COPENHAGEN BUSINESS SCHOOL
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DK-2000 FREDERIKSBERG
DANMARK

www.cbs.dk

ISSN 0906-6934
ISBN 978-87-593-8416-9

What we talk about when we talk about space

PhD Series 6.2010

Copenhagen
Business School
HANDELSHØJSKOLEN

What we talk about when we talk about space:

End User Participation between Processes of Organizational and Architectural Design

Marianne Stang Våland

Doctoral School of Organisation
and Management Studies

PhD Series 6.2010

CBS PhD nr 06-2010 Marianne Stang Våland · A5 OMSLAG.indd 1
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1st edition 2010
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ISBN: 978-87-593-8416-9
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The Doctoral School of Organisation and Management Studies (OMS) is an interdisciplinary research environment at Copenhagen Business School for PhD students working on theoretical and empirical themes related to the organisation and management of private, public and voluntary organisations

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PREFACE

On several occasions in my professional career I have come across architectural design as an opportunity to enhance and articulate organizational practice. These experiences have always left me with the sense that the spatial framework of an organization might have strategic potential: as a possible vehicle to discuss, and thereby shape and reshape an organizational design. Based on this basic interest, I initiated a study that could possibly explore its potential. The preliminary result of the exploration is this thesis.

In the study, I have taken an empirical point of departure by exploring two contemporary building projects: the Town Hall of Hillerød Municipality, north of Copenhagen, and also Danish architecture firm, Arkitema's own office domicile in Ørestad, Copenhagen. From my longitudinal engagement with the design developments in these two projects I found that not only did the involvement in these spatial design discussions affect organizational aspects within the client organization. Also, the client organization's substantial engagement in these processes had a noticeable impact on the architectural design process. From here grew the idea of *"the double design process"*, as it was characterized by one of the study's central informants.

The two projects have provided me with an opportunity to take a glimpse into the implications, possibilities and impossibilities that the double design process might hold. As the following text will unfold, it has brought me to the field of architecture and to a few of the significant challenges that the architectural profession is currently being faced with; to ethnography and the yet somewhat

unclear area of process design, and to the difficulties of applying spatial notions into management.

A great number of people have provided me with a substantial amount of information throughout the study. Each and every one has responded to my questions and requests with great generosity, and our interactions have always brought forth discussions and produced questions that have been an invaluable guide and support in the progression of this work. I am particularly grateful to Dorthe Keis, Gitte Andersen, Søren Thorup, Per Feldthaus, Julie Reinau, Mette Rødtnes, Thomas Bang Jespersen, Mette Kjærsgaard, Ole Langvad, Søren Bisgaard, Kirsten Daniels, Hallgrimur Thor Sigurdsson, Mads Mandrup Hansen, Anders Damsgaard Sørensen, Mikkel Beedholm, Britt Blichfeldt Davidsen, Mette Abrahamsen, Per Fischer Mikkelsen, Morten Mygind, Glen Elmbæk and Gerti Axelsen.

I would also like to thank my colleagues for their important input, support and patience, in particular Kristian Kreiner, Martin Kornberger, Lise Justesen, Signe Vikkelsø, Nanna Mik-Meyer, Charlotte Krenk, Daniel Toft Jensen, Peter Holm Jacobsen, Paul Du Gay, Susanne Boch Waldorf and Christian Frankel. Finally, I am indebted to the following people for having engaged in this process in such an inspiring and constructive way: Johanne Eriksen, Ouafa Rian, Winnie Merete Barrett, Lotte Forchhammer, my grandmother Lilleba Stang and my sister Tone Stang Våland. I am very grateful.

Copenhagen, January 2010
Marianne Stang Våland

CHAPTER 1: ORGANIZED END USER PARTICIPATION IN ARCHITECTURAL DESIGN PROCESSES

"I don't think there are many people, who have yet experienced that you can actually make a double design process […] with some kind of interplay or synergy between them. […] I have become aware of how vital it in fact is, not to freeze for instance the organizational development as a given precondition and then subsequently discuss space, but to keep up an interaction [between the two processes] in the considerations."

INTRODUCTION

In the quotation above, the former managing director of case organization Hillerød Municipality suggests an untraditional link between two design processes that have traditionally been organized as separate. It is the link between the organizational and the architectural design process, respectively. In his organization: a municipality administration, the establishment of a new town hall has been applied as a part of the framework to support a complex organizational change process – a merger between two municipal units.

