frees action from such constraints. When it is critically revealed that the metonymic connections underlying the former concept can no longer be made, the unconsciousness is freed to play with new associations.

'Roles' are among the most basic context-defining concepts behind social activity. When these are involved in creative play, the 'self' is also set free to search for a new kind of identity, to redefine the given role. D.W. Winnicott goes a step further to claim that creativity may appear only in the state of unintegrated personality (Winnicott 1982, 75) – and, accordingly, it is only by being creative that the individual discovers his self (*ibid.*, 63; see also Carse 1986, 18-19). In playing, and perhaps only in playing, the child or adult is free to be creative, argues Winnicott (1982, 62).

In play, new metonymic relations are made, which also means that new forms of action are created. This process is a mystery to consciousness, but as new forms of action appear, they also become consciously analyzable. Consciousness cannot grasp how the new is created, but it can examine the created new. Conscious analysis is certainly required to indicate the weaknesses of the new activity. Consciousness provides us with an ability to evaluate at the abstract level the anticipated effects that the new form of

¹ For Alvar Aalto, the concept of play was important in his work. Influenced by Yrjö Hirn and his theory of play Aalto developed a conception of the decisive role of play in the making of architecture (Aalto 1953, 159). Architecture begins in the unconscious and is gradually generated in creative play. In his article *Romkornet och laxen (L'œuf de poisson et le saumon)* (Aalto 1948) Aalto describes his design work. He argues that, almost without exception, in each desing task he stumbles, sooner or later, into a serious obstacle. The reason, Aalto suggests, is probably the complexity of the design problem, which follows from a number of different and often contradictory demands set on social, psychological, economic and technological bases. All these demands wind up into a tangle that, according to Aalto, is not solvable through rational or mechanistic means. The vast amount of different demands and subproblems form a barrier through which any architectural idea has enormous difficulties to find its way. In such a dilemmatic situation, trusting that the different demands and the general atmosphere of the task have "sunk" into his unconsciousness, Aalto puts the design problem aside and shifts to a mode of working which resembles the making of abstract visual art. "I sit and draw, allowing my instinct guide me – and suddenly emerges the main idea, a guiding substance which combines the above mentioned different and often mutually contradictory elements and brings them into a mutual harmony" (*ibid.*, 8). When sketching the Viipuri Library, Aalto spent long periods drawing naïve figures. This loose drawing produced figures which Aalto describes as some kind of wondrous mountain scenes where the hills were illuminated by many suns in many positions. With the aid of these drawings, the basic idea of the library building gradually developed. The ordering of the different floor levels in the plan – the reading-rooms and library halls around the central desk on the highest level – was like the sloping of a mountain. Above this group of indoor spaces hung a system of suns: round, conical skylights. (*Ibid.*, 8. See also Karanka 1998, 2; Lehti & Ristola 1990, 60-61.)

activity may cause to other activities and to itself. In conscious analysis, one is able to point out problems in the new behaviour in terms of its future consequences by using experience gained in similar situations in the past (see Mead 1962, 100). This, in turn, is beyond the reach of immediate unconscious action. Unconsciousness is characterized by "blind" associating and heedless intuition – while consciousness is characterized by deliberate selection of expected future obstacles to action. Creative planning can be understood as oscillating between free associative thinking and deliberate selection of new associations: now unconscious action offers spontaneous metonymies for consciousness, and now consciousness selects between the abstractions they give rise to¹. The interplay between associating and selecting would gradually give direction and determination to planning activity, eventually producing a complete abstracted organization of activities – a plan.

In Chapter 6, we will investigate, in the light of an empirical case, how this process evolves and what kind of forms it may take in land-use planning practices. We will also find that the process is much more complicated than described here. The process of critical and creative reflection on the concepts behind social activity has here been described in simplified terms in order to clarify the roles of metaphors and metonymies in language and activity. Social learning and reflection as such are not an issue in this chapter.

Planning work creates new concepts through processes where absent and present differences are joined and distinctions made upon them are selected. It depends on the concrete activity that follows planning whether, and for how long, these concepts are to endure. The *paradox* of planning is that it attempts to organize activity, and yet no plan can be an organization of activity, or differences. Each plan is an organization of abstractions, or distinctions. Despite this, our planning activity may be followed by organized activity which opens up new action possibilities in our concrete environment. In such conditions, planning redeems its place as a *possible paradox*.

¹ Faludi suggests similarly that creative planning oscillates between convergent and divergent thinking (Faludi 1976, 119). These two kinds of thinking are somewhat parallel to the two operations of the mind discussed above; convergent thinking corresponds to conscious analysing and selecting, divergent thinking corresponds to intuitive associating. In describing convergent and divergent thinking, Faludi quotes O. L. Zangwill:

"[...] in convergent thinking, the aim is to discover the one right answer to a problem set. It is highly directed, essentially logical thinking of the kind required in science and mathematics. It is also the kind required for the solution of most intelligence tests. In divergent thinking, on the other hand, the aim is to produce a large number of possible answers, none of which is necessarily more correct than the others though some may be more original. Such thinking is marked by its variety and fertility rather than by its logical precision." (Faludi 1976, 118.)

Faludi concludes that "[w]hen combined, these types of convergent and divergent thinking enable truly creative responses to an ever-changing environment in a way which neither of the two would be capable of providing on its own" (*ibid.*).

3 Different Differences¹

In this chapter, my aim is to sum up the ideas presented in the previous chapter and incorporate them into a hypothesis of human language as a layered structure of different levels of communication – different differences. My central claim is that human communication differentiates reality in different ways that can be analyzed as a "horizontal-vertical structure". The voluminous and conscious properties of human existence are here treated as "horizontal levels" that are hierarchically ordered. The levels differ in their modes of communication. Voluminous human existence is communication in terms of differences; communication at the level of consciousness, for its part, is communication in terms of distinctions formed on top of differences. The level of consciousness is further divided into two levels: consciousness and self-consciousness, the latter being hierarchically subordinate to the former. These horizontal levels, three in sum, are joined by "vertical" metaphoric binds. This, in a nutshell, is my hypothesis of the structure of human language. In this chapter, I shall also extend my argument farther from the realms of psychology to social and societal processes and thereby complete my general account of the human system.

3.1 Primary and Secondary Process

Gregory Bateson has developed Sigmund Freud's central ideas and concepts in his own systems-theoretical analyses of human and animal communication². Generally, his unconventional combination of psychoanalysis and systems theory asserts that unconscious and conscious states of mind – Freud's (1971) primary and secondary process – are not to be treated as "inner" states of the human individual's soul, but as states of his behavioural system. This system is not an organization of perceptions, projections, and hallucinations inside the individual's head; it is, necessarily, an environmental system. It is the organization of the environment – arranged and maintained by the individual's purposive activity – whereby the elements of the

¹ Developed from Mäntysalo 1997c.

² See Bateson's (1987) theory of play and fantasy.

environment as well as the elements of the physical human body turn into aspects of human personal reality. The human purpose organizes the human environmental activity system.

There are two kinds of human purposes. The *first* are the purposes directly related to human existence and survival. Here we cannot separate purpose and activity; the purpose is "embodied" in activity. The body "knows" the terms of its own survival: how hunger, sexual needs, the need for safety, etc. are satisfied. (See Järvillehto 1995, 118; Mead 1962, 328; Wilden 1980, 166.) What the body knows are qualitative *differences* in the body-environment relationships that are "acted out" in its own behaviour. These differences are oscillations between the activity situations that reveal existential needs and the situations that satisfy them. This is the realm of the unconscious – the primary process.

The purposes of the *second* kind are conscious purposes. Consciousness is abstracted knowledge of what the body knows at the level of concrete activity. Here, purpose and activity are necessarily separated. Being conscious, we are able to analyze our activity without being engaged in that activity at the actual moment of our analysis. We are able to *think* about an event without that event actually being there. This is done, in short, by *abstracting the absent event by means of symbolizing it with some present event*. This is the act of *re-presentation*. Consciousness imposes purposes of its own on activity that already is purposive at the elementary level of survival. Consciousness is the realm of the secondary process.

What is suggested here is that the use of Freud's concepts of primary and secondary process can be expanded to cover human environmental activity in general: the process of acting that has no consciousness of itself, and the process of acting by which activity reaches consciousness of itself. We here abandon the division that Freud still held between the "outer" reality and the "inner" primary process (Freud 1971, 613). Primary process *is* the reality of human existence. It is the "outer" reality as it is organized into aspects of human "being-in-the-world". Following Spinoza, we can state that this is the mode that expresses Nature the way that is characteristic of human beings (Spinoza 1994, 93). Therefore, what is "outside" the human primary process, is not "human environment". We can say that there is the environment of the earthworm, for example, but we can have no knowledge about that environment. All we can know about the earthworm is to the extent we relate to it in our own activity, and thus to the extent it becomes an aspect of our own environment. (See Järvillehto 1999.)

This leads us to expand the field of psychology. The object of psychological study refuses to "lurk" within the head and be surrounded by external physical reality. On the contrary, the physical is embedded in the psychic (Järvillehto 1995, 89). Everything physical is aspects of our psychic nature, and all we may know of it has to do with that which we are capable of making our knowledge (*ibid.*, 12; Spinoza 1994, 104).

3.2 Russell's Rule

All that is conscious has an unconscious preliminary stage (Freud 1971, 612). According to Freud, the unconscious is the general basis of psychic life. It is the larger sphere which includes within it the smaller sphere of the conscious. (*Ibid.*) Consciousness relates to

unconsciousness as a part relates to the whole (Bateson 1987, 438). Another way to put it is to state that activity can become conscious of itself only by acting – that is, *within activity*. But, Freud claims, the psychical character of the unconscious cannot become conscious as such (Freud 1971, 612). Activity that is conscious of itself is a paradox. To become conscious of activity means to take it as an object of analysis. Hence activity becomes a “frozen” object – or, to be more correct, it is *transformed*¹ into an object in consciousness. We can therefore never reach consciousness of activity, because the act of reaching consciousness of something is simultaneously an act of objectifying activity². But objectifying is itself acting. We are able to think about the abstracted, but thinking itself is never abstract (Ramírez 1995a, 1). What limits our focus is the very act of our focusing. We can never focus our attention on the focusing-on itself. It is the unconscious that is conscious of itself. That is why we know nothing about consciousness³. We only know about its objects; not *how* it comes to know about them⁴.

If we apply Russell’s rule to the above notion of consciousness as part of unconsciousness, we may infer that *consciousness is a member of the class of unconsciousness*. The rule is that in mathematical or logical discourse one must acknowledge a discontinuity between a class and its members. No class can be a member of itself; nor can one of the members of a class be the class. The rule asserts that the class is of a different level of abstraction, or logical type, compared to its members. (Bateson 1987, 189, 280.) It thus follows that consciousness is of a different logical type than unconsciousness and that there is a discontinuity between the two. The advent of consciousness would therefore mean the emergence of a new logical type. Abstractions formed in consciousness would be of a logical type different from the logical type to which concrete activity belongs. Concrete activity and the abstractions derived from it should therefore not be confused, as the abstractions, being members of the class of concrete activity, cannot be related to the latter. The name is not the bearer of the name, the map is not the territory⁵, the plan is not planning activity, the menu card is not the

¹ This concept is used by Bateson (and later by Wilden 1980) to indicate the essence of what is transmitted from one part or level of a system to another part or level, as the state of the system changes: it is not the difference as such that is transmitted, but the *transform* of the difference (Bateson 1987, 490).

² According to Mead, our activity consists of sensory and motoric processes. The motoric process can become an object of our consciousness only indirectly, via the reporting of our senses. We cannot become conscious of what we are doing, but only of the perceivable changes that are the results of what we have done. (Mead 1962, 22, 27, 94-95, 203.) It is the results of our activity that we may become conscious of, not the activity itself (Järvillehto 1995, 107, 134-35).

³ “Today we think of consciousness as the mysterious, and of the computational methods of the unconscious, e.g., primary process, as continually active, necessary, and all-embracing” (Bateson 1987, 135-36).

“Nobody, to my knowledge, knows anything about secondary process” (*Ibid.*, 139).

⁴ According to Ramírez, ‘What?’ refers to the abstract, ‘How?’ to the concrete (Ramírez 1995a, 2).

⁵ The concept of ‘map-territory relation’ was initially used by Korzybski 1941, *Science and Sanity*, Science Press, New York. In this text I use ‘map’ and ‘territory’ as psychological concepts without outruling their possible use as geographical concepts, too. Following the central claim that the physical is embedded in the psychic we may infer that there are no geographical maps and

eating of the dinner, the son of God cannot be God himself. Activity as an object of conscious analysis is not the same thing as the activity itself; they should not even be related to each other, if we follow Russell's rule. A member of a class is not related to the class, but to the other members, the relationships of which *constitute* the class, and, at the same time, the terms of their own existence. An abstraction as a member of the class of concrete activity is not related to the latter but to the other members – that is, to the other abstractions derived from concrete activity.

The class is of a *higher logical type* than its member. The class is not a member's environment, but its context of existence. In systems-theoretical terms, the class is the *ecosystem* for its member-systems, and a single member-system is surrounded by the *environment* of other member-systems. When applied in systems theory, Russell's rule would lead to the assertion that a system is related to the environment of other systems, but cannot be related to its ecosystem. The hierarchy of logical types means that, in the hierarchy of types or systems, the survival of the higher type or system is not dependent on the survival of the lower type or system (Wilden 1980, xxiii-xxiv). The survival of a community of individuals, for example, is not dependent on a single individual, but the survival of an individual, on the other hand, depends on the community. We could thus infer that the community is of a higher logical type than the individual.

The name is part of that which evoked its own naming, the map is part of the territory, the plan is part of planning activity. If we were to recognize concrete activity as belonging to a higher logical type than the abstractions derived from it, this would mean that the existence of an abstraction depends on the concrete activity wherein it has emerged, whereas the existence of concrete activity does not depend on the abstraction. The existence of a plan would therefore depend on planning activity which generated it, but the existence of planning activity would not depend on the plan. Is this really so? Could planning activity really "survive" without plans made in planning? Could the activity of deciding what to eat in a restaurant "survive" without the menu card? Could the activity of thinking "survive" without abstractions? Could name-giving "survive" without the name?

What our consciousness does is that it tries to turn the hierarchy of logical types between itself and unconsciousness into a single-level relationship. By transforming concrete activity into its object, the abstraction treats its ecosystem as if it were its environment. Consciousness denies its position as part of unconsciousness and instead appears as if it were a whole in a symmetrical relationship to the whole of unconsciousness – and this denial is the very *function* of consciousness. Here, indeed, the class is forced to become a member of itself, and the member of the class acts as if it were the whole class. The name takes the place of that which gave it a name, the map takes the place of the territory, the plan takes the place of what is being planned. We *implement* our land-use plans already in our thoughts, and change our behaviour and evaluations in relation to a given 'physical' environment in accordance to the appearance

territories that are not also psychological ones. However, not all psychological maps and territories are geographical. Only part of our mapping activity has to do with territories in the meaning of "physical spaces" or "landscapes". Furthermore, only part of our mapping of "physical spaces" and "landscapes" is done in the mode of "cartography". *Some* psychological mapping has to do with geography, and *some* geographical mapping has to do with cartography.

of the plan for its future use. Many of our confusions in science and everyday life result from this arrogance: the products of our consciousness are taken to be what they represent (Järvilehto 1995, 12). We put salt on the menu card. We deny ourselves the opportunities to change our use of the built environment in response to our changing needs, because of our unwillingness or inability to change our existing plans and relative contracts.

But on the other hand, we could not succeed with any of our activities which involve the use of representations and abstractions, if we did not make these confusions – if we did not confuse the representation with what is being re-presented, and the abstraction with concrete activity. The architect could not design a house by making drawings of it, if he did not take his drawings of the house *as if* they were the actual house. We could not decide what to eat in a restaurant if we did not take the descriptions of alternative meals in the menu card *as if* they were the actual meals. Activity that involves consciousness, representations and abstractions breaks Russell's rule¹. Such activity is able to survive *despite* the paradox it creates between logical types. As we will find later in this chapter, the survival of this activity depends on the *appropriateness* of the representations and abstractions it generates. Yes, there *is* a dependence. There is a hierarchy of logical types between consciousness and unconsciousness. By breaking the rule, consciousness does not make the rule invalid; consciousness treats the rule *as if* it were invalid. To break the rule is the condition of consciousness – and the existence of breaking the rule depends on the existence of the rule. Consciousness creates the rule and, at the very instant it creates it, it breaks it. Indeed, this is what characterizes our paradoxical existence and our capabilities to conduct our *socially organized activities*.

3.3 Goals, Tools, and Roles

What is organized activity? It is a combination of acts to reach a higher purpose – the purpose that cannot be reached by single acts alone. When a monkey puts a box on the floor under a banana hanging from the ceiling and then climbs on the box to reach for the fruit, it is already engaged in elementary organized activity. There is a *postponement* of the immediate event of grasping the banana, and the corresponding primary purpose of survival. The act of moving the box from one place on the floor to another has nothing to do, by itself, with the monkey's immediate need to satisfy its hunger. It becomes

¹ As Bateson has pointed out, Russell himself broke his rule by the very act of stating the rule. The rule commands you not to join elements of different logical types and thereby to treat them as if they were of the same logical type. But the command itself does that! Elements of different logical types are joined in the command. Russell's rule falls into a trap of self-reference that generates antinomies within his set theory (Wilden 1980, 124). As Bateson himself puts it: "[...] Russell's rule cannot be stated without breaking the rule. Russell insists that all items of inappropriate logical type be excluded (*i.e.*, by an imaginary line) from the background of any class, *i.e.*, he insists upon the drawing of an imaginary line of precisely the sort which he prohibits" (Bateson 1987, 189). A logical type cannot be identified without drawing boundaries of another logical type. (See also Wilden 1980, 122-24, 180-88.)

meaningful only as a *tool* in striving for that end. Tools emerged when our goals became too complicated to reach by single acts alone. Instead, special combinations of separate acts were needed, where goals were no longer present in the immediacy of our acts, but where acts became tools to be *used* in striving for them.

With the emergence of tools, acts and goals were separated from each other. The primary goal of satisfying hunger was absent from the monkey's act of moving the box, but as the act was part of the organized activity towards that goal, the goal was represented in it. Let us take another example, originally presented by A.N. Leontyev, where this absence of goal in the tool is even more evident. Think of the organized activity of Stone-Age hunting men, where some of the men frighten the herd of animals and make them run towards a certain canyon, where the other men wait in ambush (Leontyev 1981, 210-14). The actuality of the goal is not only absent from what the first men do, but, what is more, it is even *contradicted* in it. To catch the game by driving it away becomes rational only if it can be understood from the point of view of organized activity – that is, if driving the game away can be understood as a *means* to catch it later.

Only a purpose that necessitates more than a single act entails the creation of *tools*. Tools differentiate goals (acts) into *means* and *ends*. But there are even higher purposes. A higher end which, despite the use of tools, cannot be reached by the activities of a single individual alone, but requires the combined efforts of *two or more* individuals, entails the emergence of *language*. The creation of tools alone did not lead to the emergence of language, although they were of crucial importance for its evolution. When a monkey is able to reach a goal alone by using a tool, as in the case of moving the box, or in the case of cracking coconuts with a stone, it has no need to communicate its motives to its mates. Its activity is organized, but not *socially* organized. When the activity system becomes more complex, so that the mere use of tools is not enough, but also requires the joint efforts of more than one *tool user*, we need to objectify *ourselves*, too, in reference to our tools. Then the achievement of the goal requires not only the organization of different tools, but also the organization of different tool users – i.e. *roles* (see Mead 1962). In this sense, organized activity was more complicated in our example of the Stone-Age hunting men than in our example of the monkey using the box. The activity of the Stone-Age hunters was socially organized, since it involved a rudimentary division of roles between those who led the game towards the canyon and those who waited there in ambush.

Socially organized activity is socially differentiated in the sense that there is a division of roles between people and a common understanding of the meaning of those roles in reference to the common end. Tools are *symbolic* in their relation to the goals, from which they are separated. But if the use of tools does not involve the differentiation of roles, they have no, or only a weak, reference to *self*. Tools which bear only a vague reference to self may bear shared meanings, like the shared habit of cracking coconuts with a stone, but, to use G.H. Mead's term, such tools are not *significant symbols*. A significant symbol does not only refer to a shared object, but it also involves a shared identification of a role. Then the tool not only has an object, but also has an identified subject. An identified subject is an *objectified* subject. With the use of a significant symbol, I may recognize the object of my intention and also *myself* against the social and

societal background of other roles¹: "This is what I do, and what I am is what I do and *what others do not*." If everyone did the same things with the same tools, there would be no possibility for self-identification.

As it is generally held in communication theory, all behaviour is communication (Shannon & Weaver 1949; Bateson 1987; Wilden 1980; Ruben 1984; Watzlawick, Beavin & Jackson 1967). Because we are always behaving we cannot *not* communicate (Watzlawick, Beavin & Jackson 1967, 51-54), and in a communication system nothing *never* happens (Wilden 1980, 432). A behavioural system, or organism, is therefore a communication system. But only a communication system which involves the use of significant symbols can be called *language* (Mead 1962, 79). Language, in other words, is a name for a communication system that reaches the qualitative level of consciousness (here meaning self-consciousness). As Bateson said, "the royal road to consciousness and objectivity is through language and tools" (Bateson 1987, 48).

Language was an answer to our search for better control of our environment. We began to strive for such higher ends that could only be reached by fitting together separate person-related tasks. Language brought us the opportunity to objectify not only the things that surround us, but also ourselves: "First *I* do this, and then *you* do that"². The emergence of socially organized activity (or division of labour, if you like) meant the emergence of self-consciousness. The key to our understanding of consciousness lies in the tension between the individual's intentional actions on one hand, and the collective motive, which is based on the organization of individual actions, on the other (Leontyev 1981, 212-14). This is the tension which is embedded in the societal division of labour. According to Mead, there would be no mature consciousness of self without society. Then again, there would be no society without self-conscious individuals. Self and society are the two poles of a relationship that constitutes them both. (Mead 1962, 155, 262-64, 309.)

With industrialization, the division of labour became too complex to support the balanced development of individual selves. We could say that mass production went "out of the human scale". An individual role was not linked to such other roles that would enable comprehension of the whole organization of cooperative activity. Instead, an individual carrier of a role was surrounded by other carriers of the same role at the conveyor belt. The individuals were given tasks within organizations where they recognized the partiality of their own activities, but had no possibility to comprehend the whole of which their activities and corresponding roles formed functional parts. This led to *alienation*, i.e. to insufficiency in one's capacity to integrate one's self to the surrounding society. (See Engeström 1995, 44.)

¹ "The individual enters as such into his own experience only as an object, not as subject; and he can enter as an object only on the basis of social relations and interactions, only by means of his experiential transactions with other individuals in an organized social environment" (Mead 1962, 225; see also pages 138-42).

² According to Mead, language is the means by which individuals can indicate to one another what their responses to objects will be (Mead 1962, 122). Dewey, in turn, holds that the primary motive for language is to influence the activity of others (Dewey 1960, 239).

3.4 Royal Road to Consciousness

Language is not the same as consciousness. Language is not consciousness, but the "*royal road* to consciousness". Our language is crucially different from the communication modes of other organisms. But the reason for this difference is not that other animals (especially those genetically close to us) communicate in ways that are foreign to humans. In essence, their modes of communication are not foreign to us. The point is that humans have reached an ability to communicate also in ways that are foreign to other animals. Language is crucially more complex than other forms of communication because it involves the secondary process *in addition* to the primary process.

Language necessarily has to include within itself the lower forms of unconscious communication; otherwise we could not comprehend the fact of socially organized activity – that which is the function of both consciousness and unconsciousness. The effort to *socially organize* activity entails conscious thinking; pointing out objects and roles to others as well as to oneself before acting (Mead 1962, 363-67). (As we have seen, this is an inherently paradoxical task because we cannot organize activity, but only abstractions of activity.) To act in a *socially organized manner*, on the other hand, one needs the skills of an unconscious actor because activity is the function of the unconscious. All habituation, skill and memory formation takes place in the unconscious. The consciously formed objects must also "sink" into the level of embodied knowledge, in order to be carried out in action. The ability to use language is itself such an unconsciously learned skill. Like the communication modes of other animals, a great deal of our linguistic communication is unconscious, and necessarily has to be. The difference is that, within our linguistic communication, we are able to *become* conscious of certain aspects of our world *as* abstractions when our activities meet disturbances that arouse such attention.

Language as "the royal road to consciousness" is not only consciousness, but the "road" – with all its particular "bends" that give it its special character. These "bends" are, in the order of their appearance, *differences*, *distinctions*, *identifications*, and *oppositions*.

3.5 Difference, Distinction, Identification and Opposition

Language is here understood as a multi-level communication system, which consists of three qualitatively different "horizontal" levels and "vertical" relationships between them. (These vertical relationships – the relationships of *metaphor* – will be discussed in the latter part of this chapter.) Each level offers its own peculiar way to differentiate and determine reality. The basic way is the formation of relationships of *difference*, upon which the making of *distinctions*, and finally the making of *identifications and oppositions*, are structured.¹

¹ This classification of differences and the corresponding three-level structure of language is mainly based on ideas that Wilden presents in his essays "Analog and Digital Communication", "The

3.5.1 *Difference*

The first level of the language system is the *level of difference*. This is the level of an unconscious organism which organizes its environment according to its basic existential needs¹. The environment consists of situations to be strived for and situations to be avoided. The organism lives in a continuous "here and now" (Mead 1962), where its every life situation is a realization of its purpose to maintain itself (see Järvillehto 1995, 219; Wilden 1980, 66). Its every life situation is also meaningful, as it reveals the state and quality of its own existence². It lives in an emotional environment of hunger, thirst, love, hate, safety, fear, anger, respect, dependency, etc. Its self-maintaining activity is simply the seeking from negative to positive emotions. What the organism perceives in its environment are meaningful events which change its states of emotion. Emotions have to do with changes in the organism's environmental relationships. Emotions are aroused when the states of the organism's environmental relationships change, as the organism acts them out. These changes are differences the organism perceives between its present and former life situations structured according to its needs – for example, the difference between hunger and satisfaction, or the appearance of a threat and its disappearance. At this level the activity of the organism is filled with meaning, and this activity is directly related to the organism's goal of survival.

As regards man's existence in the 'built environment', we may also assume that there are certain elementary differences that the human being has an unconscious and emotional inclination (appetite) to perceive in his environmental behaviour. These differences have to do with meaningful events in the movement between, for example, inside and outside, arrival and departure, narrow and wide, near and far, home and away, together and alone, safe and unsafe, warm and cold (see Nyman 1998a, 24). Nyman calls these differences "archetypes" (*ibid.*, 85-95; Mäntysalo 1998b, 149; Nyman 1998b, 153). Basically they are not culture-specific but stem from the basic existential needs of the human being as a 'human animal'. The archetypes are rooted in the shared precultural history of our species. Whatever the "cultural style" of the built environment, it reflects this archetypal character when it enables the goal-seeking of the human animal – that is, when it is perceivable in terms of elementary differences in human spatial existence. (Nyman 1998a, 89-93.) Goal-seeking is impossible if this seeking does not produce any sensations of differences – if the organism is not able to detect whether it is approaching the goal or drawing away from it. A built environment of archetypal character is an environment that arouses emotions.

This standpoint provides a special basis for the critique of modern architecture. Modern architecture has categorically attempted to violate the experience of certain basic differences in human spatial existence: the outside flows into the inside and vice versa; streets and courtyards merge into huge open spaces; home is an apartment amongst

Symbolic, the Imaginary, and the Real", and "Nature and Culture" (with Gerald Hall's appendix). All essays appear in Wilden 1980.

¹ The general idea that organisms organize their own environments is proposed, for example, in Whitehead 1946, Mead 1962, Järvillehto 1995, and Sheldrake 1988.

² On the definition of meaning, see Wilden 1980, 11, 184.

dozens of identical apartments. In functionalism, the stripping of the ornament was associated with an attempt to strip sentiment from the architectural form; as form-giving was to obey the *rationale* "form follows function".

3.5.2 *Distinction*

The second level, the *level of distinction*, emerged with the creation of tools. With the advent of tools, certain life-maintaining actions were divided into sequences of several actions. Tools brought an increase in the organization of actions. Actions that until then had provided immediate embodiments of their own goals were developed into organized activities consisting of means-actions and end-actions. The ends were postponed from the means. A certain set of end-actions was attainable only if another set of means-actions was conducted first. The tool is the *distinction* we make in the continuum of activity by which we differentiate and further organize actions into means and ends. A 'tool' is not a mere means, but refers to a much deeper process of information where activity situations are formulated into means-end procedures. Tools are distinctions by which portions of the territory can be mapped.

Maybe the first "tool" ever was the hand. According to Mead, the contact experiences of most vertebrates other than man immediately present the completion of their acts, but the hand of man provided an intermediate element between the beginnings and completions of acts (Mead 1962, 237, 362)¹. Tools provided the means for the objectification of the perceptual world. They introduced *boundaries*² into the continuity of emotional differences at the first level. Tools are actually not objects but transformations that draw boundaries upon continuity, so that we may treat this continuity as limited objects. This is the ultimate function of the tool: to limit continuity.

The first-level differences are always about *more or less* – e.g. more or less hungry, more or less frightened, etc. These differences are continuous; there is no specific distinction between hungry and not hungry, or between frightened and not frightened. Accordingly, the meaningful experience does not make any specific distinction between environmental aspects that are connected to the experience. This is communication in terms of *both-and*: one is never in an absolute position, but always in a relationship where

¹ "In fighting, the food process, sex, most of the activities of parenthood or childhood, attack, flight to a place of security, search for protection against heat or cold, choice of a place for sleep, contact is coincident with the goal of the instinct; while man's hand provides an intermediate contact that is vastly richer in content than that of the jaws or the animal's paws. Man's implements are elaborations and extensions of his hands. They provide still other and vastly more varied contacts which lie between the beginnings and the ends of his undertakings. [...M]an's manual contacts, intermediate between the beginnings and the ends of his acts, provide a multitude of different ways of doing things, and thus invite alternative impulses to express themselves in the accomplishments of his acts, when obstacles and hindrances arise. Man's hands have served greatly to break up fixed instincts by giving him a world full of a number of things." (*Ibid.*, 362-63.)

² "[B]oundaries are the condition of distinguishing 'elements' of a continuum from the continuum itself" (Wilden 1980, 122).

more of one and less of the other means in no circumstance the total presence or absence of either.

Tools, however, led us to make distinctions within that continuity. They led us to recognize as objects perceived differences that were connected to our activities and the related emotional changes. These recognized objects became to stand for the perceived differences. An apple that the hand takes from an apple tree is now taken to stand for "food", or "remover of hunger". The snake that one is able to kill, or drive away, by hitting it with a stick, is recognized as "threat", and the stick as "weapon", or "remover of threat". Differences that thus became re-presented in objects were replaced by *distinctions*. Either the object is there or is not – either there is or is not food, either there is or is not a threat. The continuum of difference is therefore punctuated by distinctions – like in a thermostat, which punctuates the continuum of differences in temperature by either turning the heating on or shutting it off at pre-defined temperature levels (Wilden 1980, 160, 447). According to Wilden, "[t]here can be no distinction without motive, and there can be no motive unless contents are seen to differ in value. If a content is of value, a name can be taken to indicate this value. Thus the calling of the name can be identified with the value of the content." (*Ibid.*, 170.)

By using tools, we are able to point out things. But what we recognize is not that which was there before it was pointed out. It is the pointing out with the tool that constitutes the recognized object. To be more correct, this denotation constitutes a boundary in the both-and continuum of difference, in terms of which the difference is seen as an object distinct from its environment. This object is not and cannot be what was there before the act of denotation¹. That is because the act of denotation establishes a *metacommunicative* level in relation to what was pointed out. Metacommunication is an act of framing communication, i.e. an act of communication that comments on other communication. The making of distinctions at the second level is a commentary on the first-level communication of differences. According to Bateson, metacommunication works like a picture frame that hangs on the wall. The frame instructs you to observe the texture inside the frame with an attitude different from the attitude with which you observe the texture of the surrounding wallpaper. It indicates that the texture inside the frame is of a different logical type than the texture outside the frame. The metacommunicative boundary indicates a distinction between two logical types. (Bateson 1987, 186-90.) The act of metacommunication therefore pulls apart that which it frames from the continuity of communication. That which is pulled apart becomes an *abstraction*². All abstractions are frames of something concrete, every map is a frame (boundary) of a territory.

¹ Vattimo claims that the moment the difference is enunciated it becomes a signifier. Signifier is a pure trace of an original that cannot be given (non-place). Every alleged immediacy is already a duplication of the original that is not there. (Vattimo 1980, 141-44.) With 'difference' Vattimo refers to Heidegger's 'ontological difference' and Derrida's *différance*. Derrida defines the latter as the movement that constitutes language "historically" as a network of differences (Derrida 1988, 113). Although arriving from another direction to his philosophy of difference, Vattimo recognizes its similarity with Wilden's (1980) attempts to integrate the idea of difference into a philosophy of communication (Vattimo 1980, 153).

² Lat. *abstrahere*='to pull apart'.

Information is a concrete event that leads to its own framing at the abstract level. In other words, information is communication that leads to metacommunication (a difference that makes a distinction¹). Tools are *forms which inform* (Wilden 1980, 362-63).

The boundary of distinction is both vertical and horizontal. The *vertical* dimension of the distinction means that, with the making of a distinction a new metacommunicative level emerges – a level hierarchically subordinate to the level of differences onto which the distinction was made. The distinction is also *horizontal*, at the second level, as it creates a boundary not only between the concrete activity and the abstracted object, but also between the abstracted objects themselves.² Our abstractions derive their denotative contents from their relationships to other abstractions. Together, they form referential networks in accordance to those concrete life situations that have provided the context for their emergence.

A distinction thus draws a boundary in two directions. Firstly, it draws a vertical boundary of *representation* between the territory and the map. Secondly, it draws a horizontal boundary of *reference* within the map (see Figure 13). Maps are always of something – like the map of Raahe. The map of Raahe refers to Raahe but it does not represent Raahe. It re-presents a territory: perceptions and memories that have no name. ‘Raahe’ already is a representation. ‘Raahe’ is another map; it is a name of something. It is a name of a town of about 18 000 inhabitants on the northern coast of Finland. ‘Town’, ‘18 000’, ‘inhabitant’, ‘northern’, ‘coast’, and ‘Finland’ are but other maps. They bring us no closer to the territory³. They are just shifts of distinctions that re-present the territorial differences we perceive in our environmental behaviour. They cannot escape their nature as representations. What is a map? My definition is the following: it is an abstraction-in-reference-to-another-abstraction where this referential relationship between abstractions

¹ “Information is difference which makes a difference” (Bateson 1987, 315). Here Bateson’s latter difference is replaced with Wilden’s ‘distinction’, which Wilden reserves to denote such differences that have to do with the digital punctuation of analog continuums (Wilden 1980, 174, 222). To simplify Derrida’s *différance* we could formulate it, accordingly, as the movement of difference that makes the oppositional relationships of concepts (such as culture/nature, reason/emotion, fact/value, subject/object, theory/practice) (Derrida 1988, 16-17). Wilden defines *différance* as the *in-formation* of form (Wilden 1980, 399).

² According to Wilden ‘not’ is both a distinction between A and not-A and the *rule* of making distinctions. It is thus both the *class* of binary logic and a *member* of that class as a distinction between A and not-A following that logic. The line between A and not-A is both their dividing line and their *frame*. (Wilden 1980, 183-86.) In my vocabulary, horizontal boundary is the boundary between A and not-A, and vertical boundary is the boundary between binary logic and that from which it distinguishes itself.

³ “But what is the territory? Operationally, somebody went out with a retina or a measuring stick and made representations which were then put upon paper. What is on the paper map is a representation of what was in the retinal representation of the man who made the map; and as you push the question back, what you find is an infinite regress, an infinite series of maps. The territory never gets in at all. The territory is *Ding an sich* and you can’t do anything with it. Always the process of representation will filter it out so that the mental world is only maps of maps of maps, ad infinitum. All “phenomena” are literally “appearances”.” (Bateson 1987, 460-61.)

re-presents the territory. There are no maps without reference. By itself, a map re-presents nothing. Only reference re-presents. The map *of* Raahe ('map'-in-reference-to-'Raahe') is a representation.

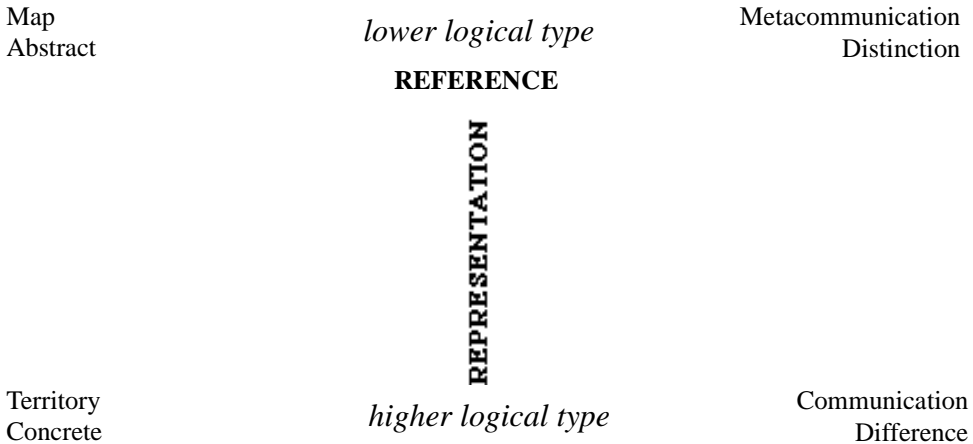


Fig. 13. Representation and reference.

Everything we claim a map to re-present is our commentary on its reference. We cannot say what our maps re-present – we can only say what they refer to. But we can safely call them representations. The evolution of language will ensure that all maps that are not adequately representative will be thrown away or developed into more representative maps. Maps that are useful and enable organized activity are representative. Maps that confuse us and lead us astray are not. If a tourist finds his way from the bus station to his hotel in the town of Raahe by using a tourist map, then his map is useful. It becomes a tool in his search for the hotel. The map does not re-present the route from the bus station to the hotel; it refers to it. The route itself is another map – a distinction in the landscape which the tourist is able to make by examining his tourist map. The tourist's actual walk through the route will show the representative quality of this referential relationship between the tourist map and the objectified route.

Reference means *signification*. The abstraction becomes *signified* from other abstractions that are related to it. An essential quality of an abstraction is that it constitutes a relationship of *not* – it is *not* what it refers to. It is this relationship of *not* that forms our objects. The map of Raahe refers to Raahe but it is *not* Raahe. Something emerges as distinct from something else by being about that something else. Objects are relationships of reference where they negate their reference. They are "of/not" – such as the map of Raahe/not Raahe. The transformation of difference into distinction means the *transformation of meaning into signification*: a gain in syntax at the expense of loss in

semantics (Wilden 1980, 24, 187-89, 447). Signification is the instrument of meaning (*ibid.*, 11).

Abstractions are hence accurately defined, but they lack content. Looking at the environing plateau of other abstractions, their positions are defined by *distinctiveness*; looking at the depth of themselves they are left with *unlikeness*¹. Horizontally, 'Raahe' is separate from 'town', '18 000', 'inhabitant', 'northern', 'coast', and 'Finland'; vertically 'Raahe' is unlike what it re-presents because the relationship of distinction is radically unlike the relationship of difference². Communication by distinctions can be precise only about boundaries; not about the contents it divides (Wilden 1980, 162). The rich and emotionally meaningful both-and is reduced to a narrow *either/or* (see *ibid.*, 163).

The horizontal network of abstractions is an *epistemology*. Epistemology maps discontinuity onto continuity. "Epistemology is a matter of where you draw the line; every *logos* deals with boundaries" (*ibid.*, 166).

The creation of tools led us to discover a new world with a multitude of objects. As Leontyev observes, a 'tool' is the first true abstraction (Leontjev 1977, 45). But we thereby also lost much of the sensuous and emotional meaningfulness that we had had in our actions. Meanings are always postponed from tools. Activity as an instrument is always about something else. Tools are empty shells which negate their having any meaningful contents in themselves, but can only signify the meaningfulness of other contents. This is the contradiction of metacommunication. As communication that frames communication, it is the activity of separating objects out of itself – claiming that it is about objects, and negating its own nature as activity. By referring to its object communication, metacommunication denies its own character as communication.

The first-level communication, at the level of difference, cannot metacommunicate. It is not communication *about* anything (see Wilden 1980, 173). It is communication as *self-realization*.³ It seeks no reference outside itself. There is nothing behind it; the meaning is all there in the actuality of performance. Take the example of a man bursting into laughter when he suddenly sees something funny. He is not laughing to denote his enjoyment; his laughter is communication in which he *is* enjoyed. He is caught unguarded by a change in his environment that triggers his laughter – and can only after the actual occurrence of this communication withdraw from it and make a metacommunicative analysis of whether it was proper behaviour to laugh or not, and what it may have been taken to denote by others in his social environment. Blushing is another example. Blushing is an integral aspect of being embarrassed. No one blushes to denote his embarrassment. Blushing is a message, but it does not involve a metacommunicative decision: "This is a message".

Because first-level communication cannot metacommunicate itself, it refuses to acknowledge the boundaries that second-level communication imposes on it. It refuses to recognize that there is any "upper" metacommunicative level. For an unconscious

¹ According to Carse, nature confronts us with its radical *unlikeness* of whatever we could think or say about it (Carse 1986, 102).

² Accordingly, binary logic is radically unlike associative thought.

³ Here I am rephrasing Bateson's notion that all communication is about relationship. In a more profound sense communication *is* the relationship. Bateson also seems to take that position when he claims that the message constitutes the relationship (Bateson 1987, 275).

organism, there are no objects, tools, and abstractions, but only perceptual differences¹. The tool loses its separateness from its reference; the tool and its reference fuse together in the emotional meaningfulness of activity. When a tourist stands with two heavy suitcases at the corner of the street in a foreign town and tries to locate himself and his hotel from the tourist map, his logic gives meaning to this event as a means to find the hotel – but his unconsciousness gives meaning to it as it is as an emotional experience. He may feel tired, uneasy, or excited by the surrounding exotic atmosphere, and may or may not let these feelings enter into his consciousness, which is preoccupied with thoughts that refer to something other than the "here and now" of his immediate experiences.

There are no boundaries at the first level (Wilden 1980, 447). But this does not mean that the first level would remain unchanged whenever a new boundary emerges at the second level. The new second-level boundary emerges when tools separate from goals and activity becomes more organized. It is precisely these changes in the organization of activity that are felt at the first level – but not in the sense of new boundaries, but rather as *new differences*. New distinctions lead to new differences. Mapping changes the territory. After each conscious moment the organism is unretrievably changed (Järvillehto 1995, 219)².

3.5.3 Identification and Opposition

Objectification of self is here reserved to the third level: the *level of identification and opposition*. The second level of distinction already reached consciousness, but here it is "heightened" in the sense of focusing on the self. As society differentiated, individuals were given separate sub-tasks that were arranged as elements of higher common tasks. Individuals could thus identify themselves and each other according to their functional roles in relation to the social background of common ends (e.g. husband, tailor, blacksmith, slave, sculptor, cripple, foreigner). People became specialized in their use of tools, and thus in their production of objects. In a sense, shared objects became the *property* of the identified individuals who were collectively assigned to produce these objects. "[W]hat is peculiar to the self is what it calls its own" (Mead 1962, 212). Owned objects became objects of *exchange*, and necessarily had to, when individuals were dependent on each other's specialized skills and craftsmanship in the production of collectively needed objects. Social cooperation can be seen as a form of exchange, where specialized individuals trade their partial services in order to achieve mutual benefits. During the modern age, with the expansion and differentiation of scientific knowledge, even epistemologies became specialized, and scientific expertise itself became an object of exchange in social cooperation.

¹ "Only perception is real, not the object of message, nor the context. They are real only insofar they are communicatively effective; i.e. function as messages or modifiers of messages, which are perceptual." (Bateson 1987, 250.)

² As Luhmann argues, the use of distinctions on events is not indifferent to what will happen next, but an operation in its own right that intervenes in the flow of events (Luhmann 1993, 106, 223).

Claude Lévi-Strauss thought that the prohibition of incest meant the birth of culture (Wilden 1980, 245-50). Maybe the first identified social roles were ‘brother’ and ‘sister’, which appeared together with the identification of family units in terms of sexual activity. The mate was supposed to be found *not* from one’s own family. Social roles emerged as objects of negation and objects of exchange through marriage.

Objects became *significant symbols*, which means that they formed new boundaries at a new level. In addition to making the second-level distinction, the significant symbol also made the third-level identification. The identification of self in an object brings with itself a new level of metacommunication. Self-identification is thus *second-order metacommunication*¹. The object is evaluated from the point of view of roles and cooperative results. Objects that can become means of self-identification always suggest both *differentiation* within society and *cooperation* between the differentiated social units. Self-identification in terms of social roles includes both separation from one’s social environment and cooperation with it. Identity implies social responsibility. Therefore, an individual who recognizes himself as an individual necessarily recognizes himself as a *moral* individual (Mead 1962, 190-91, 319-21). In essence, the third-level boundary of identification is the boundary of *ethics* – the boundary of the socially responsible individual.

This boundary leads us to evaluate our actions from the perspective of social ends, where we have the capability to estimate the importance of our own conduct for the attainment of certain collectively beneficial results. In modern society this evaluation is no longer easy, because our societies are too complex for anyone to comprehend sufficiently. Therefore, the perspective of social ends that we are able to grasp is always too narrow, and, accordingly, our social identity is also too narrow. We may have good intentions towards our social environment – but the question of what are the full and long-term social consequences of our actions, is just beyond our comprehension. The modern society is not a completely *social* system anymore, but inevitably a system of narrower and wider *social subsystems*. As there are socially wider and narrower ends, there are also wider and narrower selves.

Although our vision is limited, we are often able to tell the difference between a narrower social end and a wider social end of which the former is a part. These ends may sometimes seem relatively autonomous. A minor social system may change its end, which may have negative effects on the larger system, but the case may be that these effects reverberate destructively on the minor system only after a lengthy interval. Thus, for the minor system there is room for quick profit-making at the expense of the larger system – especially if the future damage on the minor system itself is left for others to handle. Examples, on different scales, are exploitation of the Third World, polluting industry, speculative real-estate business, short-sighted political decision-making to win votes in the next election, etc. Within the system of society, minor social groups and their ends are interconnected, but there is often certain scope among the narrower social groups

¹ Luhmann calls it “*second-order observation*” where observation means the operative use of distinctions: “[O]bservation cannot observe itself, although an observer as a system has time to switch distinctions and, at the level of observation of the second order is thus able to observe himself as well” (Luhmann 1993, 15). “Second-order observation is indicating a distinction with the help of another distinction” (*ibid.*, 223).

to redefine their ends to their own advantage, which results in a loss of functionality at the larger societal level. This is a confusion of logical types, where the narrow end aims to counter-act the wider end of which it is a part.

When identification turns into *opposition*, the self refuses or is not able to recognize the full nature of the boundary of self as both separative *and* cooperative. The narrower self starts to act against the wider self, which means that the *self starts to act against the context of its own existence*¹.

A person may bring his narrower and larger self into mutual opposition quite willingly. In modern society this is, in fact, a generally accepted and necessary habit (see Bateson 1987, 500-01)². In political, economic, and expert games, an individual is not expected to think broadly but, first and foremost, to support in all his activities the subsystem where he has a role. He may be quite aware that in a society where he identifies himself in terms of not just one but many roles (that belong to separate subsystems) he ends up negating his own purposes and values. However, these oppositions may not be too disturbing if he is able to keep the conflicting motivations apart in separate activity contexts, and is not compelled to actualize their contradiction in a single activity situation.

A person may also "drift" into an oppositional relationship without a conscious intention to do so. His activities may bear wider social consequences of which he has no previous knowledge, and which exceed his definition of his self as a socially responsible individual. This means that he unconsciously acts in a social sphere wider than the one his consciousness had drawn. Because his role conception is thus improperly punctuated, he meets disturbances in his activities. His consciousness may interpret these disturbances as a foreign outside force that threatens the coherence of his identity. He starts to defend his identity against this force by emphasizing the separative function of his self, and opposing its relative cooperative function, to the degree of the threat.

To rectify this unwanted situation the individual has to *reflect* on his oppositional definition of self. Self has a *binary structure: self and not-self*. By bringing self and not-self into a mutual dialogue – ego *with* alter – the individual may reflect upon his self. A reflective self is aware of its binary structure and sensitive to its inherent tendency to develop into an unreflective opposition – ego *against* alter – when a conflict emerges. In dialogue, the not-self that was formerly opposed to self is playfully explored without preoccupations. Reflection upon self means, firstly, the *analysis* of one's use of abstractions (distinctions) in reference to one's role and to the way social relationships are brought together in it³. Secondly, it means *creative action* whereby the individual seeks a new understanding of his actions (differences) at the abstract level (distinctions) and, through corrections at this level, arrives at a more comprehensive definition of his self (identification). (See Mead 1962, 357.)

Third-level communication is metacommunication about second-level communication, where one identifies oneself in one's use of distinctions. In reflection, this communication

¹ See Bateson's theory of alcoholism, in Bateson 1987. The theory is discussed in Chapter 5.

² "[I]gnorance of the context happens to be one of our most highly developed cultural values" (Wilden 1980, 114).

³ According to Mead, each individual self is formed by its unique relationship to its social environment (Mead 1962, 201-02). Järvillehto holds that one's personality is the locus of one's all social relationships (Järvillehto 1995, 133).

poses the question of ethics upon epistemology. The individual asks what kind of a community and division of roles his epistemology indicates. The level of distinctions deals with "what is?". The level of identities deals with "whose what?". The question of "whose what?" is an act of framing the "what is?". It recognizes that there is a wider social sphere affected by a given epistemology than the social sphere (epistemic community) that the epistemology implies. When we realize in any social activity system that there is a conflict where an improperly punctuated epistemology turns people against each other, we have to start a critical and creative search for "what should be?".

Reflective action extends vertically through all the three levels from the correction of disturbances between differences and distinctions up to the third-level correction of self-fragmentary oppositions. What is here called *reactive action* is action that covers only the vertical relationship between the first two levels. Reactive action is the correction of abstractions where the actor faces no such disturbances (or refuses to face them) that would force him to question the social basis of his epistemology wherein his correction takes place. Reflection is needed in such severe disturbances that fragment the epistemological context itself, and therefore also one's definition of self constructed upon it. One's identity is caught in a *double bind situation* (see Bateson 1987, 206-09)¹ where the oppositional attitude of one's self turns back on oneself, blocking the possibilities for action. There is the narrower self that is identified in reference to boundaries of distinctions, and there is the wider self that acts out the unbounded relationships of difference. My abstractions belong to a certain epistemic (professional, economic, political) context, but, at the same time, the interdependencies of my activity belong to a wider and different (as unlike) ecosocial context. It is never a role that acts, but a concrete human being (Engeström 1995, 50)².

It is essential to understand that social conflicts of a double bind character are also conflicts between the different aspects of individual personalities, or conflicts between the socially identified self-object and the active subject³. When we reach this kind of understanding – when we realize that it is not the contradictory interests of others that cause our social conflict situations, but the conflict within our own interests – then there is room for reflective action (Engeström 1995, 98). Mead thinks that "all of us feel that one must be ready to recognize the interests of others even when they run counter to our own, but that the person who does that does not really sacrifice himself, but becomes a larger self" (Mead 1962, 386).

¹ Double bind situations, especially in the context of land-use planning, are further discussed in Chapter 5.

² Note Mead's conception of the two-sided human personality where the objectified self ('me') is a socially fixed representation of the uncertain and creative subjectivity of one's personality ('I') (Mead 1962, 173-82, 197-200). There is also a similarity to Buber's (1995) idea of the two dimensions of self: the objectifying relationship 'I-It' where 'I' objectifies itself by objectifying 'it'; and the subjective relationship 'I-Thou' which is the undivided connection of 'I' and 'Thou' in the active presence of their relationship. Buber's 'I-It' somewhat corresponds to Mead's 'me', and his 'I-Thou' to Mead's 'I'.

³ See Mead 1962, 307. In Mead's terms a double bind situation could be defined as an unresolved conflictual position that the socially objectified 'me' has taken in its relation to 'I'.

The point is that conflicts of interests do not simply get resolved through our reflection on our own identities. Within our reorganized and larger self, we are not necessarily freed from the conflict situation, but – what is important – *freed from our oppositional attitude towards it*. The conflict is *framed* within our new self – which means that we are able to handle it; we can describe to others as well as to ourselves the circumstances where these conflicts arise and the reasoning which led others to deal with these circumstances contrary to our own dealings. In other words, we have “internalized”, to a crucial extent, a new set of interlocking roles (another social practice). By being able to see the conflict situation from the viewpoint of those roles, we are able at least to understand the “logic” behind an interest other than our own, if not able to change our own interest. However, this understanding is the precondition for any capacity to keep up a creative search for such new interests that would be acceptable to both parties in cases of conflict.

3.6 Survival, Use and Exchange

3.6.1 *Survival*

The first level, the level of differences, is the domain of *survival*. The activity of an organism is directly related to its survival as a subsystem within the ecosystem. A goal-seeking organism seeks to survive. Differences in the “degree of presence” of the goal are, at the same time, differences in the organism’s ability to survive. Differences in its reality are thus meaningful because they have *survival value* (see Wilden 1980, 119, 184). The organism “values” situations which actualize the presence of the goal. A difference towards the presence of the goal brings positive emotions. For example, a light-seeking moth “values” being in light, and its survival depends on light.

3.6.2 *Use*

The level of distinctions is the domain of *use*. All abstractions derived from the concrete are instrumental. There is no “pure representation”. Each representation is generated for a certain purpose which itself is constituted, evaluated and attainable only via this representation. As Thayer maintains, “[w]e know what we know in virtue of the social utility which that knowing has for us as individuals” (Thayer 1975, 238). The very fact that we are able to conceptualize our reality is itself a result of the process of transforming our reality into objects of use. Use is the creation and maintenance of this process. It is the constant transformation of concrete activity into abstractions and abstractions into parts of concrete activity. It is the activity of *mapping*, the process of transforming the territory into a map. When you use a map it has to maintain this active property of mapping in your use, if it is to be of any use at all. The *use value*¹ of the map

¹ For Marx the utility of an object makes it a use value (Marx 1974, 45).

is its ability to map reality. For example, a tourist may use an old tourist map to find a certain hotel, but may later notice that what he found was a new car park, built on the site where there had been an old hotel that had burnt down. The tourist map had poor use value for the tourist because, in this case, it did not enable organized activity. As all tools, the tourist map organizes activity by combining separate acts into a sequence which leads to a higher end. Here, the higher end is "finding the hotel". But the map itself has to become a functional part of this sequential activity if the goal is to be achieved. It has to function as a difference in the activity of "finding the hotel", as any other perceptual difference sensed in the process of walking through strange quarters and cityscapes, hearing sounds of traffic, picking up landmarks, reading street names, etc. The meaning lies in this activity. If the signification of the map loses its vertical connection to this meaning, it becomes an empty abstraction. It becomes useless.

Use is concrete organized activity – yet, although concrete, it necessarily involves abstraction because it would not be *organized* activity without abstraction. Abstraction enables organized activity because it *re-presents* in the present act that part of the activity which is absent. For example, with the use of the tourist map the hotel becomes re-presented in the tourist's actual activity context of walking through the strange city towards the hotel without any sight of it. *Use is paradoxical goal-seeking because it utilizes the negated presence of the goal in its search for it.*

It is this *metaphoric* quality of re-presenting into a concrete presence that which is concretely absent that gives an abstraction its use value. Metaphor is in a transformative position between the concrete and the abstract, the territory and the map, communication and metacommunication, God and son. It involves the attainment of a position (son *as* God – Jesus) where that (son) which is radically unlike what it is about (God) is *seen as* what it is about.¹

3.6.3 *Exchange*

The level of identification and opposition is the domain of *exchange*. Nothing concrete can be exchanged; only abstractions can become objects of exchange. For example, work cannot be exchanged, only signifiers of work – such as reports of results, being at the work place during the working hours, and pay cheques. At the second level, activity is transformed into an object; at the third level, it is further transformed into an *owned object*. For activity there is no ownership or non-ownership, only more or less presence of the goal. When someone sells his house he cannot sell his past and future activities and perceptions. What he sells concerns his use of the house formulated as an abstraction. Both the seller and the buyer acknowledge that the seller "owns" the decision of whether to use or not to use the house in the future. It is this decision which the seller is willing to exchange for a sufficient sum of money. Exchange metacommunicates use, but it cannot metacommunicate what is metacommunicated in use itself. *Exchange value* is a value

¹ For Carse "[m]etaphor is the joining of like to unlike such that one can never become the other" (Carse 1986, 102).

given to use value in view of its possible exchange to another use value¹. It has to do with evaluating the value of an object in relation to other objects from the point of view of the self. The object that the self desires the most has the highest exchange value. All exchange is self-centred; only identities exchange.

All exchange also has to do with ethics, because we define our social and societal relationships in exchange². Insofar as we are conscious of the interdependencies in our social relationships, we recognize our mutual responsibilities and respond to them as moral beings – with a sense of doing the right, or the wrong, thing. Our mutual exchange may be giving, helping, equalizing, and making mutual services; or it may be taking, forcing, dominating, and exploiting – depending on the nature and width of the social relationships upon which we base our identities.

Exchange involves abstracting the already abstracted (making identifications on distinctions). Exchange is therefore highly abstract. But it is also concrete because it involves concrete activity; concrete arranging of human possibilities for action in the environment. Abstractions are not concrete but the activity of abstracting *is* concrete, as is even the activity of abstracting the abstracted. As a concrete event, the exchange process always has potential for surprise. The values tentatively applied to the use objects and the hopes pertaining to reciprocal willingness to participate in exchange processes may not come true.

Objects of exchange are *second-order metaphors*. They are metaphors of use objects which already are metaphors of survival. Exchange value is in metaphoric relation to use value. *Money* is a measure of exchange value that is used as a universal metaphor of use value. As Marx observed, money is "the general equivalent of exchange" (Marx 1974, 76). It is the general equivalent form that offers direct exchangeability (*ibid.*, 73, 95). Communication in terms of second-order metaphors cannot produce novel use values because it can only use what already has a given use value. Money symbolizes use, but it cannot symbolize what use itself symbolizes. The creation of a new form of use is about abstracting the concrete. Second-order metaphors produce abstractions of the already abstracted. Money is not a sign of relationships, but a sign of things (see Wilden 1980, 252-55). Communication in terms of money cannot create new things; it can only turn them into signs of someone's ownership or control. Capital can be produced only by the creative capacity of human beings, and it is thus hierarchically subordinate to human creativity.

¹ Marx saw exchange value as a quantitative relationship between qualitatively different use values in the economic exchange process, where one use value is exchanged to the other (Marx 1974, 46, 56, 68). When qualitatively different use values are transformed into exchange values, they no longer differ in their quality but only in quantity – which allows their exchangeability (*ibid.*, 47). According to Marx, different use values are made qualitatively uniform in exchange value by abstracting work, so that different kinds of work invested in the creation of different use values become mutually comparable and measurable (*ibid.*, 48, 67). In economic exchange, exchange value is only one societal way to represent work spent in the production of objects (*ibid.*, 87).

² According to Marx, use value materializes to an individual in his relationship to his object, whereas exchange value is realizable only in the societal process of exchange between individuals (*ibid.*, 88).

Money becomes destructive to language when it expands to such realms of communication that cannot be reduced to its simple form of symbolic representation. But by being an uncreative form of language, it cannot correct itself by itself. When money ceases to function metaphorically in our life, we have to rely on the more basic levels of language, where new use values are created. By creating new use values, language can deconstruct its objects and relative identities. Money is a narrow form of language because it cannot reach beyond the processes of ownership and control (making identifications on distinctions) into the more basic processes of information (making distinctions on differences).

Only that which survives can be used, and only that which can be used can be exchanged. The survival of the human environment is of a higher logical type than humans' use of their environments, which again is of a higher logical type than humans' ownership and control of how the environment is used. Wilden holds that, under capitalism, the logical hierarchy between these three levels – *survival* of the human environment, its *use*, and the *exchange* of use – is reversed. This is done through the process of their *commoditization* into *land*, *labour potential* and *capital*. Under capitalism, capital dominates the labour potential, and the labour potential is consequently used to exploit land. (*Ibid.*, xxxiv-xxxv.)

"But 'land' (photosynthesis) stands for our life-support system, the biosphere, and capital can be produced only by the creative capacity of human beings. Thus, since land is the source or 'ground' of labor potential, and labor potential the ground of capital, then the Imaginary and commoditized hierarchy invented and imposed by capitalism is precisely the inverse of the real one. These two hierarchies of relationship notwithstanding, however, most of modern economics prefers to symmetrize the three levels by reducing all three terms to a single plane of reality, each being defined as one of the three 'factors of production': 'land, labor, and capital'." (*Ibid.*, xxxiv.)

Organized activity introduces the level of abstractions, and socially organized activity introduces the level of second-order abstractions. The level of second-order abstractions is "higher" in its degree of organization than the level of abstractions, which again has a "higher" degree of organization than the level of concrete activities. But the higher the given level's degree of organization, the lower its logical type and position in the system's hierarchy of levels (*ibid.*, 171, 238-39). The fate of abstractions and second-order abstractions depends on their effects on concrete activity. All activity, including organized and socially organized activity, is a matter of survival.

3.7 Practice, Theory and the Theorist

According to Wilden, all errors in science and philosophy are errors of punctuation (*ibid.*, 111-12). These are not mistakes about facts; "[...] there are no 'facts' in science, only an infinity of possible differences (and types of difference) among which to choose to make *distinctions*, and [...] our choice to transform or translate a particular difference into a distinction cannot not be constrained by our 'hypotheses', both individual and collective" (Wilden 1980, xxix). There is no 'pure' knowledge *about* anything. All such knowledge is

instrumental by reason of its character of being *about* something. As Bateson notes, "[...] a tool or a method can scarcely be proved false. It can only be shown not to be useful [...]". (Bateson 1987, 108.) According to Järvillehto, scientific theories are never correct or false in themselves; each theory is correct in its own use context, provided it is consistent. It becomes false only when we try to apply it to such realms of use that are beyond its original purposes. (Järvillehto 1995, 32.) According to Wilden, "[...] the implicit or explicit application of equilibrium or inertia theory, derived from mechanics or thermodynamics, to communications systems is an example of such an error" (Wilden 1980, 111-12). Another example is the currently popular attempt to apply uncritically to publicly governed organizations certain management methods that were developed exclusively for the private business world.

There is no other way to justify our claims to the truth and objectivity of our knowledge than by appealing to the *social practices within which we decide* what is true and what is false, what is objective and what is idiosyncratic (Wittgenstein 1975, 18-21, 52-53, 68, 124). The claim we make and the evidence we find to prove its truthfulness are of a different logical type than the social context within which we both make the claim and find the supporting evidence. Claims within the context, or practice, may be true or false, but there is no sense in claiming that the context itself is true (*ibid.*, 17, 23-27, 62, 68). This claim is sensible only if we appeal, again, to some larger and more fundamental context, of which we conceive the first context to form a part.

But even the most fundamental social practices – those that are ultimately beyond any claims to their truthfulness – *survive*, more or less. The very existence of our social practice – our ability to act in a socially organized manner – reveals that our "facts" within this practice are "*appropriate*". They are appropriate in so far as their use initiates and maintains such a practice that has survival value. No epistemology is about eternal truths – but that does not mean that we cannot judge it. Indeed, we *should* judge it whenever we find ourselves in a practical situation, which becomes a matter of survival – when we are paralyzed and puzzled by contradictory motivations and viewpoints and by unexpected consequences of our initiatives. (See Bernstein 1986, 46-57.) This judging (metacommunication) of an epistemology does not take place outside any epistemology, but in reference to another epistemology which we are able to use in the *critical framing* of the first epistemology. This alternative epistemology is not "truer" or more "objective" than the first one. It may be *more appropriate* if it provides us the means to comprehend the problems we face in that particular cultural-historical instance. Then its use, as a form of activity, has better survival value.

"As Marx so succinctly put it, the question of truth for humankind is not a theoretical question, but a practical question. The pragmatics of life, relationships, and meaning necessarily and invariably subsume the theoretics of knowledge, existence, and signification. Not only do the former constrain the latter; they are also the environment without which the system represented by the scientific discourse could not survive." (Wilden 1980, lx.)

According to Wilden, this relationship between the pragmatics of life and the theoretics of knowledge is similar to the relationship between *dialectics* and *analytics*. "*Both* the 'both-and' of dialectics *and* the 'either-or' of analytics are necessary to any critical perspective: the relationship between the two logics is not oppositional, but hierarchical"

(*ibid.*, lx; see also Bernstein 1986, 157-58). We cannot avoid thinking in terms of metaphors. But we may reach a different position in our thinking, a position where we, despite our acceptance of the metaphoric nature of our thinking, are simultaneously critically aware of its being such. According to Vattimo, this is the distinguishing mark of deconstructive thought (Vattimo 1980, 143). As Senge says: "The problems with mental models lie not in whether they are right or wrong – by definition, all models are simplifications. The problems with mental models arise when the models are tacit – when they exist below the level of awareness." (Senge 1994, 176.)

In human activity, Russell's rule is constantly being both *broken* and *violated*. Human *creativity* (information) makes it possible to break the rule: we are able to identify ourselves in the ways we punctuate the territory and thereby able to differentiate ourselves from it – although the territory is a realm of continuity that defies all punctuations. Despite this contradiction, we can avoid facing immediate disturbances in our socially organized activities. However, our punctuations are radically unlike what we punctuate; and no mode of punctuation can truly grasp the unpredictable interconnectedness of activity. As we act in the guidance of our punctuations, we cannot avoid disturbances forever. *Opposition* is what results when we refuse to stop identifying ourselves with our punctuations of the territory *despite* the disturbance we face. The breaking of the rule turns into its *violation* (noise).

With new creative activity, we may arrive at a more appropriate way of punctuation and, accordingly, at such reorganization of our social practice that makes the disturbance vanish. Noise is thus modified into new information (see Wilden 1980, 395-412). The *destructive violation of the rule* is changed into *deconstructive breaking of the rule*. An impossible paradox becomes a possible paradox. Our identity is restored. We may again identify ourselves as distinct from others *among* others whom we need to make ourselves distinct ("both self and not-self"). We are freed from opposing others ("either self or not-self"), which always turns back destructively upon our own personalities. As Bateson points out, self-consciousness, if unaided by creativity, must always tend towards hate (Bateson 1987, 145-46).

Creativity means formulating theories that re-present and instruct practices and, at the same time, function as parts of those practices – and precisely because they fuse into practices as their functional elements they are able to re-present them. A theorist may feel a need to oppose another theorist after his own theory has lost its pragmatic character of being useful in the activity, which it tries to re-present. Instead of criticizing the alternative theory, he opposes the theorist. Whitehead holds that true rationalism must constantly transcend itself by returning to the concrete in search for inspiration. According to Whitehead, self-satisfied rationalism is not true rationalism at all, but anti-rationalism. It means an arbitrary halt at a chosen set of abstractions. (Whitehead 1946, 250.) Sooner or later a new theory will appear to challenge the old one. For Whitehead, a conflict of doctrines is not a sign of misfortune, but an opportunity. It marks the first step toward the evolution of epistemology. This is one good reason why we, according to Whitehead, should tolerate as far as humanly possible the multitude of understandings, attitudes and conceptions. (*Ibid.*, 230-31.) This tolerance is the domain of *ethics* – which Wilden defines as the *ongoing critique* of systems (Wilden 1980, 263). Without creativity and a critical attitude, the theorist will lose the pragmatic foundation of his theoretical conceptions and his identity as a theorist. The pragmatic foundation is lost in

inappropriate punctuations of distinctions and oppositions. The result is useless abstractions and warfare between epistemic communities, which both evidently bear poor survival value. Instead the pragmatic human being – the pragmatic theorist – is a *creative and critical actor*.

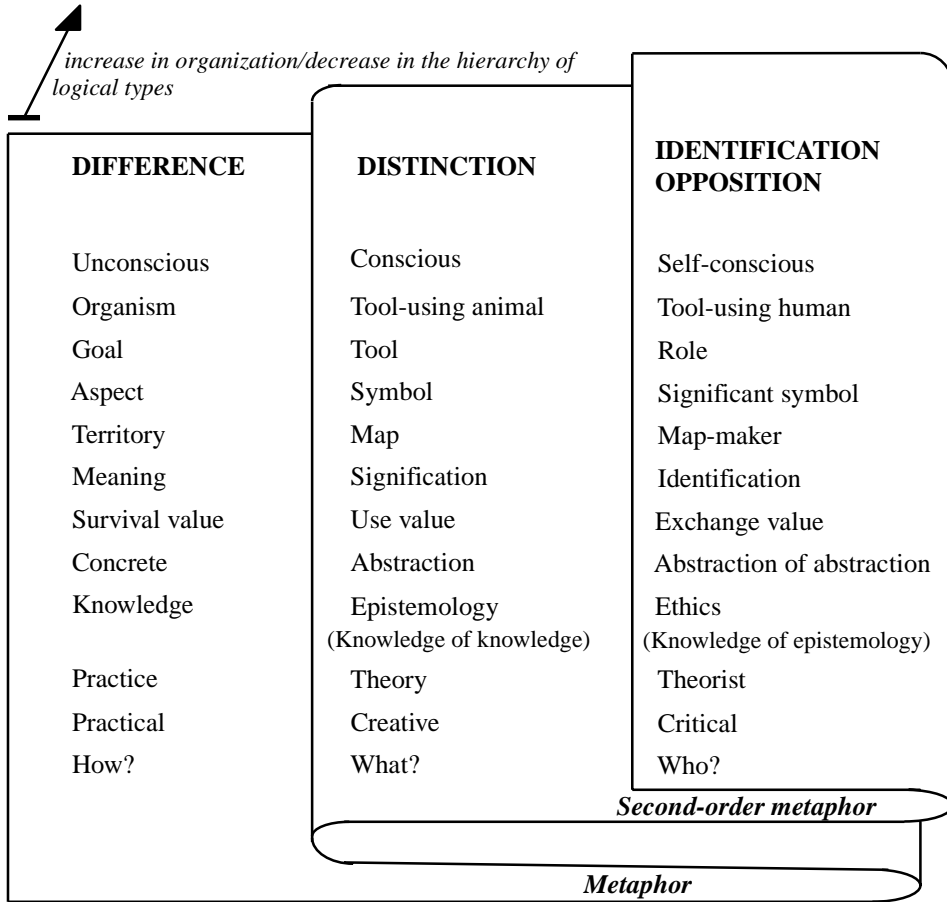


Fig. 14. The three "horizontal" levels of language and their "vertical" relationships.

PART III: POLITICAL ACTIVITY AND THE SYSTEM OF LAND-USE PLANNING

In this part, three activity systems, decisive in view of land-use planning activity are identified: *expertise*, *politics* and *economics*. Chapter 4 gives a description of these systems as subsystems of the *system of land-use planning*. The basic distinction upon which the system of land-use planning rests is *legitimate/illegitimate*. Each subsystem – expertise, politics, and economics – has to adjust itself to this ecosystemic distinction.

By acting, each subsystem inevitably changes its dialectical relationship to its ecosystem and thereby also causes indirect changes in the other subsystems' dialectical relationships, since they all share the same ecosystem. Harmful changes are felt within the subsystem as inner contradictions that hinder its decision-making activity. Chapter 5 reveals that when the subsystem exercises *pathological power* over its environment, its inner contradictions may develop into paralyzing double bind situations. The subsystem is able to transcend such situations by reflecting on itself and by thus reorganizing its own system/environment distinctions. This entails reflective cooperation between the subsystems, which in Chapter 5 is called *political activity*. Cooperation between the subsystems of land-use planning is measured with the concept '*strength*', in contrast to the concept '*power*', which is here used as a measure of the subsystems' imaginary control over their environments. As power is concerned with the subsystems' symmetrical one-level control relationships, strength has to do with the survival of their dialectical bi-level relationships with their ecosystem. Pathological power is such use of power by a subsystem which becomes a threat to the subsystem's own survival, and also indirectly to the other subsystems' survival. Political activity is a *mutual search for legitimacy*. At the same time, it involves the restoration of an ecological equilibrium between the subsystems of expertise, politics and economics. Political activity in land-use planning creates scope for decision-making situations that provides possibilities for the subsystems to survive together.

4 System of Land-Use Planning¹

In this chapter I shall present a systems-theoretical model of land-use planning activity. My approach owes much to Niklas Luhmann's systems-theoretical conception of society and politics, but it is not strictly Luhmannian – rather inspired by Luhmann's theory. Before discussing the system of land-use planning, we need to discuss briefly what is meant by the societal system and the political system, in that order. Only against a wider systems-theoretical description of society and politics can the subsequent systems-theoretical treatment of land-use planning be understood.

4.1 Societal System

According to Luhmann, western societies, as they developed from traditional into modern societies, underwent drastic structural changes. While traditional society had a stratified structure, the structure of modern society is based on functional differentiation. (Luhmann 1990, 11-15.) Modern society is diversified into *function systems*, such as religion, science, economy, education, politics, medical care, and so on. In Luhmann's terminology, function systems mean social systems that "combine intense *sensibility to specific questions* with *indifference towards everything else*" (*ibid.*, 31). In order to establish an ability to guide themselves in the complex modern society in some respects, they have to develop an indifference to all other respects. "Any continuation of this development increases sensibility and indifference at the same time. And it increases *indifference overproportionally* because the indifference to *everything else* must accompany every determination of attention." (*Ibid.*) The function systems are guided by basic distinctions that are arranged as binary codes – such as true/false in the function system of science, legal/illegal in law, and ownership/non-ownership in economics.

"Everything that occurs in the system appears, in the light of such codes, as related to the choice of one or the other side of the code – e.g. as the decision to pay a specific price or not to pay it, to hold a hypothesis for true or for false, to view a claim as legal

¹ Developed from Mäntysalo 1998a.

or as illegal. Besides, it also demonstrates that in every system-operation both sides of the distinction are always in view; that it is never simply a question of one side but always of the distinction itself and that just because of this the operations of a system distinguish themselves from those of other systems and constitute a differentiated function system.” (*Ibid.*, 176.)

No function system has control over the other function systems; the function systems are autonomic, or, in Luhmann’s words, *autopoietic*. The societal system therefore has no centre. (*Ibid.*, 31, 73, 180-81.) Unlike the stratified society that had its monarch and nobility, modern society has no top. In modern society, the political system’s function is to represent the top, which is a paradox, because it cannot actually *be* the top. The more centralized the government in a complex society, the less it knows about what it governs. It ceases to govern what the rest of society actually do, when it is structurally possible for it to react only to certain types of societal stimuli that are simplified and abstracted enough for it to digest¹. The rulers of the traditional society were still able to conceive of societal problems as *societal* problems. But modern society is not conceivable that way. The problems of modern society are no longer observable as societal problems, but as political, economic, scientific, religious, etc. problems – and this inescapable narrowness of vision, apparently, is the biggest problem of modern society.

Generally, autopoiesis² refers to a system’s self-referentially produced adjustment to its environment. Autopoiesis as a concept denotes a conception of living organisms and social organizations as systems that are simultaneously both closed and open (Luhmann 1990, 40). On the one hand, systems are *wholes* in themselves, while on the other hand, they are *parts* of larger system-wholes. Function systems, accordingly, are differentiated wholes, although they are simultaneously parts of society. As parts, they have to adapt to the changes in the societal ecosystem to which they belong, as wholes they accomplish their adaptation by means of *self-reference*. A system is self-referential when it reproduces itself through events that it itself produces (*ibid.*, 40, 184). New scientific findings are made on the basis of and in reference to former scientific findings; new political decisions are made on the basis of and in reference to former political decisions;

¹ Accordingly, in a large corporation, the top management cannot control everything that is done in the organization. Instead, it *specializes* in managing – it fulfils certain essential functions in the mutual coordination and cooperation of sub-organizations, but it is able to contribute to those aspects of that coordination only, which become signified in its own administrative processes. Management is administrative expertise that is specialized into coordinating the tasks of suborganizations, but it has no means to enter beyond the surface of those tasks. It does not possess the professional expertise required for this. The decisions as to what is practically, economically and technically feasible to produce and how must be left to professional experts within suborganizations; while the management decides which of the feasible ends to choose – where the priorities lie, where to target the resources, where to invest, where to look for market niches.

² The concept ‘autopoiesis’ was introduced by two Chilean scientists: Humberto Maturana and Francisco Varela. They use the concept in reference to those systems that have the power to generate themselves. Maturana and Varela define autopoietic systems as systems that conserve perturbations in their organization by means of self-referential dynamics. Here we are concerned with Luhmann’s application of the concept to societal systems.

new laws are enacted on the basis of and in reference to former laws; the ownership of something new is gained by giving in exchange something already owned, and money is invested in order to make more money. The cause for a system's adaptation lies in its openness; the means of its adaptation follow from its quality of being closed. Changes in a function system's *outer* relationships with other societal function systems compel it to change its behaviour, but these changes are *inner* reorganizations of its own structure (*ibid.*, 125). The *inside* of the function system is the way in which it codifies society into its own binary operations (such as true/false); its *outside* is the societal ecosystem that consists of its outer relationships to other function systems that have their own ways of codifying society. The operations *within* a function system are of a lower logical type than the operations *between* function systems.

This hierarchical conception of systems both as wholes in themselves and as parts of larger systems leads to a rather unorthodox understanding of system-environment relationships. Each system has an environment, but not in the sense that it is traditionally understood in systems theory. In general systems theory and cybernetics, systems are conceived to be directly open to their environment of other systems. A system sends messages to its environment and receives feedback about the effects these messages have. Here, however, systems are not conceived this way. A system is not seen to be directly related to other systems. There is no ontological separation between the inside and the outside of the system, so that there could be exchange of messages between them. By using its code, the system recognizes something as belonging to the system and something else as belonging to its environment. But the system is not what it identifies itself to be – the system is the *code*, which enables it to identify itself against its environment. Self-identification in terms of the system/environment binary code is the basic function of the system. (Chapter 1.)

Luhmann uses the concept 'environment' in the sense I am here using the concept 'ecosystem'. Due to the distinction between 'environment' and 'ecosystem' I made in Chapter 1, the concept 'environment' is here used to denote one side of a function system's binary distinction. The environment is thus a product of the system's own codification process; and that which is codified into the environment is the ecosystem. In the case of law, for example, the system makes legal/illegal distinctions, on the basis of which it recognizes illegal deeds as its environment and identifies itself in the negative reference to this environment – as a representative of that which is not illegal in society. The ecosystem consists of "material for codification". For each function system, its neighbouring function systems are such material. The function system of law is concerned with the legality of political decisions, of economic transactions, of the scientists' use of each other's findings, etc. The judicial aspects of these function systems are incorporated into the system of law, but everything else about them remains at the logically higher level, forming the societal ecosystem of law.

A system is here understood as an organizer of its environment. The system is a special mode that its ecosystem enters into its own organization. This line of thought dates back to Spinoza and has been further developed by Whitehead (1946) (see Chapter 2). Think of the system as a *language*. Each language is a system that has its own peculiar mode of transforming the world into its own distinctions. There is no environment outside

language; language is the environment itself¹. As Wittgenstein said, the limits of my language are the limits of my world. In this sense, a language is a closed system. A function system is a closed system: it encloses the whole society by means of its societally differentiated language. The function system of science is the society scientifically approached and organized; the system of economy approaches and organizes the society economically, the system of law judicially, and so on. The politicization of societal problems is the concern of the function system of politics:

"The political system is a self-referentially closed system, and whatever it declares to be political is thereby political. [...] Self-referential closure does not mean that the political system could not do or abstain from doing what it chooses. What is meant is that the system can only define what is to be categorized and followed through as political by means of its own (i.e. political) operations." (Luhmann 1993, 160-61.)

But, on the other hand, there are several languages that exist simultaneously and affect each other. In society, the relationships between science, economy, politics and other function systems change constantly and pose ever new problems and possibilities for each function system – e.g. scientific, political, economic, etc. problems. When a group of physicists discovered nuclear energy, it pushed our societies and ways of life into the Atomic Age with a host of unforeseen political, economic, moral as well as scientific problems. When a government changes, the system of economy usually reacts somehow. There are expectations (and expectations of expectations) of new policies in state economy, which are reflected in the stock market, rates of interests, flows of currency and investments. The change of government may also pose questions for political scientists and sociologists. If the winning parties try to fulfil in the new government the promises they gave during their campaign, they may run into legal problems. The new governmental policy has to be translatable into the system of law; if a new law needs to be enacted, it must conform to the existing legislation (see Luhmann 1990, 197-200). When the economy declines, it affects the popularity of the government and raises a demand for scientific research work in areas that are expected to serve as incentives to the economy.

In this sense, function systems, and languages in general, are open systems. When a change in politics takes place, it affects the economy. But languages are not environments to each other; not in the sense that there would be *linguistic* communication between languages. Different languages do not share the same code, but they do not exist alone, either. Function systems are self-referential but mutually dependent at the same time (*ibid.*, 19). When political behaviour changes, it is not transmitted as a message to the system of economy. The system of economy does not register political differences. Rather, it mirrors changes in political behaviour by changing its own economic behaviour. The language of economy undergoes a self-referential change when it perceives economic changes taking place in society – triggered, possibly, by the self-referential changes in politics.² There is communication between the function systems, but it is of a

¹ "Language is originally dynamic because it is self-referential, and thus there is no need to introduce an exterior to make it so" (Karatani 1995, 74).

² According to Lindblom, the difference between economics and politics lies in their different ways to view the same things:

different logical type than the linguistic communication that takes place within each function system. It is of a higher logical type: communication within each function system depends on the communication between systems. Communication between function systems takes place when structural changes at the level of function systems lead to structural changes at the societal level. These societal, inter-systemic changes reverberate on the level of function systems as political, economic, scientific, legal, religious, etc. changes. By changing their own structure, the function systems initiate changes in the societal structure – to which they later have to adjust by changing their own structure further. The function systems thereby cause, in part, their own problems (Luhmann 1990, 24, 126-27; 1993, 192). At the societal level, the differences in relationships between function systems affect – stir, restore, or maintain – their mutual equilibrium and thus regulate the terms of existence for each function system.

The societal system and its function systems do not consist of human beings but of *modes of human communication* that carry the requisite distinctions and corresponding social roles¹. The societal order employs the individual only within specifically functional relations – roles (Luhmann 1990, 30, 101; see also Boulding 1975, 29)². All function systems concern themselves with everyone, abstracted in forms that correspond to the systems' functions. Everybody gets an education, everybody owns something, everybody knows something, everybody has an ideology, everybody enjoys a legal status, everybody has health, everybody dwells... (Luhmann 1990, 35, 221.) Luhmann holds that individuals are not distributed throughout these function systems in such a way that each would belong to one and only one of these systems. Instead, everyone has to maintain access to all functions. (*Ibid.*, 220-21.) In land-use planning this means that no one is merely a planner, or a politician, or a land-owner, or a resident. The actions of each actor may receive meaning in terms of several alternative functional contexts. In different planning situations each of the following questions may become relevant in interpreting the actions of an individual: "Does he have relevant knowledge of the planned area?"; "Does he have political intentions?"; "Does he own land in the area?"; "Does he live in the area?"

"In all the political systems of the world, much of politics is economics, and most of economics is also politics. What then is the difference between the two? In common sense, "economics" refers to a certain kind of activity, whether it is undertaken by individuals, enterprises, or governments. More precisely, "economics" refers to activities, which may simultaneously be political activities, looked at in a particular way." (Lindblom 1977, 8-9.)

¹ "Those that do not carry the requisite kind of information, the requisite distinction, are thrown out of the system" (Wilden 1980, 250).

² Here we could also use Pierre Bourdieu's concept 'habitus' (see Bourdieu 1987, 120-22; Bourdieu & Wacquant 1995, 36-40, 137, 151-53) – if we understood Bourdieu's social 'fields' as function systems, and thus used the concept 'habitus' to denote a disposition in a function system an individual receives, according to his skills and capabilities to contribute to the system's special mode of social behaviour. Habitus is a habituated role, which, at the same time, is inherently creative. Indeed, with the concept 'role' we do not mean only a specified mechanical function someone is designated to perform in an organization but a deeply "naturalized" skill to act in a certain social context – and through these social activities one both habituates into a certain socially fitting identity and reflects upon that identity as a conscious "role" that can be changed.

A particular mode of communication is maintained for as long as there is communication in that mode and not communication in some other mode in its place. It involves both speaking and being silenced, and people mutually recognizing their roles in the cooperative activity of communicating and being communicated. Power arises from people's unevenly distributed capabilities to carry distinctions that are valid in a function system – i.e. from their uneven possibilities to communicate in the function system. Politicians are better equipped to communicate politically than non-politicians; planners handle better the mode of communication specific to planning than non-planners; the more you buy and sell land and estates, the more skilled you are in communicating in the land market. (Chapter 5.)

Each communication act is both linguistic and non-linguistic¹. It is linguistic by being codified into a form that a certain social group shares. It is also a non-linguistic act, because it affects the mutual relationships between the used language and its neighbouring languages. The more a certain language is used, the more firmly it exists as a system. This text is written in English, which also means that it is not written in Finnish or Swedish, for example. Systems are preserved by communication acts that carry their distinctions. Each communication act by a certain code is also an act of preserving or strengthening that code, and possibly an act of weakening some other code. Each communication act forms, alters, or maintains linguistic relationships within a language, and it simultaneously forms, alters, or maintains non-linguistic relationships between languages. There is more than one subcultural language striving to attain predominance in the formulation of land-use planning agendas. Each planning problem that is formulated scientifically serves to affirm the domination of the planners' expert language in relation to the political and economic languages – each of which might, in different circumstances, provide the decisive context for the consideration of what to treat as relevant and valuable in a planning task.

Each function system is a special language. Therefore it is a specially organized environment within itself. A function system is the whole society formed by the special mode of transformative operations that is peculiar to the system. There is also a higher-order ecosystem for the function system that consists of the society to which it belongs. This ecosystem regulates the survival of the system's own self-referential environment – its own mode of observing society². When the equilibrium between the function systems is disturbed, each system has to search, self-referentially, for new forms of organizing itself. In other words, each function system has to search for such new ways of transforming society into itself that would restabilize its own existence.

¹ By non-linguistic aspects of communication I mean behaviour that produces differences, and by linguistic aspects the making of distinctions on the basis of these differences (Chapter 3). The realm of differences cannot be a domain of any linguistic code of binary distinctions. This realm is of a higher logical type. Each communication act produces differences, which can be transformed into different distinctions that belong to different languages. Therefore an actor in one language-system cannot control how his communication act will be transformed by an actor in another language-system. All function systems produce societal differences, and through this level of societal differences they affect each other's operations of binary codification.

² According to Luhmann, the political system encodes society into 'state', in reference to which the political system identifies itself and its object (Luhmann 1990, 123-36).

4.2 Political System

The political system is a function system that represents itself as the centre of society, but because the modern societal system has no centre it is a paradox. It is not what it claims to be, but it cannot be anything else, either. For the political system the only way to be is to appear as something that it is not. Whereas in a traditional stratified society the monarch and nobility *were* the centre of society, in modern society the political system can be the centre only *metaphorically*.

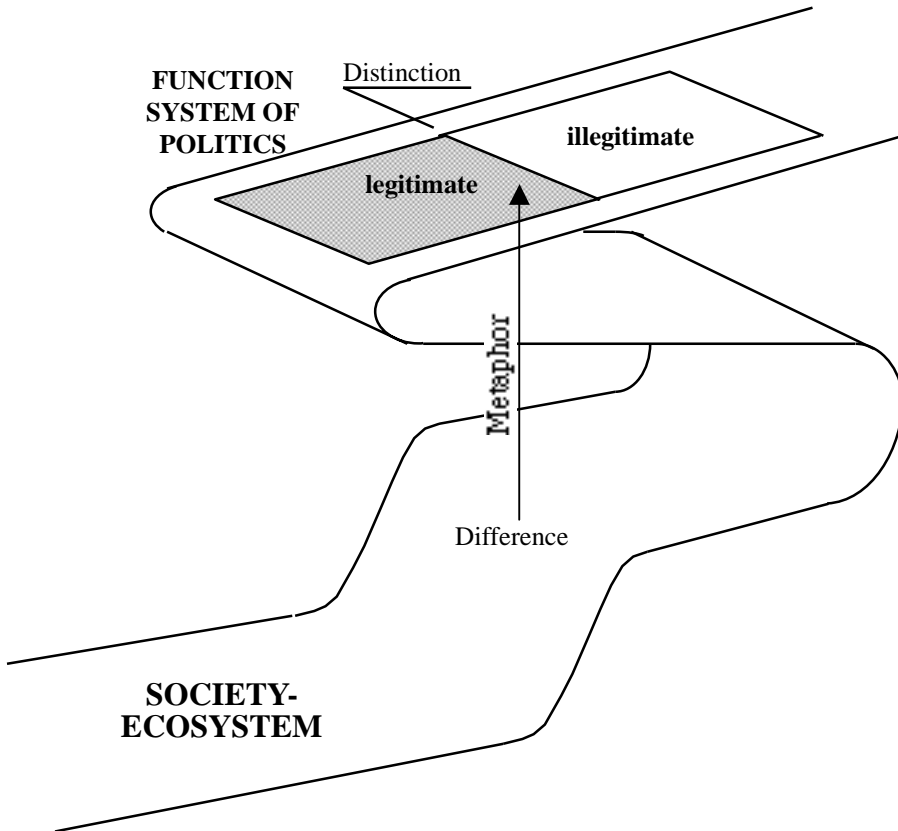


Fig. 15. Society-ecosystem and the function system of politics.

The basic distinction upon which the political system rests is *legitimate/illegitimate*¹. This distinction addresses its basic function as the centre of society – a function which is

¹ My claim, not Luhmann's.

conditioned by the legitimacy of its operations. The question of legitimacy arises only in societies where rulers can be rulers only metaphorically. In stratified societies, the rulers could have been deemed bad or vicious by the people, at times, but never illegitimate as rulers. They simply *were* the rulers and did not have to prove to the other societal classes the legitimacy of themselves *as* rulers. Instead, in modern western democracies the appearance of governments as societal "governors" is continuously open for questioning and critique by the opposition, the media and the public. The government has to prove the legitimacy of the position it has taken as the centre of society – which it often does formally by appealing to the legal validity of its decisions.

The societal function of the political system is to make *binding decisions* for society (Luhmann 1990, 74-75). This is the key process of politics and administration also at the level of municipalities (Valanta 1997, 19). But, in principle, only the decisions that are not recognized as illegitimate within society will be afforded the status as societally binding decisions. The political system may appear as the centre of society when the way it makes its decisions is not found illegitimate. In an opposite case, the political system would be heading towards a double bind situation. In such a situation, the political system can no longer fulfil its basic function of making binding decisions for society. It can no longer be not-what-it-claims-to-be. A political system that is found illegitimate and therefore deemed peripheral in society is no longer a political system.

4.2.1 *Political System and its Neighbours*

The political system consists of organized and organizing communication, by which binding decisions are prepared, made, executed and carried out – as well as opposed, criticized and rejected – for the society within the system of society. Binding decisions have to be prepared (planning), responsibly decided (politics), and finally executed (economics). Otherwise they would hardly be *binding* decisions. Through administrative and political processes binding decisions are both *made* and *taken*¹, but not independently of the economic limits and possibilities for their execution. Lindblom holds that polyarchal policy never pursues central planning of production, and in this regard it is always tied to the system of economy (Lindblom 1977, 200). Public functions in modern capitalist societies therefore rest in the hands of businessmen (*ibid.*, 172)².

¹ See the discussion on decision-making and decision-taking in Chapter 1.

² Businessmen have a privileged position in modern capitalist societies. Lindblom claims that this condition is understandable in principle and, to a degree, even acceptable in market-based societies that designate welfarist duties to businessmen. (*ibid.*, 172, 175.) Much of public decision-making is thereby handed over from the political system to the market. "[Societal] [s]ystems of market-oriented polyarchy are never highly democratic, and their polyarchal processes which approximate democracy are only a part of these systems" (*ibid.*, 193). The direct influence businessmen have on political processes is therefore not all there is to their political power, but only an addition to the *indirect political influence* they already have, due to their privileged access to decision-making on such public issues that are handed over to the market. Even within the political process, as a political interest group, they have a privileged position in relation to other interest groups.

In the execution of public decisions, *money* is the central motivating force. This itself is a result of differentiation in society. The ends expressed in decisions will not in themselves guarantee the motivation needed to carry the decisions out when those designated to do the job are not interested in the ends themselves but only in the economic benefits received as their services are bought. Private enterprises that sell their know-how and services strive for economic profitability in their contracts with the public organization. The primary motive of private firms is to produce profit, whereas the purpose of the economic activity of public organizations has traditionally not been to produce profit, but to guarantee economically the continuity of the organization's existence. In any public organization, a central problem is the proper *budgeting* of the implementation of decisions in relation to the economic resources available. (Anttiroiko & Valkama 1993, 181.)

No government skilfully employs the market as an instrument of democratic public policy¹. But, according to Lindblom, political democracy has been unable to exist except when coupled with the market (Lindblom 1977, 116). They both share the common origin in liberalism, and polyarchies were established to win and protect market liberties (*ibid.*, 162-64). Moreover, what constitutes welfare state politics and administration are decisions on the social redistribution of the economic surplus produced by the market. The methods of political and administrative decision-making in municipalities were set up during the 1960s on the assumption of continuous economic growth. One became used to redistribute *in advance* the surpluses of economic growth through the local planning system in the form of public services. (Kallio 1993b, 32; Pakarinen 1992a, 117.) The production of welfare was never an issue; the welfare self-evidently was there. The issue was the *legitimacy in its distribution*. Political processes are fueled by the market – but the market, on the other hand, rests on the legitimation it is afforded by the political processes. Governments cannot command business to perform, but they depend on the latter's performance (Lindblom 1977, 173). Here, the governments face the difficult task of supporting economic growth (and thereby supporting also themselves) without turning governmental decision-making over to businessmen (*ibid.*, 183). Business and politics are both separated and tied together by their decisions. Each makes decisions separately on the basis of its own self-reflective operations but each, at the same time, necessarily produces consequences to the other with its decisions. The economic system makes economic decisions that also produce political consequences, but the political system can address these decisions only politically. Conversely, the same goes for the economic system, too. Political economics cannot succeed, no more than economic politics.

"Here too it would not be possible for politics itself to question the distinction with which it ultimately works or even to problematize its unity, i.e. to question the idea of an economically successful politics as such. Only an observer outside of politics could come to the idea that there cannot be an economically successful politics, only an

Lindblom identifies three main reasons for this: (a) extraordinary sources of funds; (b) organizations at the ready; and (c) special access to the government (*ibid.*, 194-98).

¹ According to Lindblom, the autonomy of the private corporation may be a major specific institutional barrier to fuller democracy. Large private corporations do not fit into democratic theory and vision. (Lindblom 1977, 356.)

economically successful economy and that the political system is limited to practicing the coding of difference peculiar to it.” (Luhmann 1990, 181.)

The failure of the Eastern Bloc indicated the difficulty of managing centrally planned state economies. But, on the other hand, the market cannot replace politics and thereby receive a legitimately central position, either, as long as it keeps distributing the economic surplus in a socially unjust manner and does not achieve public transparency in its decision-making.

The system of economics is a neighbouring function system, with which the system of politics is complexly interwoven. The basic distinction of the political system was above defined as legitimate/illegitimate, and the respective basic distinction of the economic system can be defined as *profit/non-profit*¹. However, there is also a *third* function system, which cannot be ignored when studying the inter-systemic relationships of the political system: the *system of expertise*.

It is evident that since the latter part of the nineteenth century, a large part of the political and economic activity has been handed over to professional experts; their importance growing in step with the complexity of society. Expertise has become deeply involved with the bureaucratic processes of modern government (Fischer 1990, 148-49; Valanta 1997, 57). The role of expertise in public organizations is not a new phenomenon, but the issue is more salient today than ever. Not only has policy expertise become a pervasive phenomenon in contemporary society; its continuing evolution is anticipated to lead to a new configuration of power in society. Some theorists write of a new phase of societal development that is based on the production and administration of knowledge. This phase is often called the “postindustrial society”. Some say that this transformation will result in a new societal order, in which the traditional economic and political elites make room for the emerging administrative-professional elite in the governance of society generally. Many writers refer to this elite as the “new class”. (Fischer 1990, 148-49.) Here, we shall recognize such policy expertise as another function system and define its basic distinction as *expertise/non-expertise*².

¹ In Luhmann’s theory the basic distinction of the political system is defined as government/opposition, and the basic distinction of the economic system is defined as ownership/non-ownership (Luhmann 1990, 173-75).

² A system which roughly corresponds to Luhmann’s system of science.

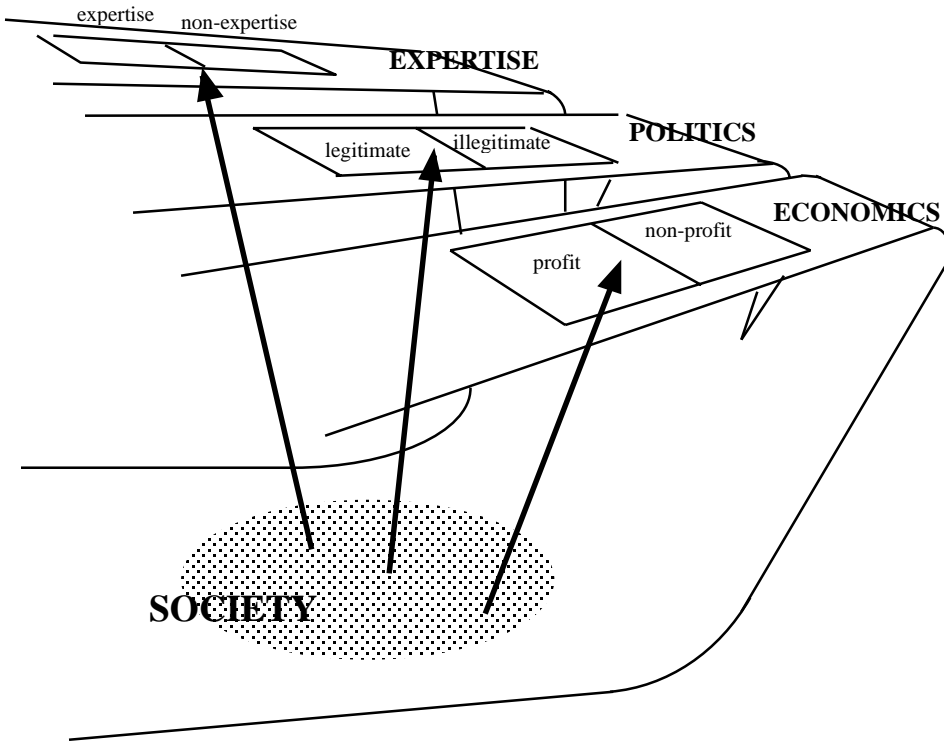


Fig. 16. The function system of politics and its neighbouring function systems.

There are hence three distinct modes of communication that are decisive in the functioning of the local political system: expertise, politics and economics. Each communication mode is structured upon the foundation of a basic distinction:

- expertise/non-expertise;
- legitimate/illegitimate;
- profit/non-profit¹.

¹ These distinctions are modified from the ones that Luhmann has defined as fundamental for such societal function systems as science (true/false), politics (government/opposition), and economy (ownership/non-ownership) (see Luhmann 1990, 173-76, 232).

There are some reservations we have to make when applying Luhmann's definition of the function system of politics to the level of local governments. The Finnish communal law, as the communal laws of many other European countries, guarantees that all the political groups represented in the council are also involved in the administrative organs of the municipality – the municipal executive board and other boards. In the municipal executive board practically all parties are represented, and

4.2.2 *Subsystems of the Political System*

These communication modes form their own distinct function systems but they also appear within each function system as its subsystems. Expertise and economics are both neighbouring function systems and subsystems for the function system of politics. Moreover, politics itself becomes a subsystem of itself. This conception corresponds, to some extent, to Parsons' "fractal" hierarchy of societal systems. In Parsons's model each societal subsystem responsible for one of society's four main functions of self-regulation comprises its own four subsystems with corresponding functions. (Heiskala 1994, 100, 102.) Accordingly, in the model presented here the societal systems that maintain either political, professional, or economic communication modes can be seen as both subsystems of society as a whole and as subsystems of each societal subsystem¹.

thus there is no established 'opposition' in municipalities. (Ryynänen 1996, 79-80.) In this sense, Luhmann's government/opposition distinction of politics does not apply in the political systems of our municipalities. But although Luhmann usually speaks of the political system in reference to central state politics, there is no reason to assume that his general approach is not applicable to local politics, too – apart from the exceptions already mentioned. According to Ryynänen, the local governments in Nordic and many Central-European countries should indeed be seen as "local parliaments". It is commonplace that the parliamentary system is taken as a model in developing local governments. The central factors in this development are the party-orientatedness of local politicians and media and the connectedness of municipal politics to national politics. Communal elections are comparable to national elections. What counts is that the councilmen are called to represent local people via political elections – not via a choice based on professional qualifications, or membership in a group, for example. The primary objective of the councilmen is not to manage the municipality, but to make politically important decisions. (*Ibid.*, 75-76, 81.)

¹ Here I am not claiming that these are the only subsystems discernible in society. My claim is merely that expertise, politics and economics are the subsystems we need to be concerned with, in order to arrive at a sufficient description of the local political system. The *system of law* should also be included, but here I am not bringing it into closer consideration. The legal system has to do with anything transformable into a legal matter. "There are no situations that are exempt from the law. The law is an autonomous function system of society that by itself determines what it regulates and subjects all matters about which it communicates to the binary code of legal/illegal." (Luhmann 1990, 188.) In a sense, it is a system of enforcing decisions, in a manner peculiar to itself, when the ability to reach decisions on the political, professional, or economic basis, for example, is temporarily lost. The legal system sort of lies there in the background, ready to take over the decision-making process in disputes that have a legal dimension (disagreement in the nomination for office, compensation for a failure in public duties, breach of contract, policy error, misuse of authority, etc.). Every decision of the state is bound to the law (*ibid.*, 187). The 'state' is a concept of law and interpreted by law as a judicial person. For politics focused on the state, this means that the political will has to assume a legal form in order to find application to the state. (*Ibid.*, 193.) Whatever the real influences behind local decision-making procedures are, these processes are legally legitimated as long as they produce signifiers recognizable as legally valid. In order to be carried out, the political decisions have to be transformable to the code of law. Plans, in order to express political will, need to express law, too – as legal documents. "The political system uses law

Paradoxically, each system occupies two levels at the same time. They are both neighbouring systems and subsystems to each other. Systems hierarchies are therefore not separate from each other (tree-like) but intermingled.

Expertise, politics and economics are therefore not only subsystems of society, but subsystems of the function system of politics, too¹. The basic distinctions of the subsystems of politics are:

- legitimate (administrative and scientific) expertise/non-expertise;
- legitimate majority/minority;
- legitimate profit/non-profit.

Each of these subsystems is "inflected" by the political system that forms its context. This means that they are structured upon the legitimate/illegitimate distinction that underlies them. Expertise within the function system of politics is not just any kind of expertise, but *political expertise*. This means that it attempts to appear as *legitimate expertise*, i.e. as expertise that is *publicly justifiable*. For such expertise, it is important to display itself as a servant of the *public interest* (see Harvey 1985, 177). Furthermore, what expertise offers as a legitimate means to derive the public interest is its own reliance on scientific facts. Similarly, economics within politics attempts to appear as *publicly justifiable economics*. In order to achieve justification for market criteria within the political system, it is necessary for economically motivated actors to present the pursuit of private wealth as the driving force of economy, and to present economic growth as a means to attain social ends. Local economic growth is claimed, for instance, to create new jobs, to strengthen the local tax base, to provide resources to solve existing social problems, to meet the housing needs caused by the population growth, and to allow the market to serve public tastes in housing, neighbourhoods and commercial development. The goals of economic development are thus presented as inherently uncontroversial and "consensual"; as goals that are aligned with the "collective good". (Logan & Molotch 1996, 318.) This serves to legitimize the privileged position of business in society, and thus serves to remove business privilege as an issue from the political agenda (see Lindblom 1977, 203-04). The majority/minority distinction, for its part, is a mechanism of making political decisions within the political system. Its purpose is to appear as the *publicly justifiable method of making politics*.

as an instrument and consequently is subject to this instrument. Whatever politics would like to achieve and implement will not function without the law. And even with the law it does not function particularly well." (*Ibid.*, 194.)

¹ These subsystems correspond roughly with the three *guidance structures* that Harisalo, Rajala and Ståhlberg recognize as alternative approaches to local political systems. The first is *regulative* guidance structure, the second *democratic* guidance structure, and the third *market* guidance structure. (See Harisalo, Rajala & Ståhlberg 1992, 35-36.)

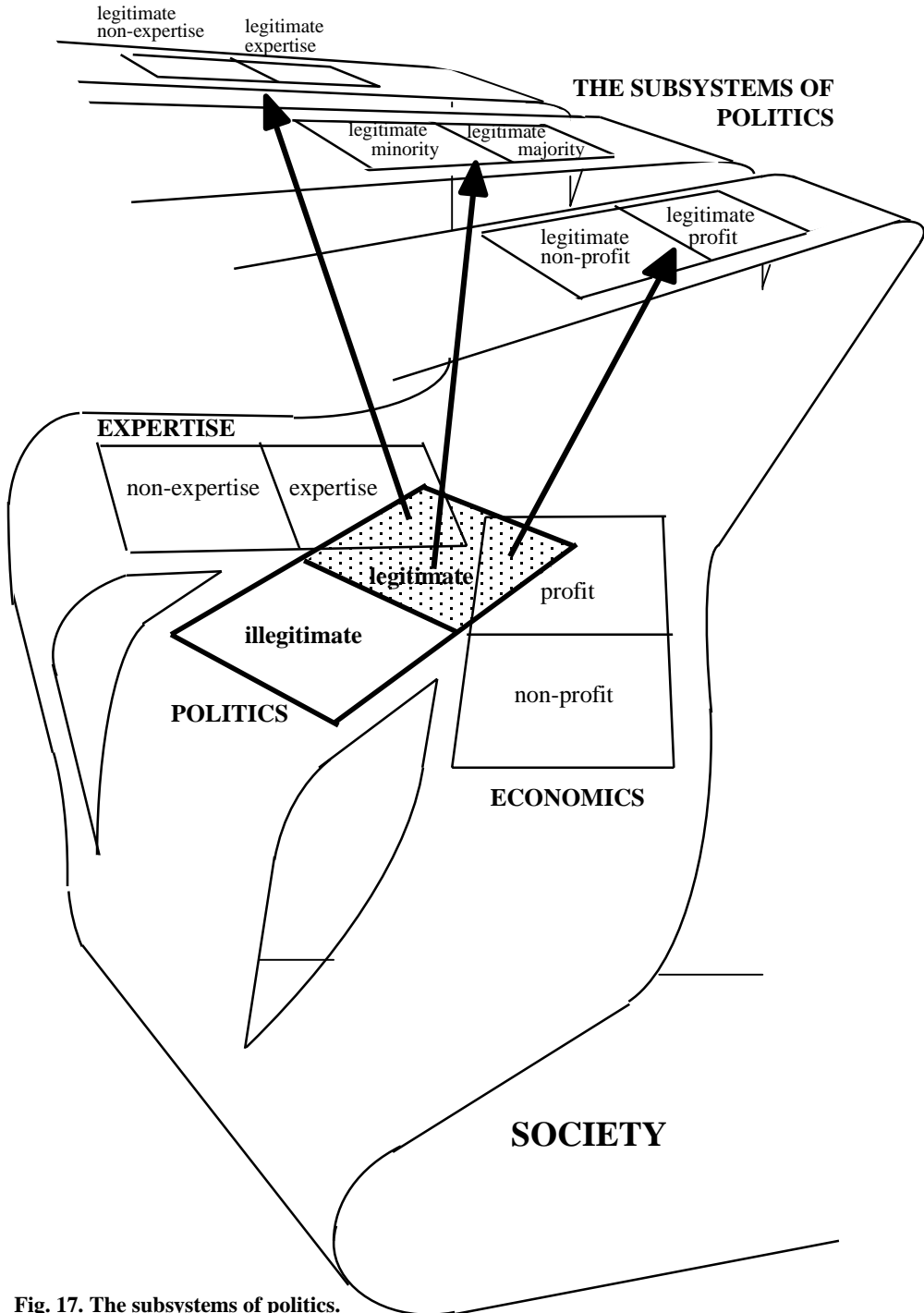


Fig. 17. The subsystems of politics.

Upon its basic distinction, each subsystem construes a framework of distinctions, building new layers of more specific distinctions upon layers of more general ones. With this framework, each communication mode codifies society into an environment to which it is sensitive. The framework frames the environment of whatever objects are considered as significant in the corresponding field of action:

- the environment of administrative and scientific significance;
- the environment of political significance;
- the environment of economic significance.

Each subsystem represents its reality (ecosystem) as an environment constituted of things from which they derive their organization – the identification and division of *roles*, and the *tools* (both conceptual and "physical") to be used.

4.2.2.1 *Three Attitudes*

The making of binding decisions consists of three main aspects: the binding decisions are prepared, responsibly decided, and finally executed. None of these aspects, or mutually overlapping phases, is a domain of any single subsystem. Each subsystem has its own specific *attitude* to *all* of these three aspects.

The subsystem of expertise approaches the making of binding decisions with its *planning attitude*. This is clearly visible in the systems view of planning discussed in Chapter 1. Politics was reduced to acceptance of responsibilities and risks of decisions already "made" (in Friend and Jessop's sense of the word) by systems-rational planning. Furthermore, the idea of planning as programming meant that planners were supposed to take an active role in the guidance of development. Instead of making static and passive plans, planning was supposed to erect development policies that initiate investment in proper target areas in a proper order. Planning, decision-making, and execution were treated as three elements in the continuously cycling cybernetic system that was to be made self-corrective by extending the governance of the planning attitude throughout the system. The uncertainties in political decision-making and economic execution were to be brought under the control of planning.

The subsystem of politics has a *political attitude* to the aspects of making binding decisions. This means that the preparation of decisions and their execution are also seen from the perspective of politics. The political dimension of these realms is thereby heightened. The planner is seen to make political choices, and he is seen to have political interests behind his allegedly value-neutral planning proposals. Private business is treated as a political interest group among other interest groups. Development and investment decisions are evaluated from the perspective of political struggles between interest groups and social classes. They are signified in terms of gains and losses for different social groups with which the politicians identify themselves as their representatives. The political attitude means that throughout the process of preparation, decision-making and execution political choices are made that affect the future of local politicians and the future of local politics itself, i.e. its capability to make a difference.

In theoretical discussion, both Lindblom's theory of incremental politics and Habermasian critical planning theory correspond, more or less, to the attitude of politicizing planning. Both undermine the creative role of planning, and approach planning as political bargaining or debating processes where the determinants of evaluating choices or claims are already given, rather than shaped through the planning process itself. Both offer their own rationalities for the deduction of decisions from given decision situations, but both undermine the role of planning as the *designing* of these decision situations themselves. Marxist urban theory (Harvey, Castells), in turn, can be said to correspond theoretically to the attitude of politicizing urban development.

The subsystem of economics has an *economic attitude* to the local political system. Its primary interest is focused on the profit-making opportunities opened and closed in the process of making binding decisions on public issues. Planners and politicians are seen as market actors, because they make decisions that make a difference in the market. Planning and political decision-making are expected to provide incentives for the market; increase competitiveness and cooperation with the private sector in the production of public services; encourage entrepreneurship; create a positive business climate, etc. This means reorientation of the public sector as a promoter of the market and economic livelihood.

The subsystem of expertise is not the only one concerned with planning – all of them are. But each has its own specific attitude towards planning. The expert mode of planning seems to plan *too much*: it strives for such comprehensiveness of analysis and for such control of future social and urban life that make the activity of planning exceed the limit of good practical sense. Planning becomes overburdened by its efforts to produce professionally valid knowledge. Such knowledge loses its practical usability as an aid in planning and decision-making when the system is no longer able to handle that knowledge in an orderly manner. It produces files which no one has time to read and provides descriptions and suggests resolutions to problems long after the time when they were acute. In its aspiration to control future, it applies such hopes to planning as an initiator and regulator that planning as an instrument is simply incapable to fulfil.

The subsystem of politics approaches planning from the perspective of *political manageability*. It expects planning to produce suggestions and decision alternatives that afford the necessary political consensus and thereby enable decision-making on a political basis. The subsystem of economics, in turn, approaches planning from the perspective of *economic profitability*, expecting planning to enable development and to provide incentives for the urban market, production and retailing.

Each subsystem develops a *culture* of its own. It would be too simple to say that the hegemony of the subsystem of expertise would mean that the other actors in local public decision-making would be surpassed by planners, or by politicians or businessmen, when each of the other subsystems in turn holds a hegemony. We rather speak of different planning cultures with different contexts upon which various people from various backgrounds identify themselves and recognize their problems, aspirations, constraints and opportunities differently. Planning as expertise, for example, means general and implicit reliance on expertise – not only by planners, but by politicians, businessmen and other citizens as well. Having grown into such a culture, they habitually reproduce its preassumptions in their everyday behaviour. Without thinking, they constantly affirm that planning problems and tasks, as well as the deeper human needs, general functions and

responsibilities of private and public sectors are properly signified by the communication mode of expertise. The same goes for other communication modes. The actors are internally conditioned to understand their world, and their place in it, in a manner peculiar to the way that world is formed by the communication mode in question. This is what is meant later in this chapter when land-use planning is discussed as expertise, politics and economics.

4.2.2.2 *Subsystem of Expertise*

The subsystem of expertise uses various sources of scientific or aesthetic knowledge¹ according to its functional realms of specialty (social planning, health care planning, education planning, land-use planning, etc.). While only architect-planners usually draw on aesthetic knowledge, the administrators' context of knowledge in general is based on "applied sciences" – particularly engineering, applied mathematics, computer sciences, and the managerial and policy-oriented social sciences (see Fischer 1990, 18)². These realms are heterogeneous, mirroring the heterogeneity of applied sciences themselves. What unifies these realms is that – although administrative action uses and produces various kinds of knowledge – it is always culturally specialized (scientific or aesthetic) knowledge that is used and produced. Communicationally, the general distinction of 'expertise/non-expertise' is shared. When administrators' expertise is based on scientific knowledge, it is not often the scientific substance that is shared – it is rather the *scientific method* that is collectively used³. Their expertise consists of their capability to manage scientific knowledge from the perspective of practical applications (see Konttinen 1997, 52). "Administrative scientists and managerial decision-makers are directed to focus their attention on verifiable "factual propositions" about means for achieving mandated ends"

¹ With aesthetic knowledge I mean such professional educatedness that provides architects, art critics and art historians a special authority in constructing conceptually architecture and/or art, and in evaluating works produced in these fields. In a sense aesthetic knowledge is comparable to scientific knowledge. Both are dominating communication modes in certain realms of social life that they themselves determine as domains of science or aesthetics. At the same time they offer authoritative positions to such scientific or aesthetic experts that are better educated and more skilled to act (to formulate arguments, to justify reasonings, to handle techniques) in those domains than the rest of us.

² "One of the component elements of a profession is that its skills are based on a theory. The application of this theory and its development give the members of the profession status and also their livelihood. Town planning is no exception. It developed out of architecture, engineering and surveying, its area of concern being that of the "system of land use and settlement", to use a modern term." (Faludi 1976, 13 – see also Konttinen 1997, 48-52; Pirttilä 1997, 73-74.)

³ "If technocrats do not agree on specific policy solutions, what they do agree on are the methods to be used to resolve policy differences. Essentially [...] they are identified by their common call for a greater role of experts in the political decision-making processes and the use of scientifically based decision methodologies." (Fischer 1990, 21.) Faludi sees the rational planning process as analogous to the scientific method (Faludi 1976, 51).

(Fischer 1990, 272). Accordingly, the empirical knowledge of administrative practice and bureaucratic mechanisms is shared. In the subsystem of administration, different realms of professional knowledge merge with the bureaucratic forms of producing public services. It is this *bureaucratization of professions* that is characteristic of the subsystem of administration, which manages land-use planning issues as well as social planning and education planning issues (see Valanta 1997, 73, 83). However, administrative expertise and scientific expertise do not necessarily merge together without causing tensions. In public organizations these tensions often produce conflicts that center around commands and instructions given by administrative officials to autonomous professionals. (*Ibid.*, 74.) The various disciplines, as they are used and combined with administrative experiences and skills, develop into what Fischer calls modern "decision technologies" (Fischer 1990, 18).

But the "factual" knowledge that is produced in administrative processes is not "purely" scientific. It has a certain normative undertone. According to David Harvey, the ideology of planning is built on the fundamental notion of *social harmony*; the idea of harmonious balance in society (Harvey 1985, 176). "The role of the planner, then, ultimately derives its justification and legitimacy from intervention to restore the balance that perpetuates the existing social order. And the planner fashions an ideology appropriate to the role." (*Ibid.*, 177.) This ideology "always puts the planner in the role of a "righter of wrongs", "corrector of imbalances", and "defender of the public interest"" (*ibid.*). Harvey maintains that we cannot separate the planner's knowledge of the world from this ideological commitment – they fuse into a single worldview that enables the planner to perform in the public organization (*ibid.*, 177-78).

The expert mode of planning developed hand in hand with the construction of the welfare state. Without faith in central planning, there would have been no welfare state, because central planning is what the welfare state is all about. The formal organizational structures of our public bureaucracies are still embodiments of the welfarist project. To the extent actors in a municipality, for example, have to adjust their organizational behaviour to its formal organizational structure – formal chains of decision-making, hierarchy of command, division and hierarchy of agencies – planning as expertise will also be carried onward in their organizational practices. We often seem to forget that the scientifically rational mode of planning in public bureaucracies is not just one planning "style" among other alternative planning styles, but it is this mode of planning that constituted the public bureaucracies in the first place. A coherent change from the expert mode of planning to another planning mode therefore entails profound changes in the public bureaucracy as a whole; and it is doubtful whether such changes can be carried out in full without suppressing the bureaucracies completely. This makes constructive criticism of the expert mode of planning so hard.

4.2.2.3 *Subsystem of Politics*

The local political subsystem does not consist of councilmen – it consists of communication of local issues codified into the political mode with the purpose of making political differences. It provides a technique of selecting and structuring interests

and decisions, where interests are clarified in reference to each other and decisions in reference to past and future decisions¹. 'Interest' is a publicly stated demand of a group that often is organized as a counterforce to another force and identifies itself in its negative relationship to that force – as an anti-new-supermarket-group, anti-new-ring-road-group, anti-new-housing-area-group, anti-anti-... Evidently, the appearance of the possibility of a certain unwanted political decision arouses political objection that transforms local social meanings into an 'interest', with a form proper for making a difference in the realm of politics. A referential framework where interests and decisions mirror each other is an environment of its own. It structures attention and implies certain behaviour.

What counts in the subsystem of politics is *organized communication* (Lindblom 1977, 196). Only well-organized interests appear on the political scene. In this subsystem, organizations communicate with organizations through their representatives. Each actor acts as a spokesman of his interest group. The subsystem provides a formula for reducing and simplifying larger collective entities of affected parties into units that can achieve communicative relationships in an organized manner. (See Luhmann 1993, 154.) According to Harisalo, Rajala & Ståhlberg, the local political system needs a "filter" to reduce and select the demands placed upon it, in order to prevent overloading. The organization of political action on a group basis serves as such a "gatekeeper". A similar effect may result from the organization of mutually opposing interests. Ideological beliefs also serve the functionality of the political system. Ideologies structure and arrange opinions and arguments within society and thus also demands that become signified as political. (Harisalo, Rajala & Ståhlberg 1992, 33-34.) Voting is a great simplifier (Lindblom 1977, 317). It reduces differences in opinion to yea/nay distinctions and splits the multitude of political actors into a supporter-group and an opponent-group in relation to the political decision at hand.

Decision problems are seen in the subsystem of politics in terms of mutually controversial *demands* (see Harisalo, Rajala & Ståhlberg 1992, 38), associated with interest groups that are identified against each other on the basis of such ideological distinctions as left/right, progressive/conservative and welfarist/liberal². Thus, a political

¹ "A system is called self-referential that *produces and reproduces* the elements – in this case the political decisions – out of which it is *composed itself*. Although such a system originates exclusively out of its elements, a specific order of these elements can reproduce itself. From the necessity of maintaining the ability to constantly reproduce new elements within itself, self-reference becomes the condition for all system operations. Therefore, a self-referential system can carry out operations only in self contact, i.e. only through co-ordinating its operations with other operations of its own. Just as with the brain, there are no direct stimulus/response relations for such systems. Instead, everything that the system is able to do is determined with regard to everything that takes place within it. Every individual decision refers to other decisions of the same system, otherwise it could not be a decision. And the individual decision possesses meaning only in such relations, perhaps as a contribution to the promotion or obstruction of other decisions or – for all these reasons – as the decision not to decide because premises or possibilities of connection are not sufficiently definite." (Luhmann 1990, 40.)

² Through this kind of oppositions the political system constructs 'political ideologies' specific to itself. Luhmann claims that party programming based on ideological oppositions is the only way to

demand can never be a "value-free" or an "ideology-free" initiative; nor can a group taking part in politics – such as the 'Uncommitted' and 'Greens' – be a truly uncommitted group. They always get caught, more or less, in the historical struggle between political ideologies. The presumption of the existence of an opponent is a central attribute of the political language (Möttönen 1997, 381). Politics is about choosing between alternatives; in the world of necessities there is no room for political behaviour (*ibid.*, 379-80). The context of political struggle between ideologically opposed interest groups thus encodes ideas and suggestions to conform with the 'our party/their party' distinction. Demands are deemed partial. It also follows that decisions are never mere solutions to decision problems, but they are also seen to mirror the power relationships between interest groups and to affect their historical balance in the political scene. A demand is weighted in proportion to the relative political power of the interest group making that demand.

The political actors consciously try to appear as representatives of the public. This means that politics involves a lot of theatrical play in front of the public. But as issues become personified and are thereby given a "political face", changes in decision-making processes are also viewed as changes in politicians' personal authority. One consequence of this is that politicians become reluctant to change their aims and opinions, because this could be read as a sign of their political weakness. Another consequence is that failures in political programs, which always promise more than can be kept, take the form of power failures of the party-internal leadership and thus assume the form of persons.

"Thus a moral controversy is enacted instead of a programmatic one, as if everything now depended on compensating for these weaknesses. Apparently, there is a kind of political law here: if money runs out as a political means, interject morality in its place. Politicians today typically act as if what matters is to instruct the people concerning who is to be respected and who is not – respect or disrespect used as a moral sanction against the whole person or the whole party. But people really do not want to know this." (Luhmann 1990, 236-37.)

The subsystem of politics pays attention to groups and persons as their representatives (the unemployed, retirees, tenants, domestics, single-parent families, etc.) (see *ibid.*, 61). It recognizes such aspects in its environment that can quickly be calculated into gains for groups and persons. But in contrast to administratively oriented decision-making, this subsystem often provides a context for disorderly conflict and struggle among competing interest groups. There are people with the public authority to vote in formal votings, and they arrange themselves into parties according to the majority/minority distinction and the expectations of voting results and their effect on the mutual power relationships. And then there are actors who try to make a difference in this political scene by mobilizing interest groups and coalitions in an attempt to influence the decisions of those in authority. They try to establish themselves as legitimate opinions of some portion of the public and thereby try to effect a political justification to be heard by the elected

put to the vote the possible directions of the political line in political elections. "Under democracy one believes that by electing of one party or party group a decision is made about a political program that differs from that of other parties. This would assume that party programming is of contrary nature [...]" (Luhmann 1990, 236.)

representatives. Here the mass media play an important role. They select samples of the variety of local "voices" and transform them into *public opinions* with political validity.

"[T]he political system creates, in agreement with a corresponding need of the mass media, topics that it just as quickly exhausts. They are ascribed to "public opinion". They are created as forms that grab the medium of "public attention" for some time – and then release it again for other commitments. In this self-created hectic state, that does not react to environmental changes that may proceed more slowly or faster, the system cannot take the time to wait for the success of long-term political planning." (*Ibid.*, 185; see also Vesala 1994, 115.)

The communication mode of politics emphasizes the interest-centered view, and, rather than guiding the actors towards comprehensive understanding of problems, it promises to achieve that comprehensiveness in the form of a *compromise* between partial interest groups. Political decisions seldom reflect the true preferences of any one interest group. The subsystem of politics seeks political settlement of disputes that are politically created. It tries to maintain the ability to reach decisions on problems that are variously interpreted by qualitatively different epistemic approaches, which are brought to the same level and furthermore into mutual conflict by the political process. Usually, the decision alternatives have already been formulated through political compromises, in order to secure that the necessary majority will be gathered behind one of them in the actual voting situation. Plans involve contradictory ends and such hopes of development that are economically and practically unfeasible, because they comprise aspects that are signified as crucial for the political consensus. The ability to make majority/minority decisions is a basic principle and technique that organizes into a *politicized form* the manifold negotiations on public issues.

The final voting procedures legitimize politically and judicially decisions that have practically already been made during the process of preparing and arranging for these voting situations. At this final stage, the content of the prepared decision usually remains the same. But this does not mean that the voting procedure would be insignificant. It *encodes* the preparatory work that it then affirms. Whatever the content of the produced decision-making material is, it has to assume a binary structure that enables the making of majority decisions. The decision-making material therefore has to take the form of (a sequence of) binary decision alternatives that enable politicians to make meaningful choices. This means, furthermore, that the binary coding of decision alternatives somehow has to correlate with the binary coding between values and ideologies, too, so that political groups can identify themselves with the choices between these alternatives.

The subsystem of politics is compromise-oriented and this makes it *conservative* by its nature. It follows that *incrementalism* becomes the intrinsic method of the subsystem of politics. It is easier to reach political consensus on increments similar to the existing policies than to gain support for a new policy (Etzioni 1967, 391). Continuous controversies make the system slow. Such big issues are avoided that are expected to turn the public opinion against the decision-making process and thus to immobilize it. Incrementalism also results from the short-sightedness of politics that follows from the rhythm of elections and from its dependency of the moody mass media publicity.

The primary purpose of conflict management in politics is not the "public interest" but to secure the existence and functionality of the political community. Unmanageable

conflicts paralyze the political community. It is essential that local politics maintains its ability to produce decisions that can be found generally agreeable despite differences in aspirations and expectations. (Harisalo, Rajala & Ståhlberg 1992, 43.) The function of the majority/minority distinction is to provide a general decision-making technique that ensures moral acceptance of decisions in addition to their legal validity.

4.2.2.4 *Subsystem of Economics*

At the level of municipalities, which is our level of interest, there are two competitive approaches to municipal economic planning. These resemble the controversy between "political economics" and "economic economics" discussed above. The first approach can be called '*municipal economic policy*' and the second the '*microeconomics of efficiency*' (Anttiroiko & Valkama 1993, 172). Municipal economic policy attempts to build a comprehensive, ecological and ethical view of municipal economics and its contextual relations. In the microeconomics of efficiency, attention is focused on the municipality's own economic processes, on its own efficiency and productivity, and increasingly, on local private business, privatization of public services, competitiveness, etc. This approach tries to incorporate notions developed in the realm of private business into the public realm of municipalities. The time perspective is focused on the next year at the most, whereas the most relevant time scale of the municipal economic policy is four to five years (Anttiroiko & Valkama 1993, 173; Kallio 1993b, 23). It follows that, in municipal economic planning, the two mutually controversial views to municipalities are in conflict: the first sees municipalities as welfarist non-profit organizations, while the second treats them as "city-enterprises". The second view has gained considerable strength during the 1980s and 1990s. (Anttiroiko & Valkama 1993, 172-86.) We can speak of the emergence of a new *culture of market-orientedness* in local public decision-making.

The rapid economic growth in the mid-1980s, and, even more so, the deep recession in the early 1990s that followed it, made money the central issue in the Nordic countries. The focus was first on how to make more of it, and then on how to get by with the lack of it. The market-orientedness of the public sector first arrived in the Nordic countries as an ideological trend, and only later did it receive a status as a practical necessity when government economies collapsed. The dismantling of the welfare state was a favourite topic of public discussions as early as the 1980s, but there was no need to take drastic action until the recession. The central government, and local ones too, redefined their main objectives. When profit margins narrowed down and government liabilities erupted, the central focus shifted from the welfarist redistribution of economic surpluses to facilitating economic growth itself. Economic development was explained as a technical problem, not as a political one. Technicized discourses accompanied the making of political changes. The neoliberalist hegemony had a convincing "numerology" on its side, to legitimate its discourse. The big issues raised in this discourse were not ethical questions but aggregates of technical-economic quantities derived from social and societal life. Furthermore, these issues were viewed increasingly from the context of global economic competition. International competitiveness set the standards for our

social and political efforts. (Anttiroiko 1993c, 7-8.) Now it even causes us to re-evaluate our cities in terms of their potentiality as centres of innovation and business that deserve international attention and initiate economic growth (see Kaupungit kasvun luojina 1995; Aronen & Berghäll 1998).

The development in Finland harmonizes with the international tendency known as "New Localism". The proponents of New Localism assert that the regulation of the function of economic accumulation is shifting down from the national to the local level, creating a new local convergence of interests between capital, labour, and other local constituencies. Cities are now hoped to play a more active and rewarding role in the world economy. (Lovering 1997, 110-11.) According to John Lovering, "the corollary is the possibility of a new city-centred form of world economic organization, of the kind long espoused by Jane Jacobs, formerly dismissed by many as romantic fantasy" (*ibid.*, 111).

In Finland, local governments struggle with their statutory responsibilities of providing social, health, education, security, legal, and infrastructure services, while the state is simultaneously cutting its subsidies and the tax revenue from local citizens and enterprises is diminishing. Nowadays, local public administrators' central problem is simply how to make ends meet financially. Democratic management is blamed for being too costly and inefficient. Private management is offered instead as a new model for local public administration¹. Public organizations are being privatized, entrepreneurship is encouraged, new public-private corporations and partnerships are being established, client-producer models are utilized, user fees are set for utility services, and private companies are called to compete for their provision. Cost-benefit analysis becomes the central matrix of decision evaluation, both in land-use-planning and in other sectors of local public administration. Cities compete for private investment and enterprises in order to improve their employment rate and tax income. As in North American cities, it is an increasingly popular policy to offer "incentive packages" and images of a "good business climate" for firms about to expand or relocate to a new favourable place. In the context of this competitive lobbying, the existing regulations on land use are "negotiable".

4.2.3 *Reflection and Self-Maintenance*

Each subsystem may act technically according to its fixed distinctions and corresponding roles, or politically by reflecting upon these. Technical decision-making is routinized action: public managing, political bargaining, and business "as usual". Political action – apart from 'politics' – is here understood in Arendt's (1958) sense as meaningful political

¹ "New Public Management" is a new management paradigm that is applied in public organizations especially in Great Britain, Australia and New Zealand. It utilizes neoliberalist economic theory and takes its models from management theories originally developed for private enterprises (such as Lean Management and Total Quality Management). The basic theses of these theories are the de-division of labour, reductions in standardization, inner and outer networking, team work, competition between work units, and leadership based on a partnership between managers and workers. (Ryynänen 1996, 94-99; Möttönen 1997, 18, 54-58.)

communication in the public domain (Chapter 5). In political action, subsystems seek out a new mutual equilibrium, where each individual subsystem reorganizes its actualized distinctions. Some "deep" and archaic distinctions may turn out to be improper as representations of the current complex decision-making situation, and better ones may be created in their place.

However, no subsystem can reflect upon its own fundamental distinction. Subsystems may reflect upon what appears as their relevant environment, but not on the fact that, by their very reflection, it is themselves and, accordingly, their environment they nevertheless reproduce. A subsystem's reflection always takes place within the subsystem itself; it cannot be reflection upon the subsystem as a whole. Every subsystem's primary interest¹ is self-maintenance. All the other interests that it concerns itself with are based upon this primary interest. The fundamental distinction – such as true/false in science, or legal/illegal in law – is constitutive for the existence of a societally differentiated social practice. Only awareness of the possible disappearance of this practice from society or from one's personal life would bring consciousness of this distinction. As long as the practice itself prevails, its fundamental distinction prevails. The system bases its identity upon its fundamental distinction. This distinction is invariant and consequently completely insensitive (Luhmann 1990, 181-82).

In the subsystem of politics, for example, decision-makers may reflect on their attitudes towards each other and on the issues they decide upon – but that it is decision-making that their activity is about is a matter that is beyond their reflection. It is not questioned – on the contrary, it is *confirmed* by their questioning, because it is the type of questioning that is *peculiar* to decision-making situations. It is the former decisions, and the former ways of decision-making that are reflected upon – and therefore, in the ultimate analysis, it is about making new decisions with the aid of former decisions. Similarly, a professional planner may reflect upon what is to be considered as professionally valid knowledge about a planning problem, and upon who to consider as relevant providers of this knowledge. But this does not question the basic assumption that there is such a thing as professional knowledge about planning issues. Also, the basic notion of social harmony remains intact when there is a change in the planner's understandings of whatever it is that is out of balance (Harvey 1985, 178). Accordingly, one's reflection on what and when to buy or sell, and on who are the potential business partners, only confirms the continuity of the world as constituted of things to be bought and sold and of people who are willing to buy and sell.

¹ This understanding of primary interest bears much resemblance to Bourdieu's concept '*illusio*'. *Illusio* has to do with the primary value placed by social actors – 'players' – not only on winning a 'game', but on the 'game' itself, in which they participate in a societally differentiated field. The actors share certain fundamental interests that are connected to the existence of the field and to the payoffs (prestige, authority, academic degree, money, etc.) it has to provide. Two football teams have mutually conflicting interests in their attempt to win each other, but they both share the more fundamental interest in the promotion of football. By playing against each other, the players play *for* the game. (Bourdieu 1987, 106-07; Bourdieu & Wacquant 1995, 144-47). For example, the breakthrough of functionalism in architecture was not a revolution against architecture – instead it was a revolution against "false architecture" with the implicit purpose of increasing the societal significance of architecture in general.

There is an important lesson here: all self-reflection is more or less partial, because it cannot escape the fact that it is initiated by the basic purpose of self-maintenance. When society is functionally differentiated, it cannot reflect on itself *as a whole* any longer. Only its function systems have such reflective capacity. This also means that each function system constantly strives to maintain its existence in society. Viewed from the level of society, each act of reflection that takes place within society thus contributes to the maintenance, or even increase, of its functional differentiation, while this differentiation *itself* is beyond reflection. The tragedy of our society is that it is helpless in the face of its own functional differentiation and thus exposed to all the risks and disasters (ecological and social) that such unsteered complexity may bring. It is blind to the structural defects inherent in its functional differentiation *because of* its differentiation. "Can we expect [...] any society to debate its own fundamentals?", asks Lindblom (1977, 211).

The subsystems renew themselves through their actors, who are never localizable to just one subsystem. No actor is given merely *one* role in *one* subsystem, but each actor occupies several roles in several subsystems. The actors may shift from one communication mode to another, and they are often tactically aware of the possibilities that open up thereby. A planner, for example, may try to get his proposal accepted by the politicians by indirectly implying that such a decision would provide certain political benefits (success in the next election, nullify the efforts of the former council's ruling party, etc.). A politician, on the other hand, may appeal to expert reports in defending a decision, which was primarily made on political grounds. A planner is better skilled in the expert mode of communication than the politician; and the politician is better skilled in the political mode of communication than the planner – but this does not mean either of them would (or even could) restrict himself to communicating in the mode he uses best. Actors are therefore more or less able to view things from different perspectives and to alternate between these perspectives. An actor may develop a critical attitude towards the subsystem with which he has been identifying himself, because his capacity to change perspectives enables him to "externalize" himself from it. To some extent, he is even able to reflect on the subsystem itself and to approach critically and creatively the ways of objectification peculiar to the subsystem.

A subsystem can react to the problems it faces only by regulating itself, not the subsystems that surround it. It affects the surrounding subsystems, but these effects are unintended and unpredictable changes in system-system relationships that result from its own self-regulation. It follows that its own self-regulation partly creates the problems it tries to regulate. The subsystems – expertise, politics, and economics – depend on the political system, which consists of relationships between these subsystems at a logically higher level. Survival depends on the subsystems' capability to reflect on their distinctions. Each subsystem needs to find an organization of distinctions that enables the balanced coexistence of all subsystems, and to reorganize its distinctions whenever this equilibrium is lost. No subsystem has control over the other subsystems. The political system therefore has no center, no more than it itself can be the center of the societal system.

4.3 System of Land-Use Planning

The formal institution of local land-use planning is defined in law and in municipal organization charts as one of the agencies of local public administration with a corresponding administrative-professional personnel. Our systems perspective, however, does not delineate the realm of land-use planning activity according to these formal boundaries (although the land-use planning system is not indifferent to them insofar as these boundaries affect decision-making behaviour on issues of land use). Here, the system of land-use planning is not treated as a fixed section or a subsystem of the political system. It is the political system insofar as the system carries certain more or less institutionalized social activities, which direct and constrain the thematization of land-use planning issues. It is the political system to the extent that the latter concerns itself with the planning of local urban environment – how land-use planning is done, what is planned, and by whom. The system of land-use planning is thus not part of the local political system, but a certain *domain*¹ of it – the domain where binding decisions on issues of land use and land-use planning are prepared, made, and executed. As the political system has the basic purpose of making binding decisions for society, so is the basic purpose of the land-use planning system to make binding decisions on land-use planning issues for society. The system is about *everything making a difference* in local land-use planning activity. I suspect that we are more successful in understanding the operations of the system of land-use planning when we do not see it as causally separate from the rest of the local political system, but merely as a separated object of our research – being aware that it is essentially the interests of our study that outlines the boundaries.

From what was said above it follows that the subsystems of the system of land-use planning are identical to the subsystems of the political system – with the exception that it is the subsystems' handling of urban planning issues that we are interested in, not their other handlings. The subsystems therefore are

- planning as expertise (incl. "artistic" expertise) (expert planning communication);
- planning as politics (politicized planning communication) and
- planning as economics (economized planning communication).

The basic distinctions upon which communications in these subsystems are based do not stem from the locality, but from societally more extensive phenomena, such as law, organizational and political culture, professional knowledge and skills, and economic behaviour. For a large part, these distinctions are maintained by subcultural communities and epistemic traditions, in which locality plays no distinctive role. It follows that there is no established subsystem for local cultural communication about local environmental issues. The subsystems of land-use planning are naturally always about local issues. But they withhold generalized and institutionalized procedures, approaches, skills and rules that determine *how to be about* these issues. A planning problem that stems from this locality has to be transformed (its distinctions re-made) to the communication mode of some other subsystem – i.e., the local problem has to make a difference either in planning politics, in planning expertise, or in planning economics. It has to gain political,

¹ Here the conceptual difference between 'part' and 'domain' is that a part is a sub-level element of the whole, while a domain is a certain realm of operations conducted by the whole itself.

professional, or economic status – that is, it has to become powerful in one or some of these respects, in order to be heard. But what is thereby heard is perhaps something that thus has been given a new form – not what was initially conceived to *be* the problem. *In land-use planning there are no problems that are not differentiated by any of its communication modes* (see Kallinikos 1997, 23). The problem enters the system as a professional, political, or economic problem, depending on the relative subsystem that *transforms* it.

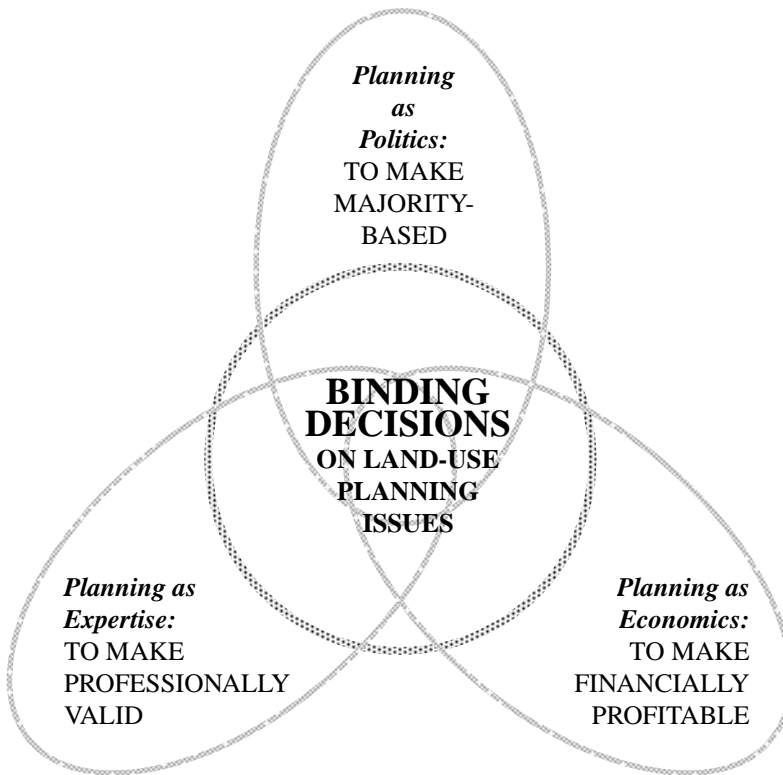


Fig. 18. The system of land-use planning: a political system.

4.3.1 Planning as Expertise

The expert mode of planning communication is dominant in the sort of land-use planning that is most familiar to us. Planning as engineering relies on scientific rationality with its alleged objectivity and freedom from value considerations. It strives to reach

comprehensiveness of analysis and has a strong belief in its capabilities to regulate future urban growth. The emphasis is on middle- and long-term planning. Although expert planners may have given up the belief of having full authority to steer urban growth on the 20-30 year time scale, they still rely on long-term *strategic* steering or "mixed-scanning" between long- and short-term planning (see Chapter 1). The planner conceives of himself as a *controller* of his object. The scientific method with its emphasis on quantifiable factors is taken as an ideal when formulating planning problems and solving them. The planner aims at a comprehensive view of planning problems (townscape, infrastructure, ecology, etc.), but at the same time his view is limited by the necessary limitedness of his professional language within which his view is formed.

An important concept is 'public interest': the planner defines what is good for the 'public'. The public is essentially undifferentiated, with the exception of physiological differences, because the scientific method is blind to differences in life style, value considerations and epistemic understandings. The planner is both a technician and a bureaucrat: he leans both on facts and on formal rules of public office. On both accounts he works for the benefit of the public good: it serves public interest to proceed in planning by the book and with reference to the facts. The planner works essentially alone – especially the architect-planner who worships the image of himself as an artistic genius. The facts of land-use problematics are "out there" to be gathered and correctly interpreted by an expert, and therefore, in principle, not open for debate (see Fischer 1990, 73-74, 146; Väättäinen 1995, 104, 116, 134). The planner is the sole judge of the rationality of decisions and proposals. The language of land-use planning – i.e. the words and graphic symbols used, the way the built environment is objectified, what deserves attention, what is a "good environment" – is therefore "privatized" to the epistemic community of planners themselves. Other interested actors, including politicians, developers, residents, etc., have only more or less limited capacities to comprehend this language (see Vesala 1994, 39-42). This privatization of expert language makes it hard even for the cooperation-oriented planner to reach communicative relationships with the other parties involved.

A large portion of planners' knowledge is so-called *tacit knowledge*. When knowledge becomes tacit, the deep theoretical distinctions that guide one's practice are not open for analysis, but are in a sense behind the actor's back. The actor is not aware of using these distinctions, and he is therefore also unaware that he could choose not to use them, and perhaps develop more suitable distinctions instead. This means that the theoretical distinctions are rather using *him* and all the elements that together constitute his activity system. Distinctions do not exist by themselves. They have to be *practised* by people, "carried" by intentionally acting bodies. The theoretical distinctions provide the general codification mechanism peculiar to the planners' profession that determines *how* the planner perceives conceptually his activity-environment – the "built environment", his working conditions, other actors, maps, plans, and documents, etc. How planning is done – what tools are used to represent and simulate the object (maps, statistics, drawings, models, etc.) – depends on how the activity-environment is coded. It is not the "objective" environment, but the coded environment that is represented and simulated. How arenas for communication (negotiations, decision-making procedures, public displays and hearings, questionnaires, etc.) are arranged – where, when, and who meet and exchange

opinions – is, again, determined by the codification of the activity-environment based on theoretical distinctions.

The planners' profession is given form by this theoretical codification mechanism. Its operation usually remains hidden from the planners themselves. The reason for this is to be found in the nature of land-use planners' profession. It still retains many aspects of the traditional handicraft culture¹. According to Engeström, handicraft is based much more on experience than on the deliberate application of theoretical knowledge (Engeström 1995, 22). Handicraft is based on theoretical knowledge, too, but this knowledge is "embodied" in the largely unconscious *craftsmanship*. One learns the theoretical knowledge of a profession mostly by habituating to working conditions that are already determined by theoretical understandings held within the profession. One *adjusts* to theory, but does not learn to *master* it. Theoretical knowledge is passed on without conscious reflection from generation to generation through training methods whereby apprentices imitate their masters' work and masters supervise the apprentices' exercises. Much of architects' education is still based on similar methods: imitation of the current architectural styles displayed in international architectural magazines and teachers' personal guidance of their students' design and planning exercises. Professional knowledge thus becomes internalized and generalized through the acquisition of a skill without a need to analyze the theoretical determinants of that knowledge. The craftsman is often in charge of the whole process of production, moulding his object from raw materials to the finished product. (*Ibid.*) To some extent, the land-use planner can also be seen as such a craftsman who is in charge of the planning process from the preliminary analyses to the finished plan-products.

Although planners may refer to themselves as mere technical executives who carry out value decisions made by elected politicians, they themselves become the real decision-makers when society itself becomes "technicized" – i.e. dependent on scientific knowledge, and accordingly, on those who produce it². The local politicians, who have become adjusted to planning as engineering (or know no alternative to it), are either hopelessly overburdened by the piles of analyses that planners produce (see Vesala 1994, 34, 39-42), or used to demand simple facts and unobscured of preferable decision alternatives from the planners of their administration. They are reluctant to make *political* value choices, but prefer to see their choices clothed in the unambiguous outfit of scientific discourse. This may sometimes serve politicians' own purposes, as they can avoid taking responsibility for a hard political choice they have made. By appealing to the planners' calculations that indisputably show their decision to be a rational one, the leading politicians implicitly deny their role as responsible actors: "they had no other choice". The centrality of expert communication in the determination of decision alternatives and agendas is therefore not always a sign of expert power, but sometimes also serves as a hidden instrument of political power, when politicians choose a suitable

¹ According to Liisa Häyrynen, the Finnish architects' professional organization bears some resemblance to the mediaeval guild system. Finnish architects have also retained from the mediaeval times the deeply emotional view to their profession as a "mystery". (Häyrynen 1992, 251.)

² On experts' power to influence local public decisions, in land-use planning and in general, see Faludi 1976, 228-46; Valanta 1997, 16-17, 76, 105; Harisalo, Rajala & Ståhlberg 1992, 79, 121-22.

scientific analysis to justify their own purposes (Fischer 1990, 28). In the long run, however, this would lead to the general domination of professional argumentation in decision-making at the expense of political argumentation. The more you communicate in the mode of expertise, the more it is expertise that determines the issues and results of your communication. No subsystem can succeed in its efforts to use another subsystem as a means for its own ends. We already saw this when discussing the difficulties governments face in their attempts to employ the market as an instrument of their policies.

The more culturally differentiated the expert language of planners is, the less the average politicians have a say about their suggestions. An exception to this are the experienced and "professionalized" elite politicians (such as chairmen of councils and boards, the mayor and other leading administrators) who may form a powerful clique with the leading planners. These key actors would then share a common professional-administrative communication mode. This clique may actually be in charge of the planning policy, although there is an ostensible formal split between democratic decision-making by the elected councilmen, and the planners' role as preparatory and executive officers for these decisions in the land-use planning agency. The final votes in council rooms only confirm decisions already made elsewhere. The real handling of local public affairs is taken over by the professional-administrative elite, while politics is reduced to performing prearranged formalities. (Valanta 1997, 16-20, 76, 114-117; Möttönen 1997, 97-98, 105-06, 126 – see also Vesala 1994, 69, 88-89.)

In planning as engineering, the economic actors agree to invest according to the profit-making opportunities provided by the centrally produced plan. But as Brindley, Rydin and Stoker point out, investors usually harmonize their deals with the planners' goals in economically buoyant areas only – that is, where submitting to planners' will is still economically profitable (Brindley, Rydin and Stoker 1989, 4, 35, 169). During the 1960s, both the public and the private sector seemed to work for the benefit of the public good. Technological modernization and urbanization accelerated growth jointly and increased people's material well-being. In countries such as Finland, where these processes occurred simultaneously, the emerging new suburbs were seen as improvements of the general living conditions. Building companies were given large housing areas to develop. With the advent of prefabrication and corresponding standardization, the building costs dropped (although the prices of apartments did not). The resulting mass-produced apartments with their new technical facilities were considered as social progress in comparison to the former rural conditions.

The laws and rules concerning the publicity of the planning process are essentially obeyed to assure legal legitimacy for the plans rather than to provide true participation and democratic accountability for the planning process. Residents' participation in planning is no more than an effort to fill the planners' knowledge gaps. Although the planner may recognize gaps in his knowledge base concerning the local living conditions, these gaps are usually filled in by structured questionnaires and interviews of certain resident groups without questioning the knowledge itself. Even the planning projects that we usually consider examples of genuine participative planning are often dominated by public administrators. In Finland, for example, many participative renewal projects have been launched by public officials in our more problematic suburbs; and it is often these public officials themselves who identify the social and physical problems of these

suburbs and then attempt to mobilize the residents to work on them (Pakarinen, Kinttula & Laitinen 1993; Koskiahio 1998, 2; see also Ryyänen 1996, 27). In fact, the new emphasis on participative planning and the respective policy reforms that attempt to decentralize decision-making and increase flexibility only serve to further increase the authority of public administrators in local decision-making. Rather than truly listening to local citizens' requests for the provision of public services, the professional suppliers of these services tell the citizens what services they should ask for. (Harisalo, Rajala & Ståhlberg 1992, 121-22, 158-59.) It seems that 'user democracy' provides a context for local public planning that makes the takeover of this realm much easier for the distinction expertise/non-expertise than for the distinctions majority/minority and profit/non-profit. When user needs and locality are seen as decisive, party politics and business interests are soon rejected, but what is left is not "pure" user needs and locality; instead it is usually these *as defined in the language of expertise*. The citizens, or residents, are considered experts of their local life, but inadvertently so within the broader context of professional expertise that determines the realms in which they are to be treated as either experts or laymen.

Advocacy planning, on the other hand, is based on participation by a citizen group transformed into the communication mode of expertise. The planner, who works as the group's advocate, attempts to give the group's needs more weight and credibility by transforming them into the language of expertise. (See Sager 1994, 48, 77-78; Schön 1983, 294-95.) According to Schön, there are two difficulties in such measures. "First, there is the difficulty of combining [the group's] adversarial stance toward the professional with a wish to benefit from his special knowledge. And second, there is the sense in which a professional advocate or citizen-professional still takes a professional stance, claiming special knowledge and autonomy which he may abuse in his relations with his clients." (Schön 1983, 295.) In this case, expertise is intended to be used in the service of political empowerment of the weak citizen group, but, paradoxically, the use of expertise becomes the empowerment of expertise itself.