On a general level, we might say that organizational practice takes place in some kind of spatial setting (for example physical or virtual) and that organizational and architectural design features are thus necessarily connected. But

as *design processes*, the two have traditionally taken place sequentially and thereby in separate processes. In a conventional building project, the client first identifies aspects of the organization's activities, in order to describe some of the qualities that the forthcoming building is supposed to accommodate. This identification process might be said to be part of an organizational design process. These identified needs are then articulated to form a brief of requirements, given to the architect as a point of departure in the process of designing. Based on the brief, the architect attempts to develop a draft for a design solution that fits the client's requirements. This is the first part of the architectural design process. In this structure, the brief represents the link between client and architect. It might thus be said to connect and separate by the same means.

When the proposal for a design solution is accepted by the client, an often complex development process begins. Here, client and architect undertake a range of negotiations, in order for the architectural design to further develop and the building project to progress. Once the building is eventually established, the client organization attempts to make a fit between the processes that constitute their practice and the opportunities that the building holds. Thereby, the organizational design process moves into another stage when the organization moves onto the new premises.

The sequence can be outlined as follows: The organizational design process starts prior to the architectural design process. On the basis of the brief, the architectural design process emerges and the building project evolves. Finally, the building is inhabited, and in some ways we might say that the organizational design process continues, or perhaps rather starts anew, with reference to the new spatial framework. The link between the processes can thus be said to exist, but the two processes have been organized in a separate structure. In diagram 1 below, the traditional sequential separation between the two design processes is marked. These are the processes that take place prior to occupation, which are the ones in focus in this study. Also, the arrows mark a causal aspect: that the two processes can be seen as influential, but that the influence takes place in a sequential structure.

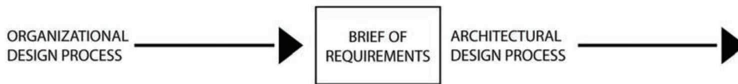


Diagram 1 illustrates how the events traditionally take place in a separate and sequential structure.

What appears to be different in the managing director's statement above is that he proposes that the two design processes can take place as concurrent activities. He characterizes the parallel development of the two designs as *"a double design process"*, and indicates that exchanges between these processes might provide *"some kind of synergy between them"* – and thus potentially with mutual contributions. By suggesting *"not to freeze"* the organizational aspects as *"a given precondition"* he not only indirectly indicates changes that might affect the traditional brief of requirements and thus the work of contemporary architects. Also, he indicates that the interaction with the architectural design process is likely to include further changes to the organizational design. However, he acknowledges that we lack experience in terms of what such parallel design developments may mean in a practical context. Traditionally, managers do not approach the organizational design process from a spatial perspective. They rather focus on current and future practice, with regards to aspects like work processes, collaboration and production. Similarly, architects (and also other main players involved in the building process: contractors, engineers and more) are not trained in issues that regard organizational design. Their attention is traditionally placed on aspects that involve functional and aesthetical conditions, with reference to the various factors that constitute the building as a construction.

On the basis of this notion of a closer link between organizational and architectural design processes, I have attempted to explore what might constitute such a link. If a closer link can disclose a bilateral opportunity for both designers, it needs to be explored and interrogated[1]. The thesis aims to provide discussions that can contribute to this exploration.

---

[1] As will also be pointed out in chapter 3 regarding the study's methodology, I have 'only' been concerned with four of the roles involved in building projects, in which the client and the end user

BACKGROUND: THE POTENTIAL LINK

The idea of a closer link is not, as such, new. In recent years, business managers and organization scholars alike seem to have found increasing interest in the spatial structure that accommodates organizational practice (e.g. Gagliardi 1991, Becker and Steele 1995, Horgen et al. 1999, Weick 2003, Boland and Collopy 2004, Clegg and Kornberger 2006, Taylor and Spicer 2007, Elsbach and Pratt 2008). The interest reflects current societal tendencies, such as the substantial focus on individual needs and wishes, as a parameter to inform organizational practice, and also on the continuous request for new ways of working and collaborating in organizational contexts. I will return to the first of these points in the forthcoming chapters. As for the latter, the increased focus on collaboration between people with different professional backgrounds is seen as an opportunity to generate new products and services, often entitled innovations. In order to support that such innovations can come about, managers aim to explore various approaches that can endorse these developments. Acknowledging that this type of work – towards the new – cannot be commanded but rather supported, factors that might enhance new ways of working have become central. Here, the spatial design of an office environment increasingly appears to be recognized as a relevant component to enhance performance and collaboration in organizational settings. Over the last years, organizations have put large resources into various types of building projects: reconstructions of existing premises, internal refurnishments, or brand new domiciles. Here, an organizational restructure might be a central factor that catalyzes the building project, with references to e.g. growth, downsizing and/or mergers. But although substantial investments into such projects are made and the spatial opportunities to support organizational means are indicated, the building process is still predominantly organized in a sequential setup. The outline in diagram 1 still persists.

If we return to the managing director's statement in the quotation above, *"not many people"* have yet begun to focus on these two design processes (for example in the situation of a merger between two organizations that are establishing in a new office building) as potentially connected. But if we start to consider the link as

represent the same organizational unit. The four roles are: the client as manager, the client as staff member/end user, the architect and the process designer.

an opportunity, it is unclear what it may contain of implications. In order to explore the link, we need a vehicle that can bring the two design processes together; a scene, through which the link can be discussed and unfolded. There might be different ways to approach this potential connection as a study object. In this study, however, it is the broad phenomenon often referred to as *"end user participation"* that has made up the scene.

END USER PARTICIPATION: A WAY TO STUDY THE LINK

End user participation appears to be a tendency that gradually involves society at large, with regards to the way public service is currently being structured and organized. As a method, it is based on a number of inspirational sources that represent methodological frameworks as well as practical techniques. Here, areas such as ethnography (e.g. Blomberg 1993, Forsythe 1999, Ivey and Sanders 2006); participatory design (e.g. Greenbaum and Kyng 1993, Schuler and Namioka 1993, Horelli 2002); human computer interaction (e.g. Anderson 1994, Dourish 2006); user-driven innovation (e.g. von Hippel 2007) seem to represent central sources. Within a large part of the contemporary design industry, knowledge about user behavior has, for decades, been considered central to the development of design products. In the field of architectural design, however, this interest seems to have developed and established at a slower pace. Architectural design is a complex practice that is difficult for architects to explain as well as for laymen to comprehend (e.g. Saint 1983, Cuff 1991, Fisher 2000, Leatherbarrow 2001). Based on current tendencies, the client increasingly demands a more central position in the development of the design solution of for example office buildings (Yoo et al. 2006). The situation thus seems to contain a certain contradiction between the architect profession's traditional constitution and some of these new conditions. This contradiction may represent substantial challenges to the contemporary architect (cf. Chapter 4).

As will be outlined below in this chapter, the point of departure in the study has been two empirical projects: Municipality Hillerød's new town hall and

architectural firm Arkitema's own new Copenhagen office. Both were building projects, in which a client organization hired an architectural firm (or a consortium of a constructor, an engineer and an architect), in order to establish a new physical framework to accommodate the organization's professional practice. In both projects, end user participation was integrated as a part of the project outline and thus as the project's basic precondition. In these participation processes, a substantial group that represented the client organization's staff (and thus the building's end users) was invited to participate in for example workshops, interviews and surveys. Here, issues that regarded the spatial organization of the professional practice were discussed. The processes were organized activities, planned and facilitated by so-called *"process designers"*. The role of the process designer seems to represent a relatively new player within the field of architectural design. Its content and responsibilities will be provisionally discussed throughout the thesis (cf. sections 5A, 6A and 6B).

But not only were these processes organized and concerned with issues that primarily addressed the spatial organization of the work practice. Also, the activities took place parallel to the emergence of the architectural design solution. Here, the idea seems to be that the outcome of the (organizational) processes of end user participation was supposed to serve as an input to inform the creation of the (architectural) design solution. As mentioned above, the potential link between the organizational and the architectural was indirectly indicated in the project outlines in both empirical projects. This aspiration thus leaves us with substantial changes, with reference to the way these design processes have traditionally been organized (cf. diagram 1). Diagram 2 illustrates the idea of organizing the two design processes in a parallel structure, in which processes of organized end user participation form a way to connect the two. Here, it comes forth that the players involved in this setup are not only the client as the responsible manager and the architect, but that also other players are involved. These other players are the client as the staff member/end user and also the new role of the process designer. The activities that the end user representatives are involved in are predominantly workshops, interviews and surveys.