4.3.2 *Planning as Politics*

Politicized land-use planning communication is dominant in interest group planning. The choices in decision-making are conceived of as being essentially value choices. The faith in scientifically rationalistic decision-making methods is low. There are two reasons for this lack of faith. *Firstly*, the dynamics of urban change is felt to be too complex. There are simply too many variables to calculate. Even if we accepted that the 'facts' are "out there" to observe, they are too complex to handle with the scientific method. The planner is no longer considered to hold facts of what are the future consequences of decisions and strategies; he has only guesses to offer. Even for the planner, the choice of policy becomes a matter of opinion. *Secondly*, with the postmodern turn of our culture, we are increasingly becoming aware of the language of science as merely one "discourse" among many. Planners' expert knowledge of land-use issues has become "socially constructed" knowledge – not factual and pervasive. Two illusions of scientific rationalism are thus broken: the illusion of controllable future and the illusion of public

interest. Either way, holding on to modern determinism or moving on to postmodern relativism, the planners lose the support of facts and have to acknowledge the pluralism of differing opinions and values.

After the oil crisis and the decline of many mass-industry-dependent regions, it has been harder to find economically buoyant growth areas, whereas, during the 1960s and early 1970s, both rapid urbanization and rapid technological growth usually guaranteed economic buoyancy of the planned areas¹. Regions and areas have differentiated in relation to their economic livelihood and business structure, and the welfarist planning system with its hierarchic controls is helpless with this development (Pakarinen 1992a, 71). The interest of economic profit-making has thus departed from the "public interest". The previous stability of economic growth also provided stability to the political power relationships between parties and trade unions. Unemployment together with ecological awareness and the problems of urbanization (such as congestion, segregation and alienation) have made local politics less predictable and have also introduced new groups into the political arena, such as the Greens, resident associations, and *ad hoc* pressure groups. The planner is forced to communicate with other actors, because their motivations have become unpredictable and because he himself is revealed to hold a partial view of planning. The planner is pressured from two directions: on the one hand, he is pressured by the lack of adequate information of the policy outcomes to make a rational choice between them; on the other hand, he is pressured by the interest groups who lobby, campaign and compete for their own, often intentionally narrow and self-centered value preferences. The problem is not only how to manage decision outcomes "out there", but also how to manage decision-making situations "in here". Land-use planning becomes a political process of "muddling through".²

¹ "Regardless of country, its idiosyncracies and pace of development, there is a broad consensus of opinion that the change in economic circumstances in the mid-1970s implied a change in planning as well. However, it is not only attitudes that changed; economic growth had now come to a standstill. Welfarist planning had been based precisely on the assumption of continued economic growth, and when that came to end, many models and many policies saw their foundations disappear." (Brindley, Rydin & Stoker 1989, 4-5.)

² The following account by Rittel and Webber (1973) of the "political turn" of planning is worth quoting here:

"Because it was fairly easy to get consensus on the nature of problems during the early industrial period, the task could be assigned to the technically skilled, who in turn could be trusted to accomplish the simplified end-in-view" (*ibid.*, 158).

"The professional's job was once seen as solving an assortment of problems that appeared to be definable, understandable and consensual. He was hired to eliminate those conditions that predominant opinion judged undesirable. His record has been quite spectacular, of course; the contemporary city and contemporary urban society stand as clear evidences of professional prowess. The streets have been paved, and roads now connect all places; houses shelter virtually everyone; the dread diseases are virtually gone; clean water is piped into nearly every building; sanitary sewers carry wastes from them; schools and hospitals serve virtually every district; and

The dominant theory behind politicized planning is Lindblom's politics of incrementalism, or "partisan mutual adjustment" (Chapter 1)¹. The decisions concerning each incremental plan are reached by means of politics. The planner is seen as an interested partisan himself, and the narrowness of his value orientation is complemented by other interest groups that act as "watchdogs" for other values (Lindblom 1965, 146, 151, 156). The interest groups debate, bargain, and compete over their conflicting values. As no value can override the others on factual grounds, their order of precedence depends on the political power that each group has². Incrementalism is favoured on two accounts: firstly, because adequate information of long-term consequences is not available, it is safer to make small land-use decisions than big ones; secondly, it is easier to reach political agreement on small decisions than on big ones. For the elected politicians, there is an additional advantage in short-term planning: some of the results may already be seen before the next election.

Forester has listed six strategies that planners adopt in interest group planning (Forester 1987, 306-09). His approach stems from the North American planning practice, but his general view seems applicable to the Finnish context, too (Vuorela 1991, 146). The first strategy takes us back to planning as engineering. The planner sticks to *facts and rules* and tries to rise above politicized planning and transform planning to the good old professionalized communication mode. But the second strategy – "*premeditate and negotiate*" – is clearly political. It implies that the planner seeks to avoid an open conflict between interest group representatives beforehand. Before these representatives are called to negotiate on a planning proposal, the planner, on the basis of his own expectations of conflicting concerns, tries to find a solution where these concerns could be harmonized, not forgetting his own professional standards. In the third strategy, the planner conceives himself as a *resource*; he meets the counterparts separately, answers their questions, formulates alternatives, and encourages the counterparts to meet each other informally. The planner avoids big formal meetings, because he fears that this might lead to a premature fixation of attitudes. Residents, for example, might interpret a city hall meeting as a "now or never situation", where it is safest not to show any signs of positive interest

so on. The accomplishments of the past century in these respects have been truly phenomenal, however short of some persons' aspirations they might have been.

But now that these relatively easy problems have been dealt with, we have been turning our attention to others that are much more stubborn. The tests for efficiency, that were once so useful as measures of accomplishment, are being challenged by a renewed preoccupation with consequences of equity. The seeming consensus, that might once have allowed distributional problems to be dealt with, is being eroded by the growing awareness of the nation's pluralism and of the differentiation of values that accompanies differentiation of publics." (*Ibid.*, 156.)

¹ Lindblom, however, was not a genuine postmodern thinker yet. He did not problematize the objectivity of facts, but only the limitedness of our capacities to obtain these facts. In Lindblom's theory, different groups have different partial knowledge of facts and therefore different values.

² "In some large part the weight given to a value depends on the authority held by the participants in partisan mutual adjustment who pursue or protect it and by their adversaries" (Lindblom 1965, 235).

towards the developer's sketchy ideas. Then value differences might develop into a crude opposition, reducing the possibilities for mutual adjustment to a simple yea/nay distinction. The fourth strategy is "*shuttle diplomacy*", where the planner probes and advises both parties – for example the developer and residents – in turn. The planner is not a mere neutral mediator, but acts practically and influentially. "He focuses attention to specific problems, shapes future agendas, legitimates a point of view, and suggests lines of further argument" (Forester 1987, 308). He recognizes that though he acts on a professional basis, his support of one side or the other will have a political effect. The fifth strategy is "*active and interested mediation*", whereby the planner seeks to build trust between the disputing parties and, further, their trust in himself as their mediator. On the basis of such trust, there would also be room for the planner to state his own professionally reasoned arguments. The planner is a "fine-tuner" of supportive negotiation atmospheres. He pays attention to emotions that are aroused, because he knows their importance as determinants of negotiation outcomes. He is a compassionate listener and pays attention first to the person, then to the words said. He is also careful to pick out early signals that may acquire central significance later on. The sixth strategy is based on "*splitting the job – you mediate, I'll negotiate*". Here the planner identifies so strongly with the professional and political mandate of his position that he cannot picture himself as taking the place of a mediator. Rather, an informal volunteer mediator with good communication skills is "borrowed" from the planning board or some other respected local institution. The planner is thus freed to participate in the negotiations as a professionally interested contributor – as one interested party among the other parties concerned with the area or site in question.

Many of these strategies are motivated by the planner's careful avoidance of overt politicization of the planning process. The politics of incrementalism in its most adversary form becomes a lose/lose game: competing values and groups reach agreement through compromises. Each gives up something. (Cates 1979, 528.) The search for new alternatives and their argumentative consideration may be changed to confrontation and warfare even before it has properly begun. The planner is not satisfied with just being "neutral" between the disputing parties. This position would resemble more the job of a referee in a boxing match than that of a mediator in facilitating agreement. (Forester 1987, 307.) He is also too deeply involved and too interested to assume credibility for taking such a position. It seems that the politically acting planner – probably due to his background as a designer – is often not only concerned with the fairness and democratic quality of the decisions reached, but tries to include a *design approach* in the process of decision-making. Politicized planning easily undermines the role of creativity in building common consent. Lindblom correctly points out that values are not manifested as general overriding principles, but emerge in the situated context of actual decision-making¹.

¹ "Social objectives do not always have the same relative values. One objective may be highly priced in one circumstance, another in another circumstance. [...] That one value is preferred to another in one decision situation does not mean that it will be preferred in another decision situation in which it can be had only at great sacrifice of another value. Attempts to rank or order values in general and abstract terms so that they do not shift from decision to decision end up by ignoring the relevant marginal preferences. [...] Somewhat paradoxically, the only practicable way to disclose one's relevant marginal values even to oneself is to describe the policy one chooses to

Values alone are too abstract. They find the reference they need in clarified decision proposals. But a decision proposal does not necessarily refer to one value only. Values may collide, but their situated facilitation depends largely on the *design of the decision situation*. The political planner clearly tries to build a consensus between the counterparts, though not only by the use of persuasive and argumentative skills, but also by using these skills to support creativity in planning. The outcome of the debate does not depend only on the given value differences but also on *what* the decision alternatives shaped in the process of planning are, *how* they were shaped, and *by whom*.

"[N]ormally, in the pursuit of a wicked planning problem, a host of potential solutions arises; and another host is never thought up. It is then a matter of *judgment* whether one should try to enlarge the available set or not. [...] In [...] fields of ill-defined problems and hence ill-definable solutions, the set of feasible plans of action relies on realistic judgment, the capacity to appraise "exotic" ideas and on the amount of trust and credibility between planner and clientele that will lead to the conclusion, "OK let's try that." (Rittel & Webber 1973, 164.)

In the course of creative political action, it is possible to reflect both on the political and on the professional context. In such action, there is a chance to find room for their situated coexistence. But that does not mean that the two separate communication modes – the political and the professional – could be combined. Instead of melting into a homogeneous gray zone, they find a context where they become wrapped up in each other – like the fine black and white contours of some well-known computer fractals. Indeed, this twilight zone seems to be the only possible realm of coherent existence for the intentionally political planner.

Interest groups are usually conceived of as organized groups that strive to influence public decision-making in order either to promote or to defend their interests without attempting to take active part in the actual processes of decision-making. When interest groups are internalized into politics and consequently become institutionalized as political actors among others in the normal and everyday political life, we can speak of *corporatization* of politics. (Harisalo, Rajala & Ståhlberg 1992, 80.) To some extent, such corporatization has taken place in local land-use planning. It is commonplace that certain interest groups, such as resident associations, local cultural associations, chambers of commerce, and major firms and developers, are given a permanent position in planning processes as legitimate representatives of local and business concerns. Corporatization is a possibility in the system of politics which, as we have seen, is sensitive to organized interests only. The politics of incrementalism takes the corporatization of interests rather as given (Chapter 1). But then we must ask where, if not in politics, could sensitivity be provided to the concerns of the unorganized and the politically uninstitutionalized? As Margit Mayer says:

achieve them. Except roughly and vaguely, I know of no way to describe – or even to understand – what my relative evaluations are for, say, freedom and security, speed and accuracy in governmental decisions, or low taxes and better schools than to describe my preferences among specific policy choices that might be made between the alternatives in each of the pairs. [...] [O]ne simultaneously chooses a policy to attain certain objectives and chooses the objectives themselves." (Lindblom 1959, 82.)

”[N]ew bargaining structures are a reality in many different cities but contrast starkly in terms of their inclusiveness and responsiveness with regard to non-CBD [central business district], non-real-estate, non-large investor interests. What is more, cleavages have become apparent not just between neighbourhoods and large developers/large firms, but also between newly included community interests on the one side and groups peripheral to the new arrangements on the other.” (Mayer 1997, 245.)

From such corporatist planning, there is only a short step to planning as economics. True pluralism cannot be found in this kind of politicized land-use planning – in fact, it cannot be found in *any* politics at all. *Pluralism lies in the coexistence of politics with other societal subsystems.*

4.3.3 Planning as Economics¹

4.3.3.1 Towards a Market Orientation

In the 1960s and early 1970s, during the heyday of planning as expertise, *science* was the privileged communication mode in society. The faith in technology was overwhelming; it equipped homes with new facilities and devices and sent man to the Moon. Nothing seemed impossible for Modern Man. New metropolises, such as Brazil and Chandigarh, were built in the wilderness, and cities were renewed without a concern for the existing social and cultural patterns. Machine cities were dreamt of by visionaries, such as Archigram, Yona Friedman and the Japanese metabolists – and a few were also built, such as Runcorn in England and Toulouse le Mirail in France.

In Finland, as in the rest of the western world, faith in strategic planning prevailed. Attempts were made to integrate urban planning to general social planning. The Garden city theory was revived along with the doctrine of hierarchic decentralization of the city centre and its subcentres. The local administration of land-use planning bureaucratized rapidly. Surveyors, traffic and infrastructure engineers, and sociological analysts joined the architect-planners who, however, still maintained their leading role in local land-use planning agencies.

But in the late 1970s and early 1980s things changed. Science had lost its inner coherence: hermeneutics challenged empirism, and empirism itself was torn apart by two major but mutually incompatible theories – theory of relativity and quantum physics. Technology had revealed its threatening side, and, like science, was also going through a tremendous change – from mass industry to information industry. Bold long-term forecasts of urban growth had failed miserably; residents protested against the lack of public facilities in their half-completed neighbourhoods and were distressed by the social

¹ Contrary to the former two – planning as expertise and planning as politics – the theoretical premises of planning as economics have not been discussed in Chapter 1. Therefore a more detailed discussion of this mode of planning is in order here. The text in this subsection is adapted from Mäntysalo 1999.

and aesthetic monotony that surrounded them. Aggressive pressure groups emerged to resist massive renewal projects that threatened historical landmarks. Real urban development departed increasingly from the instructions documented in long-term plans. Especially for this reason, planning was in crisis. The essence of planning was conceived to be control of future development. When it ceased to fulfil this primary function, more and more critics emerged to question the utility of planning. Urban change inevitably became incremental in countries such as Finland, which had more or less completed their socio-economic change-over from agricultural to industrial societies – and the rapid urbanization process that accompanied it. The flows of in-migration to cities subsided, and the tasks of planning shifted from large-scale zoning of uninhabited areas to small-scale projects where existing urban areas were renewed or complemented. The economic downturn in the mid-1970s further contributed to the shift of emphasis towards the maintenance and conservation of existing built environments. As a result, new plans were being prepared for areas that already comprised social patterns of environmental behaviour. The planned places, even the unbuilt ones, were filled with social meanings. Attempts to alter these areas with new development were often felt to be intrusions to everyday life and the emotional milieu experience. Local resident groups were organized as political fists to oppose the plans.

Planning became politicized and planners relied on the slogan "small is beautiful". The incrementalist planning theory was loosely associated with the new popularity of small-scale housing and local contextuality and with Christopher Alexander's theoretical ideas of organic, piecemeal growth of built environments. Planning in terms of small increments instead of a comprehensive master plan was also seen to reflect the postmodernist disbelief in Great Narratives. Architect-planners admired Roman piazzas and street canyons and Parisian axes and *point de vues*. Leon and Rob Krier, among others, reintroduced into planning the perspective of urban arts. The new urban designer superseded the old land-use engineer. The planners became urbanists: a city was not supposed to be a tree but a mix of overlapping functions and events. Towards the end of the 1980s, even outright fragmentation of urban spaces was found appealing – such as Robert Venturi's Las Vegas and Rem Koolhaas's Manhattan. The measurements of traffic flows, land-use efficiencies, age structures, migration etc., were paired with a new emphasis on the subjectivity of environmental experience – sense of place, environmental identity, cognitive maps – and on the semiotics of cities as texts.

These currents swept over Finland, too. Planning styles followed each other: the compact city, which replaced the organic decentralism of the previous decade, was followed in the late 1970s by the new renaissance of urban architecture, while towards the end of the 1980s the solidity of its controlled forms was to melt into a mischievous play of postmodernism. (See Pakarinen 1992a, 60.) On the other hand, throughout the 1980s, there was serious discussion under way concerning the democratization of land-use planning and local public administration in general. A big research project (SOFY) on participative planning, with several real-life experiments, was launched. Another project, the Free Commune Experiment, approached local democracy from another perspective. Following the example of similar experiments in other Nordic countries, some Finnish municipalities took part in the experiment of providing local governments greater autonomy from central state control.

It seems that the *market orientation* became the major tone of our society towards the end of 1980s. In the beginning of the decade, the "new right" in the USA and Great Britain pointed out the economic stagnation that had prevailed in the 1970s under Democratic and Labour governments. In these countries, it was the mid-1970s crisis in the capitalist system that stimulated governments to make substantial changes in their patterns of state intervention. Finally, at the end of 1980s, the failure of communism was felt to prove the sovereignty of the market-based economy. The ideology of neoliberalism gained a firmer foothold: whereas the centrally planned economy failed to organize socio-economic life, the free market was claimed to achieve this end by means of self-organization¹. The pursuit of private wealth was presented as the driving force of economy, and all such self-centred and independent pursuits were assumed to accumulate maximum collective wealth without higher-level societal guidance. Hence, the state had an opportunity to rid itself from the obligation of defining rationality and justice, and let the supposedly rational market be the judge (Harvey 1996: 428). "The advantage of this solution, of course, is that there is no need for explicit theoretical, political and social argument over what is or is not socially rational just because it can be presumed that, provided that the market functions properly, the outcome is nearly always just and rational" (*ibid.*, 429). According to Harvey, claims about rationality and justice are now used equally frequently in the justification of privatization and the market as they ever were used in support of the welfare state (*ibid.*).

Postmodernism, with its emphasis on individuality and its disbelief in fundamental doctrines and ideologies, also inadvertently cleared the table for the seemingly neutral ideology of neoliberalism. Philosophers and sociologists were fascinated by the workings

¹ Indeed, market systems display amazing capability to deal with complex decision problems. According to Lindblom, the market systems succeed in this by transforming the problems into drastically simplified ones:

"In the absence of a market system, someone has to face complex problems such as what goods and services are to be produced, how much of the gross national product should be consumed instead of invested, what sections of the country should specialize in what kinds of economic activity, and whether the society should encourage farming or import agricultural commodities from abroad. In a market system responsive to individual consumer demands, no such questions have to be faced as decision problems by anyone. To "solve" problems like these, each of many persons grapples with a much reduced problem: whether it will be to his advantage to buy or sell.

As for problems of central coordination, no central coordinator at all is required in a market system, for coordination – even global coordination – is achieved through exchange. Market systems also permit the factors that have to be weighed in a decision to be expressed quantitatively in a common denominator (prices) for comparison with each other. All these aids to rational choice are lacking in authority [politically guided] systems." (Lindblom 1977, 68.)

"And no one masterminds the process as a whole, no one needs to grasp it as an intellectual problem and solve it. The necessary calculations are largely acted out by many buyers and sellers." (*Ibid.*, 73.)

of cultural signs and meanings, but lost their interest in the grand issues of social justice and democracy. In architecture and urban design, postmodernism was developing into a style where awareness of the symbolic character of the built environment was heightened, and architectural expression centered on combining playfully and ironically details and spatial compositions of various cultural and historical architectural styles and traditions. Deconstructionism led architects to focus on visualizations of highly abstracted philosophical operations, and they deemed irrelevant the political-economic implications of their own action (Ghirardo 1994). Postmodernism seemed to be a captive of its own irony – it did not know how to be serious about big issues without falling into the trap of old-fashioned modernism. Neoliberalism fitted nicely into this picture. It displayed playful pluralism in those aspects to which postmodernism was sensitive: anything that sells goes. The deep undercurrent that it introduced – the widening of the gap between the haves and the have-nots – came largely unnoticed. The few critics of this tendency were soon labelled as Marxist relics.

4.3.3.2 *Learning from Great Britain*

Neoliberalism is usually presented as an anti-state movement. This interpretation is far from correct. The neoliberalist political ideology has a special place reserved for the public sector. While the state withdraws from the economic scene in some realms, it simultaneously creates new forms of intervention whereby it penetrates new realms (Castells 1996, 90-91). The new liberalists rely on the public sector to create and maintain the necessary conditions for the market to operate successfully. The most important purpose of the state is to provide a stable environment for capital accumulation (Thornley 1991, 54). "[It] can be summarized as providing the social stability, strong legal framework and financial security within which the individual actions of the market process can confidently take place" (*ibid.*, 84). Market guidance may *appear* as efficient, if certain back-up investments – such as the costs of infrastructure, the costs of the educational, social and health services for the labour force, and the costs of the maintenance of social order and security – are kept outside the market. According to Lindblom, "[m]arket-oriented systems may have prospered historically only because subtly working social mechanisms [...] have restrained the total demands put upon them. If these constraints are eroding, we may have to look forward to decades of growing economic disorder in market systems." (Lindblom 1977, 84.) A system that is based solely on exchange relationships between buyers and sellers is thus inherently insufficient. What is required in addition are such inducements that the public sector is able to provide in the form of economic and political benefits (*ibid.*, 173).¹ The private

¹ Harvey has discerned three basic functions that the state is expected to fulfil in capitalist society. According to Harvey, "[i]t should

1. help to stabilize an otherwise rather erratic economic and social system by acting as a "crisis manager";
2. strive to create the conditions for "balanced growth" and a smooth process of accumulation;

investors rely on the public sector to constantly absorb those realms of societal life that have become unprofitable, and to turn them into new potential targets of economic investment again. The neoliberalist political ideology privatizes the profits and socializes the risks (Uusitalo 1993, 52). The state is hired to support the market, because those to gain do not dare to let it go "free".

In the case of land-use planning, neoliberalist thinking is not attempting to discard planning, either. Rather, it tries to reorient planning. Brindley, Rydin and Stoker (1989) have examined the effects that the neoliberalist turn had on British urban planning during the Thatcher government. They argue that the Thatcher government was not opposed to planning in the broad sense. Its attack was rather on the market-critical conceptions of planning. (Brindley, Rydin and Stoker 1989, 2.) According to Andy Thornley, the intention of the Thatcher government was "to retain the bones of the planning system but to give it a new shape and purpose. This purpose is one which has as its primary aim that of aiding the market. The planning system must keep up with the current trends in that market and foster and nurture them." (Thornley 1991, 143.) The task of land-use planning was to create the right conditions for economic growth and to encourage employment (*ibid.*, 160). Planning was no longer expected to regulate the market; instead it was supposed to stimulate it.

Great Britain is indeed a case to learn from. It is a forerunner in Europe: it already adopted its strategies of privatization and dismantling of the welfare state during the Thatcher government at the turn of the 1980s. At that time, a shift to the right was also experienced in the United States, when Ronald Reagan began his first presidency. In the case of the USA, however, we can hardly speak of a "turn" of the public sector towards market orientation in such a strong sense of the word as it may be used in the case of the UK.¹ Rather, the case was that Britain changed its development policies to converge with

-
3. contain civil strife and factional struggles by repression (police power), cooptation (buying off politically and economically), or integration (trying to harmonize the demands of warring classes or factions) (Harvey 1985, 175)."

¹ The election of Ronald Reagan in 1980 marked a shift in the U.S. federal policy, leading to a termination of major federal involvement in local redevelopment activities. Local governments became increasingly entrepreneurial, but, according to Susan S. Fainstein, "[t]he departure from the past lay not in the priority given to private-sector desires, but in the heightened level of local governmental initiative in attracting private-sector involvement" (Fainstein 1997, 128). The change was ideologically not a big one. The ideology of privatism that emphasizes liberalist values has been strong in the USA since the colonial times (Squires 1996, 267-68). In the USA the local municipalities have traditionally also been much more dependent on the private sector than in the UK. If British local governments are unable to fulfil their service demands, they receive a compensating grant from the central government. Unlike their American equivalents, they therefore need not attract business and high-income residents in order to maintain themselves. (Fainstein & Campbell 1996, 12-13.) Furthermore, in American local decision-making the keen relationship between local public officials and rentiers has a long history. Major rentiers and real-estate investors are in continuous interaction with public officials – including their substantial campaign contributions. In the USA, local economic elites play a major role in electing local politicians, "watchdogging" their activities and scrutinizing administrative detail. "Whether in generating infrastructural resources, keeping peace on the home front, or using the city mayor as an

the ongoing American tendency in the 1980s. What became the dominant objective in Britain, too, was to use the public authority to assist the private sector with minimal regulatory intervention. (Fainstein & Campbell 1996, 13.) "Earlier emphases in redevelopment programs on the provision of housing, public amenities, and targeted benefits to low-income people were downplayed, as aggregate economic growth – measured by the amount of private investment "leveraged" – became the criterion of program success" (*ibid.*). Sweden and, slightly later, Finland are now also marching into the direction that Britain is pointing to (Ryynänen 1996, 91-109; Mennola 1993, 41, 43-47). We can use the reported experiences of the neoliberalist turn in local policy-making in Great Britain to anticipate the future development of the Finnish municipality and especially Finnish local land-use planning. Parallel phenomena can already be found.

However, the British and Finnish local governments are not readily comparable. Politically, the British municipality has had much less independence than the municipalities in the Nordic countries and Central Europe – or in the USA, for that matter. The money for local governments comes primarily from the state for explicit legal purposes. While the central government has made drastic cuts in its national subventions, the local councils have largely been prevented from making up for the shortfalls locally; as they are prevented from using their tax revenues as they please, and from taxing their constituents to pay for higher levels of service (Fainstein 1996, 178, 183). The political leadership in local governments is generally weak, and the mayor's main role is to act as a master of public ceremonies. Some sectors of public administration that have traditionally been handled at the local level in other European countries, are managed by state-level organizations to begin with. The most important of these is the provision of health services by the National Health Service (NHS). Similarly, water and energy supply as well as some other technical services have, until recently, been provided by national organizations. During the 1980s, however, they have mostly been privatized. (Mennola 1993, 43-44.) The Thatcherite politics was a curious mixture of neoliberalism and neoconservatism. The Thatcher government promoted both free trade *and* strong state government. This approach resulted in policies where local government and participation were surpassed by coordinations between the state-level public sector and the localized private sector. Central government stepped in to ensure that market criteria dominated at the local level (Thornley 1991, 138, 144). These measures did not actually mark the beginning of the weakening of the local government; rather they meant a remarkable acceleration of the ongoing tendency that had prevailed since the post-war years. (Mennola 1993, 43-44.) In Finland, however, there is a powerful tendency to diminish the role of the state as a supervisor of local policy-making and land-use planning. The reform of the Communal Code that came into force in 1995 already established some such changes, and the direction is similar in the new Land-use and Building Code that came into force in 2000. Local governments are becoming relatively independent of the state in the decision-making concerning their plans. But as in Britain, the public sector in Finland, too, is increasingly seeking for new forms of cooperative planning with the

"ambassador to industry", local government is primarily concerned with increasing growth" (Logan & Molotch 1996, 301). According to Logan and Molotch (1996) the local economic elites in the USA have traditionally treated their cities as "growth machines" for private profit, and it is the economic growth of the city that has provided the key context for local political life.

private sector – with the difference that in Finland the public sector in question is not the state level but the local one. Another difference is that our urban problems are not nearly as severe as in the UK (see Pakarinen 1992a, 106). Keeping these differences in mind, we can now take a look at the various forms of land-use planning in Thatcher's Britain.

Brindley, Rydin and Stoker (1989) identified three distinctive market-oriented planning styles that emerged in Britain during the 1980s. Each planning style is adjusted to a certain level of local economic attractiveness. According to Brindley and others, *Trend planning* is practised in buoyant areas, *leverage planning* in marginal areas, and *private management planning* in economically derelict areas. No distinct boundaries between these planning styles can be drawn. Terttu Pakarinen holds that Brindley and others' analysis of planning styles applied in Britain is helpful in our investigations of current planning practices in Finland, too. "Although there are clear differences between Finland and Britain in terms of the development of urban structure and in the seriousness of the problems that have unfolded in this development, the argumentation of Brindley, Rydin & Stoker with regard to market-direction is certainly worthy of serious (but not uncritical) consideration in the Finnish context, too" (*ibid.*). In the following text, Brindley, Rydin and Stoker's categorization of market-oriented planning styles is used, but their viewpoints in relation to their categorization are not strictly followed. Rather, the categorization is used as a loose framework of analysis and as a narrative aid.

4.3.3.3 *Trend planning*

In trend planning¹, the lead in urban structuration and renewal is handed over to the market. Strategic issues are left to private developers and rentiers. The planner's attention is directed towards architecture, townscape, and details. In buoyant areas the trend planner focuses on "polishing the face" of the urban structure that is left to the market to organize. In the less attractive areas he tries to curtail the worst problems. When private developers lead urban change, major shifts from one area to another take place especially in retail business, leaving the planners to worry for the declining areas. Trend planning leads to growing disparity between localities and social segregation. Instead of public places, it creates consuming spaces.

What is the urban strategy of the market? Put simply, it is the maintenance of urban structure as a "magnetic finance field", where cores of attraction and repulsion change place freely. This continuous fluctuation is the sum of investors' separate transactions, their primary interest being the short-term maximization of profit. The investors' transactions are not coordinated, but because of the shared primary interest, these acts tend to accumulate. "In order to avoid the competition that threatens profits and to maintain appropriate levels of growth, investors are constantly looking for new markets

¹ See Brindley, Rydin & Stoker 1989, 51-73. Before Brindley and others the concept of 'trend planning' has been used by Chris Pickvance. According to Pickvance, in trend planning "the negative powers of physical planning are not used to intervene on market trends. Clearly, to the extent that physical planning is trend planning it does not lead to a pattern of land uses different from that which would occur in a non-planning situation." (Pickvance 1982, 71.)

and moving capital from one investment outlet to another. Capital pursues a spatial fix to problems of too little consumption and shrinking markets.” (Beauregard 1996, 379.) Robert A. Beauregard describes this process as the continuous opening and reopening of investment frontiers. “[Frontiers] are places where intense development has not yet occurred (for example farmland on which massive suburban housing estates might be built) or where prior investment was followed by disinvestment (for example inner city neighborhoods)” (*ibid.*, 379-80). It is this latter frontier which is of current interest – the “territory into which capital can (once again) expand” (*ibid.*, 380). The “frontier of profitability” no longer takes the geographical expression of expanding built space; instead, the same end of capital accumulation is achieved by *redifferentiating* existing built spaces (Smith 1996, 343). Old urban areas are thus being re-formed by new profit/non-profit distinctions that determine urban redevelopment. According to Neil Smith, the strategy of the real estate market is to direct investments in the urban landscape so as to produce a rent-gap in the inner city (*ibid.*, 346). What is meant by a rent-gap is the difference between the actual ground rent capitalized from the present (depressed) land use and the potential rent that could be capitalized from the optimal use of a centrally located site (*ibid.*). According to Smith, the construction of new suburban areas serves real-estate and rentier interests, because it aids in the devalorization of capital in the city centre and thereby creates an *opportunity* for revalorization of this underdeveloped section of urban space. As Beauregard comments: “The decline of cities, the emergence of suburbs, and the redevelopment of urban neighborhoods are all part of an uneven unending development of space. Growth and decline feed off each other as households, businesses, and capital switch incessantly from one place to another in search of the “good life” and political and economic rewards.” (Beauregard 1996, 379.) In a dynamic market system there will always be some areas that are expanding and prospering while others are in decline – and, according to Thornley, “it is the very existence of this process that gives the market order its great strength and allows for progress” (Thornley 1991, 65). Smith claims that the logic of the rent-gap is almost universal. “Most cities in the advanced capitalist world have experienced this phenomenon, to a greater or lesser extent” (Smith 1996, 346).

Whereas for an elected politician a relevant time scale may be the term between elections (see Luhmann 1990, 24), for the market actor it is often the fiscal period, which may be not more than a quarter of a year! In Britain, certain crucial changes were made in the planning policy in order to speed up the preparation of plans. The principle of conforming local plans to the strategic context of structure plans was relaxed. The Local Government, Planning and Land Act of 1980 allowed local plans to be prepared and adopted without waiting for an approved structure plan. The sections 88 and 89 of the same Act reduced the demand for surveys, and the participation part of the planning process was diminished in both time and scope. (Thornley 1991, 126-27.) Political interference was removed by shifting the coordination of planning to the state level that purported to ensure that market criteria dominate (*ibid.*, 138, 144, 161). Participation was objected, because that was expected to lead to the introduction of other planning criteria. It was necessary to redefine democracy so as to include general elections as the *sole* form of public participation. (*Ibid.*, 211.) Structure plans and the strategic viewpoint were under a threat – it was, in fact, the market preference guaranteed by central state control that was the “strategy”. No longer were local authority decisions expected to submit to

the strategic decisions made at the county level (*ibid.*, 126). The local plans, in turn, were restricted to narrowly defined land-use aspects, and their freedom and scope were considerably diminished. Plans could be challenged by claiming other "material considerations" to be more relevant. The whole planning system was redirected to serve the shift in power and control towards the central government and market forces. (*Ibid.*, 145.) The authority of plans as politically binding documents eroded. A similar tendency can also be discerned in Finland, where rapidly emerging sports hall and supermarket projects are quite easily allowed to disturb the infrastructural arrangements of the master plans and longer-term implementation policies.

In trend planning, the planner's control of urban development is essentially aesthetic control, which means that guidance is centered on aspects where planning is not in the way of the market forces, or, even better, where it can support them by making urban aesthetics an image-improving factor. Elegance has always been a signifier of success. Urban designing becomes *designing of the sign*. Postmodern aesthetics is conscious of itself as a surface. Art proclaims its independence from historical origins. As Derrida has shown, the origin is untraceable; meanings turn out to be traces of meanings, endlessly layered one on top of the other (Derrida 1988, 34-37). As such a form of art, urban design purposively takes the "urban image" as its object, instead of "urban reality" (see Verwijnen 1996, 10-15). Sometimes architects' ideas of urban design go hand in hand even with developers' most arrogant intentions, as, for example, in Finland at the climax of the economic boom, in 1988-90, when there was a "skyscraper trend" (see Kantola 1990, 6). Both architects and developers shared the urge to build 20-storey buildings even in medium-sized Finnish cities with populations well below 100 000 inhabitants.

Of Brindley, Rydin and Stoker's three market-oriented planning styles, it is the style of trend planning that Terttu Pakarinen regards as the most prominent approach to urban planning in Finland during the 1980s and 1990s (Pakarinen 1992a, 105-06). According to Pakarinen, this shows most clearly in city centre renovations, where the goals have been derived from the needs of the market, and where long-term and comprehensive planning has often been missing. Contractors have set the schedules, which usually have been so tight that the complex procedures of the normal planning bureaucracy have been skipped. The underlying assumption has been that the market determines the appropriate scale of each planning project. (*Ibid.*)

The case of Kerava illustrates well the turn towards the trend planning style in Finnish towns during the critical years when the economic boom changed into decline. Kerava is a small town of 30 000 inhabitants, 30 km north of Helsinki. During the late 1980s, the town was affected by the intensified investment interest in the urban spaces of the capital city region. Kati Tulkki (1994) has reported of the circumstances under which land-use planning was conducted in Kerava in the early 1990s. Tulkki describes the conflicts that characterized the making of the component master plan for central Kerava.

From the beginning of the planning task onwards, there was controversy over the necessity of such an overall plan as the component master plan. Two distinct approaches to planning collided: the first was the strategic approach and the second was the project-oriented approach, where each project is generated in view of economic preconditions and where the market directs the development of the whole. (Tulkki, 1994, 1.) The first of these approaches may be called 'regulative planning' and the second 'trend planning'. The Kerava municipality was also divided by these conflicting approaches, with the

building agency supporting trend planning and the planning section attempting to continue planning in the traditional regulative manner (*ibid.*, 3). The regulative approach seemed to have lost its capacity to control environmental development, as the centre of Kerava was now opened to rapidly emerging initiatives from developers and speculative investors. Demands to increase the flexibility and reactivity of the planning system were heightened. On the other hand, there was also shared awareness of the environmental risks involved, and demands for visionary long-term planning were raised, too. (*Ibid.*, 4-5.)

During that time, a new planning experiment – Kerava 2000 project – based on participative planning in transcultural teams was launched, with Pertti Harju from the Centre for Urban and Regional Studies (YTK) as a supervising consultant. The experiment was hoped to produce a planning solution, or pathways to such a solution, that would settle the conflict between the regulative planning approach and the trend planning approach with their respective interests. (*Ibid.*, 3-9.) The point of departure was to acknowledge that there are different meaning systems that determine the motivations concerning the development of central Kerava. Two main meaning systems were recognized: the one based on locality and a sense of place that gives meaning to the everyday use of the built environment; and the one based on market criteria that define urban space as a profit-making asset for conglomerates of developers, investors and major land-owners. The experiment was able to create an atmosphere of mutual trust and respect supportive of creative dialogue. Soon a new flexible development strategy was produced. The idea was to divide the central area of Kerava into territories where interests based on each meaning system were allowed to dominate. The historical park area with its important symbols and locations for annual festivals and events was designated to planning that is sensitive to needs based on locality. The surrounding buoyant areas – the business centre around the pedestrian street and the areas surrounding the railway on the northern side of the railway-station – were meant as "simplified planning zones" (see next section) where the hectic market activity was given room to fluctuate. (*Ibid.*, 13.)

However, this new idea did not succeed in solving the prevailing conflict. On the contrary, it seemed to aggravate the situation by creating false hopes among the citizens and officials taking part in the Kerava 2010 project. The key municipal authorities were all along committed to move on in the trend planning style, with the market mechanism providing the general overriding criteria in decision making. (*Ibid.*, 15.)

The proponents of the trend planning approach – inside and outside the municipality – expected public planning not to interfere with the number, location and timing of commercial buildings. Twelve different projects were under way with a strict 2-3-year schedule. If all had been built, there would have been a 200 per cent increase in the supply of business space in the centre – and there were already lots of empty business space available. Doubts about the common sense of these projects were waved aside by appealing to the rationality of the market. The real-estate market was expected to direct the supply of business space optimally in relation to demand. (*Ibid.*, 1, 18.) What was obviously forgotten was the difference between the market demand based on the *usability* of additional business space (the use value for expanding or moving retailers, offices, etc.) and the market demand that is based on *investment* – short-term (the exchange value of selling property further at a maximum profit) and long-term (the exchange value of safeguarding profits gained elsewhere) (see Virtanen 1991, 74). In Kerava, a familiar land

market phenomenon occurred: a large portion of the demand was based on speculation concerning someone else's demand. This created an image of a market demand for additional business space that was harshly out of proportion with the real need for such space. As the faith in the accuracy of the market mechanism was solid, all attempts to regulate urban development on the part of the municipality were rejected. Regulation was accepted only in the guidance of "good architecture" – in supervising the shaping of details. (Tulkki 1994, 18.) Accordingly, the need for surveys was downgraded. Among the public officials there were some who refused to take part in "futile analyses". Supposedly, the agents behind each project would themselves provide the necessary information – based essentially on market surveys. Finally, it was generally acknowledged that each agent needed a shared knowledge base in order to evaluate the economic possibilities of his own project. It turned out that the individual analyses of the demand for additional business space differed, mostly due to secrecy between the competing projects. (*Ibid.*, 19.)

During 1991, as the country rapidly sunk into a deep recession, the building projects in the Kerava centre slowed down one after another – including the big central government projects. The Kerava municipality also faced a severe fiscal crisis, with a consequence of rapidly shifting to a private management type of administration and to corresponding organizational rearrangements. The need to cope with this crisis became the primary concern of the local government. Town planning as a separate organizational section was terminated and incorporated into the building agency. These changes reflected the further affirmation of the trend planning hegemony. (*Ibid.*, 20.) "Unnoticed was the fact that the same crisis in economy that now made the profits from the speculative real-estate business so crucial for the municipal economy, had already nullified the validity of profit expectations" (*ibid.*).

4.3.3.4 *Leverage Planning*

Leverage planning (see Brindley, Rydin & Stoker 1989, 96-120) is used in marginal areas with a potential for land value development. The difference compared to trend planning is that in trend planning urban development is a given presumption, while in leverage planning urban development has to be stimulated first. As the trend planner resorts to regulating the architecture that the "landed" market produces (without actually regulating the market itself), the leverage planner is an active contributor to the "landing" of the market. The public sector becomes a provider of incentives.

In Britain, leverage planning has become mainstream activity. Leverage planning is a corporatist planning style where property companies, developers, banks, and other financial intermediaries (insurance companies, pension funds, savings and loan associations, etc.) gather with the public sector around an urban renewal project to strike up a *public-private partnership*. Public-private partnerships are an American innovation. In the United States, too, they are looked upon as the key for urban revitalization, as the federal revenues for economic development, welfare services and other urban programs diminish (Squires 1996, 266). Gregory D. Squires, however, holds that the public-private

partnership in the USA is merely a new name for a long-standing close relationship between private firms and public agencies (*ibid.*, 267).

Public-private partnerships take many forms (*ibid.*, 266-67; Healey 1997, 267; Mayer 1997, 237-38). They may be formal organizations, where the managers of the leading private firms cooperate directly with public officials. One is the *Urban Development Corporation* (UDC). London Docklands Development Corporation is a classic example. (See Brindley, Rydin & Stoker 1989, 96-120; Thornley 1991, 165-68.) In some cases the representatives of various community organizations are also included. Some partnerships have persisted for decades, working with a multitude of issues, while some others are *ad hoc* arrangements that focus on a certain project limited in both time and space. What they have in common is that the private sector receives direct subsidies from the public sector. (Squires 1996, 266-67.) In the USA, local governments provide "incentive packages" for private firms seeking favourable location. The policy tools used include tax abatements, low-interest loans, land cost writedowns, tax increment finance districts (TIFS), enterprise zones, urban development action grants (UDAGs), and industrial revenue bonds (IRBs) (*ibid.*, 270). The most popular projects are ones where private housing, offices or recreational facilities are designed for abandoned industrial sites and harbour areas situated close to the city centre, which conceal the land value development potential. Increasingly, public-private partnerships also involve development planning and implementation in more neglected neighbourhoods, in which case the private partners include community development corporations and other neighbourhood-based groups (Mayer 1997, 237-38). The project does not usually cover only the site, but public spaces and infrastructural preparations are also included. The public-private partnership applies essentially market criteria; it tries to establish itself as a plus-sum game where every party gains a surplus for its investment, be it money or land property. The public sector's trump card in the game is its planning monopoly. (See Vuorela 1991, 140-41.) For the local government, its planning monopoly becomes a medium of exchange when, for example, a planning permit is traded in return for the construction of affordable housing, or when building size regulations are relaxed in return for public amenities.

Public-private partnerships vary greatly in their openness and responsiveness to local interests, depending on local political traditions and the current balances of power (Mayer 1997, 239). Especially the partnerships that focus on growth-promising central areas often involve an exclusive inner circle that represents selected interests only. The Urban Development Corporations that have been established in Great Britain and in the USA provide suitable institutional settings for the organized selection and amplification of market-based interests. They are not subject to normal public sector requirements, such as holding open public meetings, providing arenas for community participation, reporting extensively of their activities, and conforming to civil service rules – but they still retain many of the governmental powers of their participating public agencies. Although ultimately responsive to public elected officials, UDCs operate much like private firms; they utilize the entrepreneurial styles and professional image-building techniques that are more familiar from the corporate than governmental world. (Fainstein 1997, 130.)

While in the United States it is the local municipality that forms partnerships with the local private sector, in British UDCs the local government is virtually surpassed. Here the central government deals directly with local private developers by appointing a board accountable for it. The board consists of local influential businessmen and planning

experts, and its operation is funded by the central government. Therefore, not only local residents but also their elected representatives are outsiders to the corporation in Britain.

In Britain, the first UDCs were established in 1981. They were initially set to operate for ten years. London Docklands Development Corporation was terminated in 1998, after having operated for 17 years.

In Britain, another form of leverage planning, besides Urban Development Corporations, consists of *simplified planning regimes*. Here, too, market criteria dominate (Thornley 1991, 209). The simplified planning regime was established at the turn of the 1980s to reinforce two linked aspects: first, the greater freedom of action for economic interests through the removal of state regulations; and second, less control over decision making by the general public and the state at the local level (*ibid.*, 191). While this planning system was promoted as a "non-plan" approach, it became evident that state intervention in simplified planning areas was not relaxed as a whole – only the means and objectives of public guidance had changed. While zoning regulations were decreased, state intervention increased in the designated areas as far as financial subsidy, promotion and provision of infrastructure were concerned. The central government also intervened whenever there was hesitation with the market principle. Planning was reoriented from regulation of the land use by private enterprise to supporting private enterprises by providing financial subsidies through rebates and infrastructure provisions and by supervising the ideological purity of interests. (*Ibid.*, 191, 205.) The prime objective was to attract development, and the 'image' of the area was therefore very important (*ibid.*, 197). The realms where regulative planning was still found necessary were "externalities" – meaning the planning of activities that harm the neighbours (including noise, pollution, nuclear fallout and explosion) – "sensitive areas", and "competition" – meaning the role of planning in mediating the effects of competition in retail development (*ibid.*, 194).

The first initiative of the simplified planning regime was the *Enterprise Zone*. It was meant for marginal inner city areas that were predominantly industrial. But as early as 1982, the Thatcher government announced a new simplified planning initiative – the *Simplified Planning Zone* – which was to include a wider variety of areas: outer city and rural areas, more buoyant areas, housing areas. (*Ibid.*, 198-201.) While the Enterprise Zone policy was applied mostly in urban degeneration areas, Simplified Planning Zones also included commercial areas where offices, light industry and science parks were given more freedom to change, and residential areas where the developer took care of layout, designing and landscaping (*ibid.*, 202). The case-by-case control over development was relaxed (*ibid.*, 212).

According to Thornley, the simplified planning regime became problematic to local governments only after its expansion from the initial scope of Enterprise Zones to Simplified Planning Zones (*ibid.*, 204-05). In the latter case the ideological contradictions inherent in leverage planning also became evident. While there is already a contradiction in the principle of *limiting* other interests to make room for the *free* market, the need to *regulate competition* within that market was intensified in Simplified Planning Zones, namely with respect to retail use. There was controversy especially between the specific market interests of small-scale and large-scale retailing. (*Ibid.*, 205, 210.) Such controversies did not emerge in the less attractive areas, where the Enterprise Zone policy had been applied. After all, the purpose of leverage planning is not to create competition in the market, but primarily to establish an oligopoly of suppliers in the land and real

estate market, and thereby to secure profits for the investors in the partnership. The hegemony of market criteria turns out to be a different form of market regulation: regulation of the market to secure profit for the few investors. This is obviously a very twisted understanding of the free market.

The local government may adopt an inherently contradictory role in partnerships where market criteria dominate. As one investor in the partnership it shares the same profit-making interest as the other investors and is tempted to use in its own planning secretive strategies in order to avoid competition. On the other hand, as a democratically governed public organization, it is assumed to guarantee democratic accountability of the plans it produces. It has difficulties to find inner equilibrium in discerning what ought to be treated as business secrets and what should be considered as public matters. It faces the same difficulty in discriminating between public announcing and marketing.

In Finland, public-private partnerships are also becoming more popular. As tax revenues and national subsidies have decreased, the competition between cities and communes for private firms and tax-payers has also intensified. Municipalities have begun to advertise themselves as business and living environments. Their place marketing campaigns often resemble each other, and they therefore easily erode each other's effect. (Aronen & Berghäll 1998, 8-11.) In their attempts to build an image of a good business climate, municipalities often appeal to their favourable location, supply of services, spirit of enterprise, and subsidies available on the basis of a state regional policy (*ibid.*, 8). Local municipalities offer financial support in the provision of land and infrastructure for enterprises seeking location. The local government is often also willing to compromise their zoning regulations to provide sites that meet the firms' demands on traffic connections and floorspace. In some cases, municipalities even promise to organize the education of the labour force needed. This gives the firms an opportunity to shop around for the best deal they can get. In the 1990s, the local governments' economic dependency on private business has heightened dramatically, although not in a uniform manner. In this regard, there is a difference compared to British cities that are not directly dependent on the development of the local private economy. In Britain, the support for local business comes from the central government that, more or less, surpasses the local government. The Finnish local governments end up supporting private business, because, increasingly, they have no other choice in order to manage economically with their service responsibilities. It seems that economic scarcity and the resulting uncertainty have become the factors that dominate reactivity in Finnish municipalities (Kallio 1993b, 23; Möttönen 1997, 362). Although there is much less direct regulatory control over local governments by the central government, the central government, nevertheless, narrows down the range of choice *indirectly* by increasing economic responsibilities at the local level (for example, in the form of subjective rights) while, at the same time, it cuts down its subsidies (see Kallio 1993b, 28; Möttönen 1997, 129).

Following the general doctrines of privatization and corporatization, Finnish municipalities are increasingly taking part in urban development partnerships of varying sizes. This usually includes a specially administered project plan based on a private developer's initiative. The local government invests in the project its planning monopoly and possibly its land property. In economically less certain development projects, the municipality may share with the private developer the risks involved. Together with the developer (the bank, the contractor, the state-managed organization, etc.) it forms a

partnership or a corporation that commits itself to prompt realization of the project. The partnership is based on the market mechanism. (Vuorela 1991, 135-37.) A typical form of Finnish public-private partnerships is the land use agreement, where the property owners submit to carrying more financial burdens than what is legally obligatory; receiving in exchange a permission for additional floorspace on the site or area in question – which, in turn, increases the economic value of the land or estate property. The private sector is given more responsibility for the renewal process, which, according to Harri Andersson, may lead to a slackening of the local government's obligation to manage the urban landscape. (Andersson 1995, 154.)

A partnership which aroused much critical debate at the turn of the 1990s was the Tampella area in Tampere (a city of approx. 190 000 inhabitants). Here, the leading city officials and decision-makers had administered an agreement on the renewal of a large industrial area in the centre of Tampere with three building companies and the Tampella corporation, the owner of the site. The agreement, prepared in secrecy, involved a permission for massive development – 420 000 m² of housing, offices and retail space in the total area of 26 hectares – arrangements on the distribution of costs and on areas to be ceded to city ownership, and a promise by the Tampella corporation to move its remaining industrial activity to a new location within the city limits of Tampere. Due to public critique and organized pressure by the 'Tampella movement', however, the initial agreement had to be cancelled. Formally, the municipal decision in favour of the agreement was overruled on the basis of minor judicial failures in the order and composition of the decision-making procedure, involving charges of legal incapacity. (Aamulehti, July 11th, 1998, 8.)

Some critics argue that the corporatist planning style of leverage planning will take us back to the 1960s and 1970s, when similar corporatist pacts between local authorities and major building companies were the mainstream procedure in the building of Finnish suburbs. Indeed, according to Pakarinen, the development of Finnish suburbs provides an early form of leverage planning. The development of suburbs mostly started with council housing or state-subsidized low-income housing, which, after a sufficient level had been reached, attracted private services to the area. After having established itself as a functional unit, the area attracted private developers as well. (Pakarinen, 1992a, 105.)

Pakarinen holds that Finnish planning competitions may also take the form of leverage planning, as the public authorities organize them in order to create more attractive images for inner city renewal areas. Public support and positive publicity have stimulated private projects in a new planning situation, where the main concern of the local authorities has been the revival of private services and production instead of restrictions. (*Ibid.*)

The new Land-use and Building Code, which came into force at the beginning of the year 2000, introduces a new concept *development area*. Section 110 allows the local government to label one or more of its limited areas as development areas for a period of ten years at the most. According to Section 110, the areas suitable as development areas are built areas whose renewal, preservation, environmental improvement or change of use require special arrangements in their development. Unbuilt areas that are critical to the future development of local housing and economic life, can also be defined as development areas, provided their development requires such measures due to difficulties that stem from fragmented land-ownership or division of estates, or from similar matters. For the development of development areas, specific forms of local governance may be

engendered. In this regard, the Code is loose. It allows different forms of public-private partnerships to take shape. Development areas may be prepared in the local decision-making process separately from master and detail planning procedures, if the respective decisions do not require changes in the existing plans. When prepared separately, clauses on participation directed to planning procedures in Section 62 are to be followed to *suitable extent*, as it reads in Section 111. (Maankäyttö- ja rakennuslaki 132/1999.) According to Kimmo Kurunmäki, instruments of local governance may appear in Finnish land-use planning that depend largely on case-specific policies instead of the law, as is the case in the UK. Furthermore, similarly to UDCs in Great Britain, it is possible that public-private partnerships will become the cornerstones of local urban governance – as virtually any development project is definable as "critical to the future development of local housing and economic life", or as a project where the existing built environment is to be renewed or environmentally improved. (Kurunmäki 1999, 54.) Whether this will happen, remains to be seen.

4.3.3.5 *Private Management Planning*

Private management planning (see Brindley, Rydin & Stoker 1989, 139-157) means essentially that management-type entrepreneurial means are used in the attainment of social purposes in a socio-economically depressed neighbourhood or area. Much of its funding, administrative back-up and policy advice comes from the public sector. This affects its primary goal which is the private management of a public policy. It is relatively free of political control, and invites local participation mainly in order to add legitimacy. Private management planning is practised in economically unattractive areas. For this reason, it is often not profitable to the investors, and sooner or later the private sector developers tend to flee away from the project. This type of planning is therefore rather far-fetched. It is unrealistic to expect that, in economically and socially declined areas, the private sector alone could solve the social problems.

In Finland, no such derelict areas exist. Although there are problematic suburbs in most Finnish cities it would be highly exaggerated to describe them as derelict in the same meaning of the word as Brindley and others use it (Pakarinen 1992a, 104). We are therefore led to conclude that the last of the three market-oriented planning styles is not practised in Finland.

4.3.3.6 *Planning in the Face of Globalization*

In the 1990s, the globalization of market systems has intensified. The perspective of global competition increasingly now determines the economic buoyancy of urban regions. The classification of urban areas that Brindley, Rydin and Stoker made on the basis of differences in their economic attractiveness is still relevant today, but it should be complemented with a parallel classification of urban regions. We can speak of whole urban regions as either buoyant, marginal or derelict in reference to their capability to

attract the global market. This global perspective contributes to the planning style adopted in cities and communes.

From the perspective of global economy, Finland (as the rest of the Nordic countries) holds a marginal position. It is far from the main centres of international trade, which thus means excess costs in logistics for international enterprises trying to find routes for expansion. The urban regions in Finland are also too small and too far apart to gain much importance as innovation and market centres in comparison to numerous European metropolises. On the one hand, the few growing urban regions in Finland (namely Helsinki, Tampere, Oulu and Turku) comprise central urban areas that the domestic market actors view as buoyant. These areas attract Finnish firms and real-estate investors, and the city governments therefore do not have to make any deliberate efforts to secure their buoyancy. On the other hand, these cities are deemed marginal in their attempts to attract multinational corporations and global investment. The cities may resort to trend planning in the inner city areas where domestic investments determine urban development intentions. But at the same time, these cities are also developing globalization strategies that apply the leverage planning approach. Industry parks and "silicon valleys" are being established by utilizing the connections between exporting firms and academic research. Cities are launching international marketing campaigns and also involve in these projects their built environments as huge advertisements, such as 'image roads' from airports to city centres.

In Finland, as in the rest of the world where the globalization of market systems affects public policy-making, the picture of market-oriented planning styles is becoming more blurred. Cities alternate between their different strategic approaches toward domestic and international markets, and it is often hard to tell which, in each case, is the market towards which a planning style is oriented.

4.3.3.7 Conclusion

Among architects, some proponents of urban fragmentation seem to find fascinating the loss of control that goes with rapid urban change. This complexity fits well with the teachings of chaos theory. Like any other chaotic system that is self-organized instead of centrally organized, it is claimed that the urban system should be allowed to self-organize, too. However, what is not noticed is the difference between the complexity of urban life that is unavoidable and the complexity caused by intentional attempts to counteract planning – which is not just a matter of unavoidability, but also a matter of *power*. We need to ask: "What is it that self-organizes in our urban environments, when centralized planning is absent?" The answer is: the actions of those who possess enough economic resources to make changes in the urban space. What motivates them? Is it not the self-organizing principle of the urban market that is most likely to guide their actions in the absence of centralized planning? To make urban change too chaotic for planning serves the interests of those who seek rapid economic returns in the land and real-estate market.

If the planners withdrew from the synoptic planning paradigm, it could be an indication of their improved understanding of their fallibility and limited rationality in

their attempts to guide complex urban change. But if they withdrew from planning altogether, without offering alternatives to the synoptic planning method, they would be giving up their power to make a difference in what counts in urban change. Thereby, the planners would actually be contributing to the affirmation of the market mechanism as the dominating criterion in the decision-making of urban land use issues. If this is what land-use planners end up doing, they should at least acknowledge that they are doing so. Make no mistake: urban changes never just happen – there is always someone somewhere making decisions on them. Whether the planner chooses to take part in these decisions or not to do so is a decision in itself – a decision which usually has ethical implications when market interests are involved.

During the 1990s, the market actors in Britain have become increasingly aware of the function of planning frameworks in effective economic development. The urban market itself benefits from strategically oriented planning as far as the latter succeeds in safeguarding the key environmental qualities and secures a continuous supply of available sites and properties. (Healey 1997, 254.) There is thus a tendency from trend planning towards more regulative planning.

While in Britain it is the market itself that is now calling for stricter control and regulation, in order to maintain its functionality, in Finland the market has been overheated beyond restoration via the means of centralized planning. In consequence of the economic recession (for which the overheated real-estate market was one major cause), the real-estate and land markets became stagnated in our cities for many years. There were lots of empty apartments and office and retail space that landed into the hands of banks and holding companies from developers and firms that had invested in estates and then went bankrupt. These estates were withdrawn from the market to wait for its recovery. Some were temporarily rented out, but they were not sold because of their underrated market price.

Despite the severe mistakes made, the choices made in recent urban planning still await for a critical review. Rather, the course of events in the real-estate market – the rapid boom and the equally rapid stagnation – and the corresponding changes in the built environment, have been explained away as a "law of nature". It is also assumed that market-oriented planning was only a temporary phenomenon that was linked to the economic boom. During the 1990s, urban planning in Finland largely came to a standstill, with the exception of the few growth regions. But this stillness is as much an indication of market-oriented planning as was the intensified project-planning activity a decade ago. Moreover, as Anne Haila remarks, silence does not mean that there is no development or no profits to be made out of development (Haila 1997, 3). As not much has been learned, there is nothing to stop us from making similar mistakes again as the market recovers to its full functional capacity.

In Finland, the recession did not actually weaken the hegemony of market-oriented planning. On the contrary, market criteria are probably more in the forefront today than they were a decade ago. But the relative popularity of market-oriented planning styles is changing. It seems that leverage planning is becoming the major planning style both in our growth centres and in our smaller towns and communes – the first being marginal from the perspective of global trade, the second from the perspective of domestic trade. Firms and municipalities are now seeking mutual benefits by forming public-private partnerships of various kinds. In our larger cities, the new growth engine, Nokia, together

with the universities, is an active partner of such partnerships. The smaller municipalities outside the growth regions, troubled with their aging population, negative migration balance, and decreasing tax revenue, resort to alluring enterprises with incentive packages and image campaigns. The extreme conditions from both ends of the market-oriented planning palette found in Great Britain are non-existent in Finland. As yet, we do not have derelict urban areas, but nor do we have a global city that would be even remotely comparable to London. In an age of intensified global capitalism, it seems that our fate is to be situated somewhere in between; in a marginal region where private economic livelihood relies on the leverage of the public sector.

4.3.4 Ecology of Land-Use Planning

My hypothesis is that all the main planning communication modes presented above – planning as expertise, planning as politics, and planning as economics – are simultaneously existent and mutually dependent. The emphases between these planning modes may shift over time, but when one planning mode starts to dominate the planning practice at the expense of the others, a crisis will eventually follow. The 1960s and the early 1970s were an era when planning as expertise dominated. But during the 1970s, this trend came to a double bind because of its inability to conform to the extensive changes in the surrounding political and economic climate. The latter half of the 1970s brought forth a new emphasis on participative planning with a simultaneous relaxation of the strategic planning approach. The planning procedures became more public and inclusive in step with the general tendency towards civil society. But during the 1980s it became more and more evident that the participation of interest groups in planning was not conducive to equality. Certain interest groups were corporatized into the political planning process. As the neoliberalist political ideology advanced on the one hand and governments were running into fiscal problems on the other, the view of local governments as corporations themselves gained strength, leading to depreciation of other than market-based interests. Planning as politics was now in crisis, as it had gradually turned into planning as economics.

In the meantime, the crisis of planning as expertise was deepening further, as the methods of strategic planning gave way to the methods of short-term incremental planning and finally to project-based planning. This process ultimately turned the procedural hierarchy between plans and building projects upside down. Formerly, it was the local or master plan that was made first by the public authority to direct the future building projects. Now, on the contrary, it is commonplace that the privately initiated building project comes first, and only after the governmental and corporate elites have agreed on the project are respective changes made in the plan. The detail plan is no longer made as a proactive regulative statement to guide future urban development, but rather as a reactive document whose primary function is to provide legal legitimation for the development decisions made elsewhere.

The 1990s was an era of crisis for the economic mode of planning, as the severe problems of the urban market were largely a consequence of its own measures that were short-sighted and powerless in the face of their accumulated adverse effects. This has

critically revealed among market actors the danger of dismissing the strategic and contextual dimension of planning. But the environmental and social problems that the recent urban development has caused cannot be dealt with by merely reintroducing the expert approach to planning along with planning as economics. The environmental problems of pollution and congestion and the social problems that follow from the increasing socio-economic inequality between regions and urban areas, are first of all *political* problems that put the legitimacy of public land-use planning into jeopardy. As a consequence, the demands for publicity and inclusiveness of local concerns have by no means diminished in the 1990s, rather the opposite.

There is always a need for planning expertise. Lately, its role has been heightened by the demands for new expertise in ecological planning (Granberg & von Sydow 1998, 18; Sihvonen 1996, 37-38, 41). Impacts on the physico-biological environment cannot be derived through common sense or local experience; instead, they require science-based research (Lapintie, Kjellberg & Lainevuori 1995, 246). Planning faces social demands and bears social consequences, and therefore needs to be publicly justifiable. It is not enough that planning produces decisions that cause such changes in the built environment that are perceived as legitimate; people also need to feel that they are able to influence the decisions that affect their lives. Thus the demand for legitimacy concerns both the results of planning and the processes of planning that produce these results. Finally, plans need to be realized by someone who is willing to make the necessary investments and is able to bear the risks. To the extent that the private sector is required in the implementation of urban plans, these plans also need to afford private profitability. It is commonplace that planners are preoccupied with dreams and ideals of future urban spaces and simultaneously indifferent to the actual processes of producing the built environment (Pakarinen 1992a, 124). *Urban change demands skilled planning, politically legitimate decision-making, and financially supported realization.* This binds the planning subsystems of expertise, politics and economics together. Changes in land-use planning are always professional, political and economic issues and should be approached from all these perspectives, respectively. Subsystems need the continuity of these changes in order to maintain their existence – i.e. the *continuity of their activity*. The change needs to be planned, it needs to reach a politically agreeable decision, and it needs to be executed. When any of the three planning modes suppresses the others, the system of land-use planning runs into difficulties. No subsystem can replace another subsystem. True pluralism lies in their coexistence. Not even the planning mode of politics can guarantee this pluralism, if it limits itself to the corporatist methods of simple incrementalism. Thereby it would narrow down planning politics by its own oppositional relationships between selected interests that find their identity and determination only by negatively mirroring each other.

Subsystems enable their mutual coexistence in land-use planning by maintaining their capability to reflect on themselves. Then the subsystems in each situated planning project seek their limits of validity they should not transgress – the limits beyond which expert planning starts to depoliticize the making of value choices and loses financial support for their realization; the limits beyond which politicized planning starts to produce socially disruptive and both economically and practically unwise decisions; the limits beyond which economized planning, in turn, moves beyond the realm of political legitimacy and produces socio-economically and ecologically problematic environments. *Creative*

political action is the designing of such decision situations where the primary interests of different subsystems can simultaneously be met.

There is no general way to weigh and mutually compare values that belong to different subsystems. These are not just different values; they are based on epistemic distinctions that belong to separate conceptual environments. Conceptually, there is no overriding societal level from which we could observe and evaluate all subsystems together. We are always within these subsystems – yet each of us is not tied to one subsystem only, but adopts a role in all of them. Moreover, we are not destined to master one communication mode only. We may also learn other ones – if not wholly new ways of thinking, at least new kinds of *situated* understanding. The aim of bringing together different epistemic understandings in specific planning situations entails participants' *ability to learn different languages*. If one achieves this, then even the *evaluation of values* is possible. It is not such evaluation as "who holds the truth?" or "who is the owner?" – not even "how many would benefit?" It is more like: "What would I do, here and now, if I were *both* in your place *and* in my place – would I choose your way or my way? Or should I choose not to choose and keep searching?" The highest achievement of creative political action is to make the subsystems of planning coexist situationally in each actor's mind, and thus to make the paradoxical evaluation between contexts possible. In the next chapter, we shall investigate more closely what is meant by such political action.

The emphasis on situated planning tasks and relative decisions makes this approach incremental, too. However, this does not mean that the longer time-scale would be ignored. But instead of attempting to guide urban development in the distant future by making additional long-term plans, this approach relies more on the possible establishment of a lasting *transcultural planning practice*. Each individual decision situation is crucial to the rooting and sustenance of such a practice. Creative political action in one planning task is supportive of the emergence of similar action in the next task. It builds inter-systemic social relationships and shared experiences and enhances learning between subsystems by the actors and groups that recurrently participate in land-use planning. The "strategy", therefore, would be to improve the capabilities for each subsystem to reflect on itself in successive planning processes that are actualized whenever any one of the subsystems introduces a new problem or task to the land-use planning system. *The goal of this strategy is to maintain an equilibrium between the subsystems of planning – in other words, to maintain land-use planning activity.* Only continuous enhancement of the subsystems' self-reflective capabilities would secure quick restoration of this equilibrium in situations where land-use planning faces qualitatively new and unanticipated problems and conflicting demands.

But there is a danger of corporatism even here. Who will look after the interests of the uneducated, unorganized and unwealthy? Those without even the minimum power to make any difference in the land-use planning system through any of its three subsystems are in the worst position. Not only are the separate subsystems limited, but even their ecosystem – the system of land-use planning – is limited. Decision-making by those inside the system can be truly ethical only when even this system boundary is exceeded. Being ethical, the planner does not only pay attention to the conflicting voices that he hears, but also to the *silence*. What might be the demands, wishes and opinions that are silenced by the more privileged voices; who are silenced by whom, and how?

5 Power, Double Bind and Strength

In this chapter, we will approach land-use planning practices from the perspective of *power*. In order to do that, we cannot be content with only one concept of power. As we have seen, social systems – such as the system of land-use planning – consist of different systemic levels and paradoxical relationships between them. There is the logically higher level of *ecosystemic differences*, and there is the logically lower level of *system/environment distinctions*. Both of these levels have to do with power, but power assumes a different character at each level. At the level of ecosystemic differences, power takes on the meaning of functional capacity, i.e. the *power to survive*. At the level of system/environment distinctions, power denotes a *system's control over its environment*.

In his theory of alcoholism, Gregory Bateson discerned these two types of power (Bateson 1987, 309-37)¹. Accordingly, he used two concepts: *power* and *Power* (with the capital first letter). In his terminology, power referred to a system's efforts to control its environment, while Power referred to its ability to survive. In Hannah Arendt's political philosophy, too, power is used in two different meanings. Arendt's approach to the use of power in public life is not systems-theoretical, but her two respective concepts, *violence* and *power* (Arendt 1958, 202; 1979, 322; Palonen 1989, 34), are somewhat parallel to the distinction here made between power as control and power as capacity to survive. For Arendt, power is the citizens' capacity to act and speak together, and hence their ability to create and maintain a *public realm*. Public realm is the domain of political activity where shared meanings and ends are created. Power, therefore, is the ability to act politically in a community. Violence, on the contrary, is not a political form of activity. Violence is used to obtain ends already given and to preserve meanings already defined. Violence depoliticizes the public realm; it transforms the public realm into an environment to be controlled.

As the system of land-use planning is here approached as a political system, we shall lay much emphasis to Arendt's ideas of power in political activity. But we shall also attempt to adjust her ideas to the context of pragmatist and dialectical systems theory,

¹ The significance of Bateson's theory lies not only in its capability to explain the behaviour of an alcoholic, but in its capability to offer a theoretical insight into power from the systems theory perspective.

which is the theoretical approach of this study. Arendt's understanding of power is applied to the systems framework of land-use planning, and it is therefore seen as the ability of the land-use planning system to maintain itself as a political system. In the previous chapter, we identified different levels of the system of land-use planning. At the logically higher level, there is land-use planning as a political system. This level has to do with maintaining the legitimacy of planning activity. At the logically lower level, there are three subsystems: planning as expertise, planning as politics, and planning as economics, as described in the previous chapter. Each subsystem rests on legitimacy afforded to them by their ecosystem, the political system of land-use planning. First and foremost, the decisions made by the system of land-use planning need to be legitimate decisions. In this sense, power in land-use planning means the system's ability to make legitimate decisions on land use; i. e. its ability to survive as a political system. This entails an ability to search for shared ends and meanings. Violence, on the other hand, is not necessarily illegitimate, but it can never re-establish legitimacy once the latter is lost. Violence is depoliticized behaviour exercised by the subsystems of land-use planning. When the subsystems are depoliticized, they behave as closed systems. They resort to utilizing their given modes of codifying their political ecosystem. The subsystems are not open to the recodification of their ends and distinctions. Arendt's concept 'violence' could be likened to the subsystems' control over their encoded environments. Violence takes place in terms of given system/environment distinctions made upon the political ecosystem of land-use planning. Then there are given ways to codify the power of survival into the power of control. The system of land-use planning survives as long as it is able to maintain its ability to recodify the ways its subsystems transform their reality into professionally, politically, and economically signified environments. The public realm of land-use planning is the domain of political activity where the professional, political and economic significance of planning actions is not predetermined; instead these actions are allowed to find their professional, political and economic significance in new ways. The emergence of the public realm is required whenever the legitimacy of land-use planning is in jeopardy. The power of survival rests on the subsystems' mutual recognition of their shared dependence on legitimacy. The power of survival thus rests on their openness, while the power of control rests on their quality of being closed.

Although Arendt's theory is central to the theoretical discussions developed in this chapter, I will not use her concepts 'violence' and 'power' to denote either of the two types of power discerned here: the power of control and the power of survival. Nor will I rely on Bateson's dual use of the word power. Instead I will borrow from James P. Carse the conceptual distinction he made between *power* and *strength* (Carse 1986, 30-31). Power corresponds to an ability to control and strength to an ability to survive. As a concept, 'strength' is illustrative of the kind of power it refers to: a strong system is more existent than the weak one. On the other hand, by associating the concept of 'power' with control, I am able to use the concept in its most familiar sense. Strength has to do with the ability to initiate new activity, whereas power has to do with the ability to control given activity.

This brings us close to the new concept of power recently developed in the study of urban politics. In *regime theory*, which gained ground from the mid-1980s onwards, power assumes a new meaning in the sense of *social production* rather than *social control*. The perspective of social production is concerned with the capacity to act rather

than with control and resistance. In contrast to the elite theorists and pluralists, for whom power meant someone's *power over* someone else, the regime theorists refer to the concept in the sense of '*power to*'. (Stoker 1995, 54, 59.) While there is much reason to be critical to 'regimes' – i.e. public-private partnerships that regime theorists offer as vehicles for productive urban politics – the regime theorists' understanding of power as a *capacity of urban politics to make a difference* is noteworthy. 'Power over' and 'power to' correspond to the conceptual distinction between 'power' and strength'. Power has to do with *power over* the signified other, while strength has to do with *power to* make a difference.

Apart from 'power' and 'strength', there is yet another concept central to this chapter: the '*double bind*' – the concept already briefly discussed in various parts of this book. A double bind is a result of prolonged use of power in terms of inappropriately delineated system/environment boundaries. In a double bind situation, my use of power over the other inhibits my power to make a difference. Power becomes contradictory to strength; my desire for control at one level (subsystem) makes me weak at another level (ecosystem). In the context of land-use planning, double binds have to do with loss in the subsystems' ability to make decisions that are considered legitimate or decisions that serve the subsystems' own interests. In the subsystem of expertise, for example, experts draw on the public interest as a provider of legitimacy for their decisions. The expert planners' control over 'laymen' may lead to general disbelief in public interest as the planners' primary end, if the planners recurrently neglect the wishes and aspirations of the residents. This may lead to a double bind situation where expert power loses its legitimacy. By losing their legitimacy, the planners lose the authority that ultimately gives their plans a socially mobilizing character. On the other hand, expertise may become dysfunctional to itself. For example, the synoptic ideal of comprehensiveness of analysis may lead to a situation where planning overburdens and outdates itself. This is a double bind between the rational-comprehensive planning theory on one hand, and the complexities and uncertainties of the planning practice on the other, which Lindblom set out to resolve by his "science of muddling through".

Power is a paradox. The strength that resides in the ecosystem is transformed into a power relationship between a system and an environment within that ecosystem. Therefore, power is based on an oppositional relationship generated within a whole. The whole is divided into the controller and the controlled. But this is not necessarily an impossible situation. Power *can* be a metaphor of strength. For the system of land-use planning, this means that the uses of power by its subsystems do not necessarily make it weak as a political system. Expert power, as well as political power and economic power, can be based on legitimate authority. When power exercised within the system of land-use planning is legitimate, there is a metaphoric bind between its subsystemic power and its ecosystemic strength. For our social systems, the only way to exist is to exist as conceptually divided. This also means that we cannot do without power relationships of *some* kind in our social systems. But what kind of power relationships? How should our social systems be conceptually divided into subsystems and their environments? These are not the kind of questions that could be solved once and for all. What we need is *better understanding of the systemic nature of power*, so that we would be better equipped to recognize the characteristics of the situations where power becomes disruptive to our social systems. At a suitable level of abstraction we are able to postulate how social

systems behave – and therefore also how they behave in double bind situations where power becomes an impossible paradox. What is meant with power as an impossible paradox is power that is no longer metaphoric of strength. Power becomes weak; it loses the ecosystemic foundation of its own existence. In the case of land-use planning, this means such use of power that has lost its legitimacy. Then the system becomes weak as a political system. Its basic form of activity – the making of legitimate decisions – is severely disturbed.

What is required in these double bind situations is political activity in Arendt's sense. The political strength of the land-use planning system may be restored by creative and critical political activity, which helps to reorganize system/environment distinctions. Power is not dismissed as a characteristic of social planning activity, but it is rearranged so that it could be given a more legitimate form. Political activity is a search for legitimacy. Usually it does not address the issue of power as a primary and explicitly stated matter. It is about handling practical matters reflectively, which, however, means that the political actors necessarily have to deal with the question "Who is justified to govern whom in what kind of issues on what criteria and by what means?"

5.1 Power

There has been much debate as to whether power is a *relationship* or a *property* that belongs to a person and follows him from one social context to another, like charisma. *The standpoint taken here is that power is a property and strength is a relationship, and that power is a metaphor of strength.* Power is influence in a social relationship identified as someone's property. Power is based on a relationship of mutual dependence, but because the sense of power arises in reference to self, it creates an imaginary conception of being possessed by individuals. Here, the concept 'power' is used in the meaning of an imaginary property¹ of identities (or roles) that arise in individuals' attitudes of control towards their social contexts. Collectively, individuals are recognized to be more or less in control of various larger or smaller domains of the social system. Some are given the status as governors and others as objects of their governance. The concept 'strength' refers to power as a relationship, i.e. to the fact that in a social system power arises from social cooperation and individuals' mutual dependence on each other's actions. Strength is a "measure" of cooperation in a social system where the survival of each member of the system depends on the cooperative acts of other members. Strength becomes self-conscious when someone identifies himself with the influence his own activities have on other people's activities. *Power is identified strength.* Identities have power, social activity is more or less strong; power is imaginary, strength is real.

¹ Cf. Bourdieu's 'capital' (Bourdieu 1987, Bourdieu & Wacquant 1995).

5.1.1 Behaviourist Notion of Power

Power rests on a relationship of voluntary cooperation "in which *action could always have been different on both sides of the relation*" (Luhmann 1990, 155). According to Luhmann, "[w]hoever is subject to power experiences it and submits to it only if one sees and would prefer other possibilities of action for himself." Power needs a counterforce. When I participate in an activity system and want it to produce a certain outcome, power may be raised as an issue, but only if there is a possibility of resistance within that system (Carse 1986, 28). Power needs alternative outcomes that the system might produce, so that it can display itself by outruling them. It would sound silly if I claimed that my car obeys me by starting its engine, when I turn the key. The car has no other choice (considering there is nothing wrong with the ignition or engine). It would sound sensible, though, if a master claimed that his slave obeys him. But the slave *chooses* to obey his master – even if the price of refusal were severe suffering or death. But the fact that there is a price in the first place leads both the oppressor and the oppressed to acknowledge that the latter must agree to be oppressed (*ibid.*, 11). There would be no obedience if there were no possibility of disobedience. The subject of power always has some power, too (Möttönen 1997, 103). But even the counterpart who enjoys power would not recognize himself as powerful, if his own use of power were not based on a voluntary choice, too. "Whoever feels himself forced by the circumstances to behave in a specific way and thereby to influence others does not think of himself as someone who enjoys power but attributes the power to the circumstances that force him. [...] This means that for *the person who has power* as well as for the *person who is subordinate to it* the relation must be so defined that *both* could act otherwise." (Luhmann 1990, 155-56.)

Consciousness of a choice is thus central to the experience of power. One's power becomes identifiable when one is mutually perceived to have an influence on the others' and on one's own decision between alternative actions. The ones in power are those recognized as *decision-makers*.

Here we approach the *behaviourist* conception of power. This conception sees power as a causal relationship between two actors, A and B, who disagree on a choice between alternative courses of action. If A is able to get B to make a choice that B would not otherwise do, A is said to have power over B. (Möttönen 1997, 101.) On the basis of this conception, we may discern different types of power, which utilize different means for the same end: to make B choose as A wants.

In this study, the first type of interest is *authority*. Authority exists only when B obeys A out of a belief that he ought to do so. An authority relationship ordinarily requires *legitimacy*. There is a social contract between A and B, according to which both agree that A is justified to expect B to make certain choices in certain activity contexts. (*Ibid.*, 111-13; Lindblom 1977, 19.) Power in political systems is based on authority. Authority is a distinctively *political* form of power. It can be *formal* or *informal*. In organizations, authority is often granted to people by virtue of their formal, or legally mandated, positions in the organization. For example, councillors in municipalities are granted formal authority over administrators according to the formal position of the council as the highest decision-making unit of the municipality. Similarly, the councillors' formal authority over citizens is based on their formal position as publicly elected representatives

of the citizens. The formal authority of a group of councillors over another group is based on the rule of majority. What is meant by informal authority is social rank that, instead of being provided by one's formal position in the organizational hierarchy, is based on shared experiences of one's positive influence in collective efforts. One gains informal authority by becoming a respected member of a community, whose opinions are given high value. Formal authority and informal authority are often, but not always, coincident.

The second type of power is the power of *expertise*. Expertise as a source of power means that A, the expert, is able to make B to choose an alternative because B trusts in A's expertise in the matter and believes that A knows that this is the right thing to do (Harisalo 1991, 43, after Kolb). Expertise, too, can be formal or informal. Formal expertise as a source of power draws on *title* that denotes a formal professional education. In public agencies, experts usually possess two titles: the title of profession and the title of office. The first guarantees formal expertise and the second formal authority. Similarly to informal authority, informal expertise is based on social experiences of one's positive influence in social efforts. The primary reason to consider a person an expert is then not his title, but mutual recognition of a person as the one who has known best what to do on a certain class of problems in the past, and is expected also to be capable of this in the future. Again, formal expertise and informal expertise are often, but not always, coincident.

The third type of power is *economic power*: Economic power means A's ability to make B to choose such factors and terms of a bargain (prices, commodities, business partners, clients, available knowledge, etc.) that B would not otherwise choose. Economic power means control of the economic exchange relationship. In broader terms, it means control of the market – that is, control of the supply-demand relationships formed around a family of commodities (for example local estates in the local real-estate market). Either side of the exchange relationship may have more power over that relationship. When the suppliers control the market (as they usually do in the real-estate market (see Virtanen 1991, 76), it is they who determine the terms of bargains on their commodities. In a condition of oversupply, it is the clients that control the bargains. Profit cannot be gained without the use of power in the market. In the imaginary conditions of perfect competition, there would be no profits to distribute. It is the aspiration for profit that leads to such forms of economic power as oligopolization, cartellization and monopolization.

As mentioned above, power is here treated as a property that belongs to those socially recognized as powerful. Power is therefore an aspect of a socially constructed identity, or role. Our interest is focused on power as an aspect of identities/roles that are socially constructed in the system of local land-use planning. Here, it will suffice to concentrate on the three types of power listed above: authority, expertise and economic power. The system of land-use planning as a political system rests on authority provided by the legitimacy of its actions. Being a state organ constituted by law its decisions and procedures are provided *legal legitimacy* as long as they are signifiable as legally valid. The system of land-use planning must produce decisions that are recognizable as legally legitimate. Whether the decisions are influenced by economic power or by the power of expertise, they must display the power of legal (formal) authority. The law determines the kind of decisions on urban land use that should be designated to public agencies, and, together with the locally established agency rules, it indicates the division of roles and responsibilities between politicians and administrators in the making of these decisions.

Being elected as members or holders of office in these agencies, certain politicians and administrators are thus granted the legal authority to make certain decisions on urban land use. This does not mean that they are the sole makers of decisions they are legally authorized to make. It means that decisions can be afforded legal legitimacy only by handing them over to legally appropriate authorities. In reality, decisions can be made somewhere else, but in order to be *displayed as legitimate decisions*, they need to be brought to the legally designated arena of councillors and administrators (Möttönen 1997, 105). Planners' and politicians' legal, or formal, authority thus means their power to decide whether or not to ratify a decision as a *legally valid* decision.

Authority draws on legitimacy, but mere reliance on legal legitimacy is not enough. Decision-making in land-use planning must seek *political legitimacy*, too. Political legitimacy has to do with the political system's representativeness of society. In a political system, the power of economics and the power of expertise must seek ways to accompany themselves with the power of authority provided by political legitimacy. This means that the uses of expert power and economic power have to appear as publicly justifiable uses of power when a political system constitutes their context. It is therefore necessary to display these uses of power as efforts in the attainment of societal ends. The use of expert power appears as politically legitimate by referring to the 'public interest' as its end, and by referring to the impartial rationality that is presumably provided by the scientific method. This rationality comprises the clear-cut distinction between means and ends; so that the expert planners can claim responsibility only for the formulation of means to achieve ends allegedly determined by the politicians (see Sager 1994, 76). Public planning expertise thus strives for political legitimacy by appearing to be simultaneously above and in service of politics. The use of economic power, in turn, aspires to appear as politically legitimate by referring to the collectively beneficial economic growth supposedly provided by its deeds, and by referring to the equally impartial rationality of the 'invisible hand' of the market.

Severe dilemmas in land-use planning emerge when political legitimacy is missing. The uses of expert power or economic power in the system of land-use planning may be revealed as politically unjust. Furthermore, authority as political power may be deprived of its political legitimacy. It may start to produce illegitimate majority decisions, as discussed in Chapter 1. If that were the case, authority would fulfil the legal criteria of 'politics', but would not meet the criteria of 'political activity'.

5.1.2 *Explicit and Implicit Power*

Power is the result of *winning* (Carse 1986, 29). The oppressor gains his power by winning the obedience of those whose cooperation he needs. Winning inherently implies the possibility of losing. Power exists only in a symmetrical relationship where *ego* conceives *alter* as intentionally acting contrary to his purposes. From the power perspective, the world is always seen to consist of two poles in an oppositional relation: *alter* against *ego*. Either my power is increased or decreased in a *win-lose game*, in which my ability to control the other is challenged. A necessary precondition is that the other is unwilling to agree to my propositions, but, being powerful, I am able to force his

agreement. *Ego* conceives himself as a winner when he sees *alter* as cooperating with him towards his end, instead of acting against it (which *ego* has to see as a potential possibility in order to picture himself as a winner). George H. Mead holds that one cannot realize one's superiority over one's enemy by simply wiping the enemy out. Self-consciousness is reached through a realization of one's self in others. Therefore, one's sense of one's own superiority can only be maintained, not by wiping the enemy out, but by holding him in subjection. (Mead 1962, 284-85.)

Power needs to be used recurrently in order to be retained (Flyvbjerg 1998, 231). It has to be kept fresh by testing and demonstrating it from time to time (Habermas 1987, 269). Power is a property only as an abstraction. This "illusion" of property needs to be proved recurrently in concrete activity. A person may recognize himself as powerful only after perceiving his influence mirrored in the other – in his concrete transactions with the other. Power is a metaphor; it can keep identifying itself as an abstract property only by maintaining itself as a concrete relationship.

Bateson's theory of alcoholism is based on this idea of power as a self-regarded abstraction that necessitates the recurrence of experiences of winning the opponent. According to Bateson, a central aspect in pathological alcoholism is the alcoholic's inappropriately framed identity. This distorted identity is built upon a symmetrical control relationship between the alcoholic's 'self' and the 'bottle'. Framing his identity in terms of power, the alcoholic is caught in a recurring pattern of behaviour where he has to prove his power over the bottle time and again. After a dry period, sobriety must be put into a test, and the alcoholic starts drinking again. The temptation of the bottle is then fought and won with a new period of sobriety. The alcoholic must first face the temptation before he can resist it, and thereby recall the feeling of being in control of his drinking. (Bateson 1987, 309-37.)

The more recurrent an activity pattern is, the more self-evident it becomes. Communication in terms of power leads to the habituation of the context of communication where identities are formed in their mutually controversial relationships. There is a contextual side to power. Power is not only about who wins and who loses in a win/lose game, but also about choosing to see the social activity context as a win/lose game. In other words, it is not only about who gets to decide, but also about deciding to formulate the situation symmetrically as A's decision against B's decision. The habituation of the context of power means that the decision to conceive one's context in terms of power is no longer made consciously. It takes the appearance of a necessity. To communicate in terms of power is a decision itself, which becomes the less voluntary, the more frequently this decision is made. For the pathologically behaving alcoholic, the context that determines his attitude towards his drinking as 'self' against 'bottle' becomes self-evident, and no other ways to frame his condition are in sight. In order to maintain itself explicit, power necessitates the recurrence of an activity context where the decision-makers are put against each other. *Explicit power over decisions therefore requires an implicit decision concerning the context.* But, although implicit – habitual, self-evident and "naturalized" –, it nonetheless is a decision. It is implicit only because *power makes it implicit*. The decision concerning the context could be made explicit by withdrawing from the use of power and by *reflecting* on the activity patterns the power perspective had created. The issue of power is not dealt with by just answering the question: "Who governs in an organization?" We also need to ask *why* it is *this* question that concerns us.

It is power itself that poses this question to us. The understanding of power is too narrow, if power is only examined within the context outlined by power itself.

The behaviorist conception of power has been criticized for offering too narrow a view of power. It has been argued that power is not necessarily explicit in all its forms, but that there is a hidden "second face" to power. In this respect, power is seen as a *two-dimensional* phenomenon. The hidden dimension of power is associated with the prevailing values, beliefs, rituals and institutional procedures that function systematically in favour of some individuals or groups at the expense of other individuals or groups. (Möttönen 1997, 101.) Tore Sager uses the concept 'structural influence' to describe this dimension of power. According to Sager, "[t]he essence of structural influence is systemic inequalities of power causing unequal life chances among members of the society" (Sager 1994, 131). Thus, it is not only the arena of decision-making where power resides, but power is also used in the constitution of the arena itself. In other words, it is not only used in the making of explicit decisions, but also in the making of implicit "*non-decisions*" – decisions that are made by not bringing issues into public agenda (Judge 1995, 29). A planning culture that applies the method of incremental politics, for example, constitutes arenas of interest-group planning where highly organized interest groups are favoured at the outset (Chapter 1). A characteristic feature of contextual power is that the logic of the decision-making situation already leads the decision-makers to give special attention to certain interests without them being specially advocated (Stoker 1995, 64)¹. Economic

¹ Lindblom argues that the conflicts between government and business are structured so that the primary interests of each counterpart provide the context within which only secondary issues are disputed:

"Inevitably two separate yet cooperating groups of leaders will show hostility to each other. They will also invest some of their energies in outwitting each other, each trying to gain the upper hand. Conflict will always lie, however, within a range of dispute constrained by their understanding that they together constitute the necessary leadership for the system. They do not wish to destroy or seriously undermine the function of each other.

They therefore do not dispute the fundamentals of their symbiotic relationship – private enterprise itself, private property in productive assets, and a large measure of enterprise autonomy, for example. They dispute over an ever-shifting category of secondary issues – such as tax rates and particulars of regulation and promotion of business." (Lindblom 1977, 179-80.)

In their theory of the city as a growth machine, John R. Logan and Harvey L. Molotch argue that in the US cities the local elite groups form "growth coalitions". It is the issue of local economic growth that unites these otherwise unintegrated parties (rentiers, developers, politicians, local newspaper and university management, etc.) and separates them from those who use the city principally as a place to live and work. The elite groups' consensus on local economic growth thus constitutes the undebated context within which the ends for local decision-making are formulated and disputed. (Logan & Molotch 1996, 291-92.)

"Although they may differ on which particular strategy will best succeed, elites use their growth consensus to eliminate any alternative vision of the purpose of local government or the meaning of community. The issues that reach public agendas (and are therefore available for pluralists' investigations) do so precisely because they are matters on which elites have, in effect, agreed to

interests have always had such a privileged position in local governmental decision-making, but especially so since the late 1980s.

According to Lindblom, businessmen try to legitimize the control they exercise in politics through their privileged position by persuading citizens that the control is an integral part of the political system. "In this form of control, they make no demands on government, nor do they ask citizens to join with them in any demands. They simply try to indoctrinate citizens to overlook their privileged position." (Lindblom 1977, 203.) The businessmen share the effort of contextualizing their privileged participation in political decision-making. If they were to succeed in this, as they more or less do, decision-making would focus on secondary issues within the context of their privileged demands. "Governmental decisions on secondary issues that in fact respond to the privileged demands of businessmen are relatively easy to publicize as though they are the outcome of polyarchal processes. All that is required is that businessmen go through such polyarchal routines as appearing in legislative hearings and other interest-group forums, and all this they do conspicuously." (*Ibid.*, 204.) Moreover, businessmen use their disproportionate influence to try to create a dominant opinion that will remove grand issues from politics. "They do not press for agreement on the grand issues but for political silence on them" (*ibid.*, 204-05).

This does not mean that businessmen would act in complete unanimity. For example, in land-use planning issues their intentions are often in direct conflict. These conflicts have to do with contradictions between small and large retailing, contradictions between long-term investment and speculative (short-term) investment in the built environment¹, and contradictions between different markets and economic activities (real-estate market, retailing, construction business, tourism, different industries and services) that use planning and the built environment differently as a means of profit-making. But what all businessmen agree upon is the priority of the economic mode of communication and the view of land-use planning as a tool to organize profit-making possibilities (although profit for one may mean non-profit for someone else).

In its hidden form, power becomes a matter of *organizational culture*. It is part of the collective behaviour in an organizational culture not to bring into the open certain decisions concerning the formulation of problems and tasks, which necessarily put individuals into different roles with different capabilities to utilize power in their mutual relationships. Sager warns us of the possible effects of such structural influence:

"[T]his invisible kind of influence easily leads one to perceive social inequalities as something natural, not created by man himself. On this belief ideologies are formed, by which subjects deceive themselves about themselves and their situation (false consciousness). This kind of deception is especially dangerous because ideological

disagree. Only under rather extraordinary circumstances is this consensus endangered." (*Ibid.*, 292.)

According to Anne Haila, the theory of the city as a growth machine is relevant in Finland, too (Haila 1997, 2).

¹ These are contradictions between those that attempt to preserve the exchange values of past capital investments in the built environment and those who seek to destroy the value of these investments in order to make room for the rapid accumulation of capital (Harvey 1985, 25, 44, 61).

illusions are outfitted with the authority of common convictions. Thus structural influence manifests itself in such forms that those trying to reach agreement in undominated communication remain unaware that they are all dominated by apparently 'natural', yet man-made traits of the system." (Sager 1994, 66.)

John Forester continues:

"Some citizens or interest groups, for example, may systematically have access to local government or federal agencies, whereas other citizens do not, and knowing that may be important in gauging what is to count as rational action by a planner or policy analyst mandated to serve both groups of citizens. Notice that if analysts treat all similarly, under the banner of equal formal opportunity (that is, the door being open to all who can knock), the analysts help to ensure that the given inequality of access will be perpetuated. Significantly, though, analysts' efforts to improve access to those without it may be seen as wasteful and even inequitable if the organizational biases that constitute the actual work setting are *not* taken into account." (Forester 1993, 73-74.)

In this study, the explicit and implicit "faces" of power are not seen as two independently existing forms of power, but as two aspects of the same process. Power is inherently conservative. It is in the interest of the one in power to maintain the settings of decision-making where one gets to decide. These conditions form the context within which power is explicitly expressed. Decisions concerning the context may be kept hidden intentionally or habitually – so that not even the party favoured by these decisions is aware of them (see Möttönen 1997, 101).

According to Pierre Bourdieu, the best strategies are those, which are not recognized as strategies at all (Bourdieu 1987, 31). Bourdieu calls these strategies "strategies of distinction", and he associates them with the cultural production of knowledge. They are based on the making of a distinction between a cultural context¹ and its environment without consciously attempting to make that distinction. The ones that possess knowledge signified as valid by the context become signified as cultural 'experts' in contrast to 'laymen', who do not possess such knowledge. The games in these contexts are won through modesty, without the winner recognizing his victory or the loser recognizing his loss. (*Ibid.*) The resident himself has been willing to agree that the design of his own living environment is best left to the architect. The architect does not feel that he has "won" the control of the resident's living environment, and the resident does not feel that he has "lost" it.

It seems that expertise is a type of power that functions largely through its contextual effects. Expert power is *insidious*; it often goes unquestioned because it seldom displays itself openly (see Harisalo 1991, 43). Especially hidden is the expert power in public organizations, because it is combined with the appearance of political legitimacy, displaying itself as a value-free and rational search for means to politically mandated ends with a concern for the public interest. A symptomatic feature is that public administrators consider themselves as actors who are given the main responsibility in attending for democracy in local governance, and that they do not consider the widely

¹ "Field" in Bourdieu's vocabulary.

acknowledged power shift from politicians to administrators as a problem for democracy (Valanta 1997, 76). But as far as expert power in public organizations is concerned, the crucial problem of democracy is not who gets to make the political decisions, but *who gets to define the contexts for political decision-making*.

"Technocratic politics, based on uses of information and analytical techniques, easily escapes conventional political categories. Unlike traditional political activity, it displays neither leaders nor barricades. Instead, it moves quietly – even facelessly at times – through the administrative hierarchies of the political and economic systems. Portrayed as the "quiet revolution", it subtly manifests itself as a transformation in the very nature and terrain of politics. Working through technical methodologies and their forms of arguments, its machinations are opaquely hidden in discussions over decision criteria rather than in policy decisions per se. Politicians still choose one policy option over another, but it is increasingly the experts who shape the deliberative framework within which they must choose. More and more, they structure the processes of political deliberation by illuminating and defining the problems that politicians are compelled to consider, as well as detailing the options from which they can choose. At this more fundamental "metalevel" of political deliberation, the role of these "unelected representatives" constitutes a *basic* challenge to values that have traditionally organized the political system itself. In short, technocracy shapes, if not subverts, the very ways we think about and understand politics." (Fischer 1990, 19-20.)

We can use Stein Bråten's theory of 'model power'¹ to describe the contextual operation of expert power in public planning. Model power is based on knowledge of causal relationships and analytic techniques. When dealing with participative planning, the general assumption is that such knowledge is unevenly distributed among participants. 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 theory of model power attempts to show that the planning process is not necessarily democratized by this, if the initial possibilities to use expert knowledge are severely biased. The influence gap may even be increased. When the planners possess model power, any communication act by the lay public can be processed and used by the planners, while the local participants can utilize the planners' communication acts only to the extent they fit the participants' coarse and partial models. In other words, planning communication is held in reference to the planners' own context of planning expertise, which sets such terms for communication that other participants are naturally less able to meet. Even when the lay participants' communication abilities gradually improve during the process of participative 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 participants agree to adopt the planners' techniques of conceptualizing and representing reality. (Sager 1994, 76-77.)

¹ Taken from Sager 1994, 76. The original source is Bråten, Stein (1973): "Model Monopoly and Communications: Systems Theoretical Notes on Democratization", in *Acta Sociologica*, 2 (16) 98-107.

The first step in the attempt to invalidate model power is to arouse critical awareness of it among the participants, planners and lay members alike. In general, the effort is to expose the conditionality and limitedness of the prevailing context of knowledge production in planning. There are four pieces of advice which Bråten offers:

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, 77.)

It is a characteristic of both expert power and economic power in political systems that they do *not* express themselves openly in political decision-making. *In a political system, political authority is the only type of power that can express itself openly, because it is the only type of power that is afforded legitimacy when recognized.* Therefore, it is necessary for both expert power and economic power to try to contextualize themselves as implicit context-defining attributes of political decision-making situations. If they succeed in incorporating the privileged position of expert knowledge or market criteria as the very determinants of political struggles, the legitimacy of their primary objectives is not questioned, as the issue of legitimacy is focused on the open political struggle itself. Moreover, they cannot fail with their objectives. If it is implicitly accepted in political decision-making on land-use planning issues that decision-making is concerned with problems, ends and alternative solutions *as they are defined* by the expert planners, the planners will win, irrespective of the results of possible political disputes. Explicit political power would thus only serve to further ratify the privileged position of expert knowledge that is thereby kept in the form of implicit power. Accordingly, economic actors win if it is implicitly accepted in political decision-making on land-use planning issues that market criteria determine what matters in land-use planning – that land-use planning is primarily a means of organizing economic relations and thus a means of generating possibilities for economic growth and profit, and that property rights override other rights. Whatever is the decision reached by the explicit political process, it is an act of confirming the implicit domination of market criteria.

5.1.3 Excessive Use of Power

Communication in terms of power is communication in reference to the distinctions used in identifying individuals as more or less powerful. The maintenance of one's power entails conservative action: the maintenance of communication via the distinctions that signify one's power. One can remain powerful only so long as one is recognized as such – recognized by others, and therefore also by oneself. The one who is powerful strives to maintain the system where he is recognized as powerful. He attempts to canonize those rules within the system under which he is able to keep his advantaged position (Carse

1986, 42-43; Bourdieu 1987, 106). The winner needs continuous recurrence of the circumstances in terms of which he may keep re-establishing himself as a winner. The particular oppositional relationship that has made him powerful has to keep recurring in his activity system. Otherwise, the contextual characteristics that signify his power would vanish from the system, and his power would consequently also vanish. The expert, for example, is only powerful in the societal circumstances where the knowledge he represents is collectively seen as essential for managing the branch of societal activity of which he himself is a part. These circumstances create a polarized context of experts and laymen. According to the epistemology considered as valid in that context, the players recognize each other and themselves as more or less competent actors to guide the system. Those actors signified by the context as experts – holders of valid knowledge – are able to take charge of the whole system, although they are only part of the system. Those who do not possess the type of knowledge valued in the context often willingly, or even habitually, adopt the identity of a layman and join in cooperation under the experts' rule. From the power perspective, it is essential for the empowered experts to keep their context of action stable – i.e. to maintain the rules under which they have gained a high rank.

A change of societal rules would also mean a loss of power for societally ranked actors (Carse 1986, 43-44).

Power downgrades the meaningfulness of the communication mode where it is used. Communication in terms of power carries less use value: professionalized communication provides less practical knowledge and understanding; politicized communication loses its legitimacy; economized communication is less beneficial economically for the community in general. Formal authority is primarily concerned with the self as a signifier of legitimacy, not with legitimacy itself. Formal expert power, accordingly, is primarily concerned with the self as a signifier of factuality in terms of title, not with facts themselves. Economic power is primarily concerned with individual economic surplus, not with economic surplus in general. The power game will eventually turn into a lose/lose game, if power is used so excessively within that game that no possibilities to renew the rules of the game are opened. The excessive use of expert power, for example, will eventually lead to a planning practice that is less concerned with facts in general and more with the relative positions of the experts themselves in the planning organization. The subsystem of expertise would thereby lose its ability to fulfil its basic function in the planning system, and guidance of the system would eventually be taken over by another subsystem, or subsystems. Similarly, excessive use of economic power (oligopolization, monopolization and cartellization) narrows down the redundancy of the market and therefore reduces its capabilities to renew itself. Economic power always centers around the existing market structure; it clings to the production mechanisms and trade connections that are formed to conquer the market space that a former innovation has created. The market thus loses its sensitivity to radically new innovations, which would ensure its reflectivity to rapid changes in supply-demand relationships. This leads to a paradox: the more enduring the market (for example the local real estate market), the less it produces profit to distribute among market actors; the more the market produces profit (for the fewer actors that control it), the weaker its endurance. Without control of the urban market, the possibilities for profit-making are weak – too much control, on the other hand, stagnates the market (Harvey 1985, 161-62).

Excessive use of authority produces a problem typical of self-referential systems in general: *short-circuiting* (Luhmann 1990, 43). Short-circuiting is a technique of referring to itself by opposing the counterpart. A mistake by the government is chalked up as a victory by the opposition, and vice versa. A lot of politics takes place within the codes of government/opposition and majority/minority, and the contents of political debates may sometimes become extremely simplified and devoid of meaning. (*Ibid.*) This kind of empty mirroring between political opponents will eventually fragment the very foundation of political activity. As explained in the previous chapter, the societal function and basis of the political system is to represent society. The metaphoric quality of political activity guarantees its legitimacy. The metaphoric quality cannot be maintained by transforming the complex and continuously evolving societal problems and public demands into a too simple and stable code. Politics approaches a *double bind* when the right/left distinction, for example, loses its societal relevance, and the struggle for power between politicians and parties in terms of that distinction leads to decisions that no longer contribute to societal welfare. Politics as mere power games is unable to renew the code of politics and thus unable to create new political meanings. However, this capability for political recodification is essential for the maintenance of political legitimacy.

Since the 1970s, a popular topic among critical social theorists has been the *legitimacy crisis* of the modern political system and citizens' alienation from it. The notion of crisis may be an overstatement, but during the last few decades, the official channels of political participation have, nonetheless, been challenged by *ad hoc* political activity, especially at the local level. The formal arenas of local politics are being increasingly disregarded by not voting in elections, by becoming politically active in local communities, and by joining in various pressure groups. Thus, the possible crisis of party politics and public administration by no means indicates the citizens' loss of interest in political activity in general. (Harisalo, Rajala & Ståhlberg 1992, 62-63.) Indeed, legitimacy is at stake when the official mechanisms of politics are no longer seen as an adequate metaphor of public life in society or in a local community, and additional forms of political participation are considered necessary to complement them.

5.2 Double Bind

5.2.1 Cybernetic Explanation

No part of an internally interactive system can have unilateral control over the remainder or any other part (Bateson 1987, 315). To demonstrate this point, Bateson uses a cybernetic explanation. Cybernetics is usually seen as a science of self-corrective control systems (Chapter 1). Bateson, however, emphasizes that no self-corrective system is a control system – not in the superficial sense that there would be a certain part in the system controlling the behaviour of the rest of the system. A classic example of self-corrective systems is the steam engine. The steam engine has a governor, used to stabilize the running speed of the engine. According to Bateson, the name 'governor' is a

misnomer, if we take it to mean that this part of the system controls the speed of the engine.

"The governor is, essentially, a sense organ or transducer which receives a transform of the *difference* between the actual running speed of the engine and some ideal or preferred speed. This sense organ transforms these differences into differences in some efferent message, for example, to fuel supply or to a brake. The behavior of the governor is determined, in other words, by the behavior of the other parts of the system, and indirectly by its own behavior at a previous time." (*Ibid.*, 316.)

The governor is only an element in the constellation of elements, which together form a circuitry of successive transforms of differences when the system is in action. The system has many possible states: the speed of the engine may be stable, or it may oscillate, or go into a runaway – or the engine may stop. The stability of the system depends upon the relation between the operational product of all the transformations of difference around the circuit and the time the system spends in passing that circuit.

"The "governor" has no control over these factors. Even a human governor in a social system is bound by the same limitations. He is controlled by information from the system and must adapt his own actions to its time characteristics and to the effects of his past action.

Thus, in no system which shows mental characteristics can any part have unilateral control over the whole. In other words, *the mental characteristics of the system are immanent, not in some part, but in the system as a whole.*" (*Ibid.*)

According to Bateson, even the simplest of cybernetic self-corrective systems contain mental characteristics. Their activity in the present is partially determined by their own activity in the past. They thus have a sort of *memory*. In Bateson's terminology, a closed circuit forms a *unit of mind*. 'System', therefore, is synonymous to 'mind'. A system may consist of subsystems, as a network of closed circuits. Put differently, a mind may consist of a network of subordinate minds.

"Similarly, we may say that mind is immanent in those circuits which are complete within the brain. Or that mind is immanent in circuits which are complete within the system, brain *plus* body. Or, finally, that mind is immanent in the larger system – man *plus* environment". (*Ibid.*, 317.)

The activity system of our behaviour is not framed by the boundaries of 'self', as the latter is normally understood. The relative unit of mind is not enclosed within our skull or skin. Instead, it resides everywhere within the brain-body-environment circuitry that constitutes our behaviour.

In social systems, strength is always nested in groups of persons – in democracies as well as in dictatorships. Because the ruler needs the cooperation of the ruled, he himself has to obey certain rules to get it (Lindblom 1977, 127). But especially when we conduct our actions in terms of power, we tend to see ourselves as isolated "governors", who possess power and therefore control our environments. It is not only the other people and the surrounding phenomena we seek to control, but also our own bodily behaviour. The body, too, is environment for the 'self'. However, *the system is always stronger than the*

subsystems within it (Bateson 1987, 332-33). Behaviour is not subject to the 'self'. On the contrary, self-images emerge and are maintained by behaviour. The 'self' is a subsystem of the system of human behaviour.

The alcoholic, for example, who is driven by the oppositional power-relationship between his 'self' and the 'bottle', as he may see his situation, considers his 'self' as an agent that has to win mastery over his bodily desire for alcohol. According to Bateson's theory, the alcoholic's 'self' is only a part of the larger system of his alcohol-addictive behaviour. Trying to take control of his behaviour, the alcoholic makes the Cartesian distinction in the system of his behaviour, conceiving his behaviour as the environment that is in oppositional relation to his 'self'. Recurrently, he faces the challenge of the 'bottle', competes with it, wins it – and, after a period of sobriety, starts drinking again. This behaviour is self-destructive, as it keeps reproducing the state of inner contradiction within his activity system. Eventually, the system comes close to a collapse, and the alcoholic "hits the bottom". The system is no longer able to sustain his self-contradictory behaviour. The alcoholic has played himself into a corner, where the obsession of his self-image that condemns him to drink has developed an allergy of his body that condemns him to go mad or die. The 'self' cannot win – but nor does the 'bottle' win. The whole behavioural context of "self against bottle" loses its foundation. It is not the result of the game that is at stake, but the existence of the game itself. The playground "wears out" under the player, used up by the player's recurrent win/lose games. According to James P. Carse, all play in a win/lose game is play against itself, where the player is divided against himself (Carse 1986, 23, 92). Eventually, the alternatives of either winning or losing disappear, and there are *no alternatives left* (Bateson 1987, 335). It is said that Alexander the Great wept upon learning that there were no more enemies to conquer.

Recurrent self-contradiction eventually leads the system into a *double bind situation*. The question for the alcoholic can no longer be about winning or losing, but about *surviving* – will his mind, or life, survive? According to Bateson (et.al.), a double bind situation occurs

- when *two orders of messages* – messages at the "higher" level of system, and messages at the "lower" level of subsystem – are being communicated within and by the system;
- the messages are *mutually contradictory*, and
- the actor in the system is unable to comment on the orders of messages being communicated, to correct his discrimination of what order of message to respond to – i.e. he is *unable to make a metacommunicative statement* (*ibid.*, 206-09).

At the level of the subsystem, the alcoholic's 'self' communicates for more drinking (more instances of winning the 'bottle'); at the level of the system his physiological and psychological illness is telling him to step out of this self-destructive pattern of behaviour. That the alcoholic in a double bind situation is unable to metacommunicate his behaviour means that he is unable to observe the self/bottle distinction itself, and thus unable to gain critical awareness of its destructive effects. Being an inappropriately framed distinction, it produces an impossible paradox where the loss of strength is interpreted as an increase of power. The alcoholic is "imprisoned" by his impossible power game, and cannot "step out" of it, to begin a search for a more appropriate conception (distinction) of his

situation – as a conceptual tool with which he could organize his behaviour into a new system-enhancing form.

The epistemology of "self against bottle" led the alcoholic into a double bind situation. Is this comparable to the epistemology of *regulative land-use planning*? A common contradiction in regulative planning is its incompatibility with the logic of the markets. The regulative planner is recurrently forced to admit his limited capability to control the physical changes in the urban environment. The actors in the urban market, who mostly are the dynamos of urban change in the planned environments, focus on differences that are beyond the epistemological context of regulative planning. The planner himself inadvertently causes these differences, while concentrating on functional land-use matters. He, unwillingly, opens and closes possibilities for profit-making on the urban environment, which are in disharmony with his own intentions for the future organization of urban functions and spaces. The planner's actions become transformed into the basic code of profit/non-profit in the urban market. It is a cybernetic transform of difference where a difference in the subsystem of expert planning (a change in the planned organization of urban spatial functions) makes another difference in the subsystem of urban economics (i.e. bears economic consequences in the urban environment). Planning activity that concentrates on the professionally determined functional aspects of urban change only, is not a "governor" of this change. In its relation to the urban market, it is only a "transducer" of a difference that is passed on to the subsystem of urban economics.

Without an understanding of how this mechanism operates, the planner will initiate consequences that contradict his own intentions. The economic redistribution effects of functional planning thus deserve serious attention. As long as the planner tries to control the urban market ("self against market"), instead of accepting it as an integral part of his own activity system, he acts against himself. But even if he understood the operation of the urban market, it would not mean that he would thus be able to control it. No one controls the market - as it so clearly appears every time the economic falls and booms catch us with our pants down. By accepting the urban market as an integral part of his activity system, the planner would therefore accept the uncontrollability of urban change as an attribute of urban planning itself. Realizing this, we come to a conclusion that *urban change is not controllable* - either by planning or otherwise.

The neoliberalist critique attacks precisely this point: "Planners are powerless in the face of complex environmental phenomena! Planning is not able to handle the complexity of urban development, whereas the market has this capacity. The planners not only cause functional-spatial disorder in the built environment with their plans, but they also prevent free enterprise with their inflexible land-use instructions." Moreover, the neoliberalists claim that the self-steering mechanisms of the urban market would themselves "automatically" work for the good of the community – community understood as an economy. Thus, land-use planning as a "higher" local control system would be an unnecessary, or even harmful relic of the post-war welfarist form of public governance. Here, the very *survival* of the system of land-use planning is at stake¹. The rise of market-

¹ "Now, clearly, much 'planning' happens; armies of trained planners daily earn their living from doing planning. What do they *do* and to what effect? They produce plans, and to varying degrees they implement plans by advising on investment decisions and regulating development according to bureaucratically determined rules. Most urban development, however, is but marginally affected by

oriented planning styles can be taken as a reflection on the double bind that regulative planning brought to itself. It is connected to the larger double bind that, in fact, concerns the welfare state as a whole. The welfarist state policy of regulating the distribution of the surpluses of economic growth was no longer manageable after the oil crisis. When surpluses dry up – and thereby also investments in urban space – there is nothing left to regulate. Regulative land-use planning is only successful in economically attractive areas and at times of economic progress. This situation provided fertile soil for the seeds of the neoliberalist ideology. As we have seen, neoliberalists redefined the role of the state from a regulator to an active *solicitor* of economic growth. This change of direction was more than a mere ideological trend; it had *survival value* for the state in the changing societal ecosystem. But this new direction may bring double binds of its own, as our discussion later in this chapter will show.

But let us suppose we agreed with the neoliberalists: "Yes, land-use planning as a "higher" local control system is an unnecessary, even harmful relic of the post-war welfarist form of public governance." But let us suppose further that we have not yet agreed that land-use planning itself is unnecessary and harmful. Think of land-use planning not as a higher control system, but as an integral part of the urban community, bearing unpredictable consequences for both the urban environment and itself – i.e. its own patterns of planning action. Think of land-use planning not as powerful, but as humble activity.

5.2.2 *Pathological Power*

When the actor is unable to identify consistently the orders of the messages communicated, he takes metaphoric messages literally and vice versa. In a sense, a similar confusion between levels takes place in all habituation: the abstraction assumes the character of something concrete, the metaphoric is taken as literal, and the symbol is identified with what it symbolizes (Chapter 2). A double bind situation is also a result of habituation. It is a consequence of individuals habituating into their *pathological activity contexts*. They become used to contradicting themselves, and to regarding such activity as "normal" behaviour. Habituation also prevents them from recognizing the destructive effects of their pathological communication, until they reach the *cul de sac* of the double

all this activity. Such minimal effect, despite the paraphernalia and trappings of professionalism and the rhetoric of a welfare state based on intervention in the public interest, leads to the conclusion that it is the objective existence of planning which is in question. To put it another way, the activities of planners and the apparatuses of planning present the appearance of a (potentially) rational system of decision-making and resource allocation which helps to obscure the real workings of the space economy. Thus conceived it is planning itself which is an ideological phenomenon and the belief in the possibility of planned urban development is the ideology of planning. By concentrating on the internal mechanics of doing planning and the beliefs held by planners, this fundamental insight into the ideology of planning has remained obscured." (Paris 1982, 10-11.)

bind situation. Habituation thus prevents you from reflecting on the potential double bind situation before it actually hits you.

In ordinary habituation, it is the continuity of activity that affords the confusion between levels. The acquisition of a skill indeed requires it. A habit is action without reflection where abstractions of the intellect become the "tacit knowledge" of the body. The metaphoric links between distinctions and differences are recurrently affirmed in one's own activity, as it becomes easier and easier to accomplish practical tasks and to predict future events. Through this repetitive affirmation, the metaphoric link between these two levels becomes "invisible", so to speak, and the link adopts the character of a one-level relation between differences in unreflective action. (Chapter 2.)

But habituation into pathological behaviour is quite unlike ordinary habituation in this regard. Here, it is the *discontinuity* of activity into which one habituates. One habituates into expecting and *accepting* that connections between distinctions and differences are *not* affirmed in activity. According to Bateson (et al.), *schizophrenia* is one symptom of such habituation (Bateson 1987, 206-21). In this view, the origins of schizophrenia go back to one's childhood and the intense social relationships one is involved in during childhood. Schizophrenia is actually seen as the child's *solution* to his dilemma of how to respond to self-contradicting messages in his immediate family environment, especially in relationship to his mother. The mother may expect the child to confirm her view of herself as a loving mother, although she is unable to act lovingly and keeps pushing the child away. If the child responds correctly to his mother's concrete rejection, and thus withdraws from her, his mother punishes him, because she interprets it as the child's violation of her own self-image. Thus, the child is both pushed away and punished for withdrawing and, at the same time, demanded to signify these acts as acts of love. The child is thereby taught *both* to identify his relationship to his mother in a certain way *and* to avoid making respective expressions of this identification, *and*, further, to *refuse this avoidance*. Here, the refusal of avoidance means a prohibition of metacommunication on the avoidance¹. In his relationship to his mother, the child is recurrently faced with a contradiction that refuses to recognize its own existence – that is, a contradiction that prohibits its own metacommunicative recognition *as* a contradiction². The child adapts to this situation by dividing his own personality. One part of him shows affection to his mother and the other part punishes him for doing that, and he simultaneously prohibits himself from recognizing metacommunicatively his condition of divided personality. (Bateson 1987, 206-21.)

¹ Note the difference between analog 'refusal' and digital 'negation' ('not') (Wilden 1980, 182).

² According to Bateson (et al.), this secondary, higher-level injunction is commonly communicated to the child by nonverbal means; by posture, gesture, tone of voice, meaningful action, and by implications concealed in verbal comments. We may verbalize these acts of communication into a wide variety of forms. Bateson and others give such examples as: "Do not see this as punishment"; "Do not see me as a punishing agent"; "Do not submit to my prohibitions"; "Do not think of what you must not do"; "Do not question my love of which the primary prohibition is (or is not) an example". (Bateson 1987, 207.) According to Wilden, "[i]t is a necessary function of pathological communication to deny its own pathology at some level while admitting and using it at other levels" (Wilden 1980, 210).

Through this discussion, we arrive at a description of *pathological power*, with which I mean such use of power which leads to double bind situations. It has to do with *forced metaphors*. One is forced to misuse a distinction, such as the concept of ‘love’ above – and then one is forced to deny the recognition of being forced. There is an imperative hidden in a pathological activity system which commands that certain differences in concrete activity have to be transformed into certain abstract distinctions. The consequence of this forced transformation is severe disturbance in activity, but the imperative further commands that this causality is not to be revealed. The second command prohibits such revelation by denying the existence of the first command. At one level, pathological power is power over communication, which commands how to signify actions, while prohibiting these actions by the very acts of command themselves. At another level, pathological power is power over metacommunication of the first level. At a lower level, A uses power on B, and at a higher level A uses power on B to prevent B from recognizing that A uses power on him. Through repetition, this complex power relationship between A and B becomes habitual, and eventually neither A nor B is aware of its existence. Thus, pathological power becomes contextual power; and it has a sort of in-built defence mechanism that prevents it from becoming explicit. During this progression, the system A *plus* B grows weaker and weaker. What A and B are left with are the depriving effects of pathological power on their system of mutual cooperation, on which they both depend. What makes pathological power extremely dangerous to social systems is its higher-level mechanism of self-denial, which prevents anticipative reflection on the double bind situations towards which it leads the system.

Bateson showed that double bind situations are socially created, but he approached them from the perspective of an individual. In his psychiatric work, he sought to explain pathologies in the behaviour of single persons – such as an alcoholic or a schizophrenic patient – and found reasons for such behaviour from the group dynamics in which the individual was involved¹. Bateson only hinted at a possibility of viewing the double bind situation as a condition – not only of individual psychology – but of social and societal activity systems as well (Bateson 1987, 339). Yrjö Engeström and Chris Argyris, among others, have continued his work towards that direction. According to Engeström, entire work communities may be driven to collective double bind situations. A double bind situation of this kind means recurrent failures in organizational ends and systematic formulation of tasks as inherently contradictory (Engeström 1995, 90).

Argyris is especially interested in collective pathological behaviour patterns in organizations. He calls such behaviour patterns “defensive routines”. These are deep-seated policies which prevent some parties or members in the organization from experiencing embarrassment or threat and, at the same time, prevent the organization from reducing or eliminating the causes of embarrassment or threat (Argyris 1993, 40, 102-03). According to Argyris, there are four rules that govern defensive routines:

1. Bypass embarrassment or threat whenever possible.
2. Act as if you are not bypassing them.
3. Do not discuss 1. or 2. while it is happening.
4. Do not discuss the undiscussability of the undiscussable. (*Ibid.*, 134.)

¹ According to Wilden, alcoholism itself is a consequence of our societal pathologies (Wilden 1980, 73-74).

Individuals follow these rules all the time and do so without having to pay attention to them. In this sense, people in organizations become highly skilled in acting defensively. (*Ibid.*, 103.) Argyris's description of defensive routines in organizations presents a model of pathological behaviour that is even more perverse than the above account of pathologies in person-person relationships. In addition to denying metacommunication (*rule 3.*) of contradictory behaviour (*contradiction between rules 1. and 2.*), even metacommunication of the denial is denied (*rule 4.*). According to Argyris, individuals tend to deal with threat in terms of reasoning strategies that defend the individual in the presence of the threat but are bound to be ineffective in the actual removal of the threat. Together, people create organizational cultures that foster and reward these strategies. (*Ibid.*, 144, 159.) By rooting themselves as inherent aspects of organizational culture, defensive behaviour rules remain as individual members enter and leave the organization (*ibid.*, 103). Individuals adapt to these rules by producing further defensive behaviour. In doing so, they subject themselves to further threat or embarrassment if they are caught. Becoming skilled in avoiding embarrassment is itself embarrassing. (*Ibid.*, 135, 165.) "Defensive routines beget defensive routines" (*ibid.*, 165). In effect, members of the organization become jointly skilled in acting counterproductively. This is called "skilled incompetence" by Argyris (*ibid.*, 100).

Organizational defensive routines are anti-reflective overprotective policies (*ibid.*, 40, 103). The parties do not correct and test publicly their understandings and interpretations of each other's actions, although they pretend not to be acting this way – and, further, pretend not to be pretending (*ibid.*, 42). It follows that inappropriate understandings and interpretations are only amplified over time, until collective activity in the organization is faced with a double bind situation.

Below, we will analyze different types of double bind situations that occur in the social activity systems of land-use planning.

5.3 Double Binds in Land-Use Planning

In my treatment, the concept 'double bind' is used to indicate the *condition of a given system where a subsystem recurrently contradicts its higher, system-level terms of existence*. A 'double bind situation' is a consequence of this activity, a situation where there are no alternatives left for the subsystem. In abstract systems-theoretical terms, this conception of the character of double bind is consistent with Bateson's cybernetic explanation of psychological pathologies, which he called "double binds". In my study, however, the use of the concept of double bind is not limited to the realm of psychological systems. As is done by Wilden (1980), the systems-structural character of double bind, identified by Bateson, is applied to dialectical systems in general, not just to psychological systems¹.

The recurrence of contradictions, taking place in a double bind, means that the pathology lies at the *contextual level* of the subsystem. Its "deep", context-defining

¹ This enables Wilden to identify the double bind of the system of industrial capitalism, for example (Wilden 1980, 394).

distinctions are inappropriate. They determine the way its problems and ends are formulated so that the subsystem is repeatedly faced with impossible tasks. *The subsystem contradicts its own ends.* In terms of power, this means that the subsystem's habitual attempts to gain control of its environment bear consequences that threaten its own existence.

As we learned in Chapter 4, there are three subsystems in the system of land-use planning – planning as expertise, planning as politics, and planning as economics. The political system of land-use planning was labelled as the host system of these subsystems. There are thus three different types of dialectical relations between a system and its subsystem in land-use planning:

- the political system – planning as expertise;
- the political system – planning as politics;
- the political system – planning as economics.

If we follow the definition of a double bind as a state of recurrent contradictions between a subsystem and its system-level terms of existence, we may discern three different types of double binds in land-use planning. The *first* comprises states of land-use planning activity where planning as expertise recurrently contradicts the political terms of its own existence. Accordingly, the *second* has to do with states where planning as politics recurrently contradicts its own political terms of existence; and the *third* with states where planning as economics keeps contradicting the political terms of its existence. What is meant by political terms of existence are decisions that are signifiable as *legitimate*. Measures that contradict these therefore mean such decisions that are *not* signifiable as legitimate. When these contradictions take place repeatedly, it is the ill-formed context of the subsystem – expertise, politics, or economics – that keeps producing illegitimate decisions. Consequently, decisions based on expert knowledge, political majorities, or the attainment of economic profits, repeatedly fail to appear as publicly justifiable decisions.

But there are *two additional types* of double binds that we have to take into consideration. Besides being subsystems to the political system, planning as expertise and planning as economics are also subsystems to the systems of expertise and economics. As explained in the previous chapter, expertise and economics are related to the political system at two hierarchical levels. They are, at the same time, *both* neighbouring systems to the system of politics at the same level *and* its subsystems at the hierarchically lower level. As politics is a subsystem of itself, so is expertise also a subsystem of expertise and economics a subsystem of economics – in addition to their being subsystems of the political system¹. In the case of planning as expertise, a double bind situation may occur not only when expert planning repeatedly fails to appear as legitimate, but also when it becomes an obstacle to itself. This means that pathologies hidden in the technique of professional-administrative planning itself repeatedly cause failures in the attempts to fulfil expectations that expertise in land-use planning places on itself – such as the capacity to regulate development, to predict future needs, to provide a comprehensive

¹ Politics, accordingly, can be a subsystem to the systems of expertise and economics. Otherwise, the politicized mode of communication would be used in the specifically political organizations of the state only. But politics is present in the boards of universities, research institutes, business corporations and trade unions, too.

view of planning problems and to calculate and distribute infrastructural facilities and services. Similarly, a double bind in planning as economics may appear when the economic activity in planning becomes an obstacle to itself. This means that profit-making on urban development is endangered by planning that itself is motivated by profit-making.

Public planning as expertise and as economics both stand on two banks like the Colossus of Rhodes. Legitimacy is a "bank" they both share. For planning as expertise the other "bank" is *knowledge*. The *raison d'être* of expertise as knowledge is its capacity to enhance the possibilities of humans to organize their activities, as far as these are connected to the field of expertise in question. The political function of expert planning is to achieve legitimacy in its operations, but its other *self-referential* societal function is to provide knowledge – knowledge that contributes to humans' understanding and manageability of the causalities that affect their urban lives. For planning as economics, the other "bank" is the *market*. Economic activity takes place in the system of exchange – the market. Profit-making depends on its survival. Profits are produced in the market. When land-use planning as economics becomes an obstacle to itself, it produces decisions that threaten the livelihood of the urban market. While the political function of public planning as economics is to achieve legitimacy, its self-referential societal function is to enable the continuity of the existence of the forums of exchange it enters.

In sum, we may discern five different types of double bind that may occur in the activity of land-use planning:

- double binds in the politics of land-use planning (politics vs. legitimacy);
- double binds in the political expertise of land-use planning (expertise vs. legitimacy);
- double binds in the political economics of land-use planning (economics vs. legitimacy);
- double binds in the expertise of land-use planning (expertise vs. knowledge);
- double binds in the economics of land-use planning (profit vs. market).

Next, I will examine each type more closely. I will present some typical and central cases belonging to each type of double bind. However, I do not attempt to provide a comprehensive view – my aim is rather to illustrate these types via a less abstract theoretical discussion.

5.3.1 Double Binds in the Politics of Land-Use Planning

In general terms, double binds in politics have to do with systematic failures in the capability of politics to fulfil its basic function in society – that of representing the society within society. Being only one of the function systems of society, it has to appear as its center. Politics has to assume responsibility for the system of which it is a part and over which it has no control. It follows that the politician is expected to act even when there is really nothing he can do. (Luhmann 1990, 99.)

In public organizations, such as municipalities, politicians are the top-level decision-makers. The division of labour within the municipality is based on the idea of organizational top-down hierarchy, where the council makes the value choices and sets

the primary ends. The lower levels of the organization – the municipal executive board¹ and the boards subordinate to it – are expected to prepare issues for this top-level decision-making, and to find the most optimal means to execute these decisions. Finally the bottom level is the organ that actually carries out the decisions. This organizational networking of roles takes knowledge as an unproblematic medium that can be transmitted from one level to another without major changes in content. What may be considered as a problem is noise, understood in the sense of traditional information theory. Noise is expected to disturb information when the latter cannot reach all its destinations first hand, but only through intermediate actors located in the middle levels of the hierarchy. What is not taken into account are epistemic subsystem boundaries that exist between the different groups of roles. Accordingly, this organizational model fails to identify the different types of power that influence decision-making in the municipality. The authority of the councilmen, which draws on the legitimacy of their roles as elected representatives of the public, is not the sole and often not even the superior source of power. Expertise and economic power are autonomic sources of power in their relation to political authority, and the decisiveness of each depends on the contextual settings of the decision-making situation in question.

Intensified economic power over decision-making in the local government may be a potential source of political double binds. If the local government's dependence on private business increases, the local politicians may find themselves time and again in contradictory positions where both giving in and objecting to business intentions constitutes a threat to political survival. As an example, take an economically powerful developer whose project is publicly rejected by the residents and the respective local associations. If a politician supports the developer's project, voters will protest; if he rejects it, the developer threatens to move his business to another town, which would lead to a decrease in tax revenue and a drop in the local employment rate – and voters would protest. Similarly, the politically troublesome decision to increase the citizens' tax rate may not be avoidable in a situation where local enterprises threaten to decamp for lower-cost environments, if their demands for public incentives are not met. The first alternative is to favour local business at citizens' expense; the second is not to favour it, and thus lose private firms that are able to cut better deals with other municipalities in other locations – at citizens' expense, who, in effect, will lose jobs. In either case, by favouring or not favouring local business, the politicians end up disfavoursing the citizens and thus their own political future.²

Democratic decision-making in capitalist western societies is always, at all levels, biased by the privilege of business interests. This tension is manageable, if the politicians

¹ Finnish municipal organization has a *dualistic* structure. Politics and administration are separated. The council embodies the idea of a local parliament, while the municipal executive board is the highest executive body in the hierarchy of administration. The municipal executive board is subordinate to council, but it is often the highest authority, as most policy issues are considered to be administrative issues not demanding parliamentary treatment. In Central Europe, in turn, the dominant system is the *monist* one, where the corresponding actor to the municipal executive board is the mayor. (Ryynänen 1996, 78, 129-31.)

² As an example of such use of economic power as a means to put pressure on local political decision-makers in land-use planning, see Jauhainen 1995, 302.

and businessmen together succeed in removing the issue of business privilege from the agenda of political decision-making. As Lindblom notes, politicians are caught in a potential crossfire between privileged business controls and democratic controls. "Hence they would like to remove from politics those highly divisive issues on which businessmen would be loath to yield. Since theirs is the task of seeing to it that business performs, they do not want the fundamentals of private enterprise to become lively political issues." (Lindblom 1977, 205 – see also Logan & Molotch 1996, 292.) By contextualizing business privilege and thus narrowing conveniently the realm of open decision-making, the political subsystem thus creates an appearance of a political organization where only political interests and political power matter. The business world goes along with this scheme by forming its *own political interest groups* that appear in public hearings as any other group of citizens. The local Chamber of Commerce, for example, presents its public initiatives on local urban development as if its objectives were given the same democratic consideration as the objectives of any other local association. A representative of the developer speaks for a planning alternative in a town hall meeting as if his opinion represented just one political interest among many. However, if the local government is economically dependent on the developer, the planning alternatives may already have been formulated so that the political discussion is focused only on secondary issues from the perspective of the developer.

As long as local political life is able to conceal the influence of deeper economic power on itself, it maintains its legitimacy. But in more extreme conditions – as in economic depression, intensified competition of enterprises and residents between cities, marginalization of regions brought about by globalization, and in cities with a biased economic structure governed by one or few major corporations¹ – the concealment of economic power may become too difficult. As the dependence of local government on private business grows, the instances where the principles of democratic governance are run over by business privilege become more frequent and more obvious. The legitimacy of local public decision-making is threatened and the political system approaches a double bind situation.

Expert power may also lead to double binds in local politics. Especially in the technical sectors of local administration, such as local land-use planning, expertise has a highly influential role in decision-making (see Valanta 1997, 3-4). Here the handling of problems requires much predictive and analytical skill that the experts possess (Faludi 1976, 230-31). But the more the experts grapple with these problems, the more the problems are "internalized" into the experts' own conceptual world. The case in land-use planning is often not that a problem is first intersubjectively recognized by politicians, planners and the public alike, and only then handed over to the professional planners who seek alternative solutions for these problems. Increasingly it is within the context of planners' expertise itself that the problem is identified, given form and offered a solution. As noted earlier, the power of expertise in land-use planning is based on its hidden capacity to define the context within which political decision-making is to take place (see

¹ In the city of Raahe, Finland, where my case study is located, the local economic scene is dominated by one company: Rautaruukki Ltd – the largest steel manufacturing company in the Nordic countries. It is overwhelmingly the biggest private-sector employer in Raahe, providing ca. 70% of private-sector jobs and ca. 40% of all jobs in the city.

ibid., 228-46; Valanta 1997, 76, 105). This power over the setting of planning agendas is effectively concealed behind the general Tayloristic idea of scientific management, which still prevails as an unconscious and self-evident way to organize work-processes. It is seen as a "natural", "inevitable", or simply the "most efficient" method of managing organizations. (Fischer 1990, 303-05.)

"What Taylor introduced into the industry of his day, and what has continued to prevail in work organizations today, is managerial domination. In the modern discussion of management, the fact that management dominates the internal political structure of the organization is usually disguised – more or less – by the emphasis on the "value-neutral" science of management." (*Ibid.*, 305, 307.)

The scientific method of administration becomes an end in itself, although it displays itself as a means. The planner-administrator is the "master" of decision-making agendas, although he appears as a "servant" of the political decision-maker. The politician demands facts, but simultaneously complains that the planners have too much power. But can the planners be blamed, if they only do what they are asked to do – provide facts? As the facts and relative decision alternatives are given, the politicians' final decision often becomes evident, since the politicians usually have no capacity to question on factual grounds the "most rational" choice offered. The scientific method becomes its own justification. So who is the actual decision-maker? The politicians are caught in a double bind that is produced by the organizational culture, which relies on facts on the one hand, and on scientific management on the other. In the context of expertise and scientific management, the politician has to appear to be the one who decides and takes responsibility for the decisions made, while he is actually forced to choose the alternative offered as the most rational one, and not given means to comprehend clearly what has been decided. And even if the politician chose against the planners' advice, which he is entitled to do, he cannot choose the mode by which the alternatives are given – the mode of signifying the problem, evaluating its properties, and representing the corresponding decision alternatives. He has the freedom to choose, but within the context of expertise he cannot choose the meaning his choices are given. He can choose to make either good (rational) or bad (irrational) decisions. And no politician wants to make bad decisions.

My interpretation is that this basic dilemma was the primary cause for the atmosphere of mutual mistrust between the leading politicians and the administrators in the municipality of Raahe, Finland, in the mid-1990s. This mistrust was clearly manifested in the organization of the council meeting in October 1995, where the councillors were expected to hold a "value discussion" on strategies for Raahe. Through mutual discussion, the councillors were expected to be able to give directive information on the ends, preferences and possibilities for the agencies that were working on the municipal budget for 1996 and on the general communal plan for the remaining years of the decade. The leading administrators of the agencies were also called in to participate in the meeting, but by the ruling of the chairman of the council, they were not given permission to speak. This ruling was evidently made to highlight the councillors' power over the determination of primary ends. But the meeting gave poor results. The discussion, inasmuch there was any, was kept at a general level. The councillors were content to make obvious remarks instead of going into the real problems of how to evaluate the different municipal services in view of where to cut and how to redirect resources

between the agencies. Later, in the local newspaper, many councillors accused the chairman for the poor outcome of the meeting. It was argued that if the leading officials of the agencies had been permitted to present their visions and to provide additional practical information, they might have given the necessary incentives for the emergence of a meaningful discussion on the objectives of the municipality. (Raahen Seutu 17/10 1995, 7; 19/10 1995, 3-4; 20/10 1995, 4.)

Here we can recall Lindblom's (1959) assertion, presented in the previous chapter, that value objectives cannot be chosen without choosing the actual policies to attain them. A political value choice cannot be made in abstract terms; it needs to be "concretized" by defining the actual policy, which will "embody" the choice between value preferences. In order to be able to make value choices, politicians need the administrators to incorporate values to actual policy programs. But the threat is that value choices thereby become incorporated into the expert mode of communication and are thus taken from the hands of politicians and depoliticized. It seems that you cannot exclude the administrators if you wish to make decisions that make a difference, but you cannot involve them, either, if you wish to make *political* decisions.

But there is more. It also serves the logic of politics to keep the objectives abstract and general. When ends are not connected to specific policy decisions, but rather expressed as well-meaning political declarations, it is easier to reach political consensus on them. Such objectives as "Strive for sustainable development", "Restore balance in the municipal economy", "Decent housing for everyone"¹, and "Reduce unemployment" are, in principle, agreeable to all political parties. But they can be transformed into a multitude of different, even mutually contradictory, policy programs. At the level of actual policy programs, political disputes also arise. Political struggles on them easily lead to hectic changes in the policy direction. But if the primary ends are abstract enough, it will always be possible to find a way to use them in the justification of a new policy decision, even if it were inconsistent with the previous one.

Sustainable development, for example, can be appealed to when arguing for both a high and a low density of development. On the one hand, the concept of sustainable development can be interpreted as avoidance of traffic pollution, as savings in the use of energy, and as sparing unbuilt areas from development, in which case the concept could be used to back up attempts to develop densely built urban areas. On the other hand, if sustainable development is interpreted as a "natural way of life" or "personal ecology", then it can be used as an ideological tool to oppose highrises and to support large backyards where to grow fruits and vegetables, from where to pump up one's tap water, and where to discharge one's drainage. If successive planning decisions hover between high density and low density development decisions, due to instabilities in political power relationships, then the unspecified generality of the concept 'sustainable development' can be used as a tool in political argumentation, whereby each decision can be represented as a "good" decision and as consistent with the primary objective – as the objective can be endlessly recontextualized from the perspective of each new decision.

The loose generality of objectives thus provides a political strategy for facilitating political consensus on grand issues as well as operative decisions. Despite lacking strategy in terms of scientific rationality, politicians can use the generality of their

¹ See subsection *Technical and Political Activity* in the next section.

primary objectives in their efforts to display their decision-making as consistent and rational. In order to gain legitimacy for various interests, the political subsystem must give an impression that the activity of the public organization is not fortuitous but directed by ends and objectives (Möttönen 1997, 183). *Thus, instead of using the primary ends as the criteria upon which to base policy choices, the political subsystem uses them rather as arguments with which it can justify politically the policy decisions made (ibid., 158).* Rather than for giving direction, the primary ends are used by the political subsystem to protect its *lack of direction*. This runs contrary to the prevalent doctrine of New Public Management, according to which the politically determined value objectives are to become the strategic ends for the operative decision-making of the administration.

As noted in the previous chapter, incrementalism is the intrinsic method of politics. But as the above discussion shows, an essential feature of this method is to represent itself as strategic. Politics that openly gives in to political power struggles on every incremental decision would lose its legitimacy, because such policy-making is incapable of appearing as an advocate of any long-term interests. But since politics in reality advances more or less like that, it is necessary for politics to create an appearance of itself as strategic action committed to the pursuit of long-term ends. Thus, *incremental action that appears as strategic action is a method that politics has developed in order to sustain itself* (see *ibid.*, 362-65).

As we shall see later, this contradiction between activity and its appearance may cause a double bind for the administration, as the latter tries to incorporate politics into strategically coherent policy-making procedures. But it may also lead politics into a double bind, once it is revealed that its manifest ends are used to justify contradictory decision-making. As in short-circuiting, politics loses its ability to represent societal meanings. Its ends become decontextualized, as the politicians use them rhetorically to fit into virtually any kind of context of everyday decision-making. The consensual primary ends of politics become illegitimate if they are publicly revealed as mere rhetorical camouflage for political action that, in reality, changes direction accidentally in accordance with changes in the power relationships in individual policy decisions.

Legitimate decision-making is an end to itself. Legitimacy does not only concern *what* has been decided, but also *how* the decision was made. Legitimacy thus concerns two levels of decision-making: (a) legitimacy in the *substance* of the decisions made, and (b) legitimacy in the *procedure* of making decisions. In the politics of local land-use planning, decisions are made via the code of the majority/minority. The purpose of majority decisions is to fulfil both levels of legitimacy: (a) they are expected to express the interests of the majority of the public, and (b) they are expected to be made with a technique that appropriately identifies and represents the majority interests. Double binds emerge when the 'How?' and the 'What?' become opposite to each other. Then, a supposedly legitimate technique of making political decisions is found to produce illegitimate decisions. Majority decisions are revealed to represent interests that only *appear* to be majority interests, if it turns out that the content of decisions is rather determined by the heightened struggle for political power and media publicity within a small political elite¹. This is what is meant by short-circuiting in politics. As a result of

¹ See the list of possible situations where political majorities are found illegitimate in the closing section of Chapter 1.

pathological habituation, the technique of making majority/minority distinctions loses its societal foundation. In a double bind situation, political decision-makers are faced with the fact that they no longer know how to make legitimate majority decisions. By choosing neither side – the majority or the minority interest – a legitimate majority decision can be derived, because the code of transforming societal demands and needs into political majority and minority interests has lost its metaphoric quality.

5.3.2 Double Binds in the Political Expertise of Land-Use Planning

Double binds of the expert mode of communication in political systems have to do with a loss of legitimacy. As mentioned above, legitimacy concerns both the ‘How?’ and the ‘What?’ of planning, and double binds emerge when the ‘How?’ and the ‘What?’ become opposite to each other. The technique of expert planning is found legitimate as long as it produces legitimate decisions.

Traditionally, expert planners have tried to gain legitimacy to their planning solutions by appealing to such notions as ‘public interest’ and ‘value neutrality’. They have described their planning methods as a ‘search for scientifically rational means to politically mandated ends’. The scientific *apolitical* method of planning is found justifiable if it produces planning decisions that are “value-neutral” and serve the “public interest”. Legitimacy will be maintained for as long as the expert planners’ proposals manage to appear as outcomes of scientifically rational action. The strategy of such expert planning for gaining legitimacy in a political system is to *bypass the issue of legitimacy* by appealing to its own “scientific outlook”.

There is always tension between expertise and politics when expertise is husbanded by politics. By appearing as value-neutral and ideologically uninterested, expertise tries to dissociate itself from politics. It creates an “outer” appearance of not influencing politics and thus tries to keep its contextual influence hidden. Thereby, expertise has created a method of influencing politics that simultaneously escapes from being charged for illegitimacy. The distinctions fact/value, means/end, public interest/special interest and professional planner/layman politician enable expertise to maintain an image of itself as if it were solely in the service of politics: searching for means to politically mandated ends, treating impartially all groups of citizens, and providing factual evidence to aid ignorant politicians in their decision-making. Once we start to question the appropriateness of these distinctions, expertise also becomes visible as power over political issues. Are facts really value-neutral, or is the scientific method used to attain certain ideological ends? Are ends given before the search for means, or are the ends themselves formulated within the frame of a predetermined set of means? Does such a thing as “public interest” exist, or is it just the planners’ epistemologically limited view on their object environment, to which the planners refer as the ‘public interest’ in order to maintain their privileged position in deciding what is good for people? Who is an expert of what? What helps us to determine whether an actor should or should not be considered an expert of *this problem* – his title, what others say about him, or what he is actually saying?

These questions reveal that expertise bears political consequences and that it is therefore not indifferent to the question of legitimacy, although it willingly appears to be. Political expertise approaches a double bind situation when it is revealed to technicize politics in illegitimate ways. Political objection may be aroused against expertise that is found to determine publicly accountable issues without bringing them into the political arena.

This political objection may interfere with planners' freedom to act. The independence of bureaucratized professions in political systems is restricted. Planners depend on the benevolence of politicians who are formally the leaders of the organizations where planners work. In terms of formal authority, planners are hired for staff positions by political decision-makers to facilitate the goals of the public organization. In terms of this formal authority, the planner is signifiable as a holder of a lower position in the decision-making hierarchy than the politician. Thus, the politician is able to control the planner in decisions that can be grounded on formal organizational positions and associated formal authorities. (Fischer 1990, 360; Möttönen 1997, 135.) On the other hand, in decisions where expert knowledge matters it is the planners that are able to control politicians. The power relationship between planners and politicians is thus a matter of what mode of communication the decision-making situation in question allows one to use.

Doubts concerning the legitimacy of expertise within the public organization may lead to an unhappy situation where politicians start to oppose planners by the means available for them. This may introduce various obstacles to the planners' work. For example, a person may be fired, or the operational assets of the agency may be reduced. Most importantly, the possibilities for meaningful communication between planners and politicians are hindered so that practical decision-making, which ultimately depends on mutual cooperation between the two parties, is endangered. As we saw in our above discussion related to the problematic relationship between the leading politicians and administrators in Raahe, this renders the politicians' situation difficult, too. The political decision-makers depend on the planners' practical advice. Instead of simple objection, it is therefore necessary to acknowledge that there are also forms of expert power that are politically necessary and thus legitimate. Politicians and planners alike should be able to reach critical awareness of expertise as a type of power that necessarily has to direct political decision-making in *some* way, but which also has a potential of developing unnecessary constraints. *In the midst of the planning situation at hand, the political system should be able to ask itself where expertise in its different forms can legitimately be allowed, and should be required, to penetrate.* Otherwise, the relationship between politicians and planners might wind up in mutual opposition, which would lead both parties towards a double bind situation.

The problematic relationship between the leading politicians and administrators was one of the main reasons why the municipality of Raahe, in spring 1995, invited the University of Oulu Department of Architecture to organize an urban planning education project to work on Raahe. As it was revealed to me in some personal discussions during the education project, the project was hoped to ease up the tension between the politicians and administrators in Raahe. It was expected to provide an alternative angle to the planning of problematic central areas in Raahe. But more importantly, it was hoped to provide an alternative forum for urban planning discussions. The education project provided a possibility to negotiate on real urban problems unofficially, since cooperative

planning and decision-making was only rehearsed, not truly exercised. The unconventional organization of the planning meetings also encouraged people to abandon their fixed attitudes and positions, as some of the leading councillors and administrators gathered in meetings in the Raahe Town Hall and in the University of Oulu Department of Architecture to discuss the university students' planning proposals together with the students, their teachers (including myself), some land-owners, residents and representatives of local associations. We will return to the education project in Chapter 6.

The communicative planning approach is based on the recognition of expert planning as an inherently political form of activity that cannot escape the issue of legitimacy. In his theory of communicative action, Habermas (1984, 1987) introduced the concept 'communicative rationality', along with scientific (or instrumental) rationality, as a form of rationality that achieves legitimacy in political systems (see Chapter 1). However, the ideal of communicative rationality does not remove tensions from the planner's work. Tensions that reside within the inherently contradictory concept 'legitimate expertise' may only develop into new double binds when the expert planner aims to gain legitimacy for his planning method by making it 'communicative'.

In Chapter 1, we already mentioned the double bind that may arise between participation and bureaucracy. The communicative planning theory poses the ethical and emancipatory demand for public inclusiveness of planning practices, but, on the other hand, the theory can be criticized for not giving instructions on how public participation should be managed and organized. In the interpretations and applications of Habermas's theory, the ideal of communicative rationality in planning may even be seen as opposite to the necessity to manage and organize communicative planning processes. The management of participation as well as the planner's expertise as a guide in shaping planning problems may appear as phenomena that belong to the "system" side. Thereby they are given the appearance of oppressive power that dominates the "lifeworldly" communication in planning. In the name of legitimacy, the planner may thus be divided against his own expertise. The planner is faced with impossible tasks: on the one hand, the expert planner is required to organize the planning process as a participative search for communicative rationality, while on the other hand, he is denied from doing that because by organizing planning processes he inevitably uses the forbidden systemic power. Without proper management, knowledge provided by the participants cannot be integrated into the planning process as mobilizing factors that, from sequence to sequence, would provide practical aid in decision-making. The well-meaning intention of communicativeness may thus also lead the participating citizens into a double bind situation: they are welcomed to participate, but they cannot participate, since their participation cannot be mobilized properly.

Architect-planners who strive for communicativeness may develop a specific kind of opposition between the demands of legitimacy and expertise. A large part of architect-planners' expertise consists of 'architectural knowledge', understood as knowledge of architecture as a form of art. If conceived of in the tradition of modernity, architecture as art is evaluated using distinctions between high and popular arts, aesthetic and practical art, and between architects and ordinary people, who are seen to constitute the audience of their architecture (see Shusterman 1995, 13, 49). Especially in the 20th century, arts and architecture have been alienated from the appreciative experience of most people (*ibid.*, 50; Nyman 1998, 43-53). Modern art has been associated with the avant-garde of artistic

progress, and art is thus expected to be something that is inherently unpopular, even antipopular (Shusterman 1995, 50 – see also Cuff 1991, 73).

”Whatever appeals to more popular experience and less erudite understanding is therefore relegated to a sub-artistic realm and pejoratively labeled kitsch, entertainment, or the ”industry” of popular culture. Its appreciation and the status of its appreciators are culturally delegitimated, so that, rather than uniting human society with its communicative power, art comes to divide it into the privileged appreciators of true art and the blind masses who besot themselves with its sham substitutes.” (Shusterman 1995, 51.)

Now, if architect-planners base their conception of architecture as a form of art on this modern tradition on the one hand, and wish to open the planning processes to public participation on the other hand, they may find themselves in unresolvable conflict situations. Either legitimacy or art has to be sacrificed – and both are essential to the architect-planner’s practice. Legitimacy would be provided by public participation, but architecture as high art would simultaneously be sacrificed to the invasion of popular tastes. The architect-planner may consider it his moral obligation to open planning processes to public participation, but still regard such planning contemptible because, according to his art conception, it would mean giving in to kitsch and shallow populism, and giving up architecture and the respect of his peers.

This contradiction may often be less of a problem for the architect-planner than for the architect as a building designer who includes non-professionals in his design-processes. Architecture is usually seen to be ”more” concerned with the scale of buildings than with the scale of areas, not to mention the scale of regions. Nonetheless, participative planning requires a new understanding of architecture as a form of art, if one wishes to transcend the contradiction between public involvement in land-use planning and land-use planning as high art. The distinction between high and popular art is mostly inappropriate to the practice of participative planning. We shall return to the definition of art later in this chapter.

The expert planners are quite skilled in using their professional language rhetorically in order to gain legitimacy for their actions. They are often able to remove issues legitimately from the public realm by labelling them as matters that belong to the ”private” world of expert planners. Indeed, the public realm would become exhausted if every planning problem had to be brought to the political agenda. But sometimes planners may also use for their own strategic purposes their power to label planning problems as scientific or artistic matters, so that they get to decide issues that should be considered as political ones. In other cases, expert planners may gain legitimacy for their domination of planning processes by labelling them inappropriately as ‘participative planning processes’.

A planning procedure which is not truly inclusive, but has only been made to appear as participative is not necessarily a result of the expert planners’ deliberate action. Such planning procedures may also be examples of pathological communication which is not able to metacommunicate itself. Strategic action on behalf of the planners would entail their capacity to metacommunicate. Citizens would be invited to public planning meetings with the obvious purpose to make planning decisions publicly justifiable; decisions that, nevertheless, are beyond the citizens’ comprehension and/or are

contextuated so that decisions can be made only between "good" alternatives. But this strategic attitude can also be missing. Planners are not necessarily aware that their planning procedure does not allow meaningful participation by the citizens. For example, they may not be adequately aware of how exclusive the communication mode of expertise in land-use planning is. The planner may have taken great pains in developing representation and modelling techniques that he thinks would remove the barriers of perception and interpretation among the non-professionals. However, the more essential barriers may reside at a deeper level: the basic level of the professionally determined attitude to the reality. Then the crux of perceiving ideas is not in how the ideas are represented, but in how they are constructed through the attitude, which determines what is significant and noteworthy in one's reality. It is the way of thinking about the world that may place the true barrier for others' involvement; not the way in which you describe what you think. Being unaware of these difficulties, the planner may quite sincerely hope for initiatives, comments and even critique from the citizens whom he presents his planning proposals. He attempts to democratize planning, but at the same time he fails to recognize the deeper levels of his contextual expert power that form the "embodied hidden agenda" that functions against his conscious intentions.