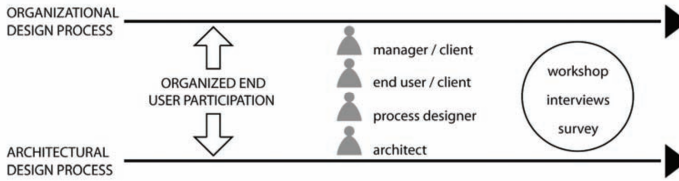


Diagram 2 shows the organizational and the architectural design processes organized in a parallel structure, in which end user participation form a way to connect the two.

RESEARCH QUESTION AND ASPIRATION

In this study, organized end user participation is thus the scene, through which the relationship between organizational and architectural design processes is explored. I have attempted to identify how these activities produce what I call 'connections' between the two design processes, and to discuss a few of the implications that these 'connections' might have. On this basis, I have asked the following research question:

How does organized end user participation in architectural design processes generate 'connections' between organizational and architectural design?

If we consider the client organization's spatial structure as a point of departure in this search, it seems central to look at the cohesion between the organizational activities and the way that these are physically organized. This is an unfamiliar perspective, from which the staff in an organization can discuss their work. As for the professional architect, she can provide knowledge about aspects like spatial disposition and lighting conditions from her educational training, but what does she, in fact, know about the work processes that the spatial structure is meant to accommodate? For both parties, the setup can thus be said to have new aspect to it. The idea seems to be that the participation activities might represent a mediating vehicle, through which the staff's knowledge about their practice can inform the

architect's creative design process. In this way we might say that the participation serves as an opportunity to go behind or dissolve a design process (the architectural) that is traditionally concealed, by exposing it to a different design perspective (the organizational).

There is a reason, however, that these two design processes have traditionally been seen as separate. As design processes, organizational and architectural developments are based on substantially different constitutions that cannot easily be subjected to mutual transference. As will be illustrated and discussed in the forthcoming chapters, the idea of bringing end user representatives into the architectural design work and thereby forming a relationship between these two design processes seems to have implications for both parties. So, although the notion of *"a double design process"* might produce 'connections' that represent a potential, these 'connections' also contain complexity that needs examination. By unfolding and interrogating some of these 'connections', the thesis aims to contribute to this exploration. Through the two empirical projects, I have attempted to study the participation activities from close range: how they were planned and executed and how the outcome they produced might be said to have influenced the design solutions.

As mentioned above, the particular interest in space and architectural design as a potential asset to organizational development currently seems to be shared among managers and organization scholars (e.g. Gagliardi 1991, Becker and Steele 1995, Weick 2003, Boland and Collopy 2004, Clegg and Kornberger 2006, Taylor and Spicer 2007, Elsbach and Pratt 2008). In these studies, a number of issues have been brought forth that, in various ways, seem to focus on how space and social relations in organizational contexts can mutually constitute each other (cf. section 2A). However, only few contributions (e.g. Gagliardi 1991, Yanow 1995, 1998, Horgen et al. 1999, Buhl Pedersen 2006, Yoo et al. 2006, Ewenstein and Whyte 2007, van Marrewijk 2009) appears to be based on empirical studies that discuss the actual implications that a closer relationship might have on these design practices.

With this thesis, I aim to contribute to the latter by taking a strong empirical point of departure. I do this by exploring how the application of organized end user participation in two building projects attempted to inform architectural practice,

while concurrently – by the very same activities – constituting organizational development. In these parallel processes that the municipality director above entitled *"a double design process"*, there might reside a bilateral resource. In the thesis, I discuss how the participation activities take place in the actual design processes, and thus how the link between them affects the design work. The way I approach and analyze the empirical material produced in the course of the projects is inspired by two theoretical concepts: sensemaking in organization (e.g. Weick 1979, 1995, 2001, Weick et al. 2005), and actor-network theory (e.g. Callon 1986, Latour 1991, 1999, Akrich 1997).

The thesis does not provide clear answers as to how organized end user participation can contribute as a vehicle to inform architectural design practice, or to how architectural design might enhance the development of an organizational design. Rather, it discusses some of the central dynamics and dilemmas that the relationship between the organizational and the architectural seems to contain. In this way, the 'connections' might be seen as tensions and thus opportunities rather than concrete vehicles. This point may lead us back to the title of the thesis: 'What we talk about when we talk about space…'. The title refers to American short story writer and poet Raymond Carver's story from 1981 ("What we talk about when we talk about love"), in which two married couples meet for dinner. Although they attempt to talk about their mutual relationships in a friendly manner, their conversation end up taking many different (and confrontational) directions. The point I want to make, with reference to this study, is that conversations are powerful vehicles. When people in organizations are invited to converse about their work practice in a spatial perspective, they end up talking about many different aspects of their work, relationships, routines and more. Here, the spatial context might be said to serve as a catalyzer. In an organizational perspective, the study thus aims to explore what happens when managers aim to apply space as a means to approach various organizational issues. In an architectural perspective, it discusses how these conversations might generate a closer interaction between client and architect, and what the implications of such proximity might bring to the contemporary architect.

IMPLICATIONS AND OPPORTUNITIES FOR ORGANIZATIONAL AND ARCHITECTURAL DESIGN

The organizational perspective

If we look at the two design fields at stake in this combined and concurrent project structure, both seem to face current challenges. From an organizational perspective, the increasing focus on the staff member's individual needs and wishes in the way organizational practice is organized seems central. Today, staff members are increasingly brought in as contributors to processes of strategic change. Also, the organization's ability to produce new products and services and to produce them in smarter ways is considered a general challenge in organizations. Based on these two points, we might say that managers need new opportunities to undertake the management assignment in ways that substantially involve the staff and that generate new ways of working and collaborating. Here, the spatial context of organizational life might represent such an opportunity.

The structure of two concurrent and reciprocal design processes indicates a process that allows staff representatives to influence, not only the design of the building, but also the rationale upon which the design is being based: A rationale that may reflect the current organizational design and at the same time indicate an organizational redesign. If we recall the managing director and his idea of *"a double design process"* in the quotation above, this structure seems to be reflected in his proposal. Here, the building project serves as a point of departure to change certain conditions in the organization's structure and practice. Again with reference to the title of this thesis, space may represent the opportunity to talk about complex organizational issues.

Organized end user participation activities in architectural design process might thus provide an opportunity to involve the staff in processes of strategic change. Here, the participation activities might be considered an opportunity to expand the staff's perception of their work practice and the conditions, upon which it is based – and thus as an opportunity to enhance the participants' ability to navigate change

conditions. But there seems to be an inbuilt tension at stake in this structure, in the sense that the involvement is also likely to expand the staff's expectations to what these changes might bring – and concretely what the future office building might look like. This tension will be discussed on various occasions in chapters 5, 6 and 7 below.

The architectural perspective

The scope, within which the field of architectural design operates today, has expanded substantially throughout the recent years. These conditions have placed new demands on the professional architect, while others have been left out. The challenges are partly based on massive technological advancements, but they also involve a shift in the relationship between architect and client, with reference to the attention to individual preferences, pointed out above. Organized end user participation can be seen as one way, through which organizational aspects are being brought closer into the architectural design practice. It is thus a potential way for client and architect to form a closer link. But what does this proximity mean if the point of departure is a concurrent design process that involves extended activities of organized end user participation? In the current climate, the image of the client as the responsible person or few persons, who represent the link between client and architect in the course of an architectural design project, seems to go through substantial changes. With the structure of the two parallel design processes that are discussed in this thesis, the client rather represents what I suggest to call a 'compound body of users'. Here, a substantial group of client representatives is actively involved in the production of requirements, not only prior to the architectural design process, but also parallel to and as a part of the emergence of the architectural design solution.

Although such developments in the relationship between client and architect might represent certain opportunities, it might also involve a potential marginalization, with regards to the architect's position. With the increased technological complexity that contemporary building projects represent, the number of for example engineers involved in the design process is also likely to grow. Also, with a more active involvement of an indistinct body of client representatives appearing on the scene (the 'compound body of users'), the

architect might be left in a more peripheral position. In this perspective, the architect needs to regain authority or redefine their professional recognition.

Based on these introductory comments, we might say that the 'connections' between architectural and organizational design processes can represent bilateral resources: New arguments to let manager as well as architect utilize and further develop their expertise, and at the same time respond to current societal requirements. To the manager, the factors that constitute the organization's spatial framework have traditionally been considered an inferior aspect of organizational practice. The thesis aims to discuss and illustrate how the spatial perspective might be seen as complex in a management perspective, but also how it might be said to have strategic potential. To the architect, the notion of a closer link to the client (through extended interaction with a 'compound body of users') may simultaneously be seen as a potential threat and a potential resource. The thesis aims to explore some of the implications and opportunities that the involvement might hold, with reference to the position of the contemporary architect.