On the other hand, the planner may also cherish an exaggerated image of himself as a 'communicative planner'. He may therefore unconsciously refuse to recognize cues and hidden messages that suggest otherwise. If he, from one public planning meeting to another, hears hardly any questions and comments on his planning proposals from the participating citizens, he interprets this as the citizens' approval of him and his ideas; and if voluntary participants get to be fewer and fewer in number, he interprets this as the development of the planning agenda to issues that arouse less general interest. He does not stop to ask himself whether the silence and increasing absence of the citizens were, after all, a sign of their helplessness and frustration over the language barrier that does not allow true participation – i.e. their sharing the common reality with him. The planner needs the participation of citizens in order to preserve his self-image as a communicative planner. Citizens are thus welcomed to participate, but inadvertently not given adequate conceptual tools to influence planning agendas.

This reminds us of the mother-child relationship we discussed above. The mother does not behave strategically. She is not deliberately making her child confused and making him vulnerable to mental illness. Similarly, the planner may not intentionally put the non-professional participants in contradictory situations, where they are expected to participate but unable to do so. The schizophrenic's mother denies the metacommunicative awareness of herself as a mother who is incapable of giving love to her child. To some extent, the planner may also deny the awareness of his planning method as a method that is only poorly inclusive, although it presupposes public participation. In the psychological sense, the case of the planner is naturally not so serious as that of the schizophrenic's mother, but an analogy can be made, nonetheless.

The planner's approach would eventually lead to a double bind situation, when it is revealed to him, through his self-critical observations, that the planning method he has to offer only *appears* to be a method for participative planning without genuinely being so. His self-critique may be accompanied by outside critique, but in a double bind situation these critiques inevitably lead to a person's self-critical revelation that *he does not know what to do* – i.e. *he does not know how to practise participative planning*. If participation

is generally required to afford legitimacy, this would mean that he does not know how to practise legitimate planning.

5.3.3 Double Binds in the Political Economics of Land-Use Planning

As was the case above with the expert mode of communication in political systems, double binds in the communication mode of economics also have to do with a *loss of legitimacy* when economics is a subsystem of politics. Accordingly, the double binds concern the oppositions between the 'How?' and the 'What?' in market-oriented planning. The legitimacy of the *procedure* of market-oriented planning is questioned when the *substances* of its decisions are no longer found publicly justifiable.

When the decision-making on land-use planning issues is delegated to market actors, it is removed from the political realm. The effect is similar when market criteria are given the hegemony in the framing of local political agendas. Like planning that relies on expertise, market-oriented planning is an *apolitical* method of planning. As we saw above, the scientific method purports to justify its apolitical procedures by displaying its planning decisions as decisions that serve the "public interest" and are "value-neutral" and "scientifically rational". The "democracy" of the scientifically rational ends is thus expected to justify the "meritocratic" means of scientific rationality. The proponents of market-oriented planning use very similar arguments in their attempts to justify the lack of public accountability in their own decision-making procedures. The pursuit of private wealth is claimed to produce socially rational results. It is argued that, if allowed to operate freely, the transactions of market-rational individuals would accumulate greater wealth that would benefit everyone. The implication is that no positive or direct action to meet social criteria is needed, because self-organization by the market would produce just and rational outcomes by itself. (Harvey 1996, 428-29; Thornley 1991, 209.) Development goals are presented as inherently uncontroversial because they are aligned with the "collective good". Market-guided development is thereby presented as "value-free" development, which should justifiably be favoured by the local government and publics. (Logan & Molotch 1996, 299, 318.) The "democracy" of the market-rational ends is expected to justify "plutocratic" means of market rationality.

However, many studies show that unrestrained market-based private capital causes unevenness in urban development. Markets fortify the prevailing inequities in social relationships and life opportunities. Therefore, they are not neutral arbiters of maximal efficiency in production and distribution.

Urban renewal has been promoted as beneficial to a wide variety of actors and groups. Besides business in inner city areas, it is said to serve the interests of labourers desiring higher wages, homeowners hoping for higher exchange values for their houses, the unemployed seeking new jobs, and politicians striving for re-election. Logan and Molotch admit that "[s]ome of these claims, for some times and places, are true" (*ibid.*, 318). Examining the effects of growth in the cities of the USA, they claim that the costs and benefits of urban renewal depend on local circumstance. "Declining cities experience problems that might be eased by replacement investments. Even in growing cities, the costs of growth can conceivably be limited by appropriate planning and control

techniques.” (*Ibid.*) But Logan and Molotch argue that, for many places and times, urban renewal is a mixed blessing at its best. Appeals that draw on its supposedly collective benefits are made merely to legitimate ideology; they are not accurate descriptions of reality. (*Ibid.*) “Residents in declining cities as well as people living in more dynamic areas are often deceived by extravagant claims that growth solves problems. These claims demand a realistic evaluation.” (*Ibid.*)

Squires claims that “[a]lthough urban renewal was launched and initially justified as an effort to improve the housing conditions of low-income urban residents, it quickly became a massive public subsidy for private business development, particularly downtown commercial real estate interests.” (Squires 1996, 274.) Jauhiainen holds that the urban economic renewal of working-class neighbourhoods is always connected with the residential rehabilitation of these areas – directly or indirectly. Urban renewal causes *gentrification*. (Jauhiainen 1995, 343.) This poses serious questions: “For whom and on whose terms is urban space developed?” Many renewal projects that were realized in the 1990s have shown that the economic benefits of these projects have not been distributed to all residents of the renewed areas. Because of this, urban development has increasingly polarized socio-economic conditions between the citizens. (*Ibid.*)

The “*trickle-down effect*” was a popular notion in Great Britain during the 1980s, and it was used to support the publicly aided private market as the engine in the recovery of problematic inner city areas. The economic profits were expected also to “trickle down” to economically and socially underprivileged residents close to the renewed areas. Although this assumption was not based on accurate research, it was adopted as a central thesis of urban governance. Despite the firm belief in the “trickle-down effect”, the economic restructuring of inner cities has not been able to remove economic and social problems. On the contrary, by increasing the gap in economic welfare between the social classes, it made racial and other social problems more critical. In Great Britain, this effect shows in the heightened rates of urban crimes and riots. (*Ibid.*, 185.) The urban renewal projects did not induce notable growth in the surrounding urban areas, and the economic profits within their target areas were unevenly distributed. For example, the arrival of the London Docklands Development Corporation in the London docklands area led to an increase in local unemployment, since many enterprises that had used local work force were pressed to move out, due to expropriation of their land property and the higher rent levels. The social problems of the original docklands residents were further intensified by major cuts in the supply of publicly funded housing. Eighty-five percent of the new apartments were directed to the private market, and moving to these apartments was not possible to the original working-class residents. During the period between 1981 and 1989, the number of homeless people in the docklands increased massively by 286 percent, whereas homelessness in the whole of London “only” increased by 86 per cent. (*Ibid.*, 187.)

Jauhiainen, among others, has reported of the urban renewal project that took place in Cardiff, Wales. The project called Atlantic Wharf was situated in the area surrounding the Bute East Dock in the Cardiff Bay area. It was launched in 1983 and completed in the early 1990s. The project followed the principles of leverage planning, with the private sector determining the direction and the public sector offering subsidies. In effect, the old dilapidated Bute East Dock area was made into an active urban space by providing new development, by renovating old warehouses into high-class apartments and hotels, and by

bringing in new shops, recreational facilities and a high technology unit. (*Ibid.*, 207-09.) The purpose of the local public officials was to refute the claim that Atlantic Wharf was situated at the "wrong side of the railroad" – that is, in the derelict docklands area, where investments in development were not expected to produce profit. Furthermore, the surplus of the renewal project was to be directed to the inner city residents – especially in Butetown nearby – in the form of new jobs, better apartments and communal services. At least part of this policy had to be abandoned, because Tarmac Properties plc, which had won the competition between the candidate investor-developers in 1983, wanted sufficient profit for its investment. Tarmac calculated that the biggest profit was to be gained from commercial services, and they therefore wanted a shopping centre in the area, contrary to the original plans. Another compromise was made by giving in to Tarmac's demand to provide more high-priced housing than was the initial intention of the county council, which was the public-sector counterpart in the negotiations. (*Ibid.*, 208-09.) Although Tarmac had to conform to the county council's demand to build social housing, too, the apartments in Atlantic Wharf were generally not built with the needs of the local people in mind. Speculation on housing demands boosted prices, so that only a very small minority of citizens in Cardiff could afford to buy an apartment in Atlantic Wharf. Not even a communal apartment in Atlantic Wharf was affordable to most people who lived in Butetown. The rents of the tenants in the communal apartments in Atlantic Wharf were paid by the municipality because most of the tenants were unemployed. The high rent level also "trapped" them in unemployment. A tenant with low education was no longer able to take on a poorly paid job, since the income would not have covered the high rent. In order to keep his apartment, the tenant in a communal apartment was therefore forced to stay unemployed. (*Ibid.*, 210-11.)

In the hands of property industry urban renewal projects easily lead to speculation on housing demands, which brings apartment prices and rents to such levels that they are no longer affordable to those whose housing problems were to be solved by the urban renewal project in the first place. The claim with which the project is initially justified is nullified by the operations of the project itself. These contradictions inherent in market-guided urban renewal projects may cause a double bind situation for the urban policies which utilize these projects. Such urban policies base their legitimacy on promises of widely distributed economic growth and improvements in the housing conditions of the less well-to-dos. Legitimacy would be lost the moment it is revealed that disappointments in the fulfilment of these promises are not caused by some unexpected outer forces but by the logic of the policy itself.

"The lead public institutions, in implementing the development projects of the era, operated in isolation from democratic inputs. By focusing on the construction of first-class office space, luxury housing and tourist attractions, and short-changing the affordable housing, small business and community-based industry sectors, they prompted developers to engrave the image of two cities – one for the rich and one for the poor – on the landscape. Redevelopment took the form of islands of shiny new structures in the midst of delayed public facilities and deterioration in living conditions for the poor." (Fainstein 1997, 133.)

Besides the housing needs of local working-class residents, inner city renewal projects are often claimed to fulfil their needs for *jobs*. Indeed, a central argument used in the

legitimation of urban renewal projects, and urban economic growth in general, is that they create jobs for local people. However the reality, according to Logan and Molotch, is that such growth does *not* create jobs – it merely distributes them. (Logan & Molotch 1996, 321.)

”Indeed, especially in cases of rapid ”boom town” growth, enthusiastic media coverage can prompt large numbers of workers to migrate, much in excess of immediate job openings. A large surplus of workers results when the boom comes to its inevitable end, often with many of the infrastructural costs still to be paid. The human strain of migration – people forced to leave their relatives and neighborhood behind – may prove to have been for nothing.” (*Ibid.*, 321-22.)

Logan and Molotch further argue that while ”new jobs” may not change the overall rate of unemployment at either the local or the national level, they may also have little bearing on unemployed individuals at the actual location of urban restructuring. ”For example, cities that are able to reverse chronic economic decline and stagnation [...] often provide new jobs primarily for suburbanites and other ”outsiders”, rather than for the indigenous working class in whose name the transformation was justified.” (*Ibid.*, 322.)

The benefits of the British Enterprise Zones are also questionable in this regard. Behind the establishment of Enterprise Zones was the central government’s intention to find out how much local economic life could be stimulated by relaxing and accelerating the planning of certain areas, and by providing new tax abatements for enterprises that would choose to move into these areas. During the first two years, 725 enterprises moved into the new Enterprise Zones, and the final outcome of the EZ policy was a total of 35 000 jobs that the enterprises in the Enterprise Zones provided. But a closer study reveals that a majority of these jobs were actually not ”new jobs”. Many firms moved into these areas in order to benefit from public sector incentives and brought old employees with them. By 1986 the sum of investments by the central government in Enterprise Zones was ca. 400 million pounds, including investments in building and infrastructure and tax losses. By the end of the 1980s, the annual budget for the areas was 500 million pounds. The cost of each new job was extremely high, and especially outside London this policy did not yield much benefit. (Jauhainen 1995, 188.)

A policy aiming at growth usually has little regard for social impacts, as is shown by most studies of redevelopment (Fainstein 1997, 140-41). Redevelopment studies indicate clearly that the assumptions of value-free development are false (Logan & Molotch 1996, 328). Squires argues that ”[a]ssumptions of a unitary interest on a benevolence of market-based allocation mystifies important decisions made at the local level that clearly favor some interests at the expense of others”. By questioning the wisdom of market guidance and growth, we bring into the open the transfer of wealth, often from the local citizens to groups of rentiers and developers (*ibid.*). Development is thus revealed to be something else than a mere technical process, which supposedly works for the collective good and thereby guarantees its own legitimacy. It is revealed to be a *political* process (Squires 1996, 270-71). *The double bind of market-oriented land-use planning follows from its hidden attempts to write off the issue of legitimacy by viewing the technique of market-based planning as inherently legitimate, while the decisions produced by this planning technique are frequently shown to be illegitimate.*

But is there any way to bring the demand of political legitimacy on the one hand and development interests on the other into a mutual harmony in any kind of land-use planning policy? For sure, the tensions between them cannot be totally removed – because we are dealing with two differently functioning self-referential systems that, nevertheless, are joined together through a system-subsystem relationship. But measures can be taken to make their coexistence more balanced¹. This requires that we gain a sufficient understanding of the systemic properties of each.

5.3.4 Double Binds in the Expertise of Land-Use Planning

Double binds in the expertise of land-use planning have to do with recurrent contradictions that expertise brings to itself. As it was mentioned in the introductory part of this section, expert planning has two basic societal functions. Besides the political function of legitimate planning, expert planning has a self-referential societal function of producing knowledge that contributes to humans' understanding and manageability of the causalities that affect their urban lives. In accordance with these two basic functions, two types of double bind situations may occur in planning as expertise. We have already examined the type of double binds where expert planning fails to appear as legitimate. Here we shall take up the other type, where expertise recurrently contradicts itself. This means that pathologies hidden in the technique of professional-administrative planning itself repeatedly cause failures in the planners' attempts to fulfil their own expectations – failures in the regulation of urban development, in the prediction of future needs, in the acquisition and utilization of knowledge, in the strategic management of planning decisions, etc.

In the subsection 'Planning and Learning' in Chapter 1, we recapitulated the recent development of planning theory with a specific view on learning. Each new phase in the development of planning theory can be seen as reflection on the double bind that the former phase has caused. Incremental analysis can be seen as a reflection on the double bind of synoptic analysis, and mixed-scanning can be seen as a reflection on the double bind of incremental analysis. Mixed-scanning, in turn, may be a source of yet another double bind.

¹ Fainstein's suggestions to improve the Anglo-American situation in this regard are worth noticing:

"Social equity demands a balanced redevelopment policy that addresses the distributional effects of economic growth and that provides for consumption as well as investment needs.[...] Better policy requires the coordination of economic and social programmes, including the integration of employment and redevelopment programmes; linking of housing and office construction; much higher and more consistent levels of subsidy for affordable housing; opportunities for small business in publicly assisted commercial developments; measures to ensure that any corporation that receives public-sector benefits be prevented from cashing in and then decamping; and a return to the public fisc commensurate with its contribution to the development." (Fainstein 1997, 140-41.)

Lindblom's method of incremental analysis, which he first presented in his classic article "The Science of Muddling Through" in 1959, was offered with a specific concern for the dilemmas faced by administrators in their planning practice. Lindblom identified the prevailing planning paradigm – synoptic planning – as a source of these dilemmas. The method of synoptic planning had a rationality concept which required such comprehensiveness of analysis that was practically unfeasible for the administrators with respect to the resources and time available for them. Overanalysis made the planning system too rigid and slow. Planning outdated itself and thus lost its ability to control the future. Due to a desire at comprehensiveness, the planning process was prolonged so much that instructions were, in part, formulated for "past futures". Analysis thus became an obstacle to itself. Lindblom's incremental analysis was a reflective account on the double bind of synoptic analysis. His resolution to this double bind was to ease up the demand for comprehensiveness and to redirect the analysis of a planning problem only to the phenomena that required changes compared to the prevailing policy. The administrator was not expected to address every issue involved in the current planning problem; instead, he could rely on institutionalized techniques and his own former experiences of handling planning problems, and focus exclusively on issues that were apparently not compatible with these techniques and experiences and thus demanded specific attention. Planning would thereby advance not by building a new bottom-up policy for each new planning problem, but by developing the given policy step by step incrementally.

But, as it was revealed in the subsection 'Planning and Learning', small increments to a given policy may accumulate into big problems that are beyond the scale of incremental analysis. Incremental analysis advances blindly in relation to policy-level issues. It may therefore lead to severe environmental changes that it cannot address as a method, since they require re-evaluation of the whole policy itself. This is the double bind of incremental analysis that was reflected by Etzioni's method of mixed-scanning. The idea behind mixed-scanning was to combine the synoptic and the incremental method so that each one could be used to overcome the weaknesses of the other. Planning and analysis would shift from the incremental (or operative) level to the synoptic (or strategic) level, or vice versa, depending on the seriousness of the planning problem encountered. The administrators would utilize former policies and experiences, but they would also be ready to reformulate the given policy when necessary. Planning would not be overburdened by exhaustive analysis, nor would it be paralyzed by problems that require comprehensive treatment.

But there are potential sources of double binds implicit in the method of mixed-scanning itself. One is the demand to separate big decisions from small ones and the consequent demand to know in advance whether a decision has small or fundamental consequences. As we have seen, the hierarchy of planning decisions in relation to their outcomes cannot be determined in advance. Incremental or operative decisions may lead to major consequences, and synoptic or strategic decisions may lead to minor consequences.

Another double bind in the method of mixed-scanning may follow from the respective division of tasks and roles between the agencies and personnel in the municipality. Double binds may develop especially in the relationships between the planner-administrators and the politicians. As we have noticed, double bind situations for the local

politicians may be caused by the organizational culture that makes the planner-administrators appear as politicians' "servants", while they actually govern the contexts wherein decision-making situations are generated. But the same organizational culture may simultaneously generate double binds for the planners, too. I refer to an organizational culture where strategic decisions are separated from operative ones – as in Etzioni's theory of mixed-scanning – and where the politicians are encouraged to focus on strategic decisions, while the planners are designated to handle operative decisions. The idea is a rational¹ construct of organizational decision-making where the politicians appear as "strategic decision-makers" and the planners appear as their "servants". But both appearances are inappropriate in view of how the decision-making processes actually take place. While the politicians are puzzled by their "servants", who seem to determine how they should decide, the planners are equally puzzled by their "strategic decision-makers", who contradict their own strategies with their involvement in operative decisions, and still claim to have followed them. As we have seen, politicians may have an attitude to strategic planning that does not conform to the planners' attitude. Whereas planners try to develop strategies in order to give direction to operative decision-making, politicians may use the strategies rhetorically in their attempts to justify the *lack* of direction in their own operative decision-making behaviour.

According to Sakari Möttönen, political behaviour has its own logic that planner-administrators are not able to control (Möttönen 1997, 369, 374). We have already discussed the unmanageability of the urban market. In both regards, planners' inappropriate conceptions of their controlling powers may lead them to double bind situations.

There may also be other reasons behind the confusions in strategic planning between the planners and the politicians. The planners' analyses are often too exhaustive and their expert language too foreign to politicians, who therefore have difficulties in understanding the decision-making material that is offered to them. Most importantly, they have difficulties in forming a holistic and coherent view of this material, and therefore lack the capabilities to approach it strategically. At times, when the council approves a carefully prepared master plan, the councillors make a formal commitment to execute a long-term strategy – but this formal commitment cannot be a *true* commitment, if the strategy is not understood in the first place. (See Vesala 1994, 46-49.) For the master planner, the project of strategic planning is usually completed with the official ratification (at the local or state level) of the master plan. The local politicians are thereby "left alone" to implement this strategy in their later decision-making on detailed land-use issues. They come to handle numerous land-use proposals, some of which may jeopardize the whole strategy. (See *ibid.*, 48-53, 84.) In Lahti, Finland, one such case was the decision to invest city funding in a massive sports/concert hall, which emerged rapidly on the agenda and was aggressively lobbied by a coalition of leading politicians and project investors (Vesala 1994). This decision broke down the planned long-term budgeting for the gradual development of residential areas that suffered from a shortage of various public services.

The councillors end up making operative decisions that contradict their own former strategic decisions, without having awareness of doing so. The master planner accuses the

¹ In the sense of systems rationality, scientific management, and Weber's purposive rationality.

councillors for their partiality and short-sightedness, while he may not notice that it is, at least in part, his own mode of planning communication that does not allow the councillors to internalize a more comprehensive view. The master planner does not possess formal organizational means to guide the gradual implementation of the strategy outlined in the master plan – nor is he expected to. On the surface there appears to be no problem in this. In the formal sense, the councillors adopt the strategy when they themselves ratify the respective documents. This formal step is also decisive in the transfer of tasks between agencies in the municipality. Often the master planner and his relative planning department step aside, while a new planning department that is in charge of detailed planning steps in. Those who are expected to provide continuity in this shift are the local politicians. As the ratification of the master plan appears to shift strategic action from one policy-making level to another, the formal structure and culture of the organization do not actually allow such a shift to take place. Knowledge cannot be transmitted by documents. It can only be shared. One problem of the expert mode of communication is that it makes the expansion of knowledge in the public organization very difficult. It is simultaneously too comprehensive and too specialized as a language. However, such expansion is required when strategic thinking is expected to be practised by other key actors, too, besides the ones who already belong to the epistemic community of expert planners.

5.3.5 Double Binds in the Economics of Land-Use Planning

Double binds in the economics of land-use planning are recurrent contradictions that economic activity brings to itself in this field. In broader terms, *double binds in economic activity stem from the acquisition of such means of profit-making that threaten the existence of the market from which the profits are drawn*. In the case of land-use planning, this can mean at least three things:

First, profit-making on the local urban environment changes the essential characteristics of the environment by making it lose its overall economic value. Land-use planning is used to organize the urban environment with a view on opportunities for profit-making on the urban market; but the consequences of this planning activity are such functional, social, or ecological problems in the planned area that the area loses its economic attractiveness and thus becomes stagnated as an urban market. The result would be a double bind situation for the local economic actors (local banks, land-owners, building companies, development corporations, etc.) that depend on the economic buoyancy of their local urban environment.

The double binds of the *second* type result from the inappropriate appeals to the ‘free market’ and ‘free competition’ in relation to the specific characteristics of the urban land and real-estate markets. Public sector involvement in market relations is rejected as if competition in the market could thus be freed. It is true that zoning is an instrument that powerfully limits competition in the urban land market. By specifying areas for different uses, it differentiates land properties and thus limits the number of potential sellers and buyers of land. However, irrespective of the effects of zoning, the possibilities to generate true competition in the land and real-estate markets are also otherwise very limited.

Usually there is no competition between the suppliers of land and estates, and the suppliers usually dominate the supply-demand relationships. This structural bias distinguishes these markets from any "normal market". The deregulation of the urban market may actually make the market *less* free. By withdrawing from the land and real-estate market, the public sector abandons its possible role as a balancing economic force. By stabilizing the supply-demand relationships – through regulation, taxation, subsidies, economic transactions, etc. – the public sector is able to improve the functionality of the market, contrary to what neoliberals claim it does. Purposively or not, the latter seem to impose the idea of 'free market' to a wrong market system.

The first two types of double bind in the economics of land-use planning have to do with such profit-making activity that threatens the functionality of the market. In the first case, the local urban environment is changed so that it loses its buoyancy; in the second case, the local urban market is developed into a too biased and selective oligopoly. The *third* type differs from the first two in that it comes about in circumstances where there is no real market potential to begin with. The double bind follows from failures in the attempts to create an urban market "artificially". Cities and Urban Development Corporations may try to attract enterprises and investment into their urban areas by constructing symbolic incentive packages and images of good business climate. It is hoped that a good image would function self-fulfillingly, i.e. that the image of an economically attractive area that initially lacks content would by itself attract investment and thereby bridge the gap between itself and reality. A double bind may follow, however, if the image fails to fulfil its promise, and the appearance of an economically buoyant urban area is revealed to be a mere appearance without content.

In the following subsections we will take a closer look at each type of double bind; the first one being entitled 'Exchange of Exchange Versus Use', the second 'Free Market Versus Balanced Market', and the third 'Image Versus Reality'.

5.3.5.1 *Exchange of Exchange Versus Use*

Our discussion of *social traps* in Chapter 1 showed that individually rational deliberation may lead to situations that are unsustainable collectively and, ultimately, even individually. Individually rational real-estate business may accordingly lead to an accumulation of transactions that bears detrimental consequences for the real-estate market itself. As the market deteriorates, so do individual market actors' opportunities for profit-making. The topic of this subsection is this type of double bind: *self-centred search for profit in real-estate business that, through its collective effects, threatens the existence of the local real-estate market and thereby works against its own purpose*.

The urban strategy of market power is to use up its target areas and to abandon them when they become unproductive for the market power itself. The ultimate double bind of the economic power over the urban market is a situation where there are no areas left to exploit. The land markets are always locally bound (Virtanen 1991, 24). Economic overheating of an area may make the area socially and aesthetically unattractive, ecologically polluted, and nonfunctional in its infrastructural arrangements (Thornley 1991, 223), which means that it will also dry up as a real-estate market. A widely known

example is Houston. Houston is the only large city in the USA without zoning. However, the issue of whether to have zoning or not is kept vivid, as the effects of the laissez-faire approach to urban development have become evident. (*Ibid.*, 102-03.) Traffic congestion, air and water pollution, toxic waste, flooding, poverty, and shortage of parkland have accompanied Houston's emergence as the "capital of the sunbelt". In addition to the visible increases in pollution and congestion, the past environmental sins will entail vast cleanup costs. By 1983, Houston was second only to New York City in per capita bonding liability. It was Feagin who originally listed Houston's ecological problems. (*Ibid.*, 103; Logan & Molotch 1996, 326.) Thornley refers to his observation that, in Houston, the issue of zoning has conventionally been presented in ideological terms as a contest between individualism and socialism with little concern for the practical results and consequences. But the decline in the city's economic prosperity, which took place in the 1980s, places a mirror in front of the proponents of unconstrained market guidance. As a result of reluctant re-evaluation, several ordinances have been passed that provide limited controls over the shape and location of certain developments. (Thornley 1991, 103-04.) "So if Houston is the image of the future there may yet be a role for planning" (*ibid.*, 104). As Logan and Molotch conclude, "[e]nvironmental decline, here as elsewhere, can exacerbate fiscal problems and inequality of life chances among rich and poor" (Logan & Molotch 1996, 326).

During Thatcherism in Great Britain, the newly found Urban Development Corporations worked for material impressiveness in their urban renewal projects, since they were set to operate for a period of only ten years. Due to the pressure for quick results, the UDCs often did not manage to create balanced development within the inner city renewal areas, to say nothing of balance in the relationship between the renewed areas and their surrounding urban areas. There have been deficiencies especially in the traffic arrangements, the most striking case of which is the problematic traffic connection between the London Docklands area and the City. (Jauhainen 1995, 185.)

As it was noted in Chapter 3, exchange values are founded on use values. Exchange value is the transformation of a difference in use value into the code of exchange – money. Exchange value is produced by cultivating an object into a new object with a higher use value, and by further transforming this positive difference in use value into a monetary price of the new object; a price that is higher than the prices labelled to the initial object and the cultivation process (work) together. Accordingly, exchange value is lost by wearing out or breaking objects so that their use value is lost. No one wants to buy a thing that cannot be used. As the use value of the urban environment is destroyed, so is its exchange value. Efforts to gain exchange value lead to double bind situations if they lead to a depreciation of the use values on which the exchange values themselves rely. Above, we discussed the environmental problems that market-led urban development may produce: traffic congestion, lack of greenery, pollution, social anxiety that follows from segregation, public costs on infrastructure, etc. In more general terms, these problems mark a loss in the use value of urban areas. Market-led development may also produce unusable urban spaces by *overdevelopment*, by producing an oversupply of offices, apartments, etc. Their use value becomes depreciated because they lack potential users.

Finance capitalism can be said to have pathological aspects in this sense. It shifts exchange processes to a higher level and purports to transform the exchange values

themselves into new, more abstract exchange values. For finance capitalism, money is a "thing in itself". It creates money markets and makes money out of making money. It is distinguished from *industrial capitalism*, which is more rooted to the original production of exchange value as transformations of increases in use value. Contrary to the latter, finance capitalism undermines the production of exchange value in favour of realizing it. It is also institutionally independent of the industrial production of exchange value. (Harvey 1985, 88-89.) As a result, finance capitalism is outrooted from its ecosystem: the world of use value differences. According to Harvey, the "perpetual tendency to try to realize exchange value without producing it", is the central contradiction of the finance form of capitalism (*ibid.*, 88). "And the tangible manifestations of this central contradiction are writ large in the urban landscapes of the advanced capitalist nations" (*ibid.*). Finance capitalism may bear pathological consequences for itself, since it is not interested in the effects its efforts have on use values, although it depends on them. Similarly, speculative real-estate business does not look beyond shifts in estate property values into the bearings these shifts have on the usefulness of the urban environment. Supply for speculative demand has an inherent tendency to create bubbles of unusable space. What may result is the stagnation of the real-estate market caused by real-estate business itself¹.

Over-reliance on the property industry as a vehicle for stimulating economic growth defeated its own purpose in Great Britain. In the 1980s, developers were actively participating in Urban Development Corporations, where they received direct financial subsidies from the central government and were further assisted by deregulation and arrangements that superseded local political control. Because such projects often had the greatest potential for profit, the developers obviously wanted to build them and sold them further to the government and financiers. But thereby the new office spaces and luxury apartments were not sold to the tenants – the actual users. Thus, an illusory market demand was created that was based on the speculative exchange value of the renewed urban areas and not on the use value determined by the needs of the actual users of those areas. Moreover, during the peak of the real-estate market, when the demand was high, nothing forced the developers to reduce the prices payable by the occupants, although the development costs had been lowered down by governmental involvement. At the same time, as Fainstein observes, no-one was responsible for calculating aggregate growth targets. The public officials claimed that such projections were not their responsibility and asserted that the estimation of demand and the respective shaping of supply was clearly the task of private business. Both parties trusted in the presumed rationality of the market in optimizing the supply-demand relationships. (Fainstein 1997, 134-35.)

Fainstein has analyzed the causes behind collapses in the property market in London and New York. Both cities developed similar institutional structures of public-private governance, and both also made financial and business services the centerpiece of their development and relied on the real-estate business as a method of encouraging and directing them. What resulted was the flooding of the real-estate market with more space than could be absorbed. (*Ibid.*, 134-37.)

¹ This corresponds to the general notion that deep economic crises are not necessarily generated by natural catastrophes and the like, but that these crises are states of affairs, which finance capitalism may bring to itself.

"Since public funds and deregulation underpinned property market activity, however, the refusal of government to limit speculative development represented an irresponsible squandering of public resources. The inability to plan comprehensively meant that too much space for the same kind of use was built on too large a scale, while there was insufficient production of needed housing, public services, and infrastructure." (*Ibid.*, 134-35.)

Harvey's notion of the "perpetual tendency [of finance capitalism] to try to realize exchange value without producing it" holds true here:

"Highly uneven outcomes were foreordained by an economic development strategy that did not stress job training and placement and did not involve aggressive efforts to identify industries with the potential to generate new employment" (*ibid.*, 135).

While the trust in market-led urban strategies shattered in the other western countries in the 1990s, in Finland it was grasped as the last straw to save the cities from their fiscal problems. The master plan was considered too rigid and slow a tool to guide urban development. Master plans were largely replaced by detail plans, which often were not tools of public planning at all, but merely tools for the legal ratification of privately initiated development projects. Markets were given considerable freedom to determine the development directions of high strategic importance. (Jauhiainen 1995, 278-79.) For example, clusters of supermarkets have been allowed to emerge at the crossings of major traffic arteries far from the city centres with little concern for their impact on the volume and arrangement of traffic and the viability of the existing suburban service centres¹. It seems that what nowadays matters for Finnish local governments is to locate private development *somewhere* within their city limits. *Where* within city limits, is a secondary issue.

The myth of the rationality of the market is dangerous when it is associated with *markets of prices*, instead of markets of "goods". Here, price markets are understood in broad terms as markets where *exchange is exchanged* – that is, where profit is made by exchanging a less profitable transaction to a more profitable transaction. A market actor is not interested in producing exchange value but in uplifting a given exchange value by selling further at a price higher than the purchasing price. In finance capitalism, the objects of exchange are not utilities but transactions of utilities. It is exchange value itself that is measured and traded, and one is not interested in measuring and trading use values. It is thus the secondary price market that determines the monetary values of given goods; not the primary market of goods, where the prices of goods would function as more accurate measures of their use value. Here we have a confusion between different levels of communication: use and exchange (Chapter 3). This confusion develops into a pathology when the price market becomes overheated by its own dynamics. During the booms and falls of finance economy, the prices of goods go harshly beyond, above or below, their worth as use objects. In these situations, prices lose their capability to

¹ The new *Land Use and Building Code* poses restrictions on possible locations of new large supermarkets. One is no longer allowed to build a supermarket, with a size of over 2000m², outside central areas (defined in the regional or master plan), unless it is shown a specific place in the detail plan. (Maankäyttö- ja rakennuslaki 132/1999, 58 §, 114 §.)

function as measures of use value – that is, they lose their *metaphoric quality*. The price market depends on the metaphoric quality of prices. A price can retain itself “as a thing in itself” only if it succeeds in maintaining itself as a metaphor of use value. The double binds of the price market are produced by its own mechanism of confusing price for the use object of which the price is a metaphor, while at the same time distorting the capability of prices to fulfil their metaphoric function, which enabled this confusion in the first place.

The real-estate market adopts the character of a price market when it is populated by speculators who buy estates in order to sell them further at higher prices. They observe built environments in terms of differences in their exchange value instead of differences in use value. The market demand based on use is thus replaced by demands based on exchange. When the real-estate market becomes perverted, the prices of estates no longer provide appropriate measures of their use value. The real-estate market as a form of finance capitalism creates its own illusory context for determining the monetary value of estates. The boom of the market widens the gap between the exchange value and the use value of urban space, as it produces less usable spaces and at the same time gives them higher market prices.

It is necessary to distinguish these pathological tendencies that strain the real-estate market. The real-estate market is far from rational, and it is certainly not a proper strategic tool to be used as a guide of urban development. The viability of the market itself requires *economic planning*. Left to function merely as an aggregate of individual investment decisions, the real-estate market is likely to have, sooner or later, pathological consequences both for itself and for urban life in general. What is needed is a collective body, which is responsible for viewing the local economic scene in broader and more general terms. Such a body would, *firstly*, evaluate the rates of market demand for additional built space (office, retail, housing, etc.) in different parts of the city from the *user's* point of view; *secondly*, it would forecast the rates of supply of respective built spaces that result from the accumulation of individual investment decisions; and *thirdly*, it would use subsidies and regulation to redirect the trends of investment decisions to balance the relationship between supply and (user) demand¹. It could be said that such a body would be responsible for *managing the dialectical relationship between use and exchange in the local urban market*.

Probably the most suitable institutional settings for such a body can be provided by the local government. This would entail redefinition of the role of the local government and reformulation of the regulatory tools available for it. One should bear in mind that the

¹ According to Fainstein, “proper economic planning for a city would set levels of desired space for each market sector and each part of the city, with subsidies and regulatory relief geared to these objectives (Fainstein 1997, 137)”. Fainstein further suggests that “[i]mplementation of such a scheme would require forecasting of demand and selection of developers by government. Under such a procedure the public sector virtually guarantees a market for privately developed space; in return the private developer can be required to provide a substantial public benefit in the form of infrastructure provision and low-income housing contributions.” (*Ibid.*) Fainstein bases her argument on the concept of public-private partnership. She claims that, under the conditions of global capitalism, public-private partnerships are inevitable; “what needs to be done is ensure that the public component is more controlling and shares more in the proceeds” (*ibid.*, 140).

real-estate market is not just an abstract market of goods, where the excess goods can simply be removed from the market when the market has become saturated. The excess goods are *built* in the urban environment. True, in some cases unsold estates can be taken out of the real-estate market in abstract terms and kept in store for a new boom in estate prices; but in concrete terms they usually cannot be removed from the built environment. They remain there to affect our urban lives in various (ecological, social, functional) ways. It is therefore never merely a matter of whether the local real-estate market can recover from the investors' mistakes, but whether our *urban lives* can recover. Economic planning should try to generate critical awareness of the consequences of investment decisions for both the real-estate market and the larger system of collective urban life – the system of which the local real-estate market is a subsystem.

It is worth reminding, though, that *economic planning is a contradiction in terms*. 'Planning', in the sense of guiding the market as a whole, is a form of activity that is foreign to the operations of the market itself. Markets are self-organizing *uncontrolled* systems. Planning – even economic planning – therefore belongs to a different system. But, on the other hand, with the advent of finance capitalism, markets have added new levels of abstraction and thereby increased their complexity. It seems that the self-organizing mechanisms of such a market cannot guarantee by themselves that coherence between different levels of the market is maintained. If this analysis is correct, we may postulate that, without the aid of planning, markets, such as the real-estate market, tend to self-organize themselves into crises. With economic planning, we may try to prevent and remedy double binds that the market may bring to itself; but, then again, the inherent tensions within economic planning itself conceal the potential for their own kind of double binds. Here, too, the question is not whether we could get rid of our paradoxes, but whether our paradoxes enable our existence or not.

5.3.5.2 Free Market Versus Balanced Market

The notion of perfect competition¹, where no economic power is used, is an imaginary construct. In reality, no market can reach such an ideal state². A wider concept is the '*free*

¹ The imaginary conditions of perfect competition are conceived to prevail when the following criteria are fulfilled:

1. There are *several sellers and buyers* in the market, so that an individual buyer or seller can have no influence on the market price or on the behaviour of other market actors.
2. The product to be sold is *homogeneous*, so that one unit is completely replaceable by another unit. Then the sellers are identical from the perspective of the buyers; in other words, it makes no difference for the buyer who the product is bought from.
3. Both the sellers and the buyers have *complete information* of the prevailing prices and bids, and *complete freedom* to decide what to buy or sell.
4. All have *free access to the market* as sellers and buyers. All are free to start their own production and no one is prohibited from buying. Accordingly, all are free to depart from the market. (Virtanen 1991, 49.)

² Regardless of the possible public sector control, the land market is far from perfect. According to Pekka V. Virtanen, the land market fails to meet the criteria of perfect competition in the following respects:

1. There are usually few sellers and often also few buyers. A central factor that reduces the number of market actors is the fact that land markets are usually localized. Furthermore, land markets within cities and communes consist of 'submarkets' for different types of land and land uses (business, housing, industry, agriculture, forestry, etc.); and the demand for certain types may be very restricted. Zoning may also efficiently reduce the number of suppliers for certain types of land uses.
2. The traded product is not homogeneous. In fact, each piece of land or estate property is unique, differing from the others at least by its specific geographical location.
3. Knowledge of the prices in relation to the value of the product is often grossly limited. For example, the quality of soil in a piece of land, or the structural condition of an existing building, are factors that are often poorly known at the time of purchase. The available information is often partial, incorrect and outdated. Many of the buyers and sellers are amateurs who enter the market only occasionally; and they therefore do not observe the market keenly. It is often hard even for the professional real-estate brokers to get adequate knowledge, as transactions on certain types of land and estate properties may take place only seldom. A big problem is the uniqueness of the products, which makes it hard to make comparisons between the prices of separate products. The buyers are often not free to decide what and where to buy. For example, one may be compelled to buy a house from an area or region where one's job is. If an existing factory increases its scale of production and thus needs additional land, there is almost no freedom to choose where to buy.

market', which does not entail the realization of the ideal perfect market, but refers to a situation where there is no public sector interference in market behaviour. The market is thus conceived to be "free" of public sector regulation and surveillance. The public sector uses economic power in many ways. In local land-use planning, one of such means is the taxation of land property. Being a major land-owner the local government is also a major supplier of land in the land market. By its own economic transactions, it can thus affect land prices. The public sector also has certain legally ratified privileges to expropriate areas that it considers would serve the public interest when allocated to public use. Zoning reduces competition by reducing the variety of possible land uses. It follows that the variety of possible land-owners that could sell a piece of land for a specific use (various forms of housing, industry, retailing, etc.) is also reduced; and, to some extent, the variety of possible buyers for a piece of land with a specified use is reduced. When planning changes the relationship between sellers and buyers to favour the sellers, land prices increase. There is thus much less supply of land for certain land uses than there is demand. The plan may change the polypolic land market into an oligopoly or an oligopoly into a monopoly. (Virtanen 1991, 61.)

Traditionally, the purpose of the public sector has not been to use its economic power for profit-making purposes¹. The purpose to which it often refers to is the public interest – the concept which neoliberalists often like to downgrade as meaningless (Thornley 1991, 90). In many respects, the use of economic power by the public sector can be seen as necessary to correct the market anomalies that the private sector itself creates by its own use of economic power. Land markets are usually *sellers' markets*: the market is controlled by the suppliers of land and estates (Virtanen 1991, 76). In any "normal" market, according to the mainstream economic theory, an increase in the rate of demand would also lead to an increase in the supply of goods. In the urban land market, this causality is often inverse: when the demand of apartments, for example, increases, fewer apartments are offered for sale. The increase in the demand of land also increases the prices of land; and the land-owners, instead of selling, choose to wait for the prices to increase even more. (*Ibid.*, 80.) The overheating of the local urban market is thus caused artificially. It follows that while there is an acute shortage of apartments and unbuilt land, there is also a high percentage of empty apartments and sites. The land market is therefore not free, but controlled by the supplier-end of the supply-demand relationship.

There are various regulative means by which the public sector may try to make the supply-demand relationship more stable. For example, the taxes of such land property that is kept unused could be made higher (*ibid.*, 100). Section 97 in the Finnish Land-use and Building Code enables Finnish municipalities to use building requests to pressure land-owners to build their unbuilt sites on planned areas (Maankäyttö- ja rakennuslaki

-
4. Free access to the market is not provided even in theory. Only those who own land get to sell it. Land is not the kind of product that you could manufacture. You have to have bought it in order to sell it. Moreover, as land is bound to its geographical location, you cannot take it with you to a "better market" in another location. Zoning limits the amount of possible sellers even more strictly: certain sites that afford certain uses can be supplied only by those, whose land properties have been designated for such uses by zoning. (*Ibid.*, 50-51.)

¹ After the recent development in public management theory towards market-orientatedness this non-profit principle is not clear anymore (Anttiroiko & Valkama 1993, 181).

132/1999). The municipality may also start to sell its own land property at a cheaper price than the private land-owners and thereby normalize the general price level that has risen to an unreasonable level (Virtanen 1991, 102). The municipality's right to expropriate a piece of land for public purposes, at a moderate price, is a means to prevent an excessive rise of land prices when the market has actually become monopolistic in relation to the transaction in question. For example, a privately owned estate may be critically situated in view of the functional placement of a new public road. Being the sole supplier of a property of such essential value to public planning, the land-owner could take gross advantage of the situation. (*Ibid.*, 63.) Here, the municipality's right to expropriate this estate is a means to use economic power against the economic power that is already there due to the zoning decision that had monopolized the market.

In many Finnish communities, the public sector rejects the employment of its right to expropriation of land, and there is hence a widely shared urge to support the freedom of the market. This support for the free market logically also means that monopolistic and oligopolistic trading is rejected. However, the question of compulsory purchase of land by the municipality is usually raised in an unfree market situation where one or few sellers of land may solely set the price for the piece of land in question. By rejecting the public sector's right to expropriation of land, one may unwittingly support the monopoly or oligopoly of sellers. Therefore, in such a situation the freedom of the market can be defended neither by rejecting nor by supporting the public sector expropriation of land. (*Ibid.*) Without awareness of the fact that the market in such situations is usually grossly dominated to begin with, one recurrently contradicts one's own purposes. An impossible paradox results, due to inappropriate advocacy for the 'free market'. The public sector's withdrawal from the local land and real-estate market does not make the market free. On the contrary, it may in some cases make the market even more dominated, as power is transferred to the private sector.

The neoliberalist critique of public sector interference often superficially suggests (or intentionally leads us to assume) that it is the public sector that should solely be blamed for the reductions of market freedom. However, the use of economic power is inherent in the logic of market behaviour itself, not just an outer force that encroaches upon the free market. It is in the interests of profit-making itself to try to reduce competition in the market and to manipulate the existing supply-demand relationship to become favourable to itself. There is an inherent tendency within the market to become monopolized by the same interest that motivated actors to enter the market in the first place. The rate of profits is inversely related to the rate of competition in the market. The less competition, the bigger the profits. In a situation of perfect competition, the relationship between supply and demand would be perfectly stable and no good would be overvalued. There would be no excess surplus over the surplus that results from transactions that provide a more optimal redistribution of utilities between people with different needs. The market would be an ideal plus-sum game of mutual exchange, where each actor would have an equal chance to exchange something he does not need for something he needs, via the code of money. The surplus for each producer would also be clearly proportional to the productive efficiency and innovative capacity of each producer. But the more the market becomes distorted, the more it will provide opportunities for (short-term) profit-making for some actors – and the more there will be those that become excluded from the market altogether.

The powerful market actors of the private sector do not want the urban land market to be free – ‘free’ as in ‘free from their domination’. Their purpose is not the freedom of the market – on the contrary, their aim is to further intensify their own control of the market. They refer to the concept ‘free market’ only rhetorically in an attempt to deprive the public sector from its control devices. The signifying characteristics of a free urban land market are not on their agenda. They are not interested in competing with each other – at least not on land and estate prices. They are not interested in the empowerment of the land and estate consumer, and thus not in balancing the supply-demand relationships on the land and estate market. They are not interested in taking financial responsibility over the domains of the market where there is poor potentiality for profit-making (for example, the costs of infrastructure and investments on derelict areas). They rely on the public sector to create and maintain the necessary conditions for them to operate successfully.

In this sense, market-oriented urban governance, as we know it from the British model, cannot be considered a form of governance that solely relies on the support of the private sector. Instead, we are here dealing with a type of urban governance where the private sector determines the ends, but where the final responsibility is imposed on the public sector. As Jussi S. Jauhiainen notes, the private sector is ready to “lick the cream” off the urban renewal projects, but in case a project should fail, they would be the first to leave the sinking ship. (Jauhiainen 1995, 434.) In the Enterprise Zones, for example, the state promoted strongly the “laissez-faire” approach, where the local market’s independence of state patronage was central, but was also very active in giving hidden support to private capital in the areas in question. In Great Britain, public economic power has been used to support the already excessive economic power that private land-owners, investors and developers possess. For example, the Urban Development Corporations have been given governmental authority to expropriate land in the urban renewal areas where they operate and purport to allure private investment. A basic idea behind leverage planning is to create conditions where urban development and redevelopment can become profitable and attractive business for the private sector. In effect, this usually means the creation of monopolistic or oligopolistic submarkets in given areas, where the developer-supplier or their cartel may freely raise the land and estate prices without competition between suppliers that would bring the prices down.

Paradoxically, the British government has simultaneously criticized planning and created highly interventionist bodies, such as the Urban Development Corporations (Brindley, Rydin & Stoker 1989, 1-2). The policy, promoted as a form of liberalist anti-planning approach, turns out to be a new form of planning. The hegemony of market criteria becomes market regulation in a different guise: regulation of the market to secure profit for the investors.

However, the profitability of the British UDCs has turned out to be highly questionable. The central government’s initial idea concerning the funding of the UDCs was that the UDCs would initially be supported financially by the central government, but that they would later be able to support themselves. At the initial stages of their renewal projects, the UDCs would use government funds to buy land and estates in their target areas, and they would later sell them at a profit with which they could finance a large part of their activities. In reality, this aim ran into several difficulties. For example, the purchase of areas came to be much more expensive than expected, as the sellers were able to negotiate notably high prices for the land they sold. After the purchase, the rapid

increase in land and estate prices stopped and in some cases the price trend even turned downward. The construction and maintenance of infrastructure in the planned areas also proved to be surprisingly expensive; and the expenses were further increased by the high loan interest rate. (Jauhiainen 1995, 186.)

The functionality of the market always entails public regulation – without any outside regulation, the market becomes distorted (Harisalo, Rajala & Ståhlberg 1992, 162-63). Paradoxically, it is the freedom of the market itself that requires regulation. There are underprivileged social groups whose purchasing power in housing and transportation, for example, needs to be guaranteed by extra means. As the market overheats, the threshold to the market platform becomes too high for the less well-to-do. The lack of competition within the market is a potential problem that the market is often poorly equipped to solve by itself. In the urban land and real-estate market, the supply of land is normally not active; there is no pressure to bring the "goods" to the market, and hardly any competition between the private suppliers – as would be the case with any other market for "normally" fabricated goods (Virtanen 1991, 76). Without public sector involvement, the supply side of the market may raise the prices to levels that exclude the less well-off buyers from the market. Public regulation and guidance are needed to guarantee that the land and real-estate market, which is coercive at the outset, does not turn into a tyranny of a few privileged suppliers. By facilitating the access to the market, the public sector does not only serve democracy in the market. First of all, it preserves the functionality of the market as a forum of exchange where different social and societal groups are able to exchange their less usable habitats and work-places into more usable ones by exchanging money, as their needs and life situations change. The basic societal question concerning the urban land and real-estate markets is: "Can they be used in citizens' and other urban actors' attempts to organize their urban activities?"

What we need is a careful analysis of the structure of urban land and real-estate markets. As commodities, land and estates have such specific characteristics that render many of the rules we associate with the behaviour of "normal markets" invalid in the case of land and real-estate markets. It seems clear that the structural biases within the land and real-estate markets themselves refute our attempts to bring these markets close to the signifying aspects of perfect competition. By rejecting public sector involvement in the name of "free market", one succumbs to associating the urban land and real-estate market inappropriately with the "normal market". The withdrawal of the public sector from the urban market is justified as an effort to liberate the market. But this does not necessarily make the urban market more liberated. The public sector's economic power over the urban market may only be replaced by the key private sector actors' heightened economic power over the market.

5.3.5.3 Image Versus Reality

As cities are becoming increasingly dependent on private enterprise, their mutual competition for scarce private investment has also intensified. In the contemporary age of global capitalism, this competition has become international. Cities and regions that face the threat of becoming marginalized in national and/or multinational business are

desperately searching for means to attract investment. Lacking real influence over significant investment decisions, the apparatus of urban economic governance is often under pressure to spectacularize policy (Lovering 1997, 118). Local governments may then be more concerned with arousing attention in the business world than with creating real possibilities for business performance in their areas. Gregory D. Squires uses the notion of 'symbolic incentives'. Symbolic incentives are not of direct economic value. Instead, their main purpose is to function as symbolic assurance that the city offers a good business climate (Squires 1996, 271-72).

But, as Squires observes, when the municipality's economic assets are spent creating an appearance of good business climate, it may be that no money is left for strengthening the base upon which local economic livelihood truly stands. Massive marketing campaigns are launched; routes from airports to conference hotels are "polished" by landscaping to create positive first impressions to business-class visitors; tourist traps are erected with far-fetched connections to local history and traditions. These measures are taken at the expense of making such reforms in public services that would advance the purchasing powers of citizens and enhance their possibilities to get professional education locally, and such reforms that would improve traffic and communications connections and public transportation. Among the key factors that enterprises require from cities offering location are local markets for their products, human resources as means of production, and good traffic and communications connections. Urban policies that lead to development in these domains would turn out to provide "real" incentives for enterprises, instead of image construction projects that remain at the symbolic level. (See *ibid.*)

The intensified competition between cities leads them to invest large sums of money, time and other resources to make themselves noteworthy and attractive to the business world. Each exaggerates the utility of the incentives it has to offer, while the competitive advantage of any one city, provided by any set of subsidies, is quickly lost when other cities match them (*ibid.*, 271). However, the enterprises seeking new location are probably not satisfied with mere first impressions, but demand "more solid evidence" of the excellence of the incentives that cities offer. As the energy in municipalities is spent on image construction, achievements that would function as such evidence may prove to be inadequate. Moreover, by focusing on symbolic strategies, a city may ignore the needs of the enterprises that it already "has". Intensified competition between cities may therefore lead to a double bind where, on the one hand, cities are forced to compete in order to attract private investment, but, on the other hand, the competition itself demands so much energy that it becomes an obstacle to private investment: "If we can't get their attention, we can't get them here; if we can get them here, we shall have nothing to show – because our resources were spent to getting their attention."

5.3.6 Conclusion

There are two types of relationship between roles in the municipal organization. *Firstly*, there are those networks of roles that do not cross epistemic boundaries. Such a network communicates with a single communication mode. Here, each role is a kind of specially inflected microcosm of the whole network. As G. H. Mead has described, each role is

able to adjust itself to every other role and to the whole "game" these roles together are playing (Mead 1962, 151-55, 162). The network of roles is analogous to a football team where each player in his own special position has to know the tasks of every other player in order to be able to perform his own task. As in a football team, the players share the same goal. In land-use planning each subsystem, understood as a network of roles, has its own primary goal: the ability to act in terms of expertise/non-expertise, majority/minority or profit/non-profit distinctions.

The *second* type of relationships between roles is much more complex. There is a functional interdependence that binds the roles together – as there is between expertise, politics and economics in land-use planning; between defining decision-making agendas over development, settling political disputes on them, and mobilizing financially the decisions reached. The formal division of tasks and judicial responsibilities implies that these relationships are simple – that the local public administrator, the councillor, and the private client/investor all play the same game and share a single goal. Despite of their functional interdependence, however, the goals are different. There are several games played within the municipal organization, none of which is sufficient by itself. Each game, in order to be played, requires the interference of other games – but still it is an *interference* of another game, not smooth cooperation.

Imagine a team that consists of a few football players, a few basketball players, and some handball players. The field on which they play is a football field, and the referees are football referees. The football players realise that they cannot win the game by themselves, but need the cooperation of other players. For example, the goalkeeper could be a basketball player. From his point of view, the football is a basketball, and he is indifferent to the football goal that stands behind him. As he reaches for the ball that is kicked towards him, he may or may not let the ball cross the goal line. He may stand on either side of the goal-line because, for him, no such line exists. It is the basketball field that he sees. The double bind of the football player here is that he cannot play football without occasionally giving the ball to a player that is not playing football. He has to cooperate with someone who is not cooperating. And the same goes for the basketball player, too.

Accordingly, the private developer's primary interest is not to implement a given plan, but to make profit. The plan needs to be given to the developer in order to be implemented, but the developer is not out there to implement the plan. The developer needs an official permission for his project from the local government, but the local government is not out there to make profit. The plan is legally ratified, but what does it actually mean? It suggests that, legally, the "ball game" in building a planned site is not about profit-making but about implementing the given plan. But even in the strictest sense, the legally valid plan can only require that "if you build something on this site, build something where one can read signifiers that conform to the given instructions." It is a well-known fact that even the most unambiguous, numerically explicit instructions cannot tie the hands of the developer totally, if it is in his interests to bend them. Forms and titles of spaces and rooms can be manipulated, so that the design for a building appears to fit into the limits of the allowed number of floors and allowed floorspace – but these signifiers of the building volume are intentionally made to indicate a much smaller building that will actually be the result. The purpose of increasing the value of land property is fulfilled, while the signifiers of design instructions are also reproduced.

The second type of relationship between roles is therefore a potential double bind relationship. The functional interdependence between both counterparts of the relationship implies that each counterpart expects the other to perform a task that complements his own task. However, neither counterpart sees himself as a complementary actor to the other counterpart's task, but is motivated to act only in terms of his own task. Both of the parties try to incorporate each other into their own game, and both thus play poorly in each other's game – like the basketball player that is incorporated into the football game as a goalkeeper. The parties try to control each other's actions. They try to force each other to become better players in their own games. But these efforts produce no real success, because both games are rooted in the societal differentiation of function systems. For each function system (game), this differentiation is a higher-order reality; the condition of its own existence. Play within one game cannot make another game nonexistent. Attempts to control players that play poorly (because they play another game) only lead to a situation where the players continue to play poorly, but start to produce signifiers of playing well. Like a basketball player in a football player's clothes, they play one game while appearing to play another. By producing certain key signifiers in his building project, the developer appears to implement the given plan.

As we saw above, most double bind situations in land-use planning result from inter-systemic relationships where the subsystems need each other's support in their own goal-seeking, while they do not share the goals themselves and their goals are not even mutually compatible. These double binds cannot be remedied by attempts to supersede other games, but, instead, by attempting to bring these games together. This would entail the recognition of land-use planning as a system where several communication modes are interlinked and mutually conditioned. The inter-systemic double bind cannot be solved once and for all. It is potentially present in every new planning situation. And in every new planning situation, it has to be turned into new action possibilities, by creating conditions which permit harmonious coexistence of mutually incompatible goals. The inter-systemic double binds of land-use planning stem from the deep tensions of which the modern capitalist society itself is made up: the tensions between the state and the market and between the scientific search for truth and the political demand for alternatives. These tensions pose ever new problems to our society. The handling of these problems should not be understood as a search for an ultimate solution. It should rather be seen as a form of activity, which provides a description of the very existence of our society.

5.4 Strength

"1. We admitted that we were powerless over alcohol – that our lives had become unmanageable.

2. Came to believe that a Power greater than ourselves could restore us to sanity."

– *Alcoholics Anonymous*, Works Publishing, New York, 1939 (quoted in Bateson 1987, 313).

These are the first two of the "Twelve Steps" of Alcoholics Anonymous. According to Bateson, the idea implicit in those first two steps is extraordinary, as it breaks up the disastrous dualism behind the myth of self-power (Bateson 1987, 313). Here is also manifested the spiritual relationship with a greater Power, or God, which the alcoholic may discover through "hitting the bottom" and "surrender" (*ibid.*, 332).

The panic of the alcoholic who has hit the bottom is like the panic of a man who has lost control over his car on an icy road. He suddenly finds that the car is slipping him off the road, regardless of his stepping on the brake. It is the panic of discovering that the system (man plus car plus road) is more powerful than he is (*ibid.*, 330).

"Cybernetics would go somewhat further and recognize that the "self" as ordinarily understood is only a small part of a much larger trial-and-error system which does the thinking, acting, and deciding. This system includes all the informational pathways which are relevant at any given moment to any given decision. The "self" is a false reification of an improperly delimited part of this much larger field of interlocking processes. Cybernetics also recognizes that two or more persons – any group of persons – may together form such a thinking-and-acting system". (*Ibid.*, 331-32.)

A healthy relation between a person and a larger social system is *complementary* – best defined in the words *is part of* (*ibid.*, 333). The power of an individual depends on the cooperative capability of the system of which he is a part. We can say that the system is *strong* if its parts are well organized to act together. Conversely, the system is weak if its parts act poorly together, thus forming a fragile organization. The stronger the system is, the more it is existent; the weaker it is, the less it exists. When the system ceases to exist, so do its parts. In this study, the system of land-use planning is conceived of as an ecology of self-referential subsystems. The strength of this ecology depends on the subsystems' ability to cooperate. Cooperation between subsystems is *reflective cooperation*. Such cooperation is required in inter-systemic double bind situations. It involves the subsystems' mutual recognition of their shared dependence of legitimacy. *Reflective cooperation in search for legitimacy is here called political activity.*

The contradiction in the use of power is that the aim the powerful wants to achieve can, in fact, never be achieved via forcing other people. The outcome is culminated everywhere in the system, as a result of cooperation. Therefore, the outcome is also a culmination of the resistance people express when forced to act against their own will. The oppressor gets only indicators of his goal, shells that pretend to have more content

than they actually do. (Järvillehto 1996, 28.) Power tends to weaken the system wherein it emerges.

It was James P. Carse who introduced the concept of '*strength*' in contrast to power. As those who play the win/lose games of society play to be powerful, those who contribute to the living culture play with strength. (Carse 1986, 30-31.) "Strength is paradoxical. I am not strong because I can force others to do what I wish as a result of my play with them, but because I can allow them to do what they wish in the course of my play with them." (*Ibid.*, 31.) Anyone can be strong, whereas power is always restricted to a relatively small number of selected persons (*ibid.*). Strength comes from one's ability to contribute to the collective activity, to initiate new chains of action, which take a course of their own and open up new possibilities, gathering contributions from other strong individuals.

Due to their capacity to gain consciousness and self-consciousness, human systems generate control systems within systems that are beyond their control. But, because of this same capacity, these systems are not mere control systems but *reflective control systems*. Control is a potential metaphor of strength. A control system within a logically higher system is a paradox, but not necessarily an impossible one. The problem with pathological power is not only that it generates control systems that make their host systems weaker and are thus not metaphoric of strength. The pathology in such control is the *prevention of reflection* – via second-order injunction that does not allow the achievement of meta-level communication. As Wilden says, "double binds are irresolvable only when metacommunication – in logic or in life – is prevented through the way in which allowable communication is framed or punctuated by those with the power to do so" (Wilden 1980, 123). Double bind situations are consequences of technicized control on the basis of inappropriate distinctions. A system's counterproductive control over its environment may become habitual if it involves a mechanism that prevents reflection on the system's deep system/environment controversies – skilled incompetence. The standpoint taken here is *not* that *all* power is bad for the survival of the system. If we discarded all appearances of power, we would no longer be talking about human systems. *What is to be rejected is pathological power that prevents self-reflection.* In the context of land-use planning, this means that we are not to reject the use of power by the subsystems as such, nor the habituation of this power. It means that we are to reject attempts – conscious or unconscious – to prohibit one from exposing this power and from reflecting on it when it begins to have pathological consequences for the subsystem and the system of land-use planning as a whole. No system can manage by reflecting on itself all the time. It has to utilize techniques that necessarily involve habituated efforts to control the environment on the basis of given system/environment distinctions. But techniques may develop obstacles to reflection; and these are what we should be wary of. *In the system of land-use planning, we should be wary of such forms of technical activity by the subsystems that hinder the possible shift to political activity between the subsystems.*

5.4.1 Public Realm

Power games do not belong to the realm of political activity. They are *pre-political* (Arendt 1958, 32). According to Hannah Arendt's political philosophy, the political realm springs up between people when they act together (*ibid.*, 200). In the political realm, people act with - not for or against - other people (*ibid.*, 180-83). This realm is a "space" of mutual appearance where subjects become disclosed through their communication about objects (*ibid.*). It is not a matter of exposing, in Carse's words, "one's unchanging identity, the true self that has always been, but a way of exposing one's ceaseless growth, the dynamic self that has yet to be" (Carse 1986, 18). Power is always used in reference to the given 'self', whereas political activity involves self-reflection. Overcoming the double bind entails the expansion from a narrower 'self' to a larger 'self', to an 'I' that has reached a new capacity to metacommunicate his 'self'. As people appear to each other, exposing their uniqueness, they inescapably create new modes of cooperation, which change the existing constellations of the political body. Therefore, what characterizes political activity is its *inherent unpredictability* (Arendt 1958, 191).

Arendt follows Aristotle, who deemed only two of all the forms of activities in human communities to be political and to constitute the *bios politikos*, namely *action (praxis)* and *speech (lexis)*. Out of them rises the realm of human affairs from which everything merely necessary or useful is strictly excluded. (*Ibid.*, 24-25.) Arendt holds that the nature of issues considered worthy to be debated in the public realm change over time (Arendt 1979, 316). She takes the housing problem as a topical example:

"The social problem is certainly adequate housing. But the question of whether this adequate housing means integration or not is *certainly* a political question. With every one of these questions there is a double face. And one of these faces should not be subject to debate. There shouldn't be any debate about the question that everybody should have decent housing." (*Ibid.*, 317.)¹

Arendt's view of political activity is drastically different from the pluralist position. This becomes evident when we compare Arendt's use of the concept of 'interest' to the pluralist 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.

"Action and speech go on between men, as they are directed toward them, and they retain their agent-revealing capacity even if their content is exclusively "objective," concerned with the matters of the world of things in which men move, which physically lies between them and out of which arise their specific, objective, worldly interests. 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, 182.)

¹ Arendt seems to think that the distinction between issues that are worthy to be talked about in public and issues that are not is an unproblematic one and in itself not a political matter. As we shall see later in this section, this assumption has met some severe criticism.

As the use of force is foreign to Arendt's conception of political activity, nor can interests be seen as vehicles of competition, but become, instead, vehicles of interrelatedness between people. People relate to each other as they, by seeking to persuade¹ each other through public argumentation, reveal their unique perspectives to objects of the shared world. Only by mutually appearing to each other can they create a shared world. According to Arendt, only a shared world can be a real world, whereas the world of force is imaginary.

"Through [speech and action] men distinguish themselves instead of being merely distinct; they are the modes in which human beings appear to each other, not indeed as physical objects, but *qua* men. This appearance, as distinguished from mere bodily existence, rests on initiative, but it is an initiative from which no human being can refrain and still be human. [...] A life without speech and without action [...] is literally dead to the world; it has ceased to be a human life because it is no longer lived among men." (Arendt 1958, 176.)

Aristotle (according to Arendt) saw two orders of existence for every citizen, with the sharp distinction between what is man's own and what is communal. Apart from his private life, man has a sort of second life - *bios politikos* (see *ibid.*, 24). In modern political thought *bios politikos* – or the public realm – hardly exists, as ends are *privatized* to interest groups who *possess* power.

However, no political body acts solely in terms of power – or solely in terms of persuasion, either. Both forms probably exist simultaneously in most western political organizations. The practical operational capacity of these organizations is based on their capability to alternate between control-dominated action and cooperation-dominated action, depending on the nature – the "wickedness" – of the decision-making situation. The political system is often not able to avoid severe inner conflicts, but yet survives without a collapse. The survival of the system usually depends on how well equipped the leading decision-makers are in managing human relationships. They must be able to recognize the critical decision-making situations where they have to retreat from using the power they possess. Not all political problems are disposable via the existing power relations – but, instead, demand *reflective political action*. The empowered ones need courage to give up control and to let themselves be led by the unpredictable stream of dialogical communication wherever it may lead.

These are the moments when we are able to distinguish real statesmen² from narrow-minded players. True statesmen are able to face the threat of losing their personal power,

¹ According to Bernstein, persuasion is the quintessence of political life. "Persuasion is not the manipulation of others by image making. Persuasion involves free open debate among equals in which we seek to form, [...] clarify, and test opinions." (Bernstein 1986, 224.)

² Mead uses the notion 'statesman' in reference to an individual who can put himself into relation with whole groups in the community whose attitudes have not entered into the lives of the others in the community (Mead 1962, 256-57). "The sort of capacity we speak of is in politics the attitude of the statesman who is able to enter into the attitudes of the group and mediate between them by making his own experience universal, so that others can enter into this form of communication through him" (*ibid.*, 257).

priorizing the strength of the community to their personal success. From the point of view of systems theory, they have no other choice – in practice, however, they often do.

5.4.2 *Representation and Democracy*

According to Gustaf von Herten, democracy may come true only if the actors are willing to put aside their personal preferences and think in terms of a larger system (von Herten 1993, 272). But if the participants end up distancing themselves from the immediacy of mutual interaction in the decision-making situation – trying to objectify their attitudes and represent the alleged attitudes of the "public" – the system, the democratic mind, will cease to exist. Only by fully participating as a subject (and being allowed to participate) may each actor take part in the mutual construction of the cooperative relationships which constitute the democratic system. By acting as a representative of a given interest, I cannot *present* my subjectivity.

For example, can "womanness" be represented in the negotiations of a board by including a female member and by expecting her to represent the attitudes and opinions of women? It is naturally an impossible assumption that being a woman is such a generalizable phenomenon that any one woman could sufficiently represent it. But I think that a more severe mistake – and one applicable to the representation of all groups – is that the board is thereby divided into representatives of the two extremes of the distinction man/woman. This is a representation of representation. Thinking and speaking already represent various phenomena as objects, including such objects as 'man' and 'woman'. An effort to think and speak as a 'woman' or a 'man' supposedly thinks and speaks means that one becomes reified from the concreteness of being the personality one is, with its possible "female" and "male" aspects. This is communication from the standpoint of a given identity, where the identity of 'woman' or 'man' is an abstraction of abstractions of activities labelled as "woman-like" or "man-like". Activity with an attitude of this kind cannot reach creativity, since all human creation involves self-creation. It is preoccupied with given distinctions and tries to control them. To represent the distinction man/woman is to become deprived from creativity, which is the most essential characteristic of our being the human beings we are. This is evident when we compare the expression of certain thoughts as they occur to someone in a peculiar situation to the expression of certain thoughts because one imagines this to belong to one's job description.

By disclosing myself, and letting the others become disclosed in me, I can be a part of 'us'. Through my own 'I', I can form a unique relationship to 'us'. Democracy, therefore, should not be understood as a formal political policy or a system of rules, which imposes limits on our political games. Democracy emerges in the actuality of our cooperative action, in our readiness to meet and discover the subjectivity in each other through meeting and discovering the subjectivity in ourselves. It is a way of handling collective affairs which cannot simply be chosen. It has to be *lived*. Only through my political 'I' can the political community become existent. Mead holds that "democracy [...] is an attitude which depends upon the type of self which goes with the universal relations of brotherhood, however that be reached" (Mead 1962, 286). As democracy appears, so

appear the political individual and the political community. Then, the possibilities for personal and collective learning and development are limitless. (See Bernstein 1986, 260-72.)¹

Politics between representatives of interest groups is no longer political activity if the representatives thereby lose their *authenticity*. On the other hand, selection between participants in public decision-making processes is *pragmatically* necessary. Not everyone in the community can be involved. Some must be selected to make decisions that bind all. (Ryynänen 1996, 56.) What I am after are the kind of representatives in public decision-making that do not merely represent given ideas and opinions, but are also able to *present themselves* by producing ideas and opinions in dialogue with others. If an interest group is a *living culture*, then it is embodied in all of its members. Such members do not have to represent their own culture, they already *are* their culture. A truly political actor takes a paradoxical position: he is a *representative* of given initiatives and at the same time *presents himself* as an initiator.

The highest achievement of political activity lies in its self-realization. When human action reaches the quality of political activity, it brings the public realm into existence. It demands the engagement of those who, in Carse's words,

"[...] are political without having a politics, a paradoxical position easily misinterpreted. To have a politics is to have a set of rules by which one attempts to reach a desired end; to be political – in the sense meant here – is to recast rules in the attempt to eliminate all societal ends, that is, to maintain the essential fluidity of human association." (Carse 1986, 39.)

Such political activity shows little interest in politics where freedom is sought within given societal limits. Instead it is concerned with examining, how freely we have decided to place these boundaries around us. It bases itself upon a conviction that political realities do not precede, but follow from the essential fluidity of our humanness (*ibid.*). For ancient Greeks, "to live" was the same as "to take part in communal life" (Friedmann 1987, 337). The question of the public realm begins with the definition of what it means to be human (*ibid.*, 335).

According to Richard J. Bernstein, Arendt has helped us to overcome being mesmerized into thinking that politics only occurs in party bureaucracies, elections, in the power of ruling cliques and interest groups – in what is conventionally called "politics". "For the real hope for the type of politics she describes may arise where it is least expected – in the dynamics of those social movements which spring up outside of the traditional political arena." (Bernstein 1986, 256.)

5.4.3 *Polis*

Strength springs up between people when they act together, thus creating a public realm (see Arendt 1958, 200). The only indispensable material factor in the generation of such

¹ Ramírez distinguishes democracy from parliamentarism, arguing that parliamentarism entails dichotomous logic, whereas democracy requires the transgression of this logic (Ramírez 1995b, 8).

strength is the living together of people. Strength exists as a potentiality for reflective action when people live close together. The foundation of cities, which as city-states have been paradigmatic for all western political organization, is therefore the most essential material prerequisite for the strength of the human activity systems (*ibid.*, 201). According to Arendt's interpretation of Aristotle's political philosophy, man received his *bios politikos* – his second life besides his private life – with the rise of the city-state. Arendt goes on to claim that it is not just Aristotle's opinion or theory, but also a historical fact that the foundation of the *polis* was preceded by the destruction of all organized units resting on kinship (*ibid.*, 24). To be political was to live in a *polis*. In the *polis* – the realm of freedom (*ibid.*, 30) – everything was decided through words and persuasion and not through force and violence. For ancient Greeks, to command people, instead of persuading them, was a prepolitical way of dealing with people, characteristic of life outside the *polis*. Life in the households (*oikos*), where the head of the household ruled his family and slaves, was seen not to belong to the *polis* (*ibid.*, 26-27).

“The polis, properly speaking, is not the city-state in its physical location; it is the organization of the people as it arises out of acting and speaking together, and its true space lies between people living together for this purpose, no matter where they happen to be. [...] It is the space of appearance in the widest sense of the word, namely, the space where I appear to others as others appear to me, where men exist not merely like other living or inanimate things but make their appearance explicitly.” (*Ibid.*, 198-99.)¹

The political life of the *polis* is pursued with the purpose “to live well”. This purpose is not a separate end, but lies within the sheer actuality (*energeia*) of political activity itself. The essence of political life in the *polis* is not the ability to make good decisions for common matters in the *polis*, but the *way* in which decisions are made – the way in which matters are made *common*, and thus the *polis* itself is made and kept existent. It is not the works that it leaves behind, but the actuality of its own performance that is the “work” (Arendt 1958, 206-07).

Arendt holds that, in Greek political philosophy since Democritus and Plato, politics was treated as an *art* among other arts. It was likened to such activities as healing or navigation, where, as well as in a dancer's or play-actor's performance, the “product” is identical with the performing act itself (*ibid.*, 207). As in dancing, where the dance is brought to existence and maintained by the very activity of dancing, the political community is created and maintained by people acting politically.

In ancient Greece, the citizenship in the *polis* was naturally highly restricted. In order to acquire citizenship, one had to fulfil three essential requirements: *gender* (male), *descent* (proper birthright, acceptance into such societal units as family, clan, brotherhood, and tribe), and *property* (ownership or use of land). The domain of equality and democratic governance was restricted to a privileged minority of 10 – 20 percent of the total population of the city-states. When viewed from the perspective of our time, such communal life seems, of course, highly biased and unjust. However, the idea of a self-governing community that emerged with the Greek city-states in the classical period (750 – 350 B.C.) is remarkable. The citizens of the *polis* stood in awe before the law, but

¹ See also Lewis Mumford's social concept of the city (Mumford 1949, 398-403).

they knew that it was they themselves, gathered in an assembly, who had made the law. The *polis* was therefore transparent politically as well as morally. The *polis*, being materially a physical city and mentally a city-state, was of human design, and, as such, it could be improved and perfected. (Friedmann 1987, 337-38.)

5.4.4 *Technical and Political Activity*

As technical activity makes objects, political activity creates *meanings* (see Arendt 1958, 236). What makes an activity political is that its primary focus is not on objects, but on *objects in relation to subjects that give them their meaning*. This activity creates a world where subjects appear to each other as producers of meanings through their communication about objects. It entails that each actor himself acts as a subject: discovers new meanings through his dialogue with other actors. Without such meaningful communication, he would remain as an object – an instrument making an object out of other objects, which all, including himself, have their given purpose not questioned during the process of making. We do not need to be political if we do not have to problematize the ways we conceive of our social problems and conduct our public policies. When we already share an understanding of what our collective problems are, how they should be solved and by whom, we can handle public matters technically. We do not need to address the issues of land-use planning, for example, politically, if we already share a common understanding of what constitutes “the good environment”, and how it can and should be achieved. But when there is obscurity or dispute about this matter – when we need to give and hear explanations why a proposed change in the built environment is good, for what purposes, for what way of living, and for whom – we have to shift from technical activity to political activity.

What issues or types of issue should be defined as political or technical matters in public decision-making is a *political question* (Bernstein 1986, 252). Following Bernstein, this does not mean that everything is political, but that “any problem may become or be transformed into a political issue” (*ibid.* – see also Flyvbjerg 1998, 173). To remove certain issues from the political arena by labelling them technical matters, before offering one the opportunity to debate about this removal, is to use power.

Perhaps the most severe critique on Arendt’s political philosophy centers on this issue (Bernstein 1986, 248-256 – see also Arendt 1979, 315-17). Arendt seems to think that the distinction between issues that are worthy and not worthy of debate in the public realm is relatively clear and unproblematic. Bernstein argues that, in this regard, “her claims are not only misleading but already reflect a hidden political judgment – which like all political judgments should be brought into the open daylight and debated” (Bernstein 1986, 252). Bernstein tackles the question of adequate housing, which, as we saw earlier in this section, is a question Arendt considered not worthy of public consideration:

“What constitutes *adequate* housing? Is not the question of *adequate* housing – as we know from experience – a debatable issue, about which there can be varying opinions and judgments? She goes on to say “With every one of these questions there is a double face. And one of these should not be subject to debate.” But the hard question is – one which Arendt never satisfactorily answers – Who decides this? Who is to

determinate what is and what is not to be debatable in the public arena? This is not an issue to be resolved by the philosopher or the political theorist, but rather by the *participants* in a political community. When Arendt adds, "There shouldn't be any debate about the question that everybody should have decent housing" she trivializes and clouds the entire issue. It is difficult to imagine anyone today, in any political situation and regardless of their "political" persuasion who would not endorse the abstract proposition "everybody should have decent housing." But this is not the locus of any real and serious conflict. Rather, only when we come down to concrete details of what is decent housing, how it is to be financed, how this is to affect the "allocation of resources," what priority this is to have, how this relates to "property rights," do we face genuine issues of social and political conflict." (*Ibid.*, 253.)

The standpoint taken in this study is that political activity goes beyond the distinction between technical and political matters. *The most important function of political activity is to formulate and reformulate distinctions between the types of issue that are to be considered as either technical or political matters.*

City planning as both political and technical activity would constitute the city as a shared mental experience of *polis* by cooperatively organizing the city as a physical structure. Communicating about plans while making them – giving and questioning the reasons for suggestions and decisions; offering new points of view – is what makes planning reflective activity. When the technical aspect of planning is embraced by its political aspect, the legitimacy of its deeds is never taken for granted.

5.4.5 Liberation and Freedom

The recovery of the political community presupposes the recognition of a sphere of common concerns and discourse about them: the public realm (Friedmann 1987, 327). John Friedmann, in his theory of planning, has given the planner the ideological task of strengthening the political community. He holds that such planning is necessarily radical, ending up – sooner or later – in opposition to the state. The practice of radical planning would run up against the regulatory and repressive agencies of the state and its oligarchical tendencies. (*Ibid.*, 305, 407.) Using systems-theoretical concepts we could speak of acting against the state as a control system, in order to strengthen it as an ecology. However, we have to remind ourselves that 'to act against', and 'to oppose', are acting in terms of power (see Carse 1986, 31; Arendt 1958, 201). The public realm is the domain of freedom, but there is no public freedom unless it is based on the exclusion of oppression and a genuine recognition of differences in opinions and aspirations (Bernstein 1986, 247). *Freedom* must be distinguished from *liberation*. The former is associated with strength, the latter with power. Bernstein maintains that

"liberation is always liberation from something – whether it be liberation from the hardships and necessities of life or liberation from oppressive rulers. But freedom does not have this negative connotation. It is a positive worldly achievement of human action and exists only as long as that public space exists in which men debate and participate in determining public affairs." (*Ibid.*, 224-25.)

The public realm cannot be made into a means of liberation. It may only emerge after we are ready to be free *with* each other – not trying to liberate ourselves *from* each other. Liberation is fighting power with power, freedom is breaking out of the oppressor/oppressed duality (Sager 1994, 131-32). Sager asks fairly whether one can be forced to be free (*ibid.*, 132).

To act with strength is to take actions which are not directed to oppose another actor, or a group of actors, but by which one takes an initiative towards mutual recognition of each other as potential partners in reflective cooperation. Thereby one *bypasses* the power game of mutual opposition and works for a recovery of the public realm. A strong planner bypasses the local government as a formal hierarchy of power by bypassing his own position in that hierarchy. By planning cooperatively, he strengthens the local community to manage with the destructive effects of the local bureaucracy.

5.4.6 Conclusion

The discussions on the public realm often fall into the trap of idealism. However, in the context of dialectical systems theory, the public realm as an idea can be associated with pragmatic dilemmas brought about by double bind situations in public decision-making. Here, our review of the public realm is not only concerned with the democratic quality of decision-making, but the question of democracy is linked with the *sheer ability to conduct public decision-making as a form of practice*. Democracy correlates with reflectivity. And no human system can manage without reflectivity. In a double bind situation, the emergence of the public realm is a practical necessity. It emerges in the mutual attempt to transcend the double bind by opening the prevailing pathological planning and decision-making technique to reflective cooperation. In the final part of this book, we shall examine *how* land-use planning practices actually develop in their efforts to overcome their double binds.

PART IV: REFLECTIVE PRACTICE OF LAND-USE PLANNING

In the previous chapter, it was revealed that the double binds and contradictions of land-use planning are often inter-systemic ones. In this part, we shall examine how these are reflected upon in land-use planning. Reflectivity is achieved through two types of learning: expansive learning and reflection-in-action. The function of the first is to resolve double binds that are caused by the inherent dynamics of the subsystems themselves. The function of the second is to postpone the emergence of the inter-systemic double bind. In reflective planning, both types of reflectivity are embraced and developed. It is not merely planning activity where contradictions and double binds in land-use planning get resolved, but also an activity where contradictions and double binds are handled legitimately when they cannot be resolved. Reflective planning is both a search for new action possibilities and a search for legitimacy. Thus, reflective planning is political activity. Rather than a single learning organization, the system of land-use planning is here understood as an ecology of mutually dependent learning organizations. This brings us to the new area of developmental research: the domain of inter-organizational learning.

6 Land-Use Planning as Organizational and Inter-Organizational Learning¹

In the previous chapter, the double binds of land-use planning were discussed. The double binds were classified into five different types in accordance with the three subsystems of land-use planning. Within each subsystem, the double bind is felt as recurring contradictions that strain the subsystem's ability to function. In a double bind situation, a subsystem initiates actions that lead to consequences that run counter to the subsystem's own purposes. But as it was revealed in the previous chapter, the subsystems' double binds are often not their "own" double binds, but *inter-systemic* ones. They usually stem from the subsystems' deeper-level distinctions that concern the ways the subsystems identify themselves through the ways the actors identify their roles within the subsystems. Self-identification is actually an inter-systemic matter. It is a matter of how systems transform each other into their environments. Systems identify themselves by creating boundaries between themselves and their environments. It is the otherness of the environment against which the system identifies itself. In the subsystem of expertise, the expert planner identifies himself against the environment of 'laymen'. In the subsystem of politics, the representatives identify themselves against the environment of the 'public', and the majority identifies itself against the environment of the minority. In the subsystem of economics, the owners of land property identify themselves against the environment of non-owners, and the suppliers of land and estates identify themselves against the environment of buyers. The double binds of land-use planning concern these self-definitions. They reveal the inappropriateness of the prevailing system/environment boundaries that determine the roles of actors in the context of land-use planning: the expert planner loses control of environmental change; the laymen are found to offer valuable knowledge of local conditions; the public disperses into a multitude of varying opinions and demands; the majority shrinks into a powerful clique of few key decision makers; the prevailing property rights and their implications on the roles of land-owners in land-use planning are questioned; buyers vanish from the overheated or unattractive urban market.

¹ Developed from Mäntysalo 1997a and 1997b.

In a double bind situation, action in terms of the given role definitions and role-specific tasks is no longer possible. Instead, the actors need to find a mutual realm where they can critically and creatively redefine their roles and expectations vis-à-vis each other. In the previous chapter, such a realm was called the realm of *political activity*. Political activity is cooperation that breaks free from the existing subsystem/environment boundaries and reaches the level of the ecology of subsystems. It is this domain of inter-systemic cooperation where *reflectivity* takes place.

In this chapter, my purpose is to clarify what actually happens in self-critical and creative reflection on the contradictions and double binds of land-use planning. As an illustrative example, I will use a case taken from a recent urban design education project in the town of Raahe on the Gulf of Bothnia, which was organized by professor Kaj Nyman from the University of Oulu, Department of Architecture, town architect Hilka Aaltonen from Raahe, and myself. In this project, fourth-year students of architecture and geography from the University of Oulu simulated the piecemeal growth of the existing centre of Raahe.

Studies on the reflectivity of planning are often content with stating general ideals of undominated dialogue, mutual trust and respect between the interest groups. As we will find, dialogue, trust and respect are indeed required, at least to some degree, if inter-systemic reflectivity is to be achieved; but the true complexity and dynamics involved are hardly grasped if we were to close our argument here. True, new ideas emerge in an atmosphere supportive for dialogue – but what happens when these ideas and their implications for cooperative action are acted upon and developed further by a growing number of actors within the planning system? It often so happens that the most difficult problems for the planning organization – and, equally, for the study of organizational learning – emerge only *after* this stage of generating new ideas. We are dealing with an expansive process, where an idea generated by a small group is offered, at one level, as a preliminary solution to the current planning problem, and, at another level, as a new model of planning activity itself – involving a redefinition of the division of labour, changes in social attitudes, new ways of conceptualizing tasks, etc. In this expansive phase, new dilemmas and contradictions emerge that demand further learning but also compromising. These contradictions may follow, *firstly*, from cognitive and organizational difficulties to adjust the existing routines and norms to the new activity model, *secondly*, from attempts to resist the changes in mutual power relationships that necessarily ensue from the application of the model, and *thirdly*, from contradictions inherent in the idea itself that are revealed only after further planning.

Yrjö Engeström's theory is exceptional among the theories of organizational learning in that it addresses the aspects and problems involved in the learning processes where preliminary ideas are developed and applied and become an object of power struggles. Below, I will use this as my main theoretical starting-point. But there is still theoretical work to be done. By conceiving land-use planning as reflective interaction by three subsystems – administration, politics and economics – we also approach the realm of *inter-organizational learning*. This is an aspect of social learning theory which, to this

date, is poorly known (see Engeström 1995, 220, 229, 233)¹. Rather than a single learning organization, *the system of land-use planning should be conceived of as an ecology of mutually dependent learning organizations*. It is not the ecology that learns; instead *the ecology is maintained by subsystems that learn together in mutual dialogue*.

6.1 Levels of Learning

According to Bateson, we may distinguish between qualitatively different levels of learning (Bateson 1987, 279–308). In his analysis of learning levels, Bateson applied Russell's Theory of Logical Types (see Chapter 3). In Bateson's theory, learning processes are classified into different types of error correction. These learning types are further arranged into a complex hierarchy of levels. The hierarchy is summarized as follows:

"Zero Learning is characterized by specificity of response, which – right or wrong – is not subject to correction.

Learning I is change in specificity of response by correction of errors of choice within a set of alternatives.

Learning II is change in the process of Learning I, e.g., a corrective change in the set of alternatives from which choice is made, or it is a change in how the sequence of experience is punctuated.

Learning III is change in the process of Learning II, e.g., a corrective change in the system of sets of alternatives from which choice is made. ([T]o demand this level of performance of some men and some mammals is sometimes pathogenic.)

Learning IV would be change in Learning III, but probably does not occur in any adult living organism on this earth. Evolutionary process has, however, created organisms whose ontogeny brings them to Level III. The combination of phylogenesis with ontogenesis, in fact, achieves Level IV." (Bateson 1987, 293.)

Human learning comprises Levels I, II and III. Learning I is problem-solving within the context of a habit or a technical practice. Learning II is acquisition of the context of Learning I. It is *learning to learn* – the formation of a habit of learning. The result of Learning II is an economy of learning acts. It provides a classifying matrix of perceptions in learning situations and directs one's attention. Experiences which repeat themselves in successive situations gradually generate an organization of basic assumptions in an

¹ However, new scientific knowledge of this area may be provided soon, as Engeström and his co-researchers have recently expanded their field of research to address the learning processes of interacting and vaguely bounded activity systems (see Engeström, Engeström & Vähäaho 1999).

actor's mind. This organization is largely unconscious¹. In the case of human Learning II, it is habituation of the way concepts are linked to each other in relationships of reference. It imposes itself on the way the organism acts in new situations². When that which is general in a certain situation already *constitutes* the perception itself, awareness is freed to concentrate on the peculiarities of the situation *within* (and in terms of) that perception. Learning II thus directs perception and equips the perceiver with a certain attitude when he approaches new situations.

Learning II frames the problem to be solved in Learning I. In land-use planning, the product of Learning II consists of the fixed assumptions that constitute one's general approach to planning problematics. In Learning II, the planner habituates into gathering knowledge for certain types of problems from certain types of sources, negotiating them with certain types of people in a certain manner, and justifying certain types of solutions by appealing to certain types of arguments and authorities.

We may also describe Learning II as the formation of an activity system – or a technique. An act of Learning I – as a technical accomplishment of a given task – is simultaneously a unit of Learning II. It affirms the premises behind the task and, therefore, affirms the structure of Learning II. In fact, Learning I and Learning II are often inseparable (Engeström 1987, 145). As the given tasks are repeatedly accomplished in Learning I, a tacit knowledge of *how* to proceed with the tasks is necessarily constructed, too. Land-use planning as a combination of Learning I and Learning II is both *learning to solve an individual problem by planning* and *learning how problems are solved in planning*. These two types of learning are combined even when planning is reduced to simple bargaining on the political and/or economic benefits of land-use decisions. In addition to learning at Level I, which is involved in reaching a specific land-use decision by making a bargain, some learning at Level II takes place in the form of learning *how bargains are made* in land-use planning.

Some learning at Level II takes place when there is an improvement in successive acts of Learning I. Over time, one makes fewer and fewer errors, as one forms an *insight* into the nature of the task. But this is not always the case. An act of Learning I may follow another act of Learning I without any improvement in Learning II (Bateson 1987, 302). Here, one is faced with problems, each of which appears to be so specific that no general lessons on how to deal with them can be drawn. Each new problem is as difficult to solve as were the former ones. The conditions where Learning I takes place without improvement in Learning II in fact characterize double bind situations. In a double bind situation, the habit of learning offered for individual problems is inappropriate. Learning acts follow one another, but no improvement in learning takes place. As an example, take a situation where one cannot learn how to make good bargains between land-use interests. Each bargain is a poor compromise arrived at through mutual use of power, secrecy and deception, so that the contextual conditions for making good bargains grow worse each time. A double bind situation involves a mismatch between Learning I and Learning II.

¹ I am tempted to call this organization of mind 'memory' and to use the concept of 'memory', not as denoting the store of previous cognitions which an organism may recall when it needs to, but, in Järvilehto's sense, as denoting the structure of an organism's activities in its environment at a certain point of its development (Järvilehto 1995, 118; 1994, 154 – see Chapter 2).

² "The concept imposes itself upon us" (Wittgenstein 1981, 318).

This mismatch may result from a profound cultural change in the activity system, so that old learning habits no longer apply in the new learning situations faced by the system. For example, a possible explanation for the double bind situation of not being able to make good bargains between land-use interests could be the ‘communicative turn’ of the planning culture. It would mean that the context: ” Land-use planning is bargaining on political and/or economic benefits on land-use decisions” – learnt through years and decades of a more hierarchic, less open municipal culture – no longer offers an appropriate approach to new planning problems. The planning system faces new attitudes and new actors, which no longer acknowledge the given game and the benefits involved. Bargaining is not, in fact, an adversary process if each actor involved is willing to recognize the given decision-making situation as a bargaining game. Bargaining becomes an adversary process when you communicate openly and your counterpart treats your opinions and demands as stakes to be secretly bargained with. One cannot improve one’s skills in bargaining through repeated experiences of bargaining with ones who are not bargaining. On the contrary, the bargainer’s possibilities to act become weaker and weaker, as he loses the legitimacy of his actions.

In such a situation, learning at Level III on the habitually imposed learning context (bargaining game) and on the identity of the learner (bargainer) is required.

The individual is driven to Level III by *double bind situations* at Level II. A double bind situation occurs when an individual is faced with contradictory messages and unable to comment on these contradictions. In other words, he cannot make a metacommunicative statement about the incompatible contexts which lie behind contradictory messages (*ibid.*, 208–09). Learning III is positive reinforcement of resolving these contraries (*ibid.*, 303–05). According to Bateson, in Learning III a person might, for example, learn to change habits and form new ones; he might learn to close for himself the ”loopholes” which would allow him to avoid Learning III; he might learn that he is a creature which can and does unconsciously achieve Learning II; and he might learn to limit or direct his Learning II (*ibid.*, 303–04).

Engeström stresses the *collective nature* of Learning III – as the outcome and form of typically human development (Engeström 1987, 158). Thus, social cooperation is essential in transcending the limits of Learning II and in establishing a qualitatively higher type of activity – an activity with the motive of resolving the contradictions at Level II. Engeström calls it *learning activity*¹.

One may *react* to changes in the built environment as perceived in land-use planning activity, and to changes in power relationships that determine the possibilities for reactivity itself – but to act successfully upon the double binds of planning activity entails *reflection*. Learning I and Learning II are reactive types of learning (*ibid.*, 2, 155, 158); *Learning III has to do with improving reflection*. Its object is not to solve a problem within an activity system (as in Learning I), nor to shape an activity system (as in Learning II), but the *historical development of activity systems*².

¹ A property of Learning III (Engeström 1987, 151) which Engeström treats as synonymous to learning activity (*ibid.*, 161).

² ”Learning activity makes [...] the historical development of activity systems its object” (Engeström 1987, 125).

The relationship between Learning II and Learning III is similar to that between Learning I and Learning II, but on a higher contextual level. Put simply, if Learning II is learning of the contexts of Learning I, then Learning III is learning of the contexts of those contexts (Bateson 1987, 304). Logically, some learning at Level III takes place when there is an improvement in reflecting on given contexts of Learning I and in reorganizing them into new more appropriate ones. But, as we may shift from one act of Learning I to another without any achievement of Learning II, we may also shift from one context of Learning I (i.e. Learning II) to another without any achievement of Learning III. This means that reflection on a double bind situation would not lead to improvement in the system's capability to handle the next potential double bind situation. The system does not learn to be more alert and wary of the dangers involved in routinization, but finds itself having been led by Learning II into a new double bind situation. True achievement in Learning III would be such continual reflectivity with which the system could critically anticipate and creatively avoid double bind situations altogether. It means that *the system learns to recognize and resolve its contradictions even before they develop into double bind situations*.

A double bind is an impossible paradox. Although Learning III is about getting rid of double binds, it is not the same as getting rid of paradoxes. All distinctions and identities are paradoxes. Learning III is about learning to deconstruct these paradoxes in such a way that our paradoxical existence becomes possible again. Actually, Learning III is learning how to turn impossible paradoxes into possible paradoxes – and there is no end to this movement as long as there is human existence.

Learning III is especially critical in activity systems, such as the system of land-use planning, which comprises multiple activity systems within itself. Here we are not dealing with only one habit of organizational learning at a time, but *several simultaneously existing habits*. If we had only one organizational routine that has fallen into a double bind situation, then a successful single episode of reflection on that routine might promise the organization a number of "peaceful" years, maybe even decades. Then, for a single organization, the cycle from one double bind situation to the next is measured in several years. But the case is different for an organization that is rather an ecology of many organizations. Being autopoietic and mutually dependent at the same time, the subsystems of land-use planning develop double binds that are both their own and mutually shared at the same time. This means that a double bind situation in one subsystem is likely to change the conditions for other subsystems, so that they may also fall into double bind situations. Accordingly, reflection by one subsystem on its own habits may reveal a need for the other subsystems to reflect on their habits, too. If the political decision makers, for example, were to reflect on their corporatist style of decision making by opening the decision making process more to the public eye and new unestablished interests and actors, this would probably also involve a change in the boundary between the realm of the urban market and its environment, and a change in the boundary between the realm of planning expertise and its environment. In effect, the habits of making profits on the urban market and the habits of producing expert knowledge for planning would have to change, too. The need for reflectivity is thus much more frequent in inter-organizational learning than in organizational learning.

Moreover, in their pursuit for their own functionally differing goals, the subsystems pose ever new problems to each other. In a very fundamental sense, the subsystems of

land-use planning are in a continuous unsettled disharmony – as are the three basic attributes of the modern society – democracy, capitalism and advanced technology – themselves¹. When subsystems reflect on themselves they cannot reflect on contradictions that strain their mutual relationships. Reflection within a system cannot reach inter-systemic relationships because the latter are of a higher logical type. Instead of a long-term resolution, reflection by the subsystems of land-use planning seems rather to be a temporary restoration of balance between the subsystems. In this regard, *reflection serves to prolong the inherently contradictory existence of the land-use planning system*.

There are, in fact, *two kinds* of reflectivity that are essential for the system of land-use planning. The function of the *first* is to resolve double binds that are caused by the inherent dynamics of the subsystems themselves. Within each subsystem, these double binds have developed during a long course of time. The function of the *second* is to postpone the emergence of the higher-order double bind – the double bind of the system of land-use planning as an ecology, where mutually incompatible subsystems recurrently contradict each other. I call the first, after Engeström (1987), *expansive learning*, and the second, after Schön (1983), *reflection-in-action*.

In Chapter 5, I listed five different types of double bind that may emerge in the system of land-use planning. Three of these – double binds in the *politics*, double binds in the *expertise* and double binds in the *economics* of land-use planning – are the kind of double binds that are caused by the inherent dynamics of the subsystems themselves. Here, the habit of practising politicized/expert/economized planning itself threatens to render the continuation of politicized/expert/economized planning impossible. These double binds are resolvable by expansive learning. For example, in administrative work the double bind of unmanageable comprehensiveness inherent in the synoptic method was resolved by the introduction of incremental analysis. The latter's short-sightedness and unresponsiveness to big changes caused another double bind, which, in turn, was resolved by the method of mixed-scanning. These are double binds that are caused by the subsystem of administrative expertise itself, and they can therefore be corrected by the subsystem's own expansive learning.

But the two remaining types of double bind listed in Chapter 5 – double binds in the *political expertise* and double binds in the *political economics* of land-use planning – are *inter-systemic* double binds that cannot be corrected by subsystemic expansive learning. These are double binds of a higher logical type, since they have to do with contradictions *between* the subsystems of land-use planning and, at the same time, *between* the level of the subsystem and its ecosystem. The contradiction between politics and expertise cannot be resolved by expansive learning within the subsystem of expertise. The tension between evaluating planning decisions either on the basis of their democratic validity or their professional (or scientific) validity will remain. What we can do in the face of an inter-systemic contradiction is to attempt at reflection-in-action. As understood in this study, its function is to create *mutual awareness of the existence of differing validity criteria*, to bring out *mutual recognition of their right to exist*, and to enable the formulation of decisions that make possible *simultaneous fulfilment of the demands set on both of them*.

¹ According to Engeström, each specific activity system comprises within itself the general contradictions and development possibilities that characterize the whole society and culture (Engeström 1995, 234).

Here, reflection-in-action does not resolve the contradiction in the system of land-use planning, but, instead, enables the continuation of its contradictory existence. Similarly, the contradiction between politics and economics cannot be a subject of reflection-in-action by the subsystem of economics in land-use planning. Reflection-in-action is required to enable the making of decisions that are, at the same time, both politically legitimate and economically profitable – and to enable mutual acknowledgement that the search for such decisions is justified and worthwhile. As the contradiction remains, there is also a never-ending need for reflection-in-action. A creative solution arrived at in the current planning task, which enabled the harmonization of mutually incompatible planning criteria, may not be applicable in the next planning task. Rather, a new creative solution in a new planning situation is required to make the harmonization of planning criteria, which remain profoundly incompatible, possible *again*.

Take, for example, a site on which the original building has burnt down in the historical part of the town centre. The site conceals a lot of land value development potential, which the present owner-developer wants to capitalize by building the site with a considerably higher efficiency than the surrounding historical area has been built. The owner-developer's plans become public. The local resident and culture associations file their protests, angry letters to the editor appear in the local newspaper, and the planners and councilmen receive aggressive phone calls. The local politicians are caught in a trap: on the one hand they do not want to act against the 'public opinion', but on the other hand they would like to conform to the owner-developer's demands, since the latter is an important tax-payer and contributes to the local economy and employment. For architectural-aesthetic reasons, the planner in charge objects to the increase in efficiency on the site, claiming that it would fragment the townscape in the area. Personally, the hired architect-designer agrees with the planner, but a design for the owner-developer's program is what he has been hired to do, and this approach is what pays his bill.

Imagine that an open dialogical design process between the active participants from each side is held and the process turns out to be successful. The architect and the planner together manage to formulate a design solution for the new building where the primary demands of each counterpart are simultaneously met. The most central characteristic of this solution is to place building masses of higher efficiency at the back of the site, and to place a smaller building mass that has dimensions similar to the surrounding historical buildings in line with the existing frontage. Although built much more efficiently than previously, the site would not, according to the architect's and planner's proposal, violate the existing townscape when viewed from the street. The higher mass at the back of the site would only be visible from a distance, and this factor would not be considered decisive.

Here the design solution enabled reconciliation between the conflicting demands, but nothing in this solution indicates a longer consensus between the fundamentally different attitudes towards planning and the built environment. The search for economic profit on local land-use decisions – as well as the search for an architectural-aesthetic townscape, political justification and a sense of locality – will continue. Each of these pursuits follows its own distinctive logic, and in some later planning task they are liable to actualize in a new conflict of interests. The consensus in the above example is therefore *task-specific*.

Reflection-in-action is bound to be more or less *local*. Unlike expansive learning, which resolves a subsystem's own pathologies, it does not seem to have long-term beneficial consequences for the subsystem. Reflection-in-action can only provide temporary relief for the subsystem (expertise, economics) that continuously has to seek ways to legitimize its existence, although legitimacy is not its goal. Instead of a single instance of reflection, legitimate production of expert knowledge and legitimate production of profit require continuous reflectivity in the context of land-use planning. Once their dependence on legitimacy is revealed, planning as expertise and planning as economics can be practiced only as *reflective practices*.

But even so, there is an aspect in reflection-in-action that contributes to reflectivity in a longer term. As a *social experience*, one instance of planning dialogue may give mutual confidence that it is possible to find situated reconciliation between the incompatible attitudes, and that the counterparts are willing to take efforts in search for it. *This* is the long-term effect of task-specific reflection on an inter-systemic contradiction: not consensus between the subsystems, but an opening for *a planning practice as a continuous reflective search for their coexistence*.

It is essential for the successful handling of planning problems that the subsystems learn to reflect together and develop reflective practices. There are recurring contradictions which can be resolved, and there are recurring contradictions which people just have to put up with. We will return to the distinction between expansive learning and reflection-in-action at the end of this chapter.

6.2 Problem of the Problem

As it is maintained by Peter L. Berger and Thomas Luckmann (1994), a human individual constructs his consciousness about reality in interaction with his social environment. Järvillehto goes further: consciousness *is* social cooperation (Järvillehto 1995, 23, 128). Still, consciousness is uniquely constructed in every individual. Social cooperation is reproduced and renewed as new individuals construct for themselves the roles and concepts that enable them to take part in this cooperation. Social structures are "personified" in individuals, which maintain and elaborate them. At the same time, individuals get "socialized" as they develop an awareness of themselves in terms of social cooperation; as a role in the social pattern. Within the cooperative field, they "step out of themselves", so to speak, and objectify their environment, including themselves¹. The environment is "punctuated" by common concepts peculiar to the patterns of social cooperation.

In modern division of labour, we may distinguish between various professional communities with their own social structures of cooperation. Each forms its own activity system, which sets its ends and relative means in terms of a specifically punctuated environment. Ends and means are manifested in the definition of problems. A definition of a problem always takes place in some cooperative context, where a solution is sought.

¹ "The self, as that which can be an object to itself, is essentially a social structure, and it arises in social experience" (Mead 1962, 140 – see also Järvillehto 1995, 126, 132–34).

Hence, the solution is already embedded in the definition of the problem as a set of context-bound alternative means for action.¹

Every subculture has its own contexts of goal-setting. Therefore, cooperation between these subcultures – as in transcultural planning situations – is difficult to achieve. Before a planning problem can be tackled, the definition of the problem itself necessarily has to be problematized (see Forester 1989, 124). A description of this point is offered by Donald Schön:

”When ends are conflicting and confused, there is as yet no ”problem” to solve [...]. It is rather through the non-technical process of framing the problematic situation that we may organize both the ends to be achieved and the possible means of achieving them.

Similarly, when there are conflicting paradigms of professional practice, such as we find in the pluralism of psychiatry, social work, or town planning, there is no clearly established context for the use of technique. There is contention over multiple ways of framing the practice role, each of which entrains a distinctive approach to problem setting and solving.” (Schön 1983, 41.)

Horst Rittel and Melvin Webber call the problems encountered in planning ”wicked”, in contradistinction to ”tame” problems:

”The kinds of problems that planners deal with – societal problems – are inherently different from the problems that scientists and perhaps some classes of engineers deal with. Planning problems are inherently wicked. [...] The problems that scientists and engineers have usually focused upon are mostly ”tame” or ”benign” ones.” (Rittel & Webber 1973, 160.)

According to Rittel and Webber, ”[f]or any given tame problem, an exhaustive formulation can be stated containing all the information the problem-solver needs for understanding and solving the problem – provided he knows his ”art”, of course” (*ibid.*, 161).

”This is not possible with wicked-problems. The information needed to *understand* the problem depends upon one’s idea for *solving* it. That is to say: in order to *describe* a wicked-problem in sufficient detail, one has to develop an exhaustive inventory of all conceivable *solutions* ahead of time. The reason is that every question asking for additional information depends upon the understanding of the problem – and its resolution – at that time. Problem understanding and problem resolution are coincident to each other. Therefore, in order to anticipate all questions (in order to anticipate all

¹ “As the saying truly goes, a question well put is half answered. In fact, we know what the problem *exactly* is simultaneously with finding a way out and getting it resolved. Problem and solution stand out *completely* at the same time.” (Dewey 1960, 108.) ”[I]f a problem is recognized, the implication is that there must be a goal – or at least, an acceptable situation which implies a goal: Problem = Goal + Impediment to that Goal” (Chadwick 1978, 124). ”[I]n planning, a ‘problem definition’ in the spirit of Popper’s teaching is really a definition of the decision-situation [...]” (Faludi 1986, 89).

information required for resolution ahead of time), knowledge of all conceivable solutions is required. [...] To find the problem is thus the same thing as finding the solution; the problem can't be defined until the solution has been found.

The formulation of a wicked problem *is* the problem!" (*Ibid.*)

Problem *solving* and problem *setting* are thus coincident in planning. In contrast to problem solving, problem setting is non-technical in nature (Fischer 1990, 371). Frank Fischer describes the difference between the two as follows:

"Whereas [problem solving] involves technical knowledge and skills, such as those typically associated with managerial and policy science methodologies (cost-benefit analysis, systems analysis, program evaluation, and so on), problem *setting* is fundamentally normative and qualitative. In technical analysis, values and goals are taken as given; in problem setting, analysis focuses on their identification and discovery. Indeed, at times it involves the consensual shaping of new value orientations." (*Ibid.*)

Coping with planning problems is thus necessarily both technical *and* political activity. Such activity characterizes the communicative approach to knowledge production. According to Patsy Healey, the communicative approach

"maintains that knowledge is not pre-formulated but is specifically created anew in our communication through exchanging perceptions and understandings and through drawing on the stock of life experience and previously consolidated cultural and moral knowledge available to participants. We cannot, therefore, predefine a set of tasks which planning must address, since these must be specifically discovered, learnt about and understood through inter-communicative processes. [...] This shifts attention from the substantive purposes of environmental planning to the practices by which purposes are established, actions identified and followed through." (Healey 1992, 153–54.)

Indeed, such a communicative planning process cannot be based on a method where the planning problem is set or understood first, albeit politically, and then solved technically. "For wicked problems [...] this type of scheme does not work. One cannot understand the problem without knowing about its context [...]" (Rittel & Webber 1973, 162.) The context of the problem is learnt through attempts to solve the problem. Only by dealing with the problem one may seek answers to the basic question: "What is the problem?" By solving, one finds out *what* one is solving.¹

According to John Forester, planning staffs cannot derive politically strategic solutions in the same way as engineers solve equations.

"Rather, they need to interpret situations and create plausible ideas about just what the problem "ought to be taken as". Such problem formulating, problem creating, sets the stage for action: phone the developer, send the plans to architectural staff, involve the neighborhood group. All this depends upon what the planners take the problem to be, what they "make of it" in the organizational and political settings within which they

¹ "Att designa och skapa är att handla, d.v.s. inte att först välja en utstakad väg och sedan vandra den, utan att skapa själva vägen under vandrandet" (Ramírez 1993, 47).

work. Less problem solvers, planning analysts might rather be problem makers (constructors)!" (Forester 1993, 21-22.)

Characteristically, planning problems require "higher" learning than achieved at Levels I and II. Learning I and Learning II are learning in the sense of problem-solving: solving as learning which draws on the given context that presents the individual with a preset problem as a learning task. (Engeström 1987, 1-2, 150, 155, 158.) Situations where the problem or the task itself must be created require learning at Level III (*ibid.*, 150).

According to Rittel & Webber, this is where the classical systems approach goes wrong. The first-generation systems approach saw planning projects as organizable into distinct phases: "understand the problems or the mission", "gather information", "analyze information", "synthesize information and wait for a creative leap", "work out a solution". Rittel and Webber argue that this conception is inadequate for dealing with wicked problems. (Rittel & Webber 1973, 162.) "Approaches of the "second generation" should be based on a model of planning as an argumentative process in the course of which an image of the problem and of the solution emerges gradually among the participants, as a product of incessant judgment, subjected to critical argument" (*ibid.*).

This criticism coincides with the view of the system of land-use planning *not* as a single system, but as an ecology of subsystems. The question is then not merely of how the system could learn to redirect its goal in a severe problem situation – but *how the subsystems could learn to redirect their goals together, so that the ecology of multiple goals could be maintained*. Multiple goals as an inherent characteristic of the system of land-use planning pose ever new problems to the system; but, being an inherent characteristic of the system, the circumstance of multiple goals itself is not a 'problem' that could be 'solved'. Friedmann observes correctly that, in planning, a "problem goes away not because it has been solved but because another problem has replaced it" (Friedmann 1987, 218). As Rittel and Webber say: "Social problems are never solved. At best, they are only re-solved – over and over again." (Rittel & Webber 1973, 160.) Solutions to planning problems are always temporary solutions; and consensus upon the attained solution is always temporary, too.

The question is *how* planning could problematize its purposes and still generate purposive activity. Such problematizing would be a process that, according to Fischer, would "help people codify into symbols an integrated picture or story of reality, which, in the course of its development, can generate a critical consciousness capable of empowering them to alter their relations to both the physical and the social worlds" (Fischer 1990, 370). Here, the professional planner occupies a crucial position. He cannot escape his decisive role in shaping attention. But attention can be shaped by either respecting or ignoring the political nature of the planning analysis. It may involve questioning of the planning problem with an approach that invites new participants, anticipates concern and possible opposition. On the other hand, if formulated by using the specialized concepts of expert language, questioning is more likely to discourage participation. (Forester 1993, 49-50.)

Planning projects as processes where planning problems are solved and their contexts simultaneously framed could be understood in Forester's sense as processes of *making sense together* in practical conversation (Forester 1989, 125). The planning situation arises from the 'social ecosystem' of planning communication within and between groups

of participants. In this ecosystem the '*physical environment*' is transformed by various modes of communication into the object of planning. As there are different communication modes occupying the ecosystem of planning, there are also differing definitions of the object of planning – competing, coexisting, and possibly seeking shared contexts upon which they could become mutually proportionate. While the object itself – the need state of the physical environment and the desires for its future state – is being framed, so also the limits and possibilities for transcultural cooperation between the participants are being framed. The planning communication consistently aims at finding a practical design solution: the developer's designs are viewed, arguments for and against heard, technological and economic possibilities examined, limitations of local building instructions and zoning law disseminated, etc. But while this is being done, the roles of the actors in planning cooperation and the concepts to be used in that cooperation are also being sought. While designs are presented to a larger public and design proposals further discussed, attempts to "translate" the language of designing to everyday language are made. The reasoning behind loose arguments is elaborated. Depending on what is said and how it is said, the architect or planner may come to adopt a new role, and thus be taken as "thoughtful", "pushy", "aggressive", "astute", "muddle-headed" or "professional", and so on (*ibid.*, 130). The role of the planner vis-à-vis the other participants is being shaped mutually while the planner talks about the object of planning. As Forester points out, this is not mere "talk", but rather a mode of interaction where social relationships are formed (Forester 1993, 49).

What are the political, professional, or economic aspects that lie behind an argument? What are the real motives behind standpoints and opinions (Sager 1994, 165–66)? Is a person speaking out his own preferences or just mediating the voice of his superiors in the hierarchy of local government? What is the difference between a person's formal position in the municipality and his real influence? Is a developer speaking for his project in reference to its use value, while his own motives concentrate on the increase of its economic exchange value? Whom is a representative of a resident association actually referring to when he reports what "we" demand? What is the local policy in interpreting strategic decisions, the zoning law and other local building instructions – or is the policy intentionally kept fluid?

"When form-giving is understood more as an activity of making sense together, it can be situated in a world where social meaning is a perpetual practical accomplishment. Designing takes place in institutional settings where rationality is precarious at best, conflict abounds, and relations of power shape what is feasible, desirable, and at times even imaginable. By recognizing design practices as conversational processes of making sense together, designers can become alert to the social dimensions of design processes, including organizational, institutional, and political-economic influences that they will face – necessarily, if also unhappily at times – in everyday practice." (Forester 1989, 120–21.)

To illustrate problem framing in planning communication, or in "designing as making sense together", I will now discuss a case project taken from the recent urban design education project already briefly mentioned. In the educational project, twenty-five students of architecture and three students of geography practised project-based planning of the central areas and sites of Raahe communicatively, i.e. together with some local

politicians, municipal planners and other administrators, land-owners, developers, representatives of local associations, and a few residents. The number and composition of local participants and represented organizations changed from one design project to the next. Those who participated in every design project were the chairman of the municipal executive board, the town architect, the planning technician from the town planning section, and the chairman of the downtown resident association. The progress of the educational project from September 1995 till April 1996 was followed by local and regional newspapers, which published short articles¹ of the students' designs and meetings held in Raahe Town Hall by the students and local participants.

The students were divided into three architect groups and one planner group, the size of each group being seven persons. As the educational project advanced, the architect groups were given altogether twelve design projects, which mostly had their basis in real ongoing projects or acute land-use planning dilemmas. The design process in each project took approximately 3-4 weeks. Three projects were prepared by the three architect groups simultaneously. Each architect group was assigned one design project at a time, and by the end of the educational project, every architect group had made three different project designs. The architect groups consulted real developers and land-owners, who were also present in the meetings where their projects were discussed. The progress of each project was followed in four design meetings: the meeting where the design task was given, two intermediate meetings (one in Raahe and one in Oulu) where the design sketches were presented, discussed and criticized, and the meeting where the final decision on the project was made. The making of this final decision was assigned to the planner group. The planner group worked without an overall plan but tried to influence the designing of separate projects and tried to advocate their larger-scale environmental concerns. They also sought, in a communicative fashion, ways to adjust the more private interests of the developers and land-owners to the larger sphere of interests.

I participated in the education project both as a researcher and as a teacher. I had an active role in arranging the general framework of the project, and I also contributed to the critique sessions between teachers and students where the teachers evaluated the students' designs. In design meetings with people from Raahe I concentrated on taking notes of discussions on students' sketches and designs.

At the beginning of the educational project, a wooden model of the centre of Raahe, in a scale of 1:1000, was made, to simulate the gradual development of the built environment over the period from 1996 to 2012. Project plans approved by the planner group were "implemented" by adding new wooden and cardboard buildings and other structures to the miniature model. The first three projects were scheduled to be designed and implemented between 1996 and 2000, the next three between 2000 and 2004, the next between 2004 and 2008, and the three final ones between 2008 and 2012. It took 3-4 weeks in our educational project to "live through" each four-year period. The student groups shifted roles, so that each group in turn took the role of the planner group for one period.

One of the twelve projects was a design task for an open-air summer theatre. The task was given, the different stages and variations of the design presented and evaluated, and

¹ Two in the regional newspaper *Kaleva*, nine in the local newspaper *Raahen seutu*, and one in the personnel magazine of Raahe municipality *Pekan Pooki*.

the final design solutions made in design meetings attended by the students and their teachers and local people from Raahe¹. The theatre was to be situated in the park area between the sea and the town centre (see area A in Figure 19). During the discussions related to the designing of the summer theatre it appeared that the building was expected also to fulfil such functional demands that are not associated with the normal function of summer theatres. There were also people who were unwilling to refer to the project by the concept 'theatre' and emphasized its flexibility for diverse uses². Along with plays and other traditional theatre performances, the theatre and its immediate vicinity were expected to accommodate mass happenings, such as jazz and rock concerts and annual festivals. These different functions seemed mutually incompatible. Firstly, there was the functional problem of how the building could meet the demands of visibility and audibility in both the case of performing plays for an audience of 150-300 people and the case of having concerts and festivals for an audience of over one thousand people. On the other hand, there was the problem of protecting the downtown residents nearby from the noise produced in rock and jazz concerts. There were also the problems of how to fence the auditorium area with such a high variation in the number of spectators, and how to protect the auditorium and the stage from the sea winds.

While the summer theatre was offered as a design task to our educational project, the location and budgeting of the "real" summer theatre were being decided in the governmental organs of the municipality, too. It became evident to the educational project that there was political controversy over the "real" summer theatre project. Recently, the town council had decided between two alternative locations for the summer theatre: the nearby island *Maafantti* (location B in Figure 19) and the above mentioned park area on the mainland. The island was connected by a bridge to the mainland, but not directly to the town centre. By a vote of 27–15, the mainland alternative was chosen. The town council thus overruled the earlier decision made by the subordinate municipal executive board, which had voted 7–3 in favour of the island³. During the educational project, the funding for the "real" summer theatre was postponed. This, along with the dispute in local government concerning the location, created a fear of a slow burial of the whole project⁴. Still, as the Head of the Culture Department stressed to us, the need for the theatre was urgent.

¹ The first design meeting, where the summer theatre design task was discussed, was held on December 5th, 1995, the second on January 16th, 1996 (in between was a four-week break between semesters in the curriculum), the third on January 23rd, 1996, and the fourth on January 30th, 1996. The third design meeting was held in Oulu at the University of Oulu, Department of Architecture, the other three were held in Raahe Town Hall.

² "This is a multi-functional stage [monikäyttöinen esiintymislava]." "'Summer theatre' as a name is misleading; we should call it 'venue-centre' [tapahtumakeskus]." – Comments made by local participants in the third design meeting on January 23rd, 1996.

³ Raahen Kaupunki, Kaupunginvaltuusto, Pöytäkirja n:o 12/1995.

⁴ "The decision to locate the summer theatre to the mainland will probably lead to a slow burial of the project" – a remark made by the town architect in the second design meeting on January 16th, 1996. The Head of the Culture Department continued: "For the part of financing, the summer theatre seems to have sunk to the sea. I believe that the summer theatre will eventually be built to Maafantti."

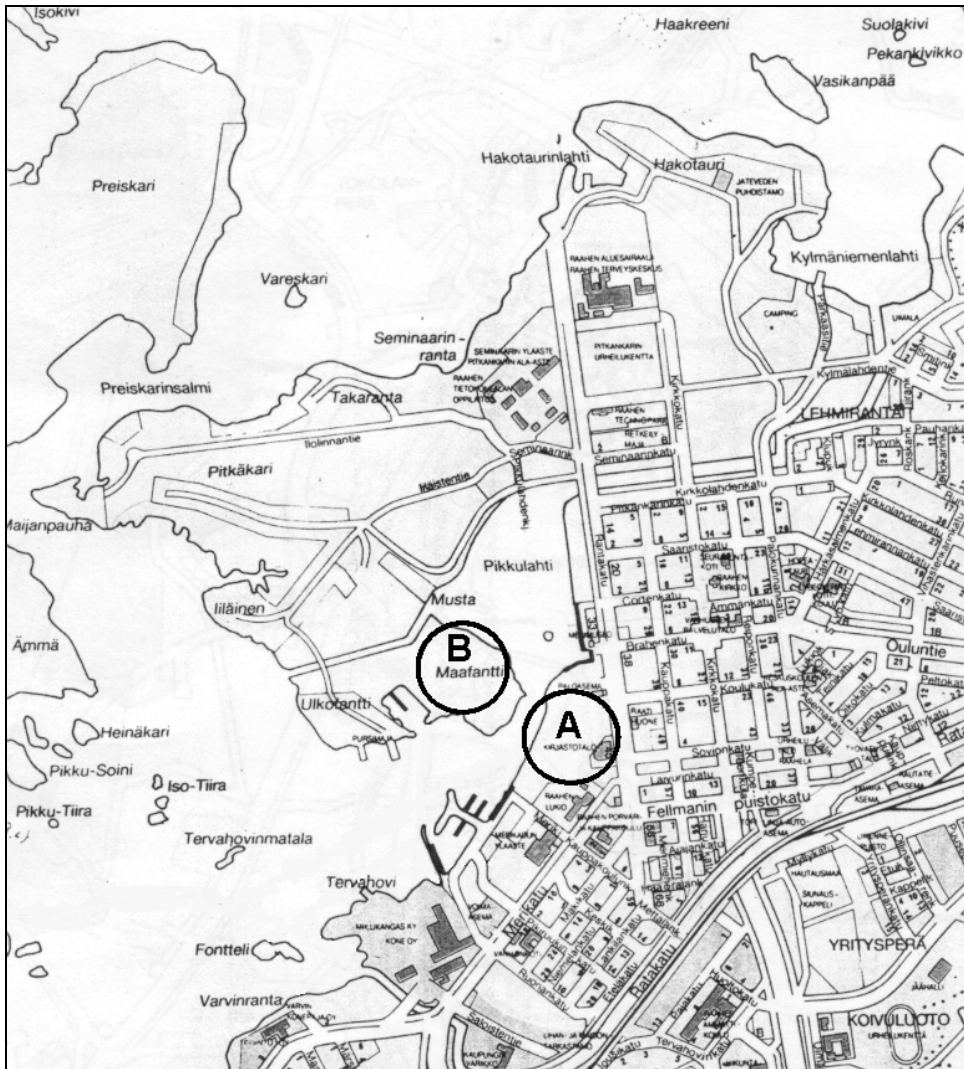


Fig. 19. The alternative locations, A and B, for the summer theatre.

Slowly, in our project, the officially outruled alternative of locating the theatre on the island crept into the design discussions. The Head of the Culture Department, who played the role of the client in our planning exercise, revealed openly her contradictory situation. Officially, according to her position in the local administration, her job was to order from the architect group a design for a theatre in the park area location, thus respecting the

town council's decision. Unofficially, however, she was all for the island alternative¹. Although any designs for the island alternative were actually never asked from the students, the alternative was there in the informal design discussions. Points in favour of that alternative came up: due to the remoteness of the island, the noise produced in rock and jazz concerts would not disturb the downtown residents; the nearby camping area and international boat harbour would bear supportive activities; a sheltered place from the winds would be easily found; the extra land masses dug up while dredging for the expansion of the boat harbour could be used in shaping landfills for the auditorium; parking and controlled ticket-selling would be easy to arrange; the remote location would better prevent vandalism; the theatre would not block the view from the town centre to the sea, and – as the Head of the Culture Department argued a bit surprisingly – the theatre structure would not spoil the old town's silhouette as seen from the sea. In her system of aesthetic premises, the theatre, if situated in the shoreline park, would apparently not be an improvement to the town's profile. Therefore, if it were situated in the park, it would be best to "hide it in the bushes somewhere in the midst of the park".

But there were also those who still maintained the strongest argument against the island location: the distance from the town centre – over 2 km – would be too long for the visiting audience².

6.3 Analysis: From Reactive Cooperation to Reflective Cooperation

In order to cooperate with other people, a person has to construct for himself the roles of the others and his own role in relation to them. A child develops this ability as he becomes *in-formed* into his social environment (see Thayer 1975, 238–39). This process is largely unconscious. Following Bateson's theory of learning, this in-formation is the construction of contexts of social cooperation in Learning II. Transcultural cooperation

¹ In the first design meeting, December 5th, 1995, when the Head of the Culture Department introduced the design task to us, she criticized indirectly the town council's decision, which provided the basic frame for the design task: "The board of the culture department and many others had the view that the summer theatre should be situated to Maafantti. But this view lost, and reluctantly we resign ourselves to the mainland alternative." Later in the third meeting, January 23rd, 1996, her criticism was more open: "It is hard to present this design task, when you disagree with the task description on almost everything, including the requirement of multifunctionality. I myself would locate the theatre as far as possible!"

² The annual public town planning review by Raahe municipality was held on December 9th, 1995. There I had the opportunity to present the educational project to new local people who visited the review. With five local visitors I had discussions where the question of location of the summer theatre was brought up. All of them favoured the island alternative – but most of them maintained that this would require the construction of a bridge between the island and the park that would connect the Maafantti island directly to the town centre. On the other hand it was acknowledged that an immovable bridge would block the access of visiting boats to Pikkulahti Bay and thus their access to the harbour alongside the historical centre of Raahe. No one was willing to compromise this.

demands more than this. One has to build some understanding of whole contexts of cooperation. It involves bringing into conscious awareness patterns of thought which have "sunk" into unconsciousness.

Bateson holds that Learning II is the formation of the premises that we commonly call a "character" or 'self' – the premises which save the individual from having to examine the abstract, philosophical, aesthetic, and ethical aspects of many sequences of life (Bateson 1987, 303–04). Learning III throws these unexamined premises open to question and change. As a product of Learning II, 'I' am my habits of acting in a context. Whereas at Level II the observing subject focuses on the problem, seen as possessing its own objective dynamics outside the subject, at Level III the focus is on the subject itself structuring the object through his observations (Engeström 1987, 151). As Senge says, "[t]o see reality more clearly, we must also see our strategies for obscuring reality" (Senge 1994, 257).

If one wishes to comprehend the actions of a professional (a business manager, an engineer, a planner, an architect, a professional politician¹, or a researcher) one has to gain some comprehension of the context of his profession. Professions are activity systems, or epistemic communities, which have their own built-in goals. A professional, as he practises his profession, confirms its structure of values, conceptual tools, and social relationships. For example, a planner, as he communicates particular messages in order to solve a planning problem, he, simultaneously reproduces the way the problem is framed within his profession. "When planners speak the language of a particular group, they do so not just to be clear, but to shape a course of action" (Forester 1989, 118).

Schön uses the concept '*knowing-in-action*' to denote professional activity within the context of professional practice. Knowing-in-action is the characteristic mode of ordinary practical knowledge implicit in action. The professional displays professional skills through his action, but he is often not able to examine the tacit understandings that constitute his skills. In a familiar practice situation, a person may simply find himself doing certain things without being aware of having learnt to do those things. With the concept 'practice', Schön refers to trained performance in a range of professional situations which bear a family resemblance. The professional encounters such similar situations – "cases" or "projects" – repeatedly, and develops a repertoire of expectations, images, and techniques to apply to them. He learns what to look for and how to respond to what he finds in his practice environment. But as professions divide into subspecialties and professional activity becomes more repetitive and routinized, the professional develops a rigidity in his selective inattentiveness to phenomena that do not fit into his categories of knowing-in-action. He "overlearns" his practice and thus misses important opportunities to reflect on what he is doing. He may be drawn into patterns of error, from which he is not able to derive general lessons to guide new corrective actions (Schön 1983, 49–54, 60–61)². As a result, professional practice may eventually end up in a double bind situation. Using Bateson's vocabulary, knowing-in-action is the affirmation of Learning II through Learning I. In a stable practice, a professional may "overlearn" at Level II, which hinders his possibilities for learning at Level III.

¹ According to José Valanta, at the local level the professionalization of politicians is a current tendency (Valanta 1997, 17, 102).

² See also Engeström's critique (Engeström 1995, 81).

Rittel and Webber caution against such habituation into professional practice when dealing with complex planning problems. Planning problems may be only seemingly similar, and the solution formulated for one planning problem may not apply to another. According to Rittel and Webber, every wicked problem is essentially unique. (Rittel & Webber 1973, 164.)

"[B]y 'essentially unique' we mean that, despite long lists of similarities between a current problem and a previous one, there always might be an additional distinguishing property that is of overriding importance. Part of the art of dealing with wicked problems is the art of not knowing too early which type of solution to apply." (*Ibid.*)

"Despite seeming similarities among wicked problems, one can never be *certain* that the particulars of a problem do not override its commonalities with other problems already dealt with" (*ibid.*, 165).

In a complex society, domains of knowledge become specialized, as do ways of knowing. According to Lee Thayer,

"the more complex a human society, the less importance is attached to what one knows, and the more to the ways by which one comes to know what he knows. [...] One has his membership in one or more of the subsets of a complex society not only in virtue of whether he knows what he needs to know, but in virtue of whether he came to know what he knows in a way sanctioned by the other members of those subsets of the larger society to whose membership he aspires. As a practical matter, the most acceptable source of such knowledge is the other members of the same subset." (Thayer 1975, 241–42.)

There can be no evolution from professional-dominated planning to transcultural planning without the actors' willingness and ability to practise *self-criticism* (see Schön 1983, 62–63, 290). Even self-criticism is cooperative and requires cooperation¹. But this is a different kind of cooperation than that taking place within epistemic communities. It is cooperation *between* communities of cooperation. "Within epistemic communities, we must believe in order to understand, between epistemic communities we must understand in order to believe" (Thayer 1975, 242).

Cooperation between epistemic communities, transcultural cooperation, is communication at Level III. It has a metacommunicative character in relation to different epistemologies. It is commentary on what is communicated within epistemic communities. I will call it *reflective cooperation*. Cooperation within an epistemic community, at Level II, is here called *reactive cooperation*².

¹ "[T]hrough self-criticism, social control over individual behavior or conduct operates by virtue of the social origin and basis of such criticism. That is to say, self-criticism is essentially social criticism, and behavior controlled by self-criticism is essentially controlled socially." (Mead 1962, 255.)

² This classification of types of cooperation as 'reactive cooperation' and 'reflective cooperation' is somewhat comparable to Järvillehto's two categories of cooperation involving conscious human beings: 'institutional cooperation' and 'conscious cooperation' (Järvillehto 1995, 127–28). Järvillehto's third category is 'physiological cooperation'. It is the production of supra-individual

Reflective cooperation is the most demanding form of social cooperation because it emerges in social situations without a single and coherent purpose for cooperative action in sight. The situation itself does not form a community, but consists of members of separate sub-communities with contradictory goals. (See Mead 1962, 322-23.)

In reflective cooperation, a higher-order consciousness is constructed: consciousness of the contexts of consciousness. Here, for the sake of clarity, it may be necessary to make a distinction between two types of consciousness, as David Bohm and F. David Peat do (Bohm & Peat 1992, 219-23). They raise a new concept '*awareness*' which is normally understood as synonymous to 'consciousness', but has different connotations. While 'consciousness' normally means 'what is known', 'awareness' has more to do with being 'wary', 'sensitive', and 'attentive'. According to Bohm and Peat, we may distinguish between 'aware consciousness' and 'unaware consciousness' – i.e. between sensitive and attentive knowing, and insensitive and unattentive knowing. As unaware consciousness focuses on the object of knowing taken for granted, aware consciousness focuses on why and how something is known. While one in unattentively conscious reactive cooperation asks: "What is out there to know?", in attentively conscious reflective cooperation one asks: "What constitutes my knowing – what is its context?" My self-criticism is my being critical to what I am *in* my knowing. As all knowledge is produced socially, my self-criticism is also my being critical to what *we* (epistemic community) are in our producing and reproducing of knowledge.

Fischer borrows Paulo Freire's concept '*conscientization*' (Fischer 1990, 370), which, as regards the level of consciousness involved, is parallel to Bohm and Peat's concept 'awareness', but further refers to the kind of cooperative learning I am after. Conscientization is described as "learning to perceive social, political and economic contradictions and to take action against the oppressive elements of reality". The conscientization process involves participation in the form of thematic investigations, where the participants engage in ever-deepening analyses of words and experiences common to their reality, in order to question common assumptions and to facilitate a better understanding of that reality. (*Ibid.*) "They emerge, in the process of such

results without the actors' consciousness of these results (*ibid.*, 127). The cooperation types, 'reactive cooperation' and 'reflective cooperation', can be seen as parallel also to Fichtner's three basic forms of intersubjectivity, namely 'coordination', 'cooperation' and 'reflective communication' (Fichtner 1984, "Co-ordination, Co-operation and Communication in the Formation of Theoretical Concepts in Instruction", in *Learning and Teaching on a Scientific Basis*, edited by M. Hedegaard, P. Hakkarainen & Y. Engeström, Aarhus Universitet, Psykologisk Institut, Århus – quoted in Engeström 1987, 333). My concept 'reflective cooperation' would correlate with Fichtner's 'reflective communication', while 'reactive cooperation' would comprise aspects of both 'coordination' and 'cooperation' – similarly to Engeström's concept 'reactive learning', which comprises aspects of both Learning I and Learning II.

Fichtner's use of his categories, however, comes closer than Järvillehto's to the idea presented here. Fichtner regards his developmental forms of intersubjectivity as phases of any cycle of genuine learning activity (coordination – cooperation – reflective communication) (*ibid.*). Järvillehto links his cooperation types rather to the gradual development of human consciousness; (physiological – institutional – conscious cooperation).

discourse, as the *subjects* rather than the *objects* of their own history. Or, as C. Wright Mills so aptly put it, history is turned into biography.” (*Ibid.*)

The participative cultural-historical analysis of shared social practice was developed into a systematic method in Engeström’s theory of developmental work research. The idea is to extend the analysis of conflicting ends and viewpoints in a work organization – between management, workers, clients and subtasks – deeper than the description of their outer appearances. According to Engeström, sticking to the outer appearances of contradictions, as determined from the fixed standpoints of counterparts, seldom leads to expansive and creative solutions. An approach of this kind would merely resort to acknowledging such assumptions among the counterparts that for each party it is the attitudes of the opposing party that is the source of conflicts. Learning at Level III is made possible only when the actors have together reached an insight into their own ends and motivations as inherently contradictory. (Engeström 1995, 98.) In land-use planning, this would mean such cultural-historical analysis into planning activity that would reveal the contradictions between the actor groups – such as politicians and administrators – as contradictory behaviours of the subsystems themselves.

Cultural-historical analysis in developmental work research is based on the view that, beneath the everyday practice phenomena and localized patterns of action and interaction, there is a historical source, a *germ cell* (*ibid.*, 100-01). In Chapter 1, I described the germ cell as a deep context-defining decision upon which new decisions have layered as the activity has developed. When this description is associated with the discussion in Chapter 2, the germ cell assumes the character of a root metaphor, which, in the long history of activity, has “naturalized” into a deep metonymy. Analysis attempts to identify the germ cell. The identification of the germ cell enables the actors to see seemingly separate phenomena as mutually related aspects of the same system. Furthermore, contradictions between organizations or groups may be revealed as historical contradictions within the organization between its present and past activity environments. This means that the germ cell, as the basic context-defining concept, still directs behaviour in the organization, although the concept has been created for cultural and societal circumstances, organizational structures and inter-organizational relations that no longer prevail. It may be revealed that the organization has merely made partial adaptive changes along the way without seriously altering the context itself. The organization may be caught in a vicious circle of ever-recurring, frustrating adaptive efforts, as the deep contradiction – the double bind between the basic out-of-date attitudes within the organization and the present demands it is faced with – has remained unnoticed.

“Land-use planning is bargaining on political and/or economic benefits from land-use decisions” and “Planning is a search for means for politically mandated ends” are possible examples of germ cell concepts that have, over years and decades, gained a contextual position as directive rules for the whole planning activity. Cultural-historical research into planning activity by the participants might reveal that, underlying the contradictions between groups – such as between local political and economic elites and civic activists, there is a deeper contradiction within the planning activity between the habituated germ cell concept of planning (planning *is* bargaining) and the new activity environment, which poses a forceful demand for the development of a more inclusive and publicly accountable planning activity.

Likewise, the contradiction between local politicians and planner-administrators may be found as a systemic consequence of the germ cell concept "Planning is a search for means for politically mandated ends" that has become outdated. Here cultural-historical analysis into the development of modern professions might reveal the inappropriateness of this context-defining concept in today's conditions. In step with the increasing complexity of modern society, the professions have increased their autonomy. Central to this autonomization is that the search for means within a professional practice becomes at least partly self-referential, so that the very search for means also determines the ends (see Kontinen 1997, 52). It therefore follows that the profession-based construction of means in land-use planning cannot be subordinated to some seemingly detached political ends. The construction of ends cannot be separated from the construction of means. In our postindustrial age, the production and administration of special knowledge have gained heightened importance in public organizations. If politicians unreflectively conform to the concept of planning as a "search for means for politically mandated ends" as the context that determines their role in planning, they inevitably subordinate themselves to professional planners in the process of formulating and making policy decisions¹. The double bind for the politician is that he cannot authorize politically the ends for planning if he leaves the search for means to professional planners.

The purpose of the analysis is to reveal to the participants the double bind situation that strains their social activity. The double bind situation does not have to be acute. On the contrary, the best service the analysis can offer to practice is that it enables reflection on a double bind situation *in advance* – i.e. makes evident the route towards a future double bind that is hidden in the undeniable logic of the outdated germ cell concept. According to Engeström,

"[t]he ultimate aim of the analysis is not just to reveal the inner contradictions and developmental logic of the activity to the researcher. The aim is to make the participants, the potential subjects of the activity, themselves face the secondary contradiction [= the double bind]. In other words, the analysis functions as the midwife for bringing about the double bind, or at least an anticipatory grasp of the double bind in the form of an intense conceptual conflict." (Engeström 1987, 327-28.)

As in action research generally (Heikkinen & Jyrkämä 1999, 40, 45; Huttunen, Kakkori & Heikkinen 1999, 111; Lahtonen 1999, 210), the role of the researcher in Engeström's method of developmental work research is to *intervene* into activity. The purpose of the intervention is to bring about a change of the work routines that is made possible by

¹ According to Möttönen, this subordination of politicians to planners in the local government is the hidden agenda of the policy-making method called *Management by Results* (a derivation of the *New Public Management* paradigm), which, in the 1990s, was canonized in the Finnish culture of public management. By offering politicians the seemingly governing role as decision-makers on strategic ends, the method secretly purports to shift "real" governance to the administrative processes where strategic ends are formulated and operative decisions are made. The hidden agenda of management by results is to increase efficiency in municipalities, which is expected to be achieved by shifting governance from politicians to planner-administrators. On the surface, this takeover is given the appearance of emphasizing the role of politicians as strategic decision-makers. (Möttönen 1997, 25-26, 85-91, 144-45, 171, 197-99, 356.)

examination of the activity by the researcher and the workers together, including the distribution of tasks, social relationships, concepts and equipment used, and physical settings. The intervention by the researcher aims at helping the workers themselves to become researchers of their own work – to offer the workers mental as well as physical conditions for reflection "on the side" while the work itself continues. The researcher gives both *analytical aid* in making evident to the workers the present dilemmas in the work conditions and the need for change, and *administrative aid* in seeing through the expansive change towards a renewed activity.

In Engeström's method, the shared research work begins with a *description* of the actual working conditions. This involves participant on-site observations, video recordings of work performances and sequences, comprehensive reading of internal and public reports on the activity, and discussions with the people involved in the activity. The description of the activity situations serves as a '*mirror*' for the workers' critical observation of their habits and routines. (Engeström 1987, 324; 1995: 110-11, 124.)¹ The next stage is the *delineation* of the activity system under investigation (Engeström 1987, 324). In this regard, "expansive research is not dealing with activities 'in general' but with real activities realised by identifiable persons in identifiable locations" (*ibid.*). Delineation aims at "identifying the personal and geographical locus of the activity" (*ibid.*). The research then proceeds to *historical analysis*². The workers themselves, with the aid of literature, review the history of their field or trade. The developmental phases of the evolution of the activity system are identified. However, the historical analysis does not aim at periodization only but especially at uncovering the double binds that have given rise to reflective transitions from one developmental phase to the next (*ibid.*, 325). In mutual gatherings, the workers discuss everyday problems in coping with duties and in fitting subtasks together. The researcher is present, trying to turn the discussion to basic questions concerning the structure of the organization, including the distribution of roles, social relationships, explicit and implicit rules, and the primary objectives. The purpose of the historical analysis is to help the participants to formulate a theoretical hypothesis of the present tensions and problems experienced in activity. Using the '*mirror*', the theoretical hypothesis is tested and elaborated. (Engeström 1995, 124.)

There are difficulties in applying this analysis method to land-use planning. There is often not enough time and resources to carry out extensive analyses of the planning system's operations and their cultural-historical roots. Moreover, the land-use planning system, as defined in this book, is not a *work* organization. Structurally, it is much less coherent. It involves people from different walks of life with different abilities and motivations to invest efforts in the development of the planning activity. In fact, only the municipal officials responsible for planning and relative decision-making can be counted as people who have a 'worker' relationship to land-use planning. The councilmen contribute to the process in their spare time (although they receive a fee of the time they spend in official meetings). Some of them are keenly interested in land-use planning

¹ Empirical cases of the use of the '*mirror*' as a developmental tool in developmental work research can be found, for example, from Virkkunen *et.al.* 1999.

² Engeström has further divided the possible analyses undertaken into three classes: the *object-historical analysis*, the *theory-historical analysis*, and the *actual-empirical analysis* (see Engeström 1987, 325-28).

issues, while some may ignore them totally. The representatives of non-profit associations who participate in public planning meetings and compose statements concerning planning issues have an attitude to planning similar to the interested councilmen, although they generally have less possibility to get involved. For the developers, their negotiating with the planners and their participating in public planning meetings account for a small part of their work for their companies. The unorganized citizens who participate in those meetings are, in turn, hardly imaginable as 'worker-like' actors in their relationship to planning. The field of concerned actors is thus diverse. The actors have commitments of differing degrees and qualities to different organizations, which also means that there is much variation in the intensity of their participation. It is therefore difficult to carry out the analysis of the existing planning activity in an organized manner. On the other hand, this incoherence of the social field of planning activity goes to show that the task for analysis is much more demanding than it would be if the analysis were only applied to one organization, where each concerned actor is a worker. Behind the tensions and contradictions apparent in the planning activity, there may be emerging not only one but many double binds.

In these circumstances, the task of analysis may become too strenuous for the practical progression of planning, in which case the task of analysis *itself* may become a potential cause of a double bind situation.

Indeed, a proper way to approach the analysis of participative land-use planning activity – an analysis which is simultaneously part of the activity itself – is not to treat it as a distinct phase in a plan-making process that proceeds incrementally, as is usually the case. Rather, the analysis of activity, including the theory-oriented tracing of historical origins to the present dilemmas, should be seen as a task that continues from one incremental planning project to the next. The purpose of cultural-historical analysis is to produce shared theoretical knowledge of the potential double binds that have developed during a period of several years, or possibly decades. This work does not have to conform to the speedy schedule of incremental planning projects. The double binds are not caused by individual planning projects, but by the planning activity. Dilemmas faced in individual planning projects are not sources of double binds, but merely indicators of them. Research into the activity of planning operates with larger-scale questions that extend the scale of individual planning projects. Therefore, the answers to these questions do not have to be found during one planning project; instead they may be "attacked" again during later planning projects. As noted in Chapter 1, the same people and the same groups and institutions tend to meet and negotiate recurrently, while individual planning tasks as objects of negotiations come and go. While each planning task poses its own demands for analysis, the more regular participants may, through reflective cooperation, engage in a longer-term, gradually evolving analysis that concerns the planning culture itself. How are the arenas for communication on planning issues set? Who are invited to the meetings? How are solution alternatives constructed, presented and evaluated? What are each participant's values and intentions and how do the arguments made relate to them? These are examples of questions that concern the planning practice in general and may be brought up time and again in critical conversations among the participants.

For example, the problems in mutual relationships between planners and politicians may become critical during a certain planning project, and these problems may indeed seriously hamper planning work relative to the project – but if the project is not the

source of the problems, it is not necessary so that these problems get solved while the project-related problems themselves are solved. Similarly, the problems in enabling citizen participation in local land-use planning do not have to get solved during a single planning project that aims at citizen participation. The recognition of the existence of these problems and the genuine will among the participants to analyze their sources already brings partial relief to them. As the contradictions in activity easily lead to oppositional attitudes among the counterparts, the shared attempt at analysis already marks a shift to healthier social relationships. In this regard, the mere recognition of the need to look for systemic causes beyond apparent scapegoats is a result in itself.

Naturally, reflective cooperation – communication between epistemic communities – requires an atmosphere of mutual tolerance, trust and compassion. It requires a social space where persons can criticize their own and each other's attitudes, assumptions and opinions without feeling threatened or ashamed. (See Bohm & Peat 1992, 246; Dilworth 1996, 412, 415; Friedmann 1973, 177-83.) It is possible to dissociate claims from identities, so that one is able to protect and support a person while criticising what he is saying. This is the art of critique without opposition. Such an atmosphere cannot emerge at once. It can only develop gradually. The gradually evolving analysis of the planning activity may serve to generate this atmosphere. Thereby, the process of making the analysis in itself slowly changes the social conditions and makes them more permissive for making analyses.

The need for a cultural-historical analysis of planning activity deserves to be recognized in its own right, without keen associations with the current planning problems and tasks. A possibility worth consideration is to organize special open forums and seminars dedicated to this purpose, which assemble at regular intervals. In such sessions, it would be possible to dive deeper into the planning activity, trying to develop theoretical tools for a systemic explanation of the contradictions in activity that seemingly belong to separate times, circumstances and people. Apart from the everyday planning worries and hassles, there would be specific times and places for reflection on "the big picture" of planning practice.

This does not remove the need to approach critically and analytically also the planning situations in which we deal with the current planning issues. In everyday planning, we all the time create and miss opportunities for learning from each other. While talking about specific planning topics, we inadvertently also make changes in our social relationships that prevail longer than the topics themselves. When you lose trust, it takes time to build that trust again. The activity is carried onward and changed in everyday action. While it is necessary, from time to time, to step aside from everyday action in order to get a reflective view *on activity*, it is possible, as Schön argues, to reflect *in action*, too (Schön 1983, 61-62). Accordingly, cultural-historical analysis *on activity* does not outweigh the importance of analysis *in action*. It is only when specific opportunities for cultural-historical analysis *on activity* are created that analytical work can reach depths, which would otherwise – i.e. by merely analyzing *in action* – not be reached.

For analysis *in action*, it is crucial how one approaches the other participants in social planning situations. In transcultural planning, the presence of different voices creates confusion, but this condition also conceals a great learning potential (Engeström 1995, 98). It provides a pool for making thinking explicit and for exploring of the reasonings behind each other's arguments – if one is willing to approach it in the spirit of "making

sense together". Analysis *in action* is reflective communication in transcultural planning situations, involving *speaking out one's dilemmas* and *critical listening*.

Schön stresses the importance of public testing in bringing to surface the dilemmas, which rest within the habitual assumptions of professional practices. When a practitioner meets a surprising phenomenon, which he is not able to handle with the ready-made conceptual tools of his practice, he may either try to hide his bewilderment or reveal it to his social environment. By hiding his bewilderment, he mystifies the deep guiding premises of his activity both from himself and from his environment. Hence, he is able to keep his knowing-in-action (and relative status) stable, at least for a while. By speaking out his puzzle, however, he asks for criticism and other ways of seeing the issue. He is simultaneously building an awareness of his unconsciously learned context of action and letting the others build that context for themselves. (Schön 1983, 345–50.) He is publicly *demystifying* the frames of his knowing-in-action by structuring a larger conceptual framework around it in reflective cooperation.

At times, one should ask the most profound of all questions: "Why?" (see Engeström 1995, 39). In land-use planning, "experts should act as if expected to be called to account to justify their actions at any moment" (Thomas & Healey (*et al.*) 1991, 198 – see also Sager 1994, 165).

It should be stressed that the argument here is not aimed against any acknowledgement of expert knowledge, but against professionals' claims to mandate for social control, autonomy in practice, and licence to hide the sources of their knowledge. The point is that experts possess valuable, although limited, knowledge which is inherently describable and, at least to some extent, understandable by others. "[I]n this sense, demystification is not showing up of the falsity of the practitioner's claims to knowledge but a bid to undertake the often arduous task of opening it up to inquiry" (Schön 1983, 289). In this respect the aim is not to deny the necessity of expert knowledge. As Fischer points out, "the critical task [...] is to restrict it to its proper realm in the organization and analysis of action" (Fischer 1990, 32) – rather than rejecting it, as radical writers often do, as an ideological ploy to increase the experts' control (*ibid.*).

But what is the proper realm of expert knowledge? Fischer continues:

"We make no attempt to say how much efficiency or participation should exist in a particular society or situation. This we leave to the relevant participants to work out among themselves in the context of their own pragmatic political experiences. It is a question that must in part be determined empirically in the context of the technical structures of society and, in part, through the processes of democracy itself. Citizens and workers, in fact, must decide their own relationships to technology and its uses. Our principal concern, in this regard, is the need to open and extend the processes that make such determinations possible." (*Ibid.*)

Together with demystification goes *critical listening* (Forester 1989, 107–18). Forester distinguishes '*listening*' from '*hearing*':

"Listening involves subjects – speakers and listeners together – rather than objects. In contrast, hearing has an object, a message sent to be received. Only hearing, we subordinate the uniqueness of the speaker to the literal meaning of his or her words. Listening, we understand the meaning of what is said in the context of the speaker's

life. [...] Failing to listen, we fail to learn, and we also damage our working relationships with others. [...] Our failure to listen neglects far more than information; it denies a common membership in a common world of action – the city, the organization, or more private relationships.” (*Ibid.*, 108–09 – see also Friedmann 1973, 238.)¹

There has to be a genuine will to meet the fellow man as a *subject*, not objectified as a client, voter, politician, land-owner, official, expert, or layman. In hearing, you do not communicate with the other person as a subject to be discovered, but merely maintain the given metacommunicative ‘title’ with which you have objectified and categorized him. According to Fisher and Ury, you cannot negotiate with an abstract organization, such as a municipality, resident association or building company. Your counterparts have to be concrete persons. (Fisher & Ury 1983, 99–100.) Hearing implies a negotiation where the process of negotiation itself does not produce any such results that were not imaginable before entering into the negotiation. In reactive cooperation – within the context of knowing-in-action – hearing will do. In reflective cooperation – between the contexts of knowing-in-action – listening is required.

In a transcultural planning situation, special efforts are needed if one wishes to discover the reasoning that underlies the other’s behaviour. Through reflective cooperation, the participants construct an awareness of the double bind that lies behind the perceptions of contradicting aspirations. We may now formulate the double bind, in Engeström’s words, “as a social, societally essential dilemma which cannot be resolved through separate individual actions alone – but in which joint co-operative actions can push a historically new form of activity into emergence” (Engeström 1987, 165).

This raises the question of democracy and participation in planning as not an ultimately moral issue, but as a *methodological* one. Only by pushing the limits of cooperation across the boundaries of his profession and epistemic community, may the professional widen the limits of his knowledge and turn his practice into a source of renewal and self-education (see Schön 1983, 296–99). According to Stuart Kauffman, “democracy may be far and away the best process to solve the complex problems of a complex evolving society, to find the peaks on the coevolutionary landscape, where, on average, all have a chance to prosper” (Kauffman 1995, 28).

Kauffman holds that the new field of research on complexity and self-organization may provide a deep new understanding of the logic of democracy and “its capacity to solve extremely hard problems characterized by intertwining webs of conflicting interests” (*ibid.*). But, along with our new understanding of the evolving culture and nature, we need a new theory of democracy (*ibid.*, 299). Rather than seeing it as a procedure of seeking adjustment and compromise between political interest groups, we should see it as a quality of cooperation on public matters that reaches reflective cooperation and as a principle, which guides us to continually search for optimal structural conditions for the emergence of such cooperation.

In reference to what has been mentioned above, it may be symptomatic that the revolutionary idea, which eventually led to a successful solution for the design of the summer theatre, did not emerge in the private discourse of the architect group, but was

¹ Both refer to Martin Buber’s book *I and Thou*.

created in a larger framework of design communication. As I see it, the members of the architect group, along with the teachers, had developed a somewhat rigid knowing-in-action through their former experiences of the educational project. This knowing-in-action could be entitled: "Keep a low profile". The architect group did not, at first, accept the new line of thinking suggested in a primitive sketch presented by a student who did not belong to the group. In the second design meeting (January 16th, 1996) where this sketch was viewed together with seven individual sketches by the members of the architect group, the idea showed in the sketch was welcomed by the Head of the Culture Department and some other local people. "The sea idea could be grand. This is one of my favourite ideas – it is crazy enough", was the client's response. But the architect group decided not to develop the idea further. Their reluctance can be partly explained by their unwillingness to develop an idea which came from outside the group and partly by their tendency to see it as unrealistic, having themselves become habituated (Learning II) to thinking "realistically". They did not even take seriously the support for the idea that the Head of the Culture Department and other local people expressed. The students of the architect group had become habituated to label the local participants as "conservative" – not merely on the basis of the experiences they had had during the educational project, but on the basis of their general assumptions that were only confirmed by their experiences during the project that far.

The architect group pursued to continue designing on the basis of their own sketches (see Figures 20 – 23), placing the summer theatre in the northern corner of the park area (area A in Figure 19). In the third design meeting, a week after the second one, they presented this scheme, but this direction was not welcomed with enthusiasm by the client. Her argument was that the theatre in the suggested location would be too close to the residents, causing complaints of noise. She also claimed that it would block the old town's silhouette to the sea.

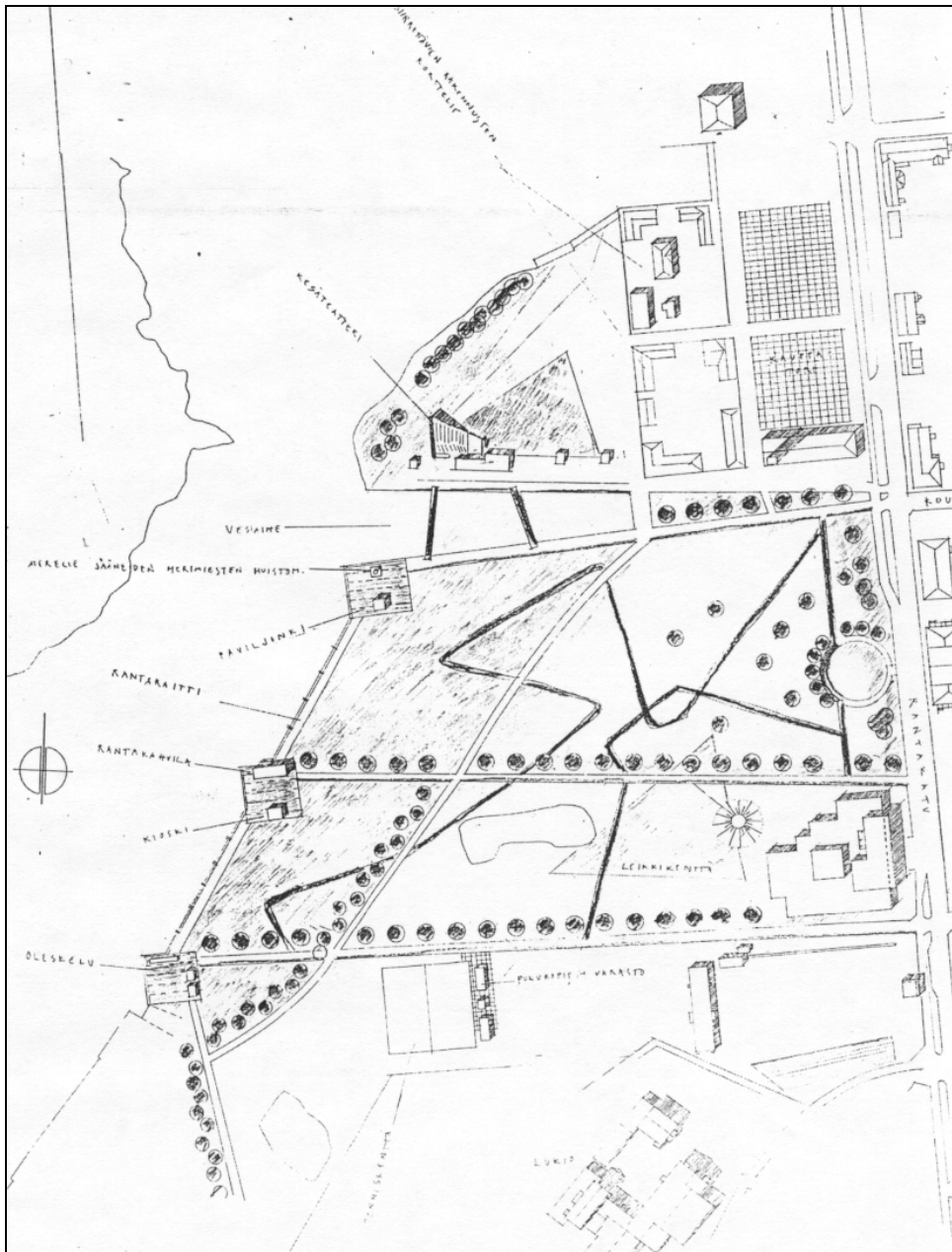


Fig. 20. The sketch of one member of the architect group, in which the summer theatre is situated near the market square (which was designed earlier during the educational project).

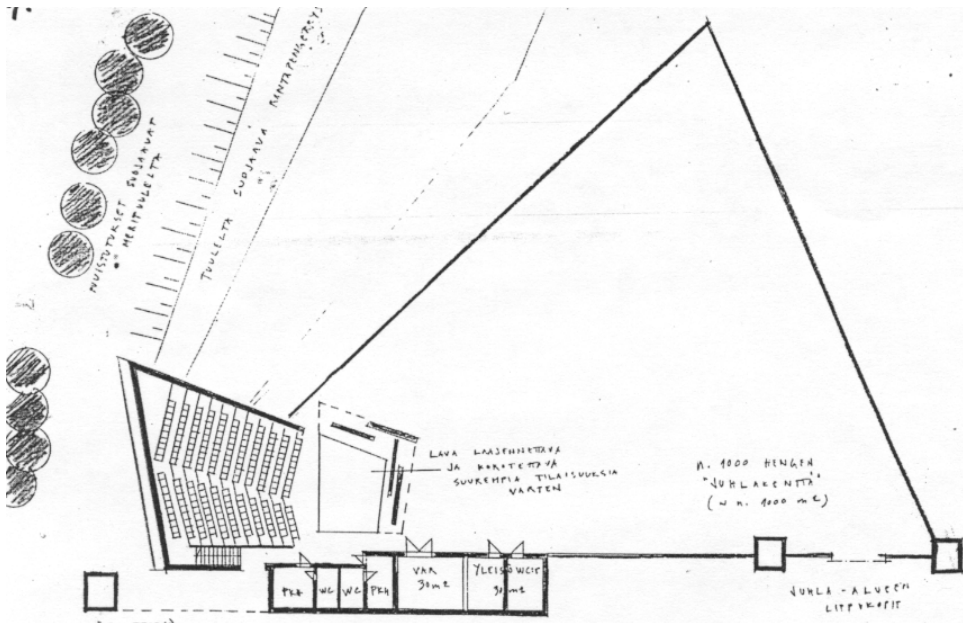


Fig. 21. Plan of the summer theatre by the same designer. The stage has a small auditorium on one side, and a large fenced area on the opposite side. By turning the stage around, the structure could be adapted to the nature of the occasion (theatre play/mass event).

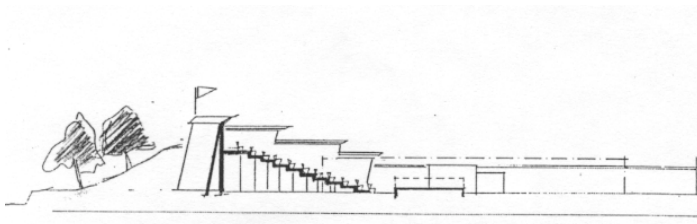


Fig. 22. Section of the summer theatre.



Fig. 23. The sketch of another member of the architect group, in which the theatre is divided into two separate stages with their own auditoriums. The bigger structure (1) is the summer theatre with enough room for larger events, while the smaller (2) is a stage for public speeches.

6.4 Generative Metaphor: From Play to Work

The ability to construct contexts of subcultural cooperation is a prerequisite for self-criticism and transcultural understanding, but that ability does not alone solve the dilemmas and contradictions inherent in planning. The incompatible contexts will have to be brought into a *dialogue* with each other.

Bohm and Peat see dialogue as "the free flow of meaning between communicating parties" (Bohm & Peat 1992, 245)¹. They emphasize the creative nature of dialogue as a process of revealing and then melting together the rigid constructions of implicit cultural knowledge. Bohm and Peat make a distinction between *dialogue* and *discussion* (Bohm & Peat 1992, 245). A discussion is like a game where the purpose of each counterpart is to "win" – to have his views accepted by the group. He may occasionally accept parts of another person's view to strengthen his own, but fundamentally he wants his view to prevail. In dialogue, the counterparts explore complex issues in an attempt to go beyond any one individual's understanding. They gain new insights that simply could not be achieved individually. Individuals suspend their assumptions, but still communicate their assumptions freely. They are no longer primarily in mutual opposition. More than interacting, they are, according to Bohm and Peat, participating in a common pool of meanings that brings into surface people's experience and thought in their full depth and penetrates beyond individual views. (*Ibid.*, 244-51.)

Senge elaborates further the distinction between these two basic forms of discourse 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, 247). Senge is not, however, objecting to discourses in the form of discussion. He argues that this type of communication may provide useful analyses of problem situations. In dialogue, complex issues are explored, but in a discussion, decisions are made.

"When a team must reach agreement and decisions must be taken, some discussion is needed. On the basis of a commonly agreed analysis, alternative views need to be weighed and a preferred view selected [...]. When they are productive, discussions converge on a conclusion or course of action. On the other hand, dialogues are diverging; they do not seek agreement, but a richer grasp of complex issues. Both

¹ The etymological explanation is that '*dia*' means 'to cross', 'through'; and '*logos*' denotes not only 'word' but, more profoundly, 'meaning' (*ibid.*). Ramírez, on the other hand, translates 'logos' as 'conversation' (Swedish '*samtal*') (Ramírez 1993, 28). In spite of these differing derivations from the etymological origins of 'dialogue' ('crossing meanings', 'crossing conversation'), both sources (Bohm & Peat 1992, Ramírez 1993) conceive of dialogue as '*meaning generating communication*'.

dialogue and discussion can lead to new courses of action; but actions are often the focus of discussion, whereas new actions emerge as a by-product of dialogue.” (*Ibid.*)¹

Necessarily all forms of dialogue are rooted in individuals’ ”mono-dialogue”². As Senge says, ”[i]n dialogue people become observers of their own thinking” (Senge 1994, 242). Through his own ‘I’, the individual constructs an awareness of contradicting voices as voices that constitute his own inherently divided self – ‘me’ being a voice in relation to the voices of ‘them’ – and brings them into dialogue with each other³. According to Friedmann, dialogue presumes an *authentic* relationship, where each person accepts his ”otherness” as a basis for meaningful communication:

”To be authentic means to discover yourself through dialogue with many others. And therefore we can say: The life of dialogue engenders a process of mutual self-discovery. At each stage in the process, you attempt to integrate discoveries about yourself into the already existing structure of your personality, thereby changing and expanding it. To do this well, you must have found an inner security based on a consciousness of what you have become and are yet capable of becoming; a basic confidence in your ability to integrate new learning; and, finally, a willingness to open yourself to others.” (Friedmann 1973, 178.)

Dialogue introduces an element of *play* into communication. ”Dialogue is ”playful”; it requires the willingness to play with new ideas, to examine them and test them” (Senge 1994, 246). What here is meant with play is not toying with a subject, but, as noted by Dewey, being ”interested in the unfolding of the subject on its own account, apart from

¹ Here Senge associates the distinction between dialogue and discussion with the distinction between divergent and convergent thinking mentioned in the last footnote of Chapter 2. When Habermas’s theory of communicative action is related to Senge’s definitions of dialogue and discussion, it can be claimed that communicative rationality and ”power of the better argument” are more akin to productive and undominated *discussion* than to dialogue. Habermas is more concerned with determining valid methods of evaluating and criticizing arguments than with the actual production of arguments.

² Engeström (1987, 173) cites V.S. Bibler (1984, ”Thinking as Creation. (Introduction to the Logic of Mental Dialogue)”, *Soviet Psychology* XXII, pp. 52-53): ”Social relations are not only immersed in inner speech: they are radically *transformed* in it; they acquire a new (as yet unrealized) sense, a new orientation toward external activity, toward their objective materialization. [...] But then, [...] inner speech (and its elementary form of mono-dialogue) may be represented as the dialogue of those cultural-historical models of thinking (activity) that are internalized in the different voices of my own ‘I,’ the argument among these functioning as a kind of positing, the creation of new cultural phenomena (knowledge, ideas, works of art).”

³ With the use of concepts ‘I’ and ‘me’, I refer to Mead’s conception of personality as it appears in social experience. Mead makes a distinction between the part of self – the ‘me’ – which is the organized set of attitudes of others, and the part of self – the ‘I’ – which is aware of this social ‘me’ and responds to it. No part of a person’s mind can reach awareness of ‘I’ as it is, because reaching awareness is the function of the ‘I’ and what one becomes aware of is the ‘me’. Because of the ‘I’, we may never be fully aware of what we are, and we are never in full control of our own action. (Mead 1962, 173–78.)

any subservience to a preconceived belief or habitual aim” (Dewey 1960, 286). Thus, a fundamental characteristic of creative play is that one does not necessarily know beforehand what one is looking for (Bohm & Peat 1992, 64). The essence of play is that it refers only to itself. It is seeking for the sake of seeking. As soon as play finds an object outside itself, it turns into work¹. Likewise, when solving planning problems without general knowledge of the nature of the problem itself, we are planning as playing. Here planning is not a search for a solution to the object of planning. Its problem is to find some firm ground – as a frame of reference outside itself – to transform itself from play to work.

Especially here, a trusting and supportive atmosphere is needed². There has to be general allowance for “*brainstorming*” – i.e. for fantasizing and uttering incomplete, even foolish and childish thoughts. We need both to arrange for ourselves specific occasions for more thorough analyses of the planning activity and to offer ourselves room for special brainstorming sessions (see Fisher & Ury 1983, 80-85). But brainstorming sessions cannot be arranged; they can only be allowed to emerge. Brainstorming may take place before, in the midst of, or after analysis. Each time it is worthwhile. When a readiness for creative thinking appears, this creativity should be encouraged whenever possible and not hindered by demanding one to examine the different aspects of the problem first. As analysis develops, the ideas already created can be developed, too. You can decide when to ignore the ideas created, but you cannot decide when your ideas are to

¹ Dewey elaborates the difference between play and work. He refuses to make a sharp distinction between these concepts as if play were purely free and work, in turn, were tied down by the end to be achieved.

“When the difference is stated in this sharp fashion, there is almost always introduced a false, unnatural separation between process and product, between activity and its achieved outcome. The true distinction is not between an interest in activity for its own sake and interest in the external result of that activity, but between an interest in activity just as it flows on from moment to moment, and an interest in an activity as tending to a culmination, to an outcome, and therefore possessing a thread of continuity binding together its successive stages.” (Dewey 1960, 212-13.)

² Dialogue requires person-centered communication which Friedmann calls the “*life of dialogue*” (Friedmann 1973, 177-82). Friedmann holds that it assumes communication which is applicable to any human relationship:

“We can be open and alert to the other, whoever he may be. We can accept him as a person different from ourselves without being threatening or feeling threatened in turn. We can try to hold our intellectual, moral, affective, and empathetic states of being in mutual tension. We can accept conflict as an inevitable part of dialogue and not its termination. We can look for the patterns of shared interests. And we can concentrate the life of dialogue on the here and now.” (*Ibid.*, 182.)

Bohm & Peat emphasize, in a similar fashion, the importance of the “*spirit of dialogue*” – the atmosphere of good will and kindness. It enables the interlocutors to examine different points of view and the deep presumptions behind them without taking opposing and competitive, emotionally charged positions. (Bohm & Peat 1992, 244-51.)

be created. The difference between analysis and dialogue is that you can determine *when* you should analyze, whereas you can only hope for dialogue to appear at *some* stage. Yet, in a complex situation, creative inventing is a necessity (*ibid.*, 103). In addition to mutual trust, respect and support, the allowance for dialogue means that the participants maintain sensitivity to the turns of the planning communication throughout the planning process. Is it never too late for good ideas to emerge in planning while you are still "only" planning?

The purpose of a brainstorming session is to generate new ideas no matter how absurd they seem at the time they emerge (Cates 1979, 531). The aim is to "dive" together into play and spare the critical comments for a later analysis. New ideas and alternatives are generated randomly by individuals with encouragement, in the hope that some of them will turn out really useful upon testing and analysis (see Chadwick 1978, 183; Fisher & Ury 1983, 80). When the players are able to dissociate their self-images from the ideas they are bringing forth, they are not concerned with "Who said what?" or "will I be caught up with saying something stupid?" When expressed to the other players, a less useful idea may lead another player to make associations which, when expressed, may lead to other associations that eventually give rise to more useful ideas. The ideas, which are social to begin with, merge into a generative stream of meanings that the players together create. The stream remains continuous if no one desires to take credit of any part of it. "As soon as we become overly occupied with "who said what," or "not saying something stupid," the playfulness will evaporate" (Senge 1994, 246). Once, when one of our design meetings in Raahe had just ended, a local official in a high administrative position came to me. He said that, in a small town like Raahe, the standpoints in negotiations easily become fixed, whereas loose design conversations, like ours, may reveal new opportunities. As he mentioned: "Even quite crazy an idea may have some sense in it".

The generative stream of meanings requires *authentic participation*. Only in this way can you contribute to the process of developing new ideas. You have to be there on the spot, making your statement at the precise moment when it can make a difference. Faxes, e-mail messages and letters to the editor are hopelessly late. Of course, this is not to say that all participation in planning should be authentic. I am merely claiming that the emergence of dialogue between the participants is enabled by authentic participation.

A crucial aspect of authentic participation is that it creates a social situation where the participants necessarily, whether they like it or not, engage in *unconscious communication*, besides communication controlled by their consciousness. You are better able to control what you communicate when you write something for a person to later read than when you speak to him in his presence. The less you control your communication, the more you communicate. Unconscious communication not only enables creative play between the participants, but also has a central role in building mutual trust. Unconscious communication is regarded as honest, and a person who inadvertently sends conscious messages which contradict his unconscious messages is regarded as dishonest. A planner who claims to have a lot of experience in handling the type of planning problem in question, and who, when saying this, avoids eye contact and makes nervous gestures is considered both inexperienced and unreliable.

The emergence of dialogue requires that the group engaging in it is not too large. Authenticity means more than merely being present. It means being in close contact to other people, i.e. taking part in a group where you do not get frustrated by having to wait

for a chance to speak and where your listeners are interested and recognizable individuals instead of a faceless audience. An ideal group size is three to six persons. These reservations on group size do not mean that the number of authentic participants in planning should be restricted, in order to enable the emergence of dialogue. It only means that, besides larger public meetings, the active participants should also be offered opportunities to assemble in small transcultural teams. In such teams, new ideas may be generated, which can later be presented and evaluated in larger public meetings.

The further development of ideas that are supported could gradually be shifted to professional planners. Then, at appropriate stages, the planners would present their sketches both to smaller authentic teams and to larger audiences – also through media. If the new direction is not supported in the later development of a given idea, or becomes otherwise problematic, the task may, for a while, be taken over by transcultural teams again.

Besides individual planning tasks, the ideas produced in dialogue may also be concerned with the planning practice. What distinguishes planning ideas that are reflective is that they often address *both* of these levels – the level of the task and the level of practice – simultaneously. The tight schedule of planning tasks and the scarcity of resources (personnel for planning and the management of participation, materials and technical facilities, etc.) set limits to the process of generating ideas. But when new ideas are generated for the planning practice, the focus is on these limits themselves. Why is the planning schedule so tight? Who is in a hurry? Whose interests are served, and whose not, by the speedy planning procedure? Is the tight schedule justifiable? How could the process be made faster without jeopardizing consideration and public inclusiveness? How could the present resources be put into more efficient use? Should the resources be increased or targeted differently? Are there possible resources that have not yet been found?

In dialogue, the players step into the world of creative play, where they are often not aware that they are playing. In this sense, playing is similar to dreaming. The dreamer, in sleep, is usually not able to make the metacommunicative statement: "This is a dream" (Bateson 1987, 185). The discrimination of play and not-play, or the recognition of the context of play, is a function of consciousness. Occasionally, during our educational project, when the quarrels on alternative design solutions became really heated, the local players had to be reminded: "This is only play."

Bohm and Peat describe the creative process as a melting of the mind's surface structure of closed sequential order into its deep structure of intuitive reason with an open generative order (Bohm & Peat 1992, 223–27). In his theory of play, Bateson uses Freud's concepts of 'primary process' and 'secondary process' (see Chapter 3). The secondary process is the level of consciousness, where there are objects; the primary process is the level of unconsciousness¹, where there are relationships. According to Bateson, play is a special combination of primary and secondary processes:

¹ All that which we are unconscious of also includes the economy of consciousness (Learning II) – i.e. the ways and habits of knowing we are not conscious of. Thus, unconsciousness includes also what was above called 'unaware consciousness'.

"[P]lay marks a crucial step forward in the evolution of communication – the crucial step in the discovery of map-territory relations. In primary process, map and territory are equated, in secondary process, they can be discriminated. In play, they are both equated and discriminated." (Bateson 1987, 185.)

According to Wilden, both origins and goals are "Imaginary illusions" conveyed of in the secondary process: "It is the *seeking* and not the goal which is at the origin of human affairs" (Wilden 1980, 399). Or we can say that the seeking itself is the goal: "[T]he goal of human goalseeking is the process of creating goals [...]" (*ibid.*, 431).

In play, new *metaphoric* relations between contexts are created. The frames of thought melt down and become "bisociated", as concepts from different categories are put together¹. The special nature of a metaphor is that it forms a complex relationship between concepts seen to be both unified and separate at the same time (Bohm & Peat 1992, 47–53). The metaphor constructs a new concept upon that pull/push relationship. According to Bohm and Peat, great discoveries in science have taken place when scientists have created new concepts upon metaphoric relations between concepts formerly seen as belonging to different categories. What Einstein did in his General Theory of Relativity was that he linked together in a special way Newton's axiomatic concepts of 'absolute time' and 'absolute space'. In the Einsteinian four-dimensional space, "time *is* space". Similarly, after Maxwell, the formerly separate concepts of electricity and magnetism were seen together as electro-magnetism. From a certain point of view, electricity *is* magnetism. (*Ibid.*, 86–87.)

The reader should not take these examples of great scientific innovations, and the world of science-making in general, as too far-fetched forms of activity to draw on in this discussion. Engeström considers science as "*universal* labor, containing in a relatively pure form the tendency toward the creation of novel general use values. This tendency is, though mostly in disguised forms, embedded in any human activity system." (Engeström 1987, 282.) Bohm and Peat, on the other hand, emphasize the necessity of a scientific attitude in all walks of life. The scientific attitude, i.e. honesty in interpreting tests and perceptions and acknowledging facts, is a prerequisite for the evolution of knowledge. This principle of preventing "foul play", i.e. the tendency to ignore or conceal disturbing and unpleasant facts and perceptions, is also present in dialogue (Bohm & Peat 1992, 246, 262–63). Schön's theory of professional action places technical problem-solving within a broader context of reflective inquiry, which "links the art of practice in uncertainty and uniqueness to the scientist's art of research" (Schön 1983, 69). The practitioner's independence of the categories of established theory and technique and his ability to construct new theories in new unique cases is essential in unstable practice situations (*ibid.*, 68–69). This ability is, indeed, at the core of the land-use planning

¹ Arthur Koestler has coined the term '*bisociation*' "in order to make a distinction between the routine skills of thinking on a single 'plane', as it were, and the creative act, which [...] always operates on more than one plane. The former may be called single-minded, the latter a double-minded, transitory state of unstable equilibrium where the balance of both emotion and thought is disturbed." (Koestler 1964, 35–36.) In bisociation, one perceives of an idea or an event where two self-consistent but habitually incompatible frames of reference are brought to intersect in a unique fashion. Thus, the event is linked simultaneously to two associative contexts (*ibid.*).

practice, which largely consists of managing political-professional-economic conflict situations.

According to Schön, new perceptions, explanations and inventions may be generated when one finds a way to model the unfamiliar phenomenon with a familiar phenomenon taken from another context. "Depending on the initial conceptual proximity or distance of the two things perceived as similar, the familiar may serve as exemplar or as generative metaphor for the unfamiliar. [...] In this way *seeing-as* may play a critical role in invention and design." (*Ibid.*, 184, 186.)

In our summer theatre puzzle, where the functions of mass events and concerts were to be mixed with conventional small-scale theatre functions and, accordingly, the problem of location had to be solved, a generative metaphor gradually provided the conceptual tools for a successful solution. A new line of conceptualizing the design problem was vaguely suggested in one of the students' first sketches (Figure 24). Although the architect group had already chosen to ignore it, it was reintroduced for discussion in the third design meeting, on January 23rd, 1996, as an idea worth developing after all. In the sketch, the summer theatre floated on the water by the mainland shore. The sketch showed how the theatre could be towed farther to the sea from the shore.

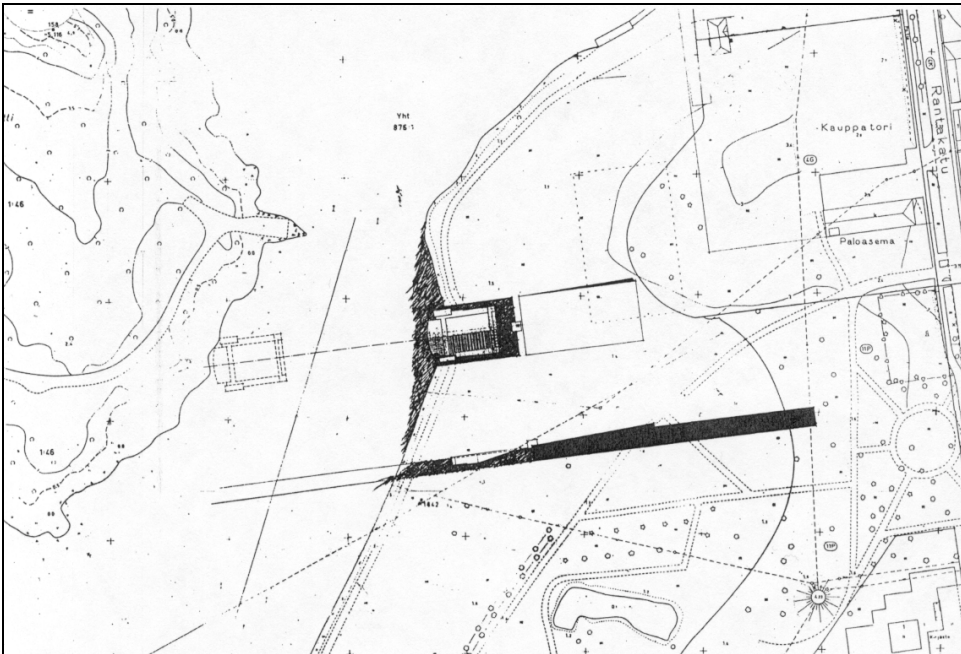


Fig. 24. A sketch by a member of an architect group not in charge of the task. In the sketch, the summer theatre is a boat-like structure floating in the groove by the park shore. An additional, larger auditorium is situated next to it on the mainland. In the plan, the theatre can be towed farther away from the shore when noisy concerts are performed in it.

Next day, the following dialogue took place between the teachers and a few students of the architect group and of the planner group (the designer of the sketch in Figure 24 was not present):

Teacher A: "We could design a place for a fenced auditorium by the shoreline in the park, and put the stage on a ferry. Then it could be towed away for the winter."

Student/architect group (hesitatingly, directing her comment to the other present members of her group): "But wouldn't it look silly, then, to have an auditorium just facing the sea?"

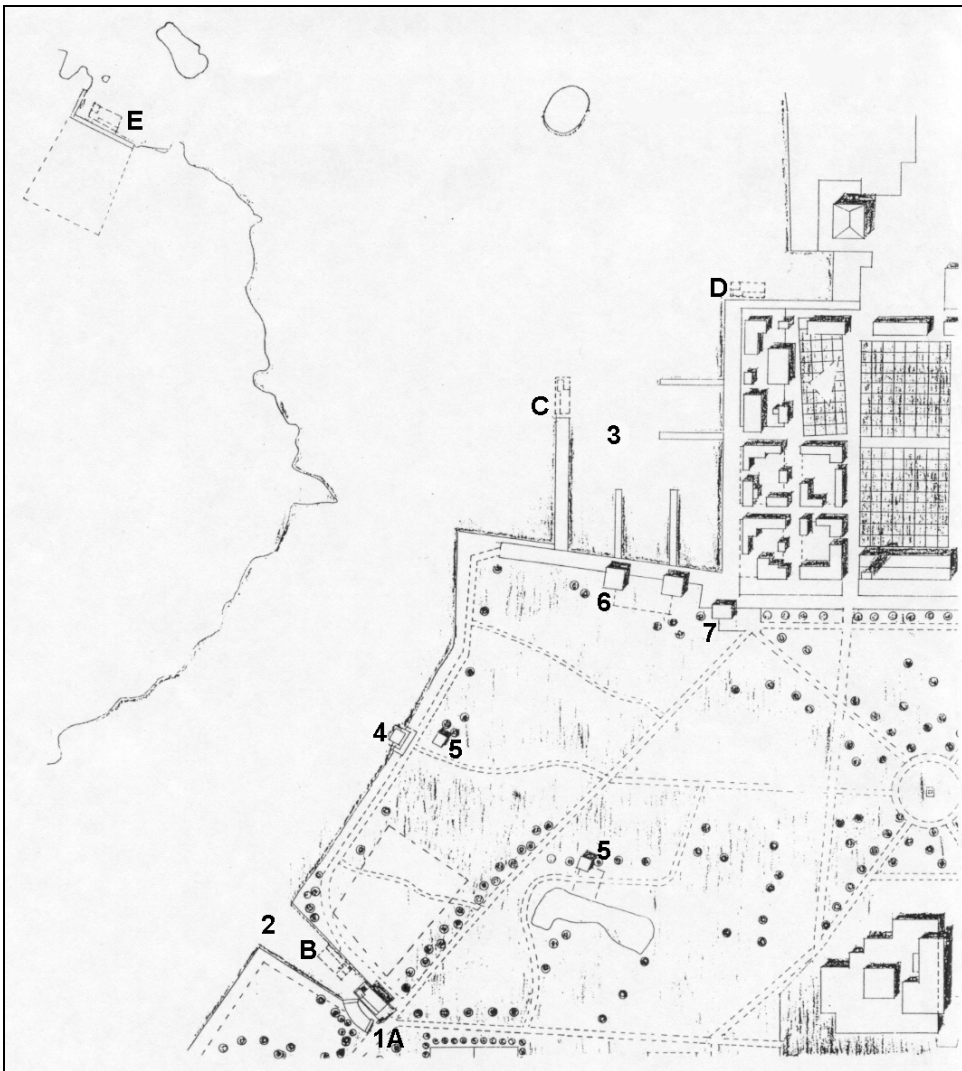
Teacher B: "Consider the demands for multiple use ... shouldn't we have different kinds of auditoriums, to which the stage could be towed...?"

Student/planner group: "...then one of those auditoriums could be there on the island – the one for rock concerts!"

Gradually, from the initial sketch and through the above dialogue, a special way of *seeing* the summer theatre *as* a boat developed. More precisely: the stage became to be seen as a boat and the auditorium was divided into differently functioning auditoriums seen as harbours. In a certain way, the functions belonging to the activity of boating were bisociated with the functions belonging to the activity of staging various outdoor performances for audiences. (See the final design in Figures 25 and 26.)

This analysis does not, however, do justice to the straightforward nature of creating metaphoric perceptions. The metaphor is based on an intuitively emerging *metonymic association*, which provides a new orientation to the situation. Comments upon this association always come later as constructs of conscious categorization¹.

¹ When x is metonymically associated with y, an unlabeled relationship between communication-in-context x/X and communication-in-context y/Y is formed: 'x is y'. In the metonymic relationship ('x is y'), the contexts X and Y are not communicated. This means that metacommunication – and thereby consciousness – is not involved. To metacommunicate this relationship is to label it or to make a comment on it: 'x/X as if y/Y' – i.e. 'x in the context of X is treated as if it were y in the context of Y'. The initial metonymies 'stage *is* boat and auditoriums *are* harbours' were formed below the level of consciousness, in creative play between the primary and the secondary process. The metonymy is a mystery. It escapes our representations and explanations, which only reach the *metaphor*; the form of 'as if'. In fact, to be conscious about the metonymy is to *transform* it into a form which involves a distinction – the metaphor: 'The stage is *not* a boat, but the stage in the context of performing plays is treated *as if* it were a boat in the context of boating, and the auditoriums are *not* harbours, but they are treated *as if* they were harbours'.



- | | |
|-----------------------------------|---------------------|
| 1. A. Summer theatre | 2. Canal |
| B. Festival area for 1000 persons | 3. Boat harbour |
| C. Open-air restaurant | 4. Pier |
| D. Open-air dance hall | 5. Pavilions |
| E. Concert stage | 6. Harbour services |
| | 7. Kiosk |

Fig. 25. The architect group's final sketch. The letters (A, B, C, D, E) point to the various functions the floating stage has, when placed on certain harbour areas on the island and on the mainland.

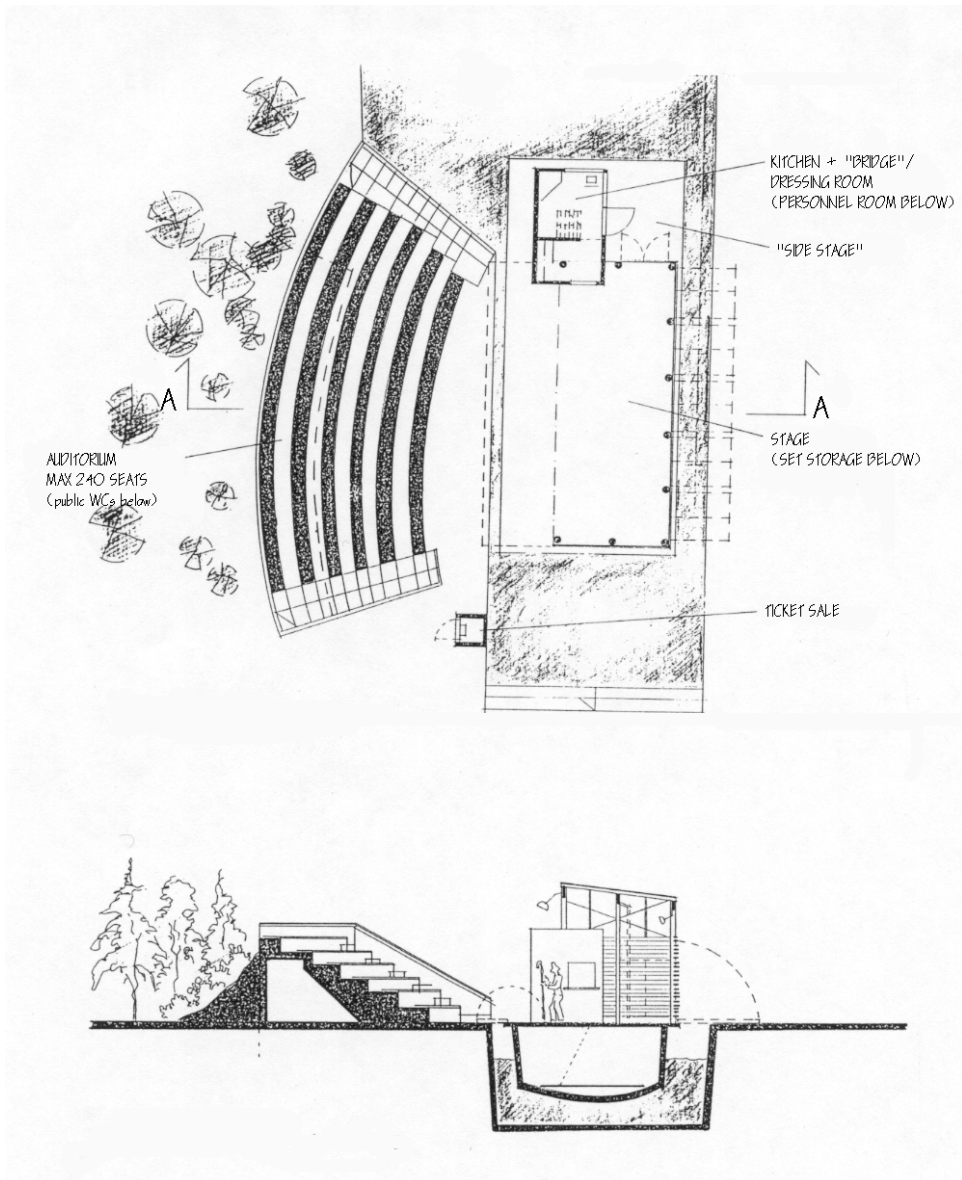


Fig. 26. Plan and section of the floating stage.

This "theatre boat" was naturally not the first and only theatre boat ever invented (see Figures 27 and 28). In fact, the few known examples of theatre boats and floating theatres gave confidence to what we were doing: "Something like this has been done before". But it would not be fair to say, either, that what was produced was just an application of some former prototype. In view of the design task and the political, functional and geographical problems and conditions considered, the idea was based upon a unique *concept-in-situation*.

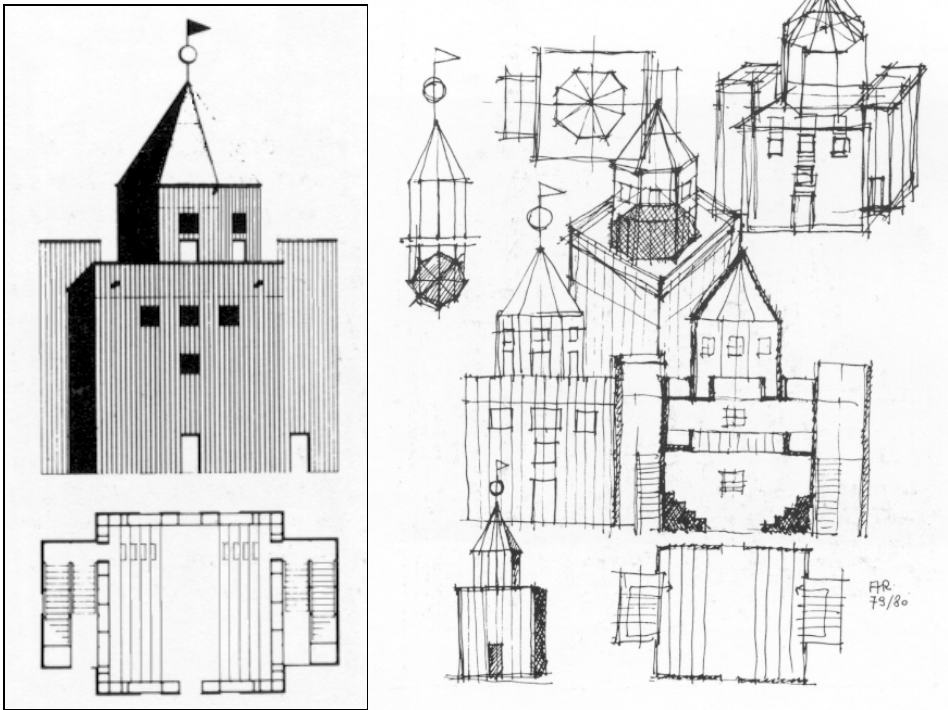


Fig. 27. Aldo Rossi's Teatro del mondo, Venice, 1979. *Left:* front façade and ground plan (source: Aldo Rossi: *Selected Writings and Projects*. Architectural Design, London/Gandon Editions, Dublin, p. 105). *Right:* sketches, 1979-80 (*ibid.*, p. 107).



Fig. 28. Teatro del mondo and Santa Maria della Salute (source: Aldo Rossi: *Selected Writings and Projects*. Architectural Design, London/Gandon Editions, Dublin, p. 109).

Generative metaphors work like *springboards*¹ by providing a shift from action-blocking dilemmas to completely new spheres of novel and unanticipated action possibilities. A generative metaphor is a metaphor which *generates* new perceptions, explanations, and inventions (Schön 1983, 185). In the final sketch of the summer theatre, the architect group had given such new functions to the floating stage as "open-air dance hall" and "open-air restaurant"; both situated in their own places by the shore. New ways of using the sea as a part of the stage decor and as a narrative element in plays also opened up. The design solution also afforded a possibility for the local theatre group to take the stage to other coastal towns and make special performances there. These new aspects concerning the use value of the project were paired with considerations of its exchange value, as some local people saw the theatre as an image-improving element for Raahe, suitable for introduction in the forthcoming 350th anniversary celebrations of the town in 1999.

The architect group's final design is naturally far from being a completed plan. Much more reflective designing and examining remains yet to be done, until a realizable plan for the summer theatre is accomplished. "Springboards are not solutions", says Engeström. "They are starters or hints toward a path leading to an expansive solution. In

¹ "The springboard is a facilitative image, technique or socio-conversational constellation (or a combination of these) misplaced or transplanted from some previous context into a new, expansively transitional activity context during an acute conflict of a double bind character. The springboard has typically only a temporary or situational function in the solution of the double bind." (Engeström 1987, 287.)

their appearance, their concrete contents often have little or nothing to do with the substance of the eventual solution" (Engeström 1987, 287). The springboard is nothing more and nothing less than the first idea (Engeström 1995, 90).

The product of a generative metaphor is thus not a solution to the problem but *new solution-seeking activity*: a way out of the action-blocking dilemma. In itself, the metaphor does not provide a solution, but it enables cooperative *solving*. The resulting new activity has a creative potential of its own.

The significance of a generative metaphor for planning activity is less in the content of the idea it provides, and more in the creative cooperation that was capable of producing the idea. The idea may or may not prove to be useful after further analysis and more detailed designing, but at the moment of its emergence, it nonetheless validates creative cooperation and encourages its continuation. The generative metaphor has *two* kinds of consequences. *One* consequence is a shift in the way the current planning problem is approached and understood. In our summer theatre example, such a shift was provided by the new 'theatre boat' concept. This shift may or may not provide a decisive initiative for a mutually agreeable, successful completion of the planning task. But the *other* consequence is of more importance. It does not limit itself to changes in an individual planning task, but affects the whole planning practice. The generative metaphor provides *both* new tools *and* new roles. The 'theatre boat' concept is an example of a theoretical tool created for a specific planning task, but the cooperation that produced the tool also implies a new way for the participants to conceive of their roles vis-à-vis each other. The creative process that produces a generative metaphor is itself an *embodiment* of reflective cooperation that transcends the fixed boundaries between who to involve in planning, who has the authority, who has valid knowledge, who is supportive, who is difficult to work with, etc. The generative metaphor embodies a reflective *microcosm*, a model for dialogical communication which may or may not expand in the planning activity. At its minimum, this microcosm may involve only one person reflecting on his routinized attitudes towards the other participants in planning. If a generative metaphor is a product of a reflective microcosm, it becomes a springboard both in the sense of a theoretical tool for further application and in the sense of a model for forming social relationships that promote reflectivity. We shall return to the microcosms in the next section.

Dialogue is reflective cooperation in its fullest sense. Reflective cooperation begins with analysis, i.e. with attempts to construct, in transcultural communication, common awareness of the contexts of reactive cooperation. This means that mutual awareness is created of the deep systemic structures, which hide behind the incompatible actions and motives. The contradictions in transcultural land-use planning do not usually lie at the level of disagreements between choices, but at the level of contexts that determine the formulation of choices. Another attribute of reflective cooperation is dialogue. It introduces an element of creative play, where concepts from different contextual settings are combined and then publicly tested. Planning as playing will often produce useless nonsense, "ideas" that will be discarded right away in critical consideration. When we are stuck or seriously dissatisfied with our performance, "our question then is not so much *whether* to reflect as *what kind* of reflection is most likely to help us get unstuck" (Schön 1983, 280). Creative solutions are not derived rationally, but this does not mean that they should not be subjected to rational judgment *after* their emergence. As Faludi observes, creativity and rationality are not opposed to one another (Faludi 1976, 117). "That the

rational argument assessing its relevance is only constructed after the solution has been found is not significant; what counts is whether it holds water" (*ibid.*). Creativity and critique, dialogue and discussion, complement each other.

In an ideal case, as regards an individual planning project, the process of play is terminated when a new commonly accepted planning solution is created. It transforms the planning situation in a new way and thus reframes the planning problem. The initial framing of the problem, which was based on contrasting motivations and demands, is no longer valid in this qualitatively new situation. In the summer theatre puzzle, reflection on tacit understandings of what summer theatres, outdoor concert arenas and meeting places are about, made it possible to transcend the contradictory interests concerning the project. The interests were kept separate with conventional images of the project. They "fused" in the new metaphoric "theatre boat" image.

Reflection in physical design is also reflection *on* social activity. How we see the task is related to how we want to act upon it. If we are able to modify our separate ways of seeing, and generate a new shared image or an idea which harmonizes situationally our different goals, we also create a new way of acting together. Rather than a common interest, the new approach to the planning problem presents a new social realm where different subsystems may coexist without causing oppositional relationships between people. Starting with an essentially socio-political problem, we now have a more instrumental problem. Hereafter, planning work may step in. But only gradually. Play generates more play upon which work builds.

During this transition phase from play to work in dialogue, reflective cooperation at Level III gradually transforms again to reactive cooperation at Level II. With the new concept-in-situation, a new generally accepted frame of the problem may be created. The emphasis then shifts from problem framing to actual problem solving, and, eventually, to 'implementation' of the plan. In short, the cycle from reactive cooperation to reflective cooperation and again to reactive cooperation is, according to Engeström, a path, where "[t]he representational concept, as a static and uncritically accepted frame [...] [is] transformed into an instrumental concept, critically reflected, moulded and applied, and back to a new representational frame" (Engeström 1987, 232). In other words, we first see an object tacitly "through" a concept ('theatre'), then take a critical look *at* it, as an object itself, and as we reflect on it, we see it metaphorically through *another* concept ('boat'). Work then develops on the basis of this new image.

6.5 Expansion: From Microcosm to Macrocosm

Prigogine & Stengers argue that a change in collective behaviour occurs with an individual, idea, or behaviour which is "dangerous" – that is, with "those that can exploit to their advantage the nonlinear relations guaranteeing the stability of the preceding regime" (Prigogine & Stengers 1995, 206). Here we have a "quantum jump" – a phase of cultural evolution which is a generally discernible feature of all *morphogenetic systems* (Wilden 1980, 373–77). According to Wilden, this quantum jump is a "metaphoric event", whereby the system selectively restructures itself and increases its degree of complexity. After the event, the system has reached a structural state where it acts as a

metasystem in reference to its former state (or as a *commentary* in reference to its former *text*) (*ibid.*). Considering the designing of the summer theatre as a morphogenetic system, the designing of the "theatre boat" (Figures 25 and 26) can be seen as commentary on the former designing of the "theatre" (Figures 20 – 23). The former design cooperation at Level II was *framed* in the new design cooperation at Level III.

Similarly, the former Cartesian conception of three-dimensional space was framed in Einstein's theory of four-dimensional space. The theory of electro-magnetism, in turn, framed the earlier theories of electricity and magnetism. As noted in Chapter 1, the development of science does not mean that the former theories would vanish as new theories with better explanatory power emerge. The case is rather that the new theory provides a new metacommunicative layer on top of the former one, and thereby frames the context wherein the former theory can still be considered valid. Thinking in terms of three-dimensional space is still relevant on our human scale, although not on the astronomical scale. Electricity may still be regarded as separate from magnetism if we do not have to take into account the relative movement of electric and magnetic particles. As theories are developed, old theories are rather shown contextual than falsified.

In Learning III, the former context of contradictory behaviour is framed by a larger context of new action possibilities (Engeström 1995, 85). According to Wilden, the metaphoric quantum jump is equivalent to Learning III at the level of highly abstract and deeply programmed "metarules" (Wilden 1980, 374)¹. The system is driven to Learning III when it is subjected to disturbances that go beyond a certain threshold. Once beyond this point, these deviations can no longer be controlled with corrective efforts within the context of the existing norms. The system is faced with two possibilities: destruction or emergence as a metasystem (Wilden 1980, 375). (Remember Bateson's warnings of the psychological dangers in attempting Learning III.) By qualitatively restructuring its rules of behaviour, it is able to generate information out of noise, or order out of chaos². This is "learning through catastrophes", so to speak.

However, this explosive mode of Learning III is not, according to Engeström, the only one available in culture (Engeström 1987, 158–61). It addresses the question of how an individual, through personal crises, learns to act in terms of contexts. But if we consider an epistemic community, or culture, as a system, and study the ways of how a community reaches Learning III, we may also discern a learning mode of quite the opposite nature. It is much less dramatic and more gradual than the individual-explosive mode.

The argument addresses the question of what happens in the enculturation of an individual. If we think of an individual as a "creator" and not as a "receiver" of his own enculturation, we see him not as a piece, which fits perfectly to the existing "jig-saw puzzle" of culture, but more like a qualitatively new piece which initiates changes in the pattern of culture surrounding it. As Lawrence K. Frank points out,

¹ "Denotative communication as it occurs at the human level is only possible after the evolution of a complex set of metalinguistic (but not verbalized) rules which govern how words and sentences shall be related to objects and events" (Bateson 1987, 180).

² The systemic functioning of this process is implied to have abstract characteristics universally discernible in processes of cultural and natural evolution and self-organization (see Wilden 1980, 395–412, Prigogine & Stengers 1985, Bohm & Peat 1992, Kauffman 1995).

“[i]t seems necessary to emphasize and re-emphasize that this personality process is not a passive adjustment to or acceptance of the consensual world with its demands, restrictions and privileges. Rather, it appears to be a very active transactional process wherein the individual imposes, imputes, or invests emotional or affective significance into each situation, person and event. This means that the human personality is engaged in a continuous process of patterning his perception of whatever he selectively observes according to his cultural-social models, but always modified, often warped and distorted, by his own idiosyncratic perceptions and feelings. While we may on the one hand emphasize regularities and group-sanctioned patterns in an individual’s behavior, we must, for an adequate conception of the individual personality, give equal recognition to the idiosyncratic, the idiomatic, in all the individualized ways in which the individual both conforms to and deviates from what is accepted and required by his group.” (Frank 1975, 130-31.)

As one habituates into a community, this process inevitably causes qualitative changes, however small, to the community’s patterns of cooperation. The internalization of the social activity system bears with itself externalized changes to the system. According to Engeström, “[t]his tacit transition from the sphere of initial internalization to the sphere of the often delayed externalization and objectification is actually a transition from Learning II to Learning III – from individual actions to the public or collective mode of activity. [...] The individual makes a contribution to the societal development and thus indirectly to his own individual development.” (Engeström 1987, 159.) The individual’s adjustment changes the community, to which he then has to re-adjust (Mead 1962, 202).

The creative potential inherent in language itself results in gradual morphogenetic evolution of our language-using communities. I am *bound* to make unique use of my language. Collective Learning III is not guided by exceptionally gifted “geniuses” alone, but also by the process of community members habituating into their mutual cooperation. Exceptionally gifted individuals may sometimes enact revolutionary changes in society, but, as Mead argues, such phenomena should actually be seen as extreme examples of how ‘I’ continuously changes the society. This change advances so slowly that we may recognize it only when it culminates in a turning-point. (*Ibid.*, 202-03, 214.) In this sense, individual Learning II always entails collective Learning III (Engeström 1987, 160). Individual habituation triggers collective development. The community is therefore “wiser” than its individual members. It would often be too much to ask the participants for an ability to communicate at Level III. But in paralyzing double bind situations we should make use of the talents of those who have that ability. When rapid reflection in a community is needed, collective Learning III guided by individual innovative “quantum jumps” is required – as members’ tacit and invisible contributions initiate and maintain only gradual development in the community.

However, these two forms of collective Learning III, which are actually quite old, do not exist separately, but are in complex interaction during cultural development. Bohm and Peat draw parallel conclusions in their criticism of Thomas S. Kuhn’s theory of development in science (Kuhn 1970). Contrary to Kuhn, they hold that science does not evolve through discontinuous leaps from one paradigm to the next, but rather through dialogue between paradigms. Much of the former scientific worldview and tacit assumptions are preserved in revolutionary discoveries of the “Great Men of Science”,

whereas creativity is also at work and results in major changes during the seemingly stable period of "normal science" (Bohm & Peat 1992, 41–45). I suggest that the scientific community reaches collective Learning III both during the revolutionary periods and during the normal science periods, but the 'personal crisis' type of Learning III is more predominant during the former, and, accordingly, the 'invisible contributions' type during the latter one.

To improve reflection on and mastery of double bind situations in our organizations, we should investigate the functioning of the process of cultural development and make conscious use of the different ways cooperative learning is achieved in it. This is done in Engeström's theory of organizational learning.

The arrangement of a participative planning process should be flexible enough to give way to the free emergence of transcultural *microcosms*. Engeström's definition of microcosms is that they are "miniatures of the community upon which the new form of activity will be based. They are social test benches of the new activity." (Engeström 1987, 296.) The microcosm is a vehicle for transition from reactive cooperation to reflective cooperation. It reaches within itself reflective communication and propagates it outwards. At the same time, it expands and therefore eventually dissolves into the whole community (*ibid.*, 334). In a similar fashion, Bohm and Peat refer to the notion of "microculture" – the microcosm of a bigger culture. In a microculture of a few "open-minded" and authentic members, it is possible to generate a "spirit of dialogue" which, like a seed, could then spread to the larger community (Bohm & Peat 1992, 250–51; Bohm 1990, 32). Senge, in turn, emphasizes the importance of *team learning* for organizational development. Individual learning may prove to be indifferent for the whole organization, but when a team learns, it becomes a microcosm of the organization. (Senge 1994, 236.) For the rest of the organization, it serves as a model of social interaction able to reach reflective cooperation. Being a group of a few individuals, it embodies the preliminaries of an alternative social activity.

I would suggest that, in our summer theatre project, such a microcosm was formed by the few people who participated in generating the "theatre boat" idea. There was the designer of the first sketch (Figure 24), a few local people (including the client) who supported it in the second and third design meetings – and there were the ones who participated in the short and spontaneous dialogue where the decisive hit was made. The idea emerged through collective efforts in such a "team" (which was never a formal team, nor saw itself as a team), where both creativity and critical awareness of tacit understandings of the design task were mutually supported.

But we must remember that the idea was a product of people who themselves are products of their social life histories. Actually, we should not see microcosms as consisting of certain people, but rather of nodes of social relationships, which in their fluent fusion become collectively reorganized¹. This new social organization then "fluctuates" outwards. The microcosm is a form of cooperation where concepts, as results of former cooperative action, become restructured. The microcosm, conceived of as such a "web", may never be localized to occupy a certain location in space and a certain period

¹ Järvillehto sees personality as an intersection of the individual's all social relationships (Järvillehto 1994, 191). According to Leontyev, an individual's personality emerges in his involvement in social activity where societal relationships are realized (Leontyev 1977, 110, 143, 187).

in time. A good deal of both its background and causes and its outcomes and consequences will remain in the dark. Also, the question of whether a microcosm can consist of only one person turns out to be ill-founded. It consists, in all cases, of social relationships.

The new concept of the theatre gained ground, as it was accepted and further developed by the architect group. Their proposal (Figures 25 and 26) gained common acceptance in the final design meeting concerning the project (January 30th, 1996). The proposal aroused debate, not on the basic idea itself, but on questions of its realization. There was discussion on whether the auditorium in Maafantti should be built by shaping earth, or whether it should be built by using building materials entirely. Another debated issue was how the mobility of the stage should be achieved – by building it as an actual boat with an engine of its own, or by building it as a ferry to be towed by a separate boat. The emerged consensus on the general content of the design is noteworthy, since in the third design meeting, only a week ago, there were still radically contrasting views on the project, especially on the question of location. The planner group, after having a private meeting during the lunch break of the fourth design meeting, gave the permission to "build" the theatre boat and the auditorium structures. A member of the planner group announced his evaluation: "The [architect] group has been able to shuttle between different and contradicting wishes. In my opinion, the proposal is very good. However, the park area requires further planning." The project was later "realized" by making respective additions to the miniature model of central Raahe.

But the expansive path from the initial generative metaphor to a new form of activity is seldom as clear-cut and unidirectional in real life situations as it was in our simplified land-use planning game. Although there is much enthusiasm among those involved in the creation of the new idea, uncertainty and struggle are heightened on the phases of analysis and application (Engeström 1987, 330–31).

"Moreover, it should be fallacious to expect and demand that each step and sub-step is taken by the participants as if through their own discovery. Certainly it is important to let the participants proceed through tasks of problem solving and problem finding, so that the new general model is not acquired only mechanically and superficially at the outset. But no matter how cleverly such tasks are designed, the new model represents the *given* new and thus includes the aspect of guided or even imposed acquisition." (*Ibid.*, 330.)

For the architect group, too, the "theatre boat" was a *given* idea. Although the group members voluntarily preferred it against their own ideas, they were not really excited about it. Their attitude revealed a certain "coolness".

Accordingly, as we move ahead with the task from the generative metaphor, we gradually move away from the level of problem framing to problem solving. While during the self-critical and creative dialogue phase the definition and justification of the whole goal was addressed, the following activity is more or less faced with a given goal – slowly taking shape and dissolving further into autonomous tasks with their own sub-goals. The activity becomes less intense and more decentralized. Concerning the immediate demands of thinking and acting relative to the project, less and less reflective communication at Level III is needed, whereas issues demanding reactive communication at Level II increase.

Bearing in mind also the overall difficulty in communicating in terms of contexts of contexts, we may conclude that the new activity is formed and acquired not only through Learning III, but also through Learning II. The "seed" of the new activity is produced in the microcosm reaching Learning III. But as the new activity spreads and develops, not only Learning III but also a replacement of the former activity context and habituation into the new activity context takes place. The latter does not involve individual Learning III, but is merely a shift from former Learning II to new Learning II through Learning I. But even in this case, Learning III – as a personal experience of reflection – may appear as a later construct. There is a possibility to "return" to find a personal springboard even after the design project has been completed and implemented (*ibid.*, 330–31).

Considering the inherently unique and creative nature of all Learning II, even the problem-solving tasks, as they are handed over to new individuals, produce new surprising features and unanticipated changes in the project. Another aspect of unpredictability will often result from the conflict between the prevailing old activity system and the model of the new, more advanced activity system (the metasystem of the former). These conflicts take many forms. They may be struggles between the old and new conceptual instruments ('theatre'/'theatre boat'), or between the old division of roles and the new model for cooperative activity provided by the microcosm. In the latter case, there may be contradictions between the acquired positions of various subjects (who decides what?, who are involved?, who represent who?, who are allies and who are enemies?, who are subordinates and who are superiors?) and the new roles suggested by the new activity model. These conflicts are often experienced as fear, resistance, stress and other intense psychic conflicts within individuals and collectives (*ibid.*, 334).

The idea produced by a microcosm for a single planning project has far-reaching implications for the planning activity itself. *The idea is a model for the project, the microcosm is a model for the activity.* The new activity model will not escape the clash between use values and exchange values. As it involves changes in social roles among those involved in local planning issues, it necessarily arouses self-regarded speculations. The new activity model is therefore a potential subject to *power struggles*, which means that it is supported or rejected with reference to individuals' and groups' success-oriented calculations. According to Engeström, the survival of the new activity model depends on whether it succeeds in creating its own social "infrastructure": rules, community, and division of labour – i.e. whether it succeeds to transform itself into a real life practice (*ibid.*, 190). Much naturally depends on how paralyzed the activity system in its prevailing state has become, i.e. how acute the double bind situation causing disorganisation is and hence how acute the consequent demand for a qualitative change within the system.

These conflicts between the old and the suggested new activity, together with reactive forms of the latter's application (Learning II), often result in practical solutions of unexpected forms. According to Engeström, these forms are likely to be hard to incorporate into the original idea, are often foreign to it, and sometimes even make it look outright ridiculous (*ibid.*, 334–35). He therefore claims that the generation of new conceptual instruments, though outwardly the most dramatic step of the transition, is *not* the most decisive step when viewed from the perspective of the actual practical solutions (*ibid.*, 331). The resulting new activity is, in fact, *dissimilar to both* the old activity system *and* the more advanced metasystem suggested by the microcosm (*ibid.*, 184–85,

334–35; Engeström 1995, 94, 194). In organizations in general, the development of activity does not take place in the form of pure replacement of old methods and task descriptions with new ones. Instead, the old and the new both exist as stratified combinations. (Engeström 1995, 95.) A reflective change in the activity of an organization is always compromised by the use of power, by relics of former organizational rules, routines and conceptualizations, and by inability for individual Learning III. It involves both returning to the old routines and expansive modification of the activity model into new, more radical forms (*ibid.*, 149). For example, if a transcultural team of participants in a local land-use planning project provides a new model for increasing the inclusiveness of the planning activity, the planning activity may develop by both returning to the old administration-dominated style in some realms, and by creating new forms of participation in other realms.

"The created new aspect is that which emerges as *the new actions produce richer results than expected* and thus expand, transform or even explode the constraints of the given new, turning into something wider and uncontrollable. Thus, the new activity realized is never qualitatively quite the same as the representatives of the advanced frontiers had planned. This means also that the modest terms of 'application and generalization' bear the true essence of creation and surprise." (Engeström 1987, 185.)

"A genuine expansive cycle inevitably produces not only civilization but also an ingredient of wilderness" (*ibid.*, 335).

In Raahe, shortly after the summer theatre design task was completed in the educational project, the planning division of the local government held a meeting concerning the future planning of the theatre and the issues concerning its realization. Preliminary discussions between the planning division and the students of the architect group were held concerning the students' interest in continuing the design work as employed by the local government. The members of the planning division themselves took a positive attitude towards the "theatre boat" idea, but the decision was to start comparative analyses upon costs, technical issues, and general support – putting side by side the two overall solutions for locating the theatre. The town council's former majority decision to locate the summer theatre in the park area now competed with the "mobile theatre" idea – as the term was.

As it turned out, this competition between alternative locations for the summer theatre was soon overridden by a differently framed agenda of competing decision alternatives. In the spring 1996, the town council decided to invest almost 20 million FIM in a new concert hall that was to be built on a centrally located site. It became evident for the amateur theatre association that the concert hall would not be designated for theatre-making purposes. The concert hall project was put against the summer theatre project, both involving municipal investments in cultural facilities. As a result, the summer theatre project was delayed for an indefinite number of years. The amateur theatre activity almost disappeared in Raahe. For a while, the amateur theatre association did not produce summer plays.

With new coordinators from the Raahe Workers' Evening School, the theatre hobby in Raahe has recently gathered new momentum. During the autumn 1999, preliminary discussions on reviving the summer theatre project were held between the coordinators

and the town architect. In these discussions, it turned out that the amateur theatre association has by itself gathered private funding, supplies and work aid for the realization of the summer theatre. Thanks to these efforts, the local government's share of the investments would be considerably reduced. It is hoped that this would finally make the local government supportive of the project.¹

The coordinators clearly expressed their preference for the island alternative as the location of the new summer theatre. The strongest argument in favour of this location has been its remoteness from the traffic noise. The traffic noise has always been a problem in the previous temporary locations of the summer theatre in the historical part of the town centre. What has emerged as a suitable site for the theatre in the discussions so far is the north-eastern corner of the Maafantti island². Here, the topography of the slope would enable the use of the ground as a part of the auditorium structure, and the surrounding trees would shelter the place from the roaring noise of the sea and from the south-western winds, which is the prevailing wind direction. The coordinators do not consider the 2 km distance of the site from the town centre a problem. Since the educational project, a wide parking area has been built next to the Maafantti island, to serve the boat harbour, which also has been enlarged. This makes the island more accessible. In the preliminary scheme, a small boat harbour is to be built in connection to the stage, so that the theatre could also be visited by boat. The boats nearby the stage have been thought of as part of the stage decor.³

This is an "inverse" version of the theatre boat idea. Instead of having the theatre come by boat to the audience, part of the audience is now conceived of by the coordinators as coming by boat to the theatre. The theatre boat idea itself has been mentioned only in passing in the preliminary discussions between the new coordinators and the town architect. The issue was soon bypassed by one of the coordinators, who said that the theatre boat solution would be too costly in view of the available funding. The costliness of the solution, according to him, would follow from the need to build two roofed auditoriums instead of only one. Moreover, he thought that the roofed auditorium structure would not fit aesthetically into its surroundings in the park area. It is evident that the coordinator was not familiar with the initial theatre boat design produced by our educational project. In the architect group's design there was only one auditorium structure (see 1A in Figure 25 and Figure 26), and the "harbours" for mass gatherings (1B in Figure 25) and jazz festivals (1E in Figure 25) were to be built by planting, shaping land masses, and reinforcing the soil. The town architect also told me that she doubts the necessity to roof the summer theatre auditorium. She referred to the summer theatre in the city of Oulu built about fifteen years ago in the Hupisaaret park area without a roof on top of either the auditorium or the stage. But she did not voice her doubts about the roof to the coordinators. Nor did she want to debate further on the pros and cons of the theatre boat idea in comparison to the coordinators' scheme. She did not want to give an

¹ Personal discussion with the town architect.

² The place was one among many evaluated alternative summer theatre locations on (and nearby) the Maafantti island and the park area as early as in 1995, when the preliminary planning (with the aid of a consult architectural firm) and decision-making on the project was conducted by the municipality (*Raahen Kaupunki*, Kaupunginvaltuusto, Pöytäkirja n:o 12/1995).

³ Personal discussion with the town architect.

appearance of reluctance towards the amateur theatre association's initiative by scrutinizing how the summer theatre should be built. It was more important at this stage to support the tentative first steps of the project. Thus, she conformed to the self-acting initiators' first plans.¹

The question of using the summer theatre structure also for big public events has hardly been discussed in this new situation. According to the town architect, the chosen site is not suitable for such events, since the area needed would require the cutting down of many of those trees that, due to the protection they provide against wind and the noise of the sea, are essential for the theatre function. The coordinators, in turn, are not interested in involving functions that differ much from the central summer theatre function. In comparison to the situation in 1995-96, the summer theatre project is now much more clearly identifiable as the amateur theatre association's own project. When the local government administered the project, and – as in our educational project – was identifiable as its client, the definition of the project was different. The theatre structure was expected to function not merely as a summer theatre but as an open-air stage for annual jazz festivals and other events, too. There was also some disagreement within the local government as to what functions should be emphasized, where the theatre structure should be placed, and even on the name of the project, as we have seen. These contradictions between the functional demands set for the design and between the attitudes towards the project were creatively harmonized in the theatre boat design. In the recent revival of the summer theatre project, these contradictions seem to be largely missing. It is merely a new, well designed *summer theatre* that the amateur theatre association is after. The theatre boat was a complex solution to a complex problem. If the problem is to be redefined as a simpler one, then it also needs a new simpler solution.

6.6 Reflections on the Summer Theatre Design Task

Although the decisions made in land-use planning may be incremental, they still have long-term consequences. There are two kinds of long-term consequences. *Firstly*, decisions on land use, whether long-term or short-term, usually lead to permanent changes in the built environment. Especially if we think of how long it takes for nature to heal the ecological damage that we cause to it with our seemingly "small" land-use decisions, we have to admit that incremental decisions are not so small and easy to correct as Lindblom would like us to think. Decisions which cause changes in the physical environment cannot be cancelled or corrected entirely. But here we are more concerned with the *second* kind of long-term consequences of land-use planning decisions, namely their influence on the future of planning practice. An individual planning project may become decisive for the evolution of the planning practice. The contents – the '*what*' – of planning come and go as individual planning projects get solved, but the *procedure* – the '*how*' – of planning develops and evolves with each new "project step". Reflective action in one decision-making situation may work as a "germ cell" for improved reflectivity at the level of practice. It may function as a springboard for

¹ Personal discussion with the town architect.

a new "habit" of reflectivity (if we can think of becoming skilled in avoiding unnecessary habituation as a habit). The exercise of power by some actors in one decision-making situation may, on the other hand, also shatter the progression of a new reflective planning practice. The building of mutual trust and respect is a long and fragile process.

In this book, Learning III in land-use planning activity is understood as improvement in reflecting on double binds and incompatible goals of planning. This means development in the capabilities of communicating analytically and dialogically in planning, so that it becomes progressively easier to act in planning situations demanding reflection. From one 'unit' (see Engeström 1987, 188; Bateson 1987, 304) of reflective learning to the next, there is improvement, such as an increase of mutual trust and respect, an increase of the willingness to examine one's own and each other's reasonings and assumptions, an increase of abilities to seek mutually comprehensible modes of representing and explaining planning problems and solutions, and better success in creating formal organizational settings that allow the emergence of reflective cooperation.

A unit of Learning III is reflective action that functions at *two levels* simultaneously: the level of individual projects and the level of planning practice. Its goal at the level of the current project is *to solve the planning problem in question*; at the level of planning practice its goal is *to improve reflectivity*. A planning project where such reflectivity occurs produces both situated, project-bound distinctions and generalizable distinctions. The latter are distinctions which suggest, for example, new modes of organizing planning communication, new ways of approaching and conceptualizing the problem, new modes of explaining and visualizing ideas, new skills in persuasive argumentation and in achieving transcultural comprehensibility.

The learning process described above and illustrated by using the summer theatre design task as an example comprised such a unit. The unit is a *cycle* from one double bind situation to the next, from problem framing to solving and back to framing again, from reactive cooperation to reflective cooperation and back to reactive cooperation again, from discussion to dialogue and back to discussion again, from planning as working to planning as playing and back to working again, from macrocosm to microcosm and back to macrocosm again.

The learning process is often described as a cycle or forward moving spiral. One such description is offered by David A. Kolb, whose learning cycle consists of four stages: 1) concrete experience, 2) reflective observation, 3) abstract conceptualisation, and 4) active experimentation. Kolb's model is a combination of Lewin's and Dewey's four-stage learning models and Piaget's four-stage model of cognitive development. (Kolb 1984, 20-34.) Engeström's model of learning, however, is more relevant to this study, since it offers a cyclic description of the historical development of an activity system, where the expansive transition of the system through its resolution of a double bind situation is identified as the basic unit cycle.

Engeström's expansive learning cycle comprises five stages (see Figure 29). The cycle begins with the *need state*, where interferences in activity start to emerge and individuals experience a vague need for change (*primary contradiction*). The second stage, the *double bind*, arises when the need state develops into a double bind situation (*secondary contradiction*). The expansive resolution of the double bind requires historical analysis, which purports to gain a conceptual grasp of the double bind. The next stage is *object/motive construction*, which begins with finding the first idea, springboard, for

breaking the constraints of the double bind, and proceeds with constructing a new general model for the subsequent activity on the basis of that idea. In the fourth stage, *generalization and application*, the prevailing work routines are changed to conform to the new activity model, and the model is further refined as it is applied in specific tasks. This stage is characterized by contradictions between the new activity model and old activity (*tertiary contradiction*). The final stage of the expansive cycle, *consolidation and reflection* of the new activity form, involves the system's transition to a stage where the new activity form is systematically followed. Contradictions emerge also at this stage, as the central activity has to compete with and adjust to the dynamics of its neighbour activities that have remained unaltered (*quaternary contradiction*). According to Engeström, this outward interaction will inevitably introduce some qualitatively new disturbing elements into the system, generating a new need state which may develop into a new double bind. Thereby the expansive learning cycle of the system begins its new round. (Engeström 1987, 188-92; 1995, 87-92.)

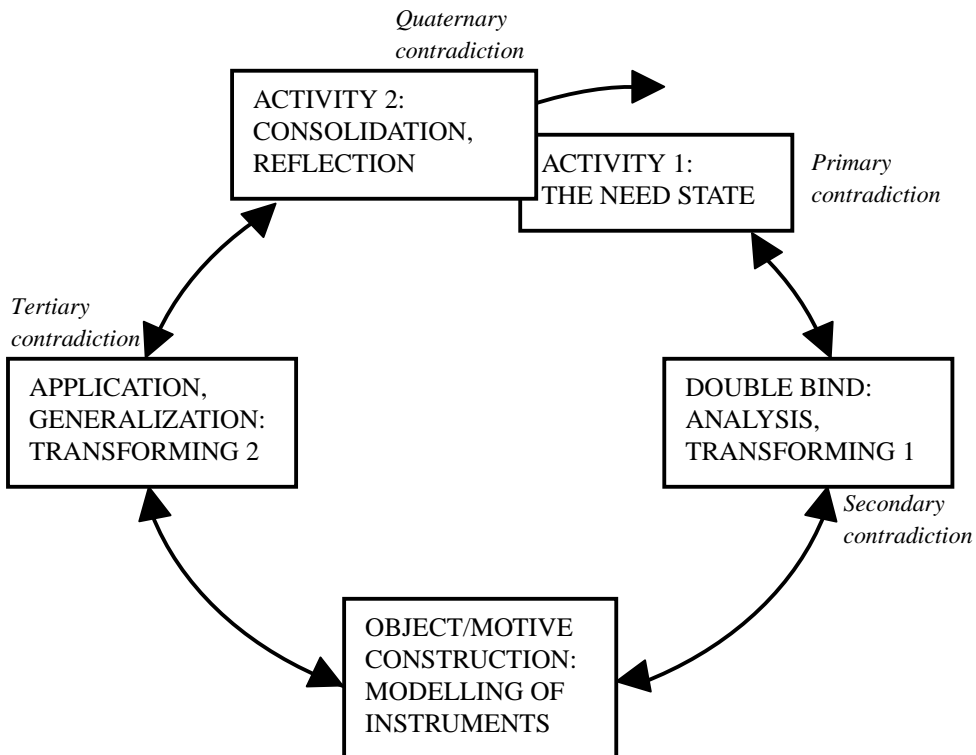


Fig. 29. Engeström's expansive learning cycle (after Engeström 1987, 189). In Engeström's vocabulary, 'Transforming 1' refers to Davydov's first learning action, i.e. transforming the initial double bind by using thought experiments, inner dialogue, etc. 'Transforming 2' means the transformation of actions into activity, in the sense of Bratus and Lishin.

An important aspect, which distinguishes Engeström's model of learning cycle from other respective models (besides its account on the resolution of the double bind) is its *two-directedness*. The cycle does not only rotate in the 'clockwise direction' from one developmental stage to the next, but it may also rotate in the 'counter-clockwise direction', regressing from a "higher" stage of development to a "lower" one. Furthermore, the activity system or organization does not proceed from one stage to another in a synchronized manner, instead some parts of the organization may reach a new stage, while other parts remain at the previous one. This lack of synchronism in the cycle's rotation, as well as its possible changes of direction, have to do with the dynamics involved in the socialization of the new activity modes initiated by Learning III. New ideas and analytic skills are not achieved uniformly and simultaneously within the organization, instead they are initiated by one or few members of the organization who are able to think and act critically and creatively. This microcosm of the organization is a forerunner; it reaches the ability to analyze conceptually the double bind situation before the rest of the organization, or it succeeds in the generalization or application of the new activity model before the others. This creates tension within the organization, since it introduces a qualitatively altered activity mode, belonging to a new developmental stage, while the old mode of activity is still being practised. The new and the old activity modes may end up competing with each other. The result of this competition may be a failure of the new mode and thereby a failure of the microcosm's effort to bring the whole organization to the next developmental stage. Here few individuals that reach Learning III by generating new analytic skills and ideas, fail to enact a developmental shift in their organization that would correspond to their own development as individuals and as a group. This failure marks a backward turn of the cycle.

Let us return, from our follow-up of the later turns concerning the "real" summer theatre, to the summer theatre design task as part of the "play world" of our educational project. Was the design task a true unit of Learning III among the participants of the educational project?

It is difficult to give a definite answer to this question. It can be argued that in the process of designing the summer theatre, there was not much reflection on the definition of the design task. As Engeström says, in learning at Level III, the task itself must be created (Engeström 1987, 150). "If the problem is given, the subject asks: 'What is the meaning and sense of this problem in the first place? Why should I try to solve it? How did it emerge? Who designed it, for what purpose and for whose benefit?'" (*Ibid.*, 151.) In our educational project, the design task of the summer theatre was largely accepted as given. The original definition of the task was questioned as far as the location of the summer theatre was concerned. This questioning was already present in the mixed way the client presented the task, as she revealed her own preference for the island location, although a design for the park area location in the mainland was what she ordered. But this questioning on the location of the summer theatre was only the tip of the iceberg. The conflict of interest between the alternative locations and the corresponding conflict between the rulings of the municipal executive board and the town council, could be mere indicators of deeper contradictions in local politics and administration concerning the summer theatre project and the planning activity in general. Another visible indicator of the possible deeper contradictions could also have been the first postponement on the budgeting for the project, which was publicized during the design process. Clearly, the

contradiction concerning the location was largely a consequence of the contradiction between the various functional demands applied to the summer theatre. Why was it necessary to load the summer theatre design task with use aspirations that were so difficult to combine?¹ An easy answer is that the summer theatre was thus hoped to serve a wider variety of users than theatre goers only. This answer was tacitly accepted as a self-evident point of departure for the design process. A certain feature of architects' general problem-solving behaviour probably reinforced the acceptance of this among the architectural students and their teachers (myself included). This feature is the desire for complex problems as *challenges* for creative designing. Architects love puzzles. *The complex and contradictory context of the design task was not reflected upon, so that reflection could be displayed in the realm of architectural designing.*

By reflecting on the concept of the summer theatre, the design process was able to produce the ingenious theatre boat solution, which made it unnecessary to reflect on the contradictory frame of the task itself. Yes, the design process *was* reflective, and, *as far as* the summer theatre project was concerned, it produced a solution that was mutually agreeable among the participants involved. The theatre boat solution chose *both* the mainland *and* the island location for the summer theatre; it *separated* the mutually incompatible uses of the theatre from each other, and yet *combined* them. So what is there to complain about?

If the summer theatre design task were to fully exemplify Learning III in land-use planning, certain properties in the design procedure should have been handled differently. Reflection on the design task mostly took place *within* the frame of the problem. It was limited to the particulars of the task without seriously touching the dilemmas that possibly went beyond the task and strained the whole planning practice. The *way* the problem was presented was not critically analyzed, in fact reflection on the summer theatre concept *concealed* the need for such an analysis. A good design for the summer theatre was produced, but nothing was done to prevent the possible inner contradictions in the way problems are handled from being transferred to the next design tasks. Had there been questioning beyond the evident tensions on the location, the definition, and the timing and financing of the summer theatre project, hidden aspects of how things are generally handled in local land-use planning and politics might have been brought into light. Possible even some power cliques, inequalities in the treatment of interest groups and their demands, and tactics in linking and trading decisions on the summer theatre and other design projects might have been exposed. Learning and reflecting on such issues while at the same time analyzing and solving the summer theatre project would have provided results beneficial for the planning activity beyond the project itself. Instead, reflection focused on the task-specific concept that had nothing to do with the conceptual construction of the planning activity. What lesson is there to be learnt for the activity of planning in the revelation that summer theatres can also be theatre boats?

Above, I have deliberately confused the summer theatre project as part of our educational project with the "real" summer theatre project, and therefore presented some undeserved critique of the summer theatre design process. The summer theatre design

¹ "As we initiated it, the [real summer theatre] project took off with a very modest shape, placed in Maafantti. It has swollen afterwards." – A comment made by the Head of the Culture Department in the third design meeting, January 23rd, 1996.

task, as many others in our educational project, was formulated by the participating local administrators following the administrative and political procedures and discussions concerning the corresponding "real" project in the local decision-making arena. The design problems were first framed somewhere else and then presented to our educational project. We were like a "problem-solving machine" with only limited access to the "real" local planning activity, from where we received our planning tasks. Surely there were political compromises, power games, publicity stunts, etc. embedded in the tasks. But we were too separated from the "real" local planning activity to be able to read the given formulations of the planning tasks as indicators of deeper contradictions straining the "real" planning practice. We were making our *own* planning practice, which was partly parallel to and partly framed by the "real" planning practice. We were, however, able to question the meaningfulness of the tasks given to us. Our purpose was not to produce plans for the projects that would be realizable one way or another, but to plan them in order to make informed decisions on them. Generally, this meant that the planning of a project was followed by either its implementation (in the miniature model), or – as in one design task – by the abandonment of the project. But in our questioning, we were *not* able to question the meaningfulness of the local political and administrative procedures wherein the tasks had initially been formulated. In this sense, our reflectivity in relation to the "real" planning practice was limited to the tasks it produced for us¹.

Thus, there were limitations in the educational project that prevented the emergence of full Learning III. The given-ness of the design tasks was one such limitation, while another one was the tight planning schedule (3-4 weeks for each design task). Under such circumstances, it is unrealistic to expect the educational project to produce outstanding examples of reflective land-use planning. Among the twelve design tasks, the summer theatre project turned out to be the one that came closest. Indeed, as has been done in this chapter, it can be used to illustrate many characteristics and phases of expansive learning, such as the lack of clarity at the initial problem stage, the emergence of the generative metaphor, and the application and development of the new idea. But where was the double bind and where was its resolution? As the design task was detached from the local planning activity that produced it and brought as a separate "object" into the planning activity of our educational project, there was no possibility to dive deeper from the apparent contradictions of the design task into the more hidden contradictions and even potential double binds of the local planning activity itself. Instead, the apparent contradictions were treated as merely task-related contradictions.

Learning III is motivated by the resolution of double binds. This means that contradictions of the current planning task are revealed as symptoms of the planning practice where a pattern of contradictory behaviour is habitually repeated from one planning task to another. Learning III comprises both the revelation of the double bind and reflection upon it. The current planning problem gets solved and, at the same time,

¹ However, reflectivity was not limited in relation to the planning practice *we* were creating in the educational project. When examining the planning practice of our "play world" we also have to consider the educational purposes and view it in the cultural-historical and systemic context of academic education of architecture and planning. Some adaptive changes were made in the curriculum of the educational project, but no such reflection took place which would have shaken its premises.

the settling of future planning problems is facilitated, since the given habit of reproducing planning problems as inherently contradictory becomes corrected. In the summer theatre project, contradictions were reflected upon, but as these contradictions were treated as task-related, they were not analyzed as possible indicators of double binds. Double binds are always *practice-related*, and they require *some* historical analysis of the planning activity beyond the current task in order to be detected. Such an analysis was missing from the summer theatre design process. Reflection *in* the design task was not reflection *on* planning activity.

The design process that led to the theatre boat idea can be explained by using Schön's concept of *reflection-in-action*. According to Schön, reflection-in-action is a combination of reflective thinking and acting which a practitioner (an architect, town planner, psychiatrist, lawyer, business manager, scientist or engineer) sometimes expresses when faced by a puzzling, troubling, or interesting phenomenon which he is trying to tackle. This reflection involves the process of exposing tacit understandings behind one's approach to the problematic situation, criticising them, restructuring them and, finally, embodying them in new action. (Schön 1983, 50.) In this process, the given problem becomes reformulated with the help of a 'generative metaphor' (e.g. theatre *seen-as* boat). But according to Engeström, this is not yet true expansive learning (Engeström 1987, 149). It "is still typically restricted to the insightful, experimental solution of *discrete, given problems*" (*ibid.*)¹. In this sense, it is essentially discontinuous and does not reach the level of practice. The generative metaphors created in reflection-in-action are only *potentially* expansive, they do not necessarily offer one instruments for transcending the given ways of addressing problems. (Engeström 1987, 149.) The concept 'theatre boat' was a task-related generative metaphor; it was not a *springboard* towards a qualitatively altered planning practice.

But we must bear in mind that each planning project has social consequences beyond the limits of the project itself. In this sense, all planning tasks, whether solved reflectively or not, affect the level of planning practice. They may elicit positive experiences of social cooperation that strengthen mutual trust and respect and readiness for experimentation and dialogue among participants in forthcoming planning tasks – or they may turn out to be negative social experiences that discourage further attempts at reflective cooperation. In principle, the dialogue that resulted in the theatre boat idea could have served as a *microcosm*: as a social model for further planning cooperation². As a microcosm, cooperative reflection-in-action may provide a seed for the expansive development of a planning practice.

Reflection-in-action is not Learning III in its fullest extent, since it is not motivated by the resolution of double binds (Engeström 1987, 148-51). But on the other hand, there are also potential inter-systemic double binds in land-use planning that are unresolvable by

¹ Schön's idea of reflection-in-action is closely related to Dewey's concept of reflective thought, the function of which is to transform a situation experienced as dilemmatic and contradictory into a situation that is coherent and settled (Dewey 1960, 100-01). Reflection is thereby occasioned by the character of a particular experienced situation (*ibid.*, 99).

² The summer theatre design task was among the latter tasks handled in our educational project. The educational project ended too soon to afford evaluation of the social consequences of the summer theatre design task on cooperation in the few design tasks that followed it.

expansive learning. As explained earlier in this chapter, these are higher-order contradictions that are beyond correction by any of the subsystems. The theory of organizational learning as expansive resolution of Level II contradictions was formulated for the study of single activity systems (Engeström 1995, 233). In *inter-organizational learning*, we are also dealing with contradictions that are not derivable to originate from deep inner contradictions within a single activity system. There are also contradictions that result from the inconsistency between the basic goals of autopoietic, yet mutually dependent, subsystems. Expertise and economics as subsystems of the political system of land-use planning are indeed *founded* on contradictions: on contradictory notions of democratic professionally acquired knowledge and democratic economic profit. The contradictions in planning that evolve from the contradictory existence of these subsystems are of a kind that cannot be resolved by expansive learning. The purpose of reflection in this case is to make possible the continuation of the contradictory existence of expertise and economics as subsystems of the political system. An essential function of the analysis of planning activity is to indicate when we are dealing with systemic contradictions and when with inter-systemic ones. Such an analysis would reveal *what kind of learning is required. My hypothesis is that learning in the sense of reflection-in-action is the best we can do in the face of a planning dilemma that embodies an inter-systemic contradiction*. When the current dilemma is revealed as an inter-systemic contradiction, it also brings with itself the revelation that, irrespective of how the dilemma gets resolved, this resolution will not resolve the inter-systemic contradiction and prevent it from causing new planning dilemmas. In this sense, *inter-systemic contradictions are recurrently task-related*. Time and again, they require task-related reflection, i.e. reflection-in-action.

As the practice of planning advances, learning in the sense of improving reflection-in-action reaches Level III if, each time, reflection-in-action is paired with an analysis of the problematic situation that reveals the need for this kind of reflectivity. Such an analysis necessarily has to be extended beyond the problematics as actualized in the task at hand. Task-related reflection becomes a unit of Learning III when the contradictions of the given task are not straightforwardly reflected upon – as was done in the summer theatre design process – but when the contradictory task is revealed through analysis as a situated indicator of a deep inter-systemic contradiction. *The reflective practice of planning is about learning, at the level of practice, both to resolve the inner contradictions of each subsystem of planning, and to find situated reconciliations between the subsystems whose contradictions are revealed as unresolvable at the level of practice*.

6.7 Legitimate Reflectivity

Cultural diversity is here seen as a source for the expansion of human possibilities: diversity begets diversity (Kauffman 1995, 28, 292; Thayer 1975, 242; Engeström 1995, 98). It is essential to retain this diversity. An open dialogical planning process, as it seeks a synthesis between different subsystems, not only produces new knowledge for better planning solutions, but also – to a degree – a *planning community*. Planning activity does not only produce instrumental results but also reproduces social and political relations

(Forester 1989, 71). Mutual understanding arrived at in one design situation brings forth, as a side product, a certain amount of social integration and organizational coordination. It is also a potential step back to the fixation of planning activity, to socio-political domination and exclusion of new interested participants in the forthcoming planning tasks. Therefore, learning at one point in time may become a hindrance to learning at the next (Healey 1992, 159).

Healey, however, holds that truly shared understanding in transcultural planning may never be reached. Participants may share a concern, but arrive at it through different cultural, societal and personal experiences. They belong to different systems of knowing and valuing that will remain nearer or farther 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 (*ibid.*, 154).

"Through such processes of argumentation we may come to agree, or accept a process of agreeing, on what should be done, without necessarily arriving at a unified view of our respective lifeworlds. The critical criteria built into such a process of argument encourages openness and 'transparency', but without simplification. If collective concerns are ambivalent and ambiguous, such a communicative process should allow acknowledgement that this is so, perhaps unavoidably so. So the dilemmas and creative potentials of ambiguity enrich the inter-discursive effort, rather than being washed out in the attempt to construct a one-dimensional language." (*Ibid.*, 156.)

To Forester's notion: "designing as making sense together", Healey makes an addition: "while living differently" (*ibid.*, 148).

A planning decision which serves everyone's interests, or is generally accepted as a good decision, may indeed be hard, or even impossible, to find. More important than the content of the decisions themselves is to have general support behind the *procedure* of seeking decisions. As Lindblom observes, "[w]e 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, 240 – see also Fisher & Ury 1983, 91-92.) It is important that, at the very beginning of the planning process, shared acceptance is gained concerning the method of dealing with contradictory ends that may remain contradictory even after reasonable efforts at reflective cooperation. Instead of handing the disputes over to courts, the method itself should function as a "court" for the participants. (Healey 1995, 63.) The purpose is to find a legitimate method of making decisions on land-use planning issues without giving privilege to the communication mode of law. The communication mode of law transforms decisions to be made in terms of the distinction legal/illegal. It emphasizes issues that are easily transformable, such as land property rights, and downgrades issues that are not, such as rights to beauty and comfort in one's living environment.

One may not agree upon the value of a certain decision, but may nevertheless accept it – knowing that it has been reached in conditions of open communication, where the reasonings behind the arguments have been revealed, actors and their different interests are acknowledged, and genuine efforts have been made to harmonize them. Being able to gain some comprehension of my opponent's claim, I am also able, to some degree, to take

his role. The aim is not necessarily to reach a shared interpretation of the problematic situation, but to bring forth the contradictory attitudes and to legitimize their right to exist (see Jyrkämä 1999, 148-49)¹. If the actors are not able to extract a shared interest out of their conflicting interests, they may still be able to weigh, in a dispassionate fashion, what interests can justifiably be allowed to override other interests in *this* planning situation. Only in reflective cooperation may an actor conclude: "My personal interests were not served, but we came to a fair decision."

The reflective practice of land-use planning is not merely a practice where contradictions and double binds in land-use planning get resolved, but it is also a practice where contradictions and double binds are handled *legitimately* when they cannot be resolved. Reflective planning is both a search for new action possibilities and a search for legitimacy. Thus, reflective planning *is* political activity.

The conception of land-use planning practice as an ecology of subsystems means that the basic goals of different subsystems will remain different, even if mutually agreeable solutions were produced in individual planning tasks. This is how I interpret Healey's notion "Making sense together while living differently". It is then not a single shared goal that a reflective process in a planning task is to produce – but the conditions for the balanced coexistence of multiple goals. These conditions need to be reproduced again and again from one planning project to the next, since the diverging goals never get merged in a single reflective planning project, but are only situationally settled. Thus, the problem of settling conflicting motivations is faced each time a new planning task appears. *Land-use planning as reflective practice means continued tolerance for diverging goals and an ability to handle them productively and creatively in individual planning tasks, where the basic conflicts between subsystems actualize in constantly new ways.*

It thus means mutual recognition of the rights of differing goals to exist. No subsystem of the land-use planning system is illegitimate as such. It is the way the subsystem seeks its goal in the ecosystem of subsystems that may be found illegitimate. A form of goal-seeking which hinders the possibilities of other forms of goal-seeking is illegitimate. The production of expert knowledge in planning is not illegitimate. But it would be if it were to depoliticize planning. Similarly, the pursuit for economic profits in land-use decisions is not illegitimate, yet. Such decision-making that disregards any other criteria is, however, illegitimate. A planning practice where the subsystems together continually reflect on themselves and search for balanced coexistence *is* legitimate.

¹ According to Kimmo Lapintie, mutual understanding and common interest are transcendentals in urban planning and decision-making. Their inaccessibility is as essential for the city as is its polyphony and silent meanings. The city is the realm of unresolved conflicts. (Lapintie 1999, 9-11.)

7 Conclusion

7.1 Dialectical Systems Theory of Land-Use Planning

The planning theory presented in this book is based on *systems theory*. It builds on the work of planning theorists, such as Simon, Lindblom, Etzioni, Faludi, Chadwick and Schön. These theorists were central figures in the development of procedural-normative planning theory from the post-war years to the early 1970s. Systems theory provided the scientific core of planning theory during this period, and it made this era in the development of planning theory the most powerful scientifically. Thus, the crisis of systems-influenced planning theory in the 1970s signified a crisis of not only one tradition within planning theory, but of planning theory itself (see Pakarinen 1992a, 29-30, 60-61). This is not to say that we have not seen important contributions to planning theory since. We have, indeed, especially within the more recent tradition of critical (or communicative) planning theory. Such theorists as Forester, Fischer, Healey and Sager have made a major contribution to the theory and to the ideas presented in this book, too. But a large part of their theoretical efforts have been spent on demonstrating and articulating the crisis of planning theory, while their proposals concerning novel planning theory have been rather vague and tentative. New prospects for methodological development bring up the issue of management in planning, which is theoretically difficult to critical planning theorists, as I have tried to show¹. Critical planning theory runs into difficulties when one makes the observation that emancipation in planning has to be *organized emancipation* in order to make a difference. Critical planning theory is an instrument for criticizing the existing planning methods from the point of view of democracy, rather than an instrument for generating new democratic planning methods. Its essential contribution to the procedural-normative planning theory is the formulation of the crisis of the former systems-theoretical tradition of the theory. But, in their reliance on Schön, the critical planning theorists' new proposals have marked a curious return to that tradition, too.

¹ Section *Critique on Critique* in Chapter 1.

In this book, my purpose has been to show that, in our efforts to create a new planning theory, we can face the challenge posed by the critical planning theory without abandoning systems theory and its methodological potential. Systems-influenced planning theory can be developed to frame its earlier doctrines – and even to frame the criticism of critical planning theorists. In order to do this, we have to approach systems theory from an unorthodox perspective. I have called this perspective *dialectical systems theory*. It is not new, as it dates from Spinoza's and Leibniz's monism. Whitehead's organismic philosophy enabled the elaboration of the monistic worldview in systems terms. Bateson linked it to the terminology of cybernetics, and he pointed the way towards dialectical systems theory by approaching conscious human organisms as paradoxical cybernetic systems. Wilden gave an explicit formulation to dialectical systems theory by associating the dialectics between ontological difference and epistemological distinction with the dialectics between ecosystem and system, and system and metasystem. Luhmann reformulated Parsons' theory of modern society in terms of dialectical function systems. Engeström incorporated Bateson's learning theory in his theory of organizational learning and explained how learning and reflection in an organization follow directly from its structure as a dialectical activity system. This is the route (which I do not claim to be the only possible one) I have followed in my efforts to reorient the systems-based theory of land-use planning activity.

7.2 Pathological Planning

The dialectical systems view enables us to look at *power* dialectically in land-use planning. Quoting Carse's terminology, I have approached power by using two concepts, 'power' and 'strength', in place of only one. Strength means a system's ability to survive. Power, in turn, emerges when some part of the system identifies itself with the strength residing in the whole system, and transforms this strength into its own control over the rest of the system. Power is paradoxical. It separates itself from strength *within* strength. Planning is power. It aspires to control the future changes in the environment from which it has separated itself. But, as Bateson says, "[w]e are not outside the ecology for which we plan – we are always and inevitably a part of it" (Bateson 1987, 512). In the dialectics between power and strength, power is a potential *metaphor* of strength. Such use of power is metaphoric, which enables activity. Planning as power is metaphoric of strength if it enables us to organize our future activities.

Power becomes disruptive only when it loses its metaphoric character. The use of such power by one part of the system makes the whole system weaker. Planning as this kind of power becomes an obstacle to itself. The activity of organizing future activities is disabled by an inappropriate planning method, which is not able to address the acute and potential future problems of activity properly and therefore produces poor plans. The activity labelled as 'planning' is no longer able to do what the activity of planning is supposed to do. For example, the activity of participative planning is disabled by a planning method that some participants identify inappropriately as 'participative planning'. This means that the activity which is labelled as 'participative planning' has serious faults which hinder the actual participation in planning.

When the system becomes paralyzed, *reflection* is required. The system has to redefine its deeper boundaries in order to find such forms of power that would regain metaphoric quality. In short, reflection in participative planning would mean, firstly, *critical* exposure by the participants of the poor quality of the existing planning method in mobilizing participation, and secondly, *creative* participation in the formulation of a new, more enabling planning method. In human systems, power is always present. All human systems are also systems that make representations of themselves and thereby plan themselves. The function of reflection in a planning system is not to dispose of the activity of planning but to redefine it in order to retrieve the system's ability to plan itself. Reflection in participative planning is motivated by the attempt to retrieve participative planning as a form of activity.

However, organizations are vulnerable to a form of disruptive power, which effectively prevents organizations from correcting their activities through reflection. I have called it *pathological power* (Chapter 5). Pathological power causes disturbances in activity and simultaneously denies the existence of these disturbances and, further, denies the existence of the denial. The purpose of the last denial is to prevent the actors' metacommunicative awareness of the character of their activity as self-contradictory. By preventing metacommunication on the self-contradictory and counter-productive effects of collective action, it is likely to push the system into *double bind situations*. In participative planning, pathological power is used when the applied planning method not only disables participation, but when, furthermore, the disabling character of the method is collectively denied by the participants and the denial further denied. The participating citizens are caught in an organizational context where it is unlikely that they can detect and correct important errors in the planning process and important cultural constraints on learning. The expert planners bypass these conditions and act as if they were not doing so. Thereby they inhibit corrective reflection (Argyris 1993, 148). The inhibition of reflection becomes a collective habit. The result is skilled incompetence in participative planning, which is likely to lead into a double bind situation, i.e. a situation of no alternatives where one can participate neither by participating, nor by not participating.

This vicious circle, where the participants are imprisoned by their mutually fostered defensiveness, may demand special efforts in order to be broken. The prevailing activity context has to be shaken somehow to enable actors' *metacommunication* on it. Only reflection through metacommunication can open up new possibilities for action. A central idea of developmental research is to enable metacommunication on the existing problematic activity context by making an *intervention* into it. This is done by introducing an outside researcher in the activity context. Scientific knowledge concerning the context, especially knowledge of pathological power, is gained by *changing* the context – instead of observing it from a distance, as the traditional view of science-making has it. In this book, I have examined more closely Engeström's method of cultural-historical analysis, where the outside action-researcher, in close cooperation with the actors of the studied organization, makes special arrangements to create a new context for the actors' collective metacommunication on their daily routines and established action sequences (Chapter 6).

In land-use planning, it is also critical to have specially arranged contexts for collective metacommunication on the prevailing planning activity. As I suggested in the last chapter, in local land-use planning, open forums or seminars for discussion on

practice-related problems could assemble at regular intervals, twice a year or so. These sessions would not be tied to the specific problematics of individual planning tasks. The local government's role in establishing these forums is crucial, as is also the municipal planners' and politicians' committed involvement in them. If an outside action-researcher on planning is not available, the role of the conductor of metacommunicative discussions on local planning activity might suit best a respected member of the local community who, through his long experience and/or special education, is familiar with planning issues and especially with local planning problematics, but who is not tied to the local government by council or staff membership. Otherwise, his ability and willingness to genuinely contribute to critical evaluations of the local planning activity – which necessarily addresses power relations and formal positions in the local government – might be in too much doubt. Such a person might be, for example, a local consulting planner, a retired planner-administrator, or a resident appreciated for his long involvement and achievements in local environmental issues. Even if an outside action-researcher were available for this task, his work on the reflectivity in local planning practice would only be temporary. As a continuously maintained "skill", reflectivity on the local planning practice has to rely on the local participants and resources. The action-researcher may have a crucial role in initiating and establishing such a reflective planning practice that eventually continues on its own without him.

In comparison to such concepts as 'systemic distortion of communication' and 'structural influence', which are used by critical planning theorists, the concepts 'pathological power' and 'double bind' have more explanatory potential. They disclose the anatomy of contextual power and reveal how it is systemically connected to contradictions in planning activity and difficulties in reflecting upon them. Lacking adequate theoretical tools to explain how contextual power affects the practical problem-solving capacities of planning, the critical planning theorists rely on expressing ethical objections to its undemocratic nature. Critique that reveals the lack of democracy in public planning is naturally necessary. But democracy is never the sole end of public planning. Planning is fundamentally about organizing future activities. Contextual power in land-use planning is undemocratic, but such planning may yet succeed in organizing future activities in the built environment. You may thereby criticize the existing planning practice for its lack of democracy, but your critique does not yet address the question of efficiency in its efforts to organize the future land use. But when a form of contextual power is revealed as pathological power and as an initiator of an acute or potential double bind situation, you will reach the ability to explain *how* the lack of democracy is tied to the lack of efficiency. Pathological power as skilled incompetence is *both* undemocratic *and* inefficient. Reflective cooperation in an acute or potential double bind situation implies a *search for better efficiency which, as a form of activity, actualizes democracy*. A central task of this book has been to reach a mode of explanation where ethics, in the sense of equality, and pragmatics, in the sense of ability to act, can be seen as unified.

7.3 Organizational Learning in Planning

Since Lindblom's 'Science of Muddling Through', the idea of planning systems as learning systems has been closely connected to the systems view of planning. The idea of planning as learning through feedback was introduced in incrementalism, and it was later developed by Etzioni, Faludi, Chadwick and others. Central to their approach was the notion of learning as improvement of the planning system's control over environmental changes. Learning was considered important because one needed to learn more about the environment in order to better control it. The demand for continuous learning was seen to lie in the complexity of the environment, of which comprehensive knowledge can never be gained. Engeström's theory of organizational learning is exceptional in its focus on dilemmas that stem from the organization's own behaviour. The most difficult problems for the organization – the double binds – are not posed by the unexpectedly behaving 'outer' environment, but by the *pathological way* the organization has *learnt* to approach its environment. Here it is the way of learning from the environment that itself recurrently produces new "environmental surprises" from which the organization again and again has to learn. In participative planning, for example, one may learn to incorporate various interest groups in planning tasks in such a manner that certain basic controversies in the way they are incorporated are not addressed. The controversies therefore reside at the level of practice. But addressing them at this level is felt to be too threatening, since it would make the participants question their own self-images. This is therefore bypassed and, instead, the controversies are transformed to the level of individual planning tasks. A pathological practice of participative planning results when the controversies are not seen to originate from the way the participants have *learnt to avoid correction* of their deep mutual attitudes and expectations, but when the cause of controversies is "safely" seen to reside in the "environmental peculiarities" involved in each planning task.

In order to resolve its double binds, the organization has to reach a higher level of learning, a level where it learns about its own ways of learning. It learns about how it learns to learn. Such learning is called *expansive learning*.

Expansive learning in planning activity is not mere dialogue but a complex process. It involves *analyzing the planning activity* with the purpose of revealing an acute or potential double bind situation. Following this, and possibly overlapping with it, there is *dialogue in small transcultural teams* that consist of various active participants. In dialogue, new ideas are playfully created and later critically tested in the hope of finding a *springboard idea* as the first step towards resolving the double bind. But the process towards a renewed planning practice does not end here. The springboard is only the *first* tool, which some of the participants present to the others as a new model of planning activity, and possibly, at another level, as a solution to the current planning problem. The new model of planning activity may be embodied in the new abilities the members of the transcultural team have gained as a "by-product" of their cooperating on an individual planning problem. The new model of planning activity may involve rearrangements in the division of labour, changes in social attitudes, new ways of conceptualizing tasks, new representation techniques, new demands for reasoned and open argumentation, etc. When it appears, it exists simultaneously with the prevailing planning activity. As we saw in Chapter 6, the new model is not straightforwardly adopted. While it expands, *new*

dilemmas and contradictions emerge that demand further learning, but also compromising. These contradictions may follow from cognitive and organizational difficulties to adjust the existing routines and norms to the new activity model, or they may follow from attempts to resist changes in the existing power relationships that necessarily ensue from the application of the model – or, finally, they may follow from contradictions inherent in the model itself. The renewed planning activity, which results from expansive learning is therefore dissimilar to both the former activity and the initial model of the new activity.

7.4 Inter-Organizational Learning in Planning

This short description of expansive learning in land-use planning applies Engeström's general theory of organizational learning. But Engeström's theory was developed for the study of single organizations. The issue becomes more complex when we extend our examination to practices that involve multiple organizations. I have analyzed the system of land-use planning as an ecology of both mutually dependent and autopoietic subsystems (Chapter 4). If this analysis is correct, then the problematics involved in *inter-organizational learning* cannot be avoided when studying the reflectivity of land-use planning practice.

Following Luhmann's theory of modern society, I have identified three subsystems within the system of land-use planning: *expertise*, *politics* and *economics* (Chapter 4). The relationships between the system of land-use planning and its three subsystems are dialectical. The basic distinction of land-use planning is *legitimate/illegitimate*, and the subsystems depend upon that distinction. This means that decision-making in planning, whether on the basis of expertise, politics or economics, strives for legitimacy. For the subsystems of expertise and economics, this dependence on legitimacy is an inexhaustible source of contradictions. The tension inherent in the demand to produce professional knowledge legitimately and in the demand to make economic profit legitimately constitutes the very essence of these subsystems. As subsystems of the system of land-use planning, they continuously have to legitimize themselves, although it is not legitimacy that they are after. The contradictions which follow from these basic tensions between the subsystems and their ecosystem can be called *inter-systemic contradictions* – in distinction from contradictions that individual subsystems may generate within themselves.

Engeström's theory of organizational learning is fully applicable to explaining learning in the resolution of contradictions and double binds *within* the subsystems of the land-use planning system – the kind of contradictions and double binds that expertise, politics and economics cause to themselves through their own inappropriate models of thinking. But inter-systemic contradictions have to be approached differently. My hypothesis is that *inter-systemic contradictions encountered in land-use planning cannot be resolved by expansive learning*. No form of learning can harmonize the fundamental inconsistencies between expertise, politics and economics as long as the latter endure as distinctive activity systems. Their basic goals will remain mutually incompatible. Yet, as subsystems of the system of land-use planning, they are mutually dependent. Hence, the function of

learning is to create planning solutions that provide task-related contexts for their coexistence. An essential function of analysis in planning activity is to reveal, whether one is dealing with contradictions that stem from individual subsystems' inherently contradictory behaviours or with inter-systemic contradictions that stem from fundamental differences between the subsystems.

7.5 Legitimizing Inter-Organizational Learning in Planning

Inter-systemic contradictions are higher-order contradictions that keep reappearing in different forms in various planning tasks. The recurrence of these contradictions is an integral structural property of the land-use planning system. The creative solutions produced by reflection can promise only local, task-specific consensus between the subsystems' diverging goals. But, in addition, reflection creates mutual awareness of the existence of these goals. Reflective activity creates a public realm where actors from different epistemic contexts learn, to a degree, each other's roles and are able to acknowledge – if not share – reasonings that are different from their own. Therefore, when dealing with inter-systemic contradictions, reflective learning in planning is not only about creating solutions to individual planning problems that succeed in combining demands derived from different epistemic contexts – it is also about *making such efforts justifiable*.

The reflective practice of land-use planning is both a planning practice where contradictions and double binds in planning get resolved and a practice where the participants learn to handle legitimately those contradictions that are found unresolvable in mutual analysis. The search for reflectivity is in itself also a search for legitimacy – and thereby political activity. Such a search may not resolve all the contradictions encountered in planning; but, by recognizing and justifying the existence of contradictory goals and by striving for transcultural understanding, it may provide possibilities for making choices between them that are mutually recognized as legitimate.

7.6 Suggestions for Further Research

An important research area, which has hardly been touched in this study, is the role of *mass media* (local newspapers, local radio stations) in local land-use planning communication. It seems evident that mass media, as they mediate planning communication between those responsible for planning and those watching them, do not merely serve as "channels" that make planning more transparent. They have their own stakes and interests, which they follow as they make their selections from the "material" of ongoing planning communication, and as they further turn these selections into public matters. Mass media can possibly be studied as a *system* in its own right; a system which feeds on its ongoing production of public news and opinions. Hence, it would not "transfer" any planning communication, but *transform* this communication into public communication on planning issues. (See Luhmann 1990, 203-17.) It would be interesting to learn from a possible future study on mass media in local land-use planning whether

the general dialectical systems approach is found applicable, and whether, and how, it fits to my framework of the system of land-use planning as an ecology of subsystems.

There is another area of research on land-use planning, which I have brought up but only in very general terms, and rather indicated the need for such research without actually becoming engaged in it myself: *cultural-historical research on land-use planning activity*. My conviction is that cultural-historical research on land-use planning activity, both in general and localized terms, would provide a crucial new perspective to land-use planning activity and its problems. It offers theoretical tools to the comprehension of the present state and dilemmas of planning activity through the description of its past developmental phases.

In this book, my attempt has been to increase the explanatory power of procedural-normative planning theory in relation to planning practices. Especially, I hope to have laid a basis for developmental planning research that aims at contributing to the self-understanding and development of the existing historical land-use planning practices, with their specific and generalizable characteristics. The book itself, in this form, is highly theoretical and as such it is a tool better suited for researchers on planning practice than the planning practitioners. I can only hope that the basic ideas presented here – on the dialectical systems explanation of planning activity and power used in planning, on the structure and function of the land-use planning system and its subsystems, and on organizational and inter-organizational learning in planning activity – will be found applicable in future planning research that is more directly related to specific empirical cases of local land-use planning. On the other hand, the theory itself needs further refining for which experience and results gained from empirical research are essential. Empirical research is needed to indicate whether my hypothesis of the nature of inter-organizational learning in land-use planning is appropriate in conceptualizing both land-use planning work and empirical research work on it.

References

- Aalto, Alvar (1948): "Romkornet och laxen", *Arkkitehti* 1-2/1948, pp. 7-12
- Aalto, Alvar (1953): "Koetalo", *Arkkitehti* 9-10/1953, pp. 158-59
- Aamulehti*, July 11th, 1998, p. 8
- Adorno, Theodor W.; Max Horkheimer & Herbert Marcuse (1991): *Järjen kritiikki*, trans. & edited by Jussi Kotkavirta. Vastapaino, Tampere
- Ahmavaara, Yrjö (1976): *Yhteiskuntakybernetiikka*. Weilin+Göös, Helsinki
- Albertsen, Niels (1996): "Arkitekturens praksis. Habitus, felt og kulturel kapital", a paper presented in the Nordic seminar "Arkitektur som konst" 3.-10. June, 1996
- Alexander, Christopher (1966): "Kaupunki ei ole puu" ("A City is not a Tree"), trans. by Leena Maunula, *Arkkitehti* no. 7-8, pp. 120-26
- Andersson, Harri (1995): "The Crisis of Modernism and Finnish Localities", in *Are Local Strategies possible? – Scrutinizing Sustainability*, edited by Terttu Pakarinen & Helena Ylinen. Tampere University of Technology, Department of Architecture, Institute of Urban Planning, Publications 29, Tampere, pp. 145-57
- Anttiroiko, Ari-Veikko (1993a): "Systeemitheoria kunnallistieteellisen tutkimuksen paradigmaattisena lähtökohtana", in Ari-Veikko Anttiroiko, Olavi Kallio & Pentti Rönkkö, *Systeemitheoria kunnallistieteellisen tutkimuksen lähestymistapana*. Tampereen yliopisto, kunnallistieteiden laitos, julkaisusarja 4 / 1993, Tampere, pp. 2-29
- Anttiroiko, Ari-Veikko (1993b): "Tiede, yhteiskunta ja systeemi", in Ari-Veikko Anttiroiko, Olavi Kallio & Pentti Rönkkö, *Systeemitheoria kunnallistieteellisen tutkimuksen lähestymistapana*. Tampereen yliopisto, kunnallistieteiden laitos, julkaisusarja 4 / 1993, Tampere, pp. 125-44
- Anttiroiko, Ari-Veikko (1993c): "Tieteen ja käytännön dialogi. Johdatus 'Uudistuvan kunnallistutkimuksen' tematiikkaan", in *Uudistuva kunnallistutkimus. Kunnallistutkimuksen paradigmanmuutos 1990-luvulla*, edited by Ari-Veikko Anttiroiko. Tampereen yliopisto, Kunnallistieteiden laitos, julkaisusarja 5/1993, Tampere
- Anttiroiko, Ari-Veikko & Pekka Valkama (1993): "Kunnallistaloudellisen tutkimuksen uudet painopistealueet", in *Uudistuva kunnallistutkimus. Kunnallistutkimuksen paradigmanmuutos 1990-luvulla*, edited by Ari-Veikko Anttiroiko. Tampereen yliopisto, Kunnallistieteiden laitos, julkaisusarja 5/1993, Tampere
- Arendt, Hannah (1958): *The Human Condition*. The University Of Chicago Press, Chicago
- Arendt, Hannah (1979): "On Hannah Arendt", in *Hannah Arendt: The Recovery of the Public World*, edited by Melvyn A. Hill. St. Martin's Press, New York, pp. 301-40
- Argyris, Chris (1993, orig. 1992): *On Organizational Learning*. Blackwell, Cambridge, Massachusetts
- Aro, Jari (1994): "Sosiologia kielenkäyttönä", in *Sosiologisen teorian nykysuuntauksia*, edited by Risto Heiskala. Gaudeamus, Helsinki, pp. 38-62

- Aronen, Kauko & Elina Berghäll (1998): "Parhaat käytännöt kaupunkien kansainvälistymisessä. Alustava raporttiluonnos kaupunkien kansainvälistymisstrategiaverkostoprojektista", a paper presented in the seminar "Kaupungit globalisaation aikakaudella – Cities in the Age of Globalisation", The University of Tampere, May 25th, 1998
- Bachelard, Gaston (1969): *The Poetics of Space*. trans. by Maria Jolas. Beacon Press, Boston
- Bateson, Gregory (1987, orig. 1972): *Steps to an Ecology of Mind*. Jason Aronson, Northvale, New Jersey
- Beauregard, Robert A. (1996): "Voices of Decline", in *Readings in Urban Theory*, edited by Susan Fainstein and Scott Campbell. Blackwell, Malden, Massachusetts, pp. 363-91
- Berger, Peter L. & Thomas Luckmann (1994): *Todellisuuden sosiaalinen rakentuminen (The Social Construction of Reality)*. Gaudeamus, Helsinki
- Bernstein, Richard J. (1980, orig. 1971): *Praxis and Action*. University of Pennsylvania Press, Philadelphia
- Bernstein, Richard J. (1986): *Philosophical Profiles*. Polity Press, U.K.
- von Bertalanffy, Ludvig (1975): "General System Theory", in *General Systems Theory and Human Communication*, edited by Brent D. Ruben & John Y. Kim. Hayden, Rochelle Park, New Jersey, pp. 6-20
- Bohm, David (1990): "Interview London", *Art & Design Profile: Art Meets Science and Spirituality*, n:o 21
- Bohm, David & F. David Peat (1992): *Tiede, järjestys ja luovuus (Science, Order, and Creativity)*, trans. by Tiina Seppälä, Jukka Jääskinen & Paavo Pyökkänen. Gaudeamus, Helsinki
- Boulding, Kenneth E. (1975): "General Systems Theory – the Skeleton of Science", in *General Systems Theory and Human Communication*, edited by Brent D. Ruben & John Y. Kim. Hayden, Rochelle Park, New Jersey, pp. 21-32
- Bourdieu, Pierre (1987): *Sosiologian kysymyksiä*. Vastapaino, Tampere
- Bourdieu, Pierre & Loic J. D. Wacquant (1995): *Reflektiiviseen sosiologiaan*. Joensuu University Press, Joensuu
- Brindley, Tim; Yvonne Rydin & Gerry Stoker (1989): *Remaking Planning. The Politics of Urban Change in the Thatcher Years*. Unwin Hyman, London
- Buber, Martin (1995): *Minä ja Sinä.*, trans. by J. Pietilä. Werner Söderström, Porvoo
- Carse, James P. (1986): *Finite and Infinite Games*. Free Press, New York
- Castells, Manuel (1996): "The Informational Mode of Development and the Restructuring of Capitalism", in *Readings in Urban Theory*, edited by Susan Fainstein and Scott Campbell. Blackwell, Malden, Massachusetts, pp. 72-101
- Cates, Camille (1979): "Beyond Muddling: Creativity", *Public Administration Review* 39(6), pp. 527-532
- Chadwick, George (1978): *A Systems View of Planning* (2nd edition). Pergamon Press, Oxford
- Cuff, Dana (1991): *Architecture: The Story of Practice*. The MIT Press, Cambridge, Massachusetts
- Darwin, Charles (1980): *Lajien synty*, edited by Richard E. Leakey. Trans. by Antto Leikola. Kirjayhtymä, Helsinki
- Derrida, Jacques (1988, orig. 1972): *Positioita (Positions)*, trans. by Outi Pasanen. Gaudeamus, Helsinki
- Dewey, John (1960, orig. 1933): *How We Think. A Restatement of the Relation of Reflective Thinking to the Educative Process*. D.C. Heath and Company, Lexington, Massachusetts
- Dilworth, Robert L. (1996): "Institutionalizing Learning Organizations in the Public Sector", *Public Productivity & Management Review*, 19 (4), pp. 407-21
- Eco, Umberto (1971): *Den frånvarande strukturen (La struttura assente)*. Bo Cavefors Bokförlag, Lund
- Engeström, Yrjö (1987): *Learning by Expanding*. Orienta-konsultit, Helsinki
- Engeström, Yrjö (1995): *Kehittävä työntutkimus. Perusteita, tuloksia ja haasteita*. Hallinnon kehittämiskeskus, Helsinki
- Engeström, Yrjö (1997): "Activity Theory and Organizational Learning: The Approach and an Application in a Manufacturing Plant", lecture held in 1st Nordic Baltic Conference on Activity Theory, Helsinki, Finland, 7.-9.2.1997

- Engeström, Yrjö; Ritva Engeström & Tarja Vähäaho (1999): "When the Center Does not Hold. The Importance of Knotworking", in *Activity Theory and Social Practice*, edited by Seth Chaiklin, Mariane Hedegaard and Uffe Juul Jensen. Aarhus University Press, Aarhus, pp. 345-74
- Etzioni, Amitai (1967): "Mixed-scanning: A "Third" Approach to Decision-making", *Public Administration Review* 27(Dec.), pp. 385-392
- Fainstein, Susan S. (1996): "The Changing World Economy and Urban Restructuring", in *Readings in Urban Theory*, edited by Susan Fainstein and Scott Campbell. Blackwell, Malden, Massachusetts, pp. 170-86
- Fainstein, Susan S. (1997, orig. 1995): "Urban Redevelopment and Public Policy in London and New York", in *Managing Cities. The New Urban Context*, edited by Patsy Healey, Stuart Cameron, Simin Davoudi, Stephen Graham & Ali Mahani-Pour. John Wiley & Sons, Chichester, pp. 127-43
- Fainstein, Susan S. & Scott Campbell (1996): "Introduction: Theories of Urban Development and their Implications for Policy and Planning", in *Readings in Urban Theory*, edited by Susan Fainstein and Scott Campbell. Blackwell, Malden, Massachusetts, pp. 1-17
- Faludi, Andreas (1976, orig. 1973): *Planning Theory*. Pergamon Press, Oxford
- Faludi, Andreas (1986): *Critical Rationalism and Planning Methodology*. Pion Limited, London
- Fassbinder, Helga (1996): "New Dimensions in Planning. The Berlin City Forum", in *Managing Urban Change*, edited by Jan Verwijnen & Panu Lehtovuori. University of Art and Design, UIAH B 50, Helsinki, pp. 68-77
- Fichtner, Bernd (1999): "Activity Revisited as an Explanatory Principle and as an Object of Study – Old Limits and New Perspectives", in *Activity Theory and Social Practice*, edited by Seth Chaiklin, Mariane Hedegaard and Uffe Juul Jensen. Aarhus University Press, Aarhus, pp. 51-65
- Fischer, Frank (1990): *Technocracy and the Politics of Expertise*. Sage, Newbury Park, California
- Fischler, Raphaël (1995): "Strategy and History in Professional Practice. Planning as World Making", in *Spatial Practices*, edited by Helen Liggett & David C. Perry. Sage, London, pp. 13-58
- Flyvbjerg, Bent (1998): *Rationality and Power. Democracy in Practice*, trans. by Steven Sampson. The University of Chicago Press, Chicago
- Forester, John (1987): "Planning in the Face of Conflict: Negotiation and Mediation Strategies in Local Land Use Regulation", *Journal of American Planning Association* 53(3), pp. 303-314
- Forester, John (1989): *Planning in the Face of Power*. University of California Press, Berkeley, Los Angeles
- Forester, John (1993): *Critical Theory, Public Policy, and Planning Practice*. State University of New York Press, Albany
- Forrester, Jay W. (1969): *Urban Dynamics*. The M.I.T. Press, Massachusetts Institute of Technology, Cambridge Massachusetts
- Foucault, Michel & Paul Rabinow (1989): *Kaupunki tila valta*. Tampereen teknillinen korkeakoulu, Arkkitehtiosasto, Yhdyskuntasuunnittelun laitos, Julkaisu 16, Tampere
- Frank, Lawrence K. (1975): "Cultural Organization", in *General Systems Theory and Human Communication*, edited by Brent D. Ruben & John Y. Kim. Hayden, Rochelle Park, New Jersey, pp. 128-35
- Freud, Sigmund (1971, orig. 1900): *The Interpretation of Dreams*. Trans. by J. Strachey. George Allen & Unwin, London
- Friedmann John (1973): *Retracking America*. Anchor Press/Doubleday, Garden City, New York
- Friedmann John (1987): *Planning in the Public Domain. From Knowledge to Action*. Princeton University Press, Princeton, New Jersey
- Gadamer, Hans-Georg (1979): *Truth and Method*. Sheed and Ward
- Ghirardo, Diane (1994): "Crossing the Lines in American Architectural Education: Power and Knowledge", a lecture held and a paper presented in the Nordic Research Course "Architectural Research in the Mirror of Disciplines", Aarhus School of Architecture, November 1st, 1994
- Gibson, James J. (1986, orig. 1979): *The Ecological Approach to Visual Perception*. Lawrence Erlbaum Associates, Hillsdale, New Jersey
- Gleick, James (1990, orig. 1989): *Kaaos (Chaos: Making a New Science)*, trans. by Raimo Keskinen. Art House, Helsinki

- Goodin, Robert & Ilmar Waldner (1979): "Thinking Big, Thinking Small, and not Thinking at All", *Public Policy* 27 (1), pp. 1-24
- Granberg, Mikael & Åsa von Sydow (1998): "Samhällsplanering. Roller, teman och utveckling under trettio år", a paper presented in the Nordic seminar "NSBB – Urban forskning", Hanasaari, November 14th, 1998
- Habermas, Jürgen (1984): *The Theory of Communicative Action. Volume 1- Reason and the Rationalization of Society*, trans. by Thomas McCarthy. Beacon Press, Boston
- Habermas, Jürgen (1985): *Järki ja kommunikaatio. Tekstejä 1981-1985*, Texts chosen and translated by Jussi Kotkavirta. Gaudeamus, Helsinki
- Habermas, Jürgen (1987): *The Theory of Communicative Action. Volume 2 - Lifeworld and System*. Polity Press, Cambridge, U.K.
- Haila, Anne (1997): "Is the Theory of the City as a Growth Machine Relevant in Finland?", in *Milieu Construction. An Interdisciplinary Conference, January 23-25, Turku, Finland*, edited by Ari Lainevo. Helsinki University of Technology, Milieu Construction Centre, Conference report S4/1997
- Hale, Mary M. (1996): "Learning Organizations and Mentoring. Two Ways to Link Learning and Workforce Development", *Public Productivity & Management Review* 19 (4), pp. 422-32
- Harisalo, Risto (1991): "Valta ja vallan käyttö henkisten resurssien johtamisessa kunnallishallinnossa", in *Kunnat tienhaarassa*, edited by Risto Harisalo, Paavo Hoikka & Tuija Rajala. Finn publishers, Jyväskylä, pp. 29-54
- Harisalo, Risto; Tuija Rajala & Krister Ståhlberg (1992): *Kunnallispolitiikka*. Vapokustannus, Helsinki
- Harvey, David (1985): *The Urbanization of Capital*. Basil Blackwell, Oxford
- Harvey, David (1996): "Social Justice, Postmodernism, and the City", in *Readings in Urban Theory*, edited by Susan Fainstein and Scott Campbell. Blackwell, Malden, Massachusetts, pp. 415-35
- Healey, Patsy (1992): "Planning through Debate. The Communicative Turn in Planning Theory", *Town Planning Review* 63 (2), pp. 143-62
- Healey, Patsy (1995): "The Argumentative Turn in Planning Theory and Its Implication for Spatial Strategy Formation", in *Are Local Strategies Possible? – Scrutinizing Sustainability*, edited by Terttu Pakarinen & Helena Ylinen. Tampere University of Technology, Department of Architecture, Institute of Urban Planning, Publications 29, pp. 46-70
- Healey, Patsy (1997, orig. 1995): "Discourses of Integration: Making Frameworks for Democratic Urban Planning", in *Managing Cities. The New Urban Context*, edited by Patsy Healey, Stuart Cameron, Simin Davoudi, Stephen Graham, Ali Madani-Pour. John Wiley & Sons, Chichester, U.K., pp. 251-72
- Heikkinen, Hannu L.T. & Jyrki Jyrkämä (1999): "Mitä on toimintatutkimus?", in *Siinä tutkija missä tekijä. Toimintatutkimuksen perusteita ja näköaloja*, edited by Hannu L.T. Heikkinen, Rauno Huttunen & Pentti Moilanen. Atena kustannus, Juva, pp. 25-62
- Hintikka, Jaakko (1982): *Kieli ja mieli*. Otava, Helsinki
- Horelli, Liisa (1981): *Ympäristöpsykologia*. Weilin+Göös, Espoo
- Huttunen, Rauno, Leena Kakkori & Hannu L.T. Heikkinen (1999): "Toiminta, tutkimus ja totuus", in *Siinä tutkija missä tekijä. Toimintatutkimuksen perusteita ja näköaloja*, edited by Hannu L.T. Heikkinen, Rauno Huttunen & Pentti Moilanen. Atena kustannus, Juva, pp. 111-36
- Heiskala, Risto (1994): "Talcott Parsons ja rakennefunktionalismi", in *Sosiologisen teorian nykysuuntauksia*, edited by Risto Heiskala. Gaudeamus, Helsinki, pp. 88-120
- von Herten, Gustaf (1993): *The Spirit of the Game*. Fritzes, Stockholm
- Häyrynen, Liisa (1992): "Arkitehti katsoo taakseen – arkkitehtikunnan koettu historia", in *Arkitehdin työ. Suomen Arkkitehtiliitto 1892-1992*, edited by Pekka Korvenmaa. Suomen Arkkitehtiliitto – Finlands Arkitektförbund r.y., Rakennustieto Oy, Helsinki, ss.233-253
- Jauhiainen, Jussi S. (1995): *Kaupunkisuunnittelu, kaupunkiudistus ja kaupunkipolitiikka. Kolme eurooppalaista esimerkkiä*. Turun yliopiston maantieteen laitoksen julkaisuja n:o 146, Turku
- Judge, David (1995): "Pluralism", in *Theories of Urban Politics*, edited by David Judge, Gerry Stoker & Harold Wolman. Sage, London, pp. 13-34

- Jyrkämä, Jyrki (1999): "Toimintatutkimus ja sosiaaliset toimintakäytännöt – giddensiläisiä näkökulmia toimintatutkimukseen", in *Siinä tutkija missä tekijä. Toimintatutkimuksen perusteita ja näköaloja*, edited by Hannu L.T. Heikkinen, Rauno Huttunen & Pentti Moilanen. Atena kustannus, Juva, pp. 137-54
- Järvilehto, Timo (1994): *Ihminen ja ihmisen ympäristö*. Prometheus, Pohjoinen, Oulu
- Järvilehto, Timo (1995): *Mikä ihmistä määrää?* Pohjoinen, Oulu
- Järvilehto, Timo (1996): "Tietoisuus, yhteistyö ja valta", *Tiedepolitiikka* 21 (4), pp. 23-28
- Järvilehto, Timo (1999): "The Theory of the Organism-Environment System IV. The Problem of Mental Activity and Consciousness", an article manuscript to be published in *Integrative Physiological and Behavioral Science* 2000, 35:1, wwwedu.oulu.fi/homepage/tjarvile/art4.htm
- Järvinen, Jukka (1992): *Reference and Meaning in Architecture*. Department of Architecture Tampere University of Technology Occasional Papers DATUTOP 16, Tampere
- Jääskinen, Niilo (1988): "Niklas Luhmann ja sosiaalisten systeemien yleinen teoria", in *Teorioita oikeuden kehityksestä*, edited by Kaarlo Tuori. Helsingin yliopiston julkisoikeuden laitoksen julkaisuja D: 1, Helsinki, pp. 91-102
- Kallinikos, Jannis (1997): "Economic Governance and Social Values: The Case of a Major Housing Project", *Scandinavian Housing and Planning Research* 14, pp. 7-25
- Kallio, Olavi (1993a): "Systeemitteoria kunnallistieteellisessä tutkimuksessa", in Ari-Veikko Anttiroiko, Olavi Kallio & Pentti Rönkkö, *Systeemitteoria kunnallistieteellisen tutkimuksen lähestymistapana*. Tampereen yliopisto, kunnallistieteiden laitos, julkaisusarja 4 / 1993, Tampere, pp. 30-48
- Kallio, Olavi (1993b): "Kuntien toimintaympäristön muuttuminen 1990-luvulla", in *Uudistuva kunnallistutkimus. Kunnallistutkimuksen paradigmanmuutos 1990-luvulla*, edited by Ari-Veikko Anttiroiko. Tampereen yliopisto, Kunnallistieteiden laitos, julkaisusarja 5/1993, Tampere
- Kangas, Olli (1994): "Rationaalisen valinnan teorian", in *Sosiologisen teorian nykysuuntauksia*, edited by Risto Heiskala. Gaudeamus, Helsinki, pp. 63-87
- Kantola, Helena (1990): "Teesejä 1990-luvun kaupunkisuunnittelulle", *Arkkitehtiutiset* 19/90, pp. 6-9
- Karanka, Juhani (1998): "Leikin villi voima oli luovuuden perusta", *Aamulehti*, February 2nd, 1998, p. 2
- Karatani, Kojin (1995): *Architecture as Metaphor. Language, Number, Money*, trans. by Sabu Kohso. The MIT Press, Cambridge, Massachusetts
- Kauffman, Stuart (1995): *At Home in the Universe*. Viking, London
- Kaupungit kasvun luojina* (1995). Sisäministeriö, Painatuskeskus, Helsinki
- Kim, John Y. (1975): "Feedback in Social Sciences: Toward a Reconceptualization of Morphogeneses", in *General Systems Theory and Human Communication*, edited by Brent D. Ruben & John Y. Kim. Hayden, Rochelle Park, New Jersey, pp. 207-21
- Koestler, Arthur (1964): *The Act of Creation*. Hutchinson, London
- Kolb, David A. (1984): *Experiential Learning. Experience as the Source of Learning and Development*. Prentice-Hall, New Jersey
- Konttinen, Esa (1997): "Professionaalinen asiantuntijatyö ja sen haasteet myöhäismodernissa", in *Muuttuva asiantuntijuus*, edited by Juhani Kirjonen, Pirkko Remes & Anneli Eteläpelto. Koulutuksen tutkimuslaitos, Jyväskylän yliopisto, Jyväskylä, pp. 48-61
- Koskiahho, Briitta (1998): "Tee niin kuin haluaisit toisten tekevän sinulle", *Aamulehti* November 2nd, p. 2
- Kuhn, Alfred (1975) "Social Organization", in *General Systems Theory and Human Communication*, edited by Brent D. Ruben & John Y. Kim. Hayden, Rochelle Park, New Jersey, pp. 114-27
- Kuhn, Thomas S. (1970): *The Structure of Scientific Revolutions* (2nd edition, enlarged). The University of Chicago Press, Chicago
- Kurunmäki, Kimmo 1999: "Suomi seuraa muita maita – lainsäädäntö suunnittelun hallinnonin tukena", *Yhteiskuntasuunnittelu* 37 (1-2), pp. 42-60
- Lahtonen, Maarit (1999): "Keskustellen parempaan työyhteisöön", in *Siinä tutkija missä tekijä. Toimintatutkimuksen perusteita ja näköaloja*, edited by Hannu L.T. Heikkinen, Rauno Huttunen & Pentti Moilanen. Atena kustannus, Juva, pp. 201-20

- Lang, Jon (1987): *Creating Architectural Theory*. Van Nostrand Reinhold, New York
- Lapintie, Kimmo (1993): *The So-called Good Environment. Morality and Criticism in Architecture*. Department of Architecture Tampere University of Technology Occasional Papers DATUTOP 17, Tampere
- Lapintie, Kimmo (1996): "The Justification of Planning Solutions in Ecological Housing – A Case Study of Viikki in Helsinki", *Scandinavian Housing and Planning Research* 13, pp. 183-99
- Lapintie, Kimmo (1999): "Ratkaisemattomien kiistojen kaupunki", in *Kaupunki vuorovaikutuksessa*, edited by Liisa Knuuti. Teknillinen korkeakoulu, Yhdyskuntasuunnittelun tutkimus- ja koulutuskeskus, C 52, Espoo, pp. 7-13
- Lapintie, Kimmo; Seppo Kjellberg & Ari Lainevo (1995): "Ecopolis – An Option for the Future", in *Are Local Strategies possible? – Scrutinizing Sustainability*, edited by Terttu Pakarinen & Helena Ylinen. Tampere University of Technology, Department of Architecture, Institute of Urban Planning, Publications 29, Tampere, pp. 240-59
- Laurikainen, K.V. (1987): *Tieteen giljotiini*. Otava, Helsinki
- Lawson, Chester A. (1975): "Biological Organization", in *General Systems Theory and Human Communication*, edited by Brent D. Ruben & John Y. Kim. Hayden, Rochelle Park, New Jersey, pp. 80-95
- Lehti, Esko & Kari Ristola (1990): *Suunnittelu luovaa työtä*. Rakennuskirja Oy, Helsinki
- Lehtonen, Hilka (1994): *Perspektiivejä arkkitehtuurisuunnitelmien esityskäytäntöihin*. Helsingin teknillinen korkeakoulu, Yhdyskuntasuunnittelun täydennyskoulutuskeskus, julkaisu A 22, Espoo
- Leontjev, A.N. (1977): *Toiminta, tietoisuus, persoonallisuus*, trans. by Pentti Hakkarainen. Kansankulttuuri, Helsinki
- Leontyev, A.N. (1981): *Problems of the Development of the Mind*. Progress Publishers, Moscow
- Leskinen, Antti (1994): *Environmental Planning as Learning: The Principles of Negotiation, the Disaggregative Decision-making Method and Parallel Organization in Developing the Road Administration*. University of Helsinki, Department of Economics and Management, Publication 5, Land-use Economics, Helsinki
- Lindblom, Charles E. (1959): "The Science of Muddling through", *Public Administration Review* 19(2), pp. 79-88
- Lindblom, Charles E. (1965): *The Intelligence of Democracy*. The Free Press, New York
- Lindblom, Charles E. (1977): *Politics and Markets. The World's Political-Economic Systems*, Basic Books, New York
- Lindblom, Charles E. (1979): "Still Muddling, not yet through", *Public Administration Review* 39(6), pp. 517-526
- Logan, John R. & Harvey L. Molotch (1996): "The City as a Growth Machine", in *Readings in Urban Theory*, edited by Susan Fainstein and Scott Campbell. Blackwell, Malden, Massachusetts, pp. 291-337
- Lovering, John (1997, orig. 1995): "Creating Discourses Rather than Jobs: the Crisis in the Cities and the Transition Fantasies of Intellectuals and Policy Makers", in *Managing Cities. The New Urban Context*, edited by Patsy Healey, Stuart Cameron, Simin Davoudi, Stephen Graham, Ali Madani-Pour. John Wiley & Sons, Chichester, U.K., pp. 109-26
- Luhmann, Niklas (1990): *Political Theory in the Welfare State*, trans. by John Bednarz, Jr. de Gruyter, Berlin
- Luhmann, Niklas (1993): *Risk: A Sociological Theory*, trans. by Rhodes Barrett. de Gruyter, Berlin
- Lundquist, Jerker (1995): "Modelling, Simulation, Design", in *Design Methodologies in the Urban Context*, edited by Reza Kazemian. Royal Institute of Technology, Department of Architecture and Town Planning, Stockholm, pp. 41-52
- Lynch, Kevin (1981): *The Theory of Good City Form*. The MIT Press, Cambridge, Massachusetts
- Maankäyttö- ja rakennuslaki* 132/1999
- Mannermaa, Mika (1993): *Tulevaisuus - murroksesta mosaiikkiin*. Otava, Helsinki
- March, James G. & Herbert A. Simon (1967, orig. 1958): *Organizations*. John Wiley & Sons, New York
- Marx, Karl (1974, orig. 1867): *Pääoma. Kansantaloustieteen arvostelua. 1 osa – Pääoman tuotantoprosessi*, trans. by O.V. Louhivuori. Kustannusliike Edistys, Moskova

- Mayer, Margit (1997, orig. 1995): "Urban Governance in the Post-Fordist City", in *Managing Cities. The New Urban Context*, edited by Patsy Healey, Stuart Cameron, Simin Davoudi, Stephen Graham, Ali Madani-Pour. John Wiley & Sons, Chichester, U.K., pp. 231-49
- Mead, George H. (1962, orig. 1934): *Mind, Self, and Society*, edited by Charles W. Morris. The University of Chicago Press, Chicago
- Mennola, Erkki (1993): "Lopun alku vai alun loppu? Paikallinen itsehallinto 1990-luvun mullistuksissa", in *Uudistuva kunnallistutkimus. Kunnallistutkimuksen paradigmanmuutos 1990-luvulla*, edited by Ari-Veikko Anttiroiko. Tampereen yliopisto, Kunnallistieteiden laitos, julkaisusarja 5/1993, Tampere
- Mumford, Lewis (1949): *Kaupunkikulttuuri (The Culture of Cities)*, trans. by Lassi Huttunen. Werner Söderström, Porvoo
- Mäntysalo, Raine (1997a): "Learning in Town Planning Practice", in *Maan päällä - taivaan alla*, edited by Anna-Maija Ylimaula. Acta Universitatis Ouluensis Technica C 97, Oulu, pp. 197-234
- Mäntysalo, Raine (1997b): "The Art of Reflection", *Nordisk Arkitekturforskning* 10 (2), pp. 31-40
- Mäntysalo, Raine (1997c): "Different Differences: Territory, Map, and Map-maker", in *NGP Yearbook 1997, Nordia Geographical Publications* 26 (1), edited by Jani Vuolteenaho & Topi Antti Äikäs. University of Oulu, Department of Geography, pp. 58-78
- Mäntysalo, Raine (1998a): "The System of Land-Use Planning", in *Rationality Runs Amok*, edited by Anna-Maija Ylimaula & Georg Henrik von Wright. Acta Universitatis Ouluensis Technica C 121, Oulu, pp. 65-82
- Mäntysalo, Raine (1998b): "Kaj Nyman: Talojen kieli" (a book review), *Nordisk arkitekturforskning* 11 (4), pp. 149-53
- Mäntysalo, Raine (1999): "Learning from the UK: Towards Market-Oriented Land-Use Planning in Finland", *Housing, Theory and Society* 16 (4), pp. 179-91
- Möttönen, Sakari (1997): *Tulosjohtaminen ja valta poliittisten päätöksentekijöiden ja viranhaltijoiden välisissä suhteissa*. Suomen kuntaliitto, Helsinki
- Nyman, Kaj (1986): "Wittgenstein meaning Architecture", *Datutop* 10. TTKK, Tampere, pp. 39-66
- Nyman, Kaj (1989): *Husens språk*. Atlantis/Art House, Helsinki
- Nyman, Kaj (1995): "Art as Method in Urban Design", in *Design Methodologies in the Urban Context*, edited by Reza Kazemian. Royal Institute of Technology, Department of Architecture and Town Planning, Stockholm, pp. 73-78
- Nyman, Kaj (1998a): *Talojen kieli*. Rakennusalan Kustantajat RAK/Kustantajat Sarmala Oy, Helsinki
- Nyman, Kaj (1998b): "Reply to Raine Mäntysalo", *Nordisk arkitekturforskning* 11 (4), pp. 153-55
- Pakarinen, Terttu (1992a): *Urban Planning Then and Now. Planning Theory in History and Contemporary Planning Problems*. Tampere University of Technology, Department of Architecture, Institute of Urban Planning, Publications 28, Tampere
- Pakarinen, Terttu (1992b): "Kohti moniarvoista yhdyskuntasuunnittelua", in *Kunta, kuntalainen ja ympäristö – ympäristön kehittämisen haasteet*, edited by Seppo Aura & Pentti Siitonen. Valtion painatuskeskus, Helsinki, pp. 119-31
- Pakarinen, Terttu; Vesa Kinttula & Minna Laitinen (1993): *Luova periferia - asuntoalueen uusi elämä*. Asuntohallitus, tutkimus- ja suunnitteluosasto, asuntotutkimuksia 10:1993, Valtion painatuskeskus, Helsinki
- Palonen, Kari (1989): "Hannah Arendt", in *Politiikan teorian moderneja klassikkoja*, edited by Jukka Kanerva. Gaudeamus, Helsinki
- Paris, Chris (1982): "Introduction by the Editor", in *Critical Readings in Planning Theory*, edited by Chris Paris. Pergamon Press, Oxford, pp. 3-11
- Pickvance, Chris (1982): "Physical Planning and Market Forces in Urban Development", in *Critical Readings in Planning Theory*, edited by Chris Paris. Pergamon Press, Oxford, pp. 69-82
- Pirttilä, Ilkka (1997): "Teoria, markkina-analyysi ja futurologinen silmä eksperttiyden ehtona", in *Muuttuva asiantuntijuus*, edited by Juhani Kirjonen, Pirkko Remes & Anneli Eteläpelto. Koulutuksen tutkimuslaitos, Jyväskylän yliopisto, Jyväskylä, pp. 73-82
- Prigogine, Ilya & Isabelle Stengers (1985): *Order out of Chaos: Man's New Dialogue with Nature*. Flamingo, London
- Raahen Kaupunki*. Kaupunginvaltuusto, Pöytäkirja n:o 12/1995

- Raahen Seutu, October 7th, 1995
 Raahen Seutu, October 19th, 1995
 Raahen Seutu, October 20th, 1995
 Ramírez, José L. (1993): *Strukturer och livsformer*. Nordplan, meddelande 1993:3, Stockholm
 Ramírez, José L. (1995a): *Design teori och teoridesign*. Nordplan, meddelande 1995:3, Stockholm
 Ramírez, José L. (1995b): *Om meningens nedkomst*. Nordplan, Avhandling 13:3, Stockholm
 Ramírez, José L. (1995c): *Två kiasmer av tystnad och ironi*. Nordplan, meddelande 1995:1, Stockholm
 Rapoport, Amos (1982): *The Meaning of the Built Environment*. Sage, Beverly Hills
 Rapoport, Anatol (1989): *Decision Theory and Decision Behaviour*. Kluwer Academic Publishers, Dordrecht
 Rittel, Horst W. J. & Melvin M. Webber (1973): "Dilemmas in a General Theory of Planning", *Policy Sciences* 4 (2), pp. 155-69
 Ruben, Brent D. (1984): *Communication and Human Behavior*. MacMillan, New York
 Ryyänen, Aimo (1996): *Kunnan uusi toimintamalli. Oikeudellinen rakennetutkimus kunnallisen kansanvallan sisällöstä ja ilmenemisestä*. Gummerus, Jyväskylä
 Sager, Tore (1994): *Communicative Planning Theory*. Avebury, Aldershot
 Schön, Donald A. (1983): *The Reflective Practitioner*. Basic Books, New York
 Schön, Donald A. (1993): "Learning to Design and Designing to Learn", in *International Conference on Theories and Methods of Design: Proceedings*, edited by A. Reza Kazemian. The Royal Institute of Technology, School of Architecture, Department of Design Methodology, pp. 25-46
 Senge, Peter M. (1994, orig. 1990): *The Fifth Discipline. The Art and Practice of the Learning Organization*. Currency Doubleday, New York
 Shannon, Claude & Warren Weaver (1949): *The Mathematical Theory of Communication*. University of Illinois Press, Urbana, Illinois
 Sheldrake, Rupert (1988): *The Presence of the Past*. Fontana/Collins, Cornwall
 Shusterman, Richard (1995, orig. 1992): *Pragmatist Aesthetics. Living Beauty, Rethinking Art*. Blackwell, Massachusetts
 Sihvonen, Jukka (1996): Ekologinen diskurssi kaupunkiseudun yhdyskuntasuunnittelussa, *Yhdyskuntasuunnittelu* 34 (1)
 Simon, Herbert A. (1979): *Päätöksenteko ja hallinto (Administrative Behavior)*, trans. Pirkko Rajala. Weilin+Göös, *Ekonomia* sarja 58, Espoo
 Smith, Neil (1996): "Gentrification, the Frontier, and the Restructuring of Urban Space", in *Readings in Urban Theory*, edited by Susan Fainstein and Scott Campbell. Blackwell, Malden, Massachusetts, pp. 338-58
 Sotarauta, Markku (1996): *Kohti epäselvyyden hallintaa. Pehmeä strategia 2000-luvun alun suunnittelun lähtökohtana*. Finn publishers, Gummerus, Jyväskylä
 Spinoza, Benediktus de (1994, orig. 1677): *Etiikka*, trans. by Vesa Oittinen, Gaudeamus, Helsinki
 Squires, Gregory D. (1996): "Partnership and the Pursuit of Private City", in *Readings in Urban Theory*, edited by Susan Fainstein and Scott Campbell. Blackwell, Malden, Massachusetts, pp. 266-90
 Stoker, Gerry (1995): "Regime Theory and Urban Politics", in *Theories of Urban Politics*, edited by David Judge, Gerry Stoker & Harold Wolman. Sage, London, pp. 54-71
 Suchman, Lucy A. (1987): *Plans and Situated Actions. The Problem of Human-machine Communication*. Cambridge University Press, Cambridge
 Thayer, Lee (1975): "Knowledge, Order, and Communication", in *General Systems Theory and Human Communication*, edited by Brent D. Ruben & John Y. Kim. Hayden, Rochelle Park, New Jersey, pp. 237-245
 Thom, René (1980, orig. 1975): *Structural Stability and Morphogenesis*, trans. by D. H. Fowler. Benjamin/Cummings, Reading, Massachusetts
 Thomas, Huw & Patsy Healey (et al.) (1991): *Dilemmas of Planning Practice*. Avebury Technical, Aldershot
 Thomas, Michael J. (1982): "The Procedural Planning Theory of A. Faludi", in *Critical Readings in Planning Theory*, edited by Chris Paris. Pergamon Press, Oxford, pp. 13-26

- Thornley, Andy (1991): *Urban Planning under Thatcherism*. Routledge, London
- Tulkki, Kati (1994): *Murtumia. Kaupunkisuunnittelu taitekohdassa. Keravan keskustan suunnittelu 1990-91*. Yhdyskuntasuunnittelun täydennyskoulutuskeskus, julkaisu C 34, Espoo
- Uusitalo, Paavo (1993): "Yhteiskuntasuunnittelu ja uusliberalismi", *Yhteiskuntasuunnittelu* 31 (4), pp. 51-54
- Valanta, José (1997): "Valta ja vallaton kaavoitus. Asiantuntijat ja amatööri kuntien kaavoituksessa", *Lisensiaatintyö*, Turun yliopisto, Valtio-opin laitos (unpublished)
- Vartola, Anni (1997): *The Fiction of Order*. Research publications by Helsinki University of Technology, Department of Architecture 1997/13, Espoo
- Vattimo, Gianni (1980): *The Adventure of Difference*. Trans. by C. Blamires & T. Harrison. Polity Press, Cambridge, UK
- Verwijnen, Jan (1996): "Introduction", in *Managing Urban Change*, edited by Jan Verwijnen & Panu Lehtovuori. The University of Art and Design, UIAH B 50, Helsinki, pp. 10-15
- Vesala, Riitta (1994): *Maankäytön suunnittelun strategiat ja käytäntö – Esimerkkinä Lahti*. Yhdyskuntasuunnittelun täydennyskoulutuskeskus, Teknillinen korkeakoulu, A 21, Espoo
- Virkkunen, Jaakko; Yrjö Engeström; Juha Pihlaja & Merja Helle (1999): *Muutoslaboratorio. Uusi tapa oppia ja kehittää työtä. Kansallinen työelämän kehittämisohjelma, raportteja 6*, Edita, Helsinki
- Virtanen, Pekka V. (1991): *Kiinteistömarkkinoiden ominaisuuksia ja erityispiirteitä*. Teknillinen korkeakoulu, Maanmittaustekniikan laitos, Kiinteistöoppi, julkaisu B 57, Otaniemi
- Vuorela, Pertti (1991): "Rakennetun ympäristön suunnittelun johtavista periaatteista Toisen maailmansodan jälkeen", in *Rakennetun ympäristön kauneus ja laatu. Esteettisesti ja laadullisesti korkeatasoinen fyysinen ympäristö ja uudet suunnittelutekniikat. Osa I*, Pauline von Bonsdorff et.al. Valtion teknillinen tutkimuskeskus, Tiedotteita 1234, Espoo, pp.92-153
- Väättäin, Eija (1995): *YVA - kohti ympäristötietoista kaavoituskäytäntöä?* Ympäristöministeriö, Alueidenkäytön osasto, tutkimusraportti 4:1995, Valtion painatuskeskus, Helsinki
- Watzlawick, Paul; Janet H. Beavin & Don D. Jackson (1967): *Pragmatics of Human Communication*. Norton, New York
- Wedberg, Anders (1947): *Johdatus nykyiseen logiikkaan*, trans. by Otso Aalto. Otava, Helsinki
- Whitehead, Alfred North (1946, orig. 1926): *Science and the Modern World*. Cambridge University Press, Cambridge, England
- Wiener, Norbert (1969): *Ihmisestä, koneista, kielestä (Materia, maskiner, människor)*, trans. by Pertti Jotuni. Werner Söderström Osakeyhtiö, Porvoo
- Wilden, Anthony (1980, orig. 1972): *System and Structure. Essays in Communication and Exchange*. Tavistock, London
- Winch, Peter (1958): *Yhteiskuntatieteet ja filosofia (The Idea of Social Science and its Relation to Philosophy)*, trans. Ilkka Malinen. Gummerus, Jyväskylä
- Winnicott, D.W. (1982, orig. 1971): *Playing and Reality*. Penguin Education, Harmondsworth, England
- Wittgenstein, Ludwig (1958): *Philosophical Investigations (Philosophische Untersuchungen)*, trans. by G.E.M. Anscombe. Basil Blackwell, Oxford
- Wittgenstein, Ludvig (1975): *Varmuudesta*, trans. by Heikki Nyman. Werner Söderström, Porvoo
- Wittgenstein, Ludvig (1981): *Filosofisia tutkimuksia (Philosophische Untersuchungen)*, trans. by Heikki Nyman. WSOY, Juva
- Wright, von, Georg Henrik (1983): *Humanismi elämänasenteena (Humanismen som livshållning)*, trans. by Kai Kaila (third printing). Otava, Helsinki