THE EMPIRICAL CONTEXT

In order to discuss and illustrate the implications that a closer link between organizational and architectural design processes might hold, I have sought an empirical context from which such potential could be disclosed. The study is based on two cases that represent building projects, within which a substantial amount of participation activities have formed a point of departure, in order to inform the design of the buildings. In both projects, the link between the organizational and the architectural were articulated as an ambition that the project aimed to explore. In the outline below, the two cases are presented very briefly, while a more thorough and contextual presentation of the projects will be outlined in chapters 5 and 6.

The Town Hall project (cf. chapter 5)

The establishment of municipality Hillerød's new town hall might be seen as a part of large national restructuring of the public sector in Denmark. Here, Hillerød was being merged with geographically adjacent unit, Skævinge. Although the planning of the town hall had started prior to the public reconstitution, the building project was seen as an opportunity to enhance the organizational redesign that the merger represented. In the project, organized end user participation served as a vehicle to induce developments within the organizational design, while the same processes were seen as a way to inform the architectural design of the building.

As an architectural design process, the project was formally set forth by an architectural competition, to which five design consortia were invited. But already before the competition took place, several participation activities: a survey and three workshops had taken place. These activities were organized by external consultants from Signal Arkitekter, a firm of *"process designers"*, who holds the facilitation of end user participation in architectural design processes as a central service. In these activities, a substantial group of staff representatives were invited to discuss their work practice in a spatial perspective. The outcome of these processes was used as a means to inform the competition brief.

Based on the competition, a winner was selected and the design process could continue. The architectural firm in the winning consortium was Danish architects KHR Arkitekter. In the following process, the participation activities and the development of a building construction took place as two concurrent processes. Here, the process designers from Signal Arkitekter might be said to have served as mediators between the organizational activities and the architectural design process. In this way, the client considered the two parallel processes as somewhat integrated; as a reciprocal resource, from which both could benefit.

The Town Hall project was characterized by a reasonably sectionalized structure, in which the roles were clear and the design processes might be said to have progressed in sequences of activity, translation and design. Here, one activity was planned and facilitated; the outcome was translated and thereby transferred to the next step in the design process. In most instances, the external parties knew their responsibility. The players I have focused on in this study are Hillerød as the

client organization, Signal Arkitekter as the process designer, and KHR Arkitekter as the architect.

The Mikado House project (cf. chapter 6)

The Mikado House project represents Danish architectural firm, Arkitema's attempt to design and establish a new domicile for the firm's activities in Copenhagen. Arkitema is one of the architectural firms in Denmark that has shown substantial interest in some of the challenges that the architect profession currently seems to be faced with. A closer link to the client organization through more extended involvement of the end users of the building is but one of these challenges. In the Mikado House project, the firm aimed to explore how this tendency towards a closer collaboration between architects and end users could become a way of working within the firm.

The project held three central objectives. The first was to design and build a house to accommodate Arkitema's activities in Copenhagen. The second was to establish a new method to be applied in Arkitema's product portfolio and also in the firm's professional practice. Here, end user participation as a method was considered an integrated part of the architectural design process. Finally, and parallel to the development of the Mikado House project, Arkitema aimed to undertake a substantial reconfiguration of the organization's structural framework, not only to meet current societal requirements, but also to accommodate end user participation as a method.

The Mikado House project underwent substantial changes in the course of its establishment. Due to severe changes in the market conditions, the firm first withdrew as investors, and professional property developers took over the project. As a part of this restructuring of the project's basic structure, it was initiated to expand the project. From being an office building of 5-6000 m2 to accommodate Arkitema's activities, the project got enlarged to form what was characterized as a *"network house"* of 23000 m2, which could accommodate several organizations. At first, the responsible team of architects and process designers continued their work based on the hitherto conceptual idea for a design solution. But as it turned out, this solution was found financially unfeasible. Eventually, the design team was replaced and the project was conceptually redesigned. Based on these occurrences,

we might divide the developments in the Mikado House project into two main phases, of which this study has focused only on the first phase (cf. 6A).

The project structure in the Mikado House project can be said to be complex in the sense that Arkitema played most of the roles in the project. As a design process and also as a building project, Arkitema represented not only the client as investor (in the first period) and the end user, but also the architect, responsible for the architectural design solution, and the process designer, who facilitated the participation activities.

THE STRUCTURE OF THE THESIS

These introductory notes are followed by six chapters. Chapter 2 outlines the literature to which the thesis aims to refer. First, I address the area of ‘Space in organization studies’ (cf. 2A). The section describes how organizational scholars have discussed the opportunities that space and architecture might hold as a contribution to the study of management and organization. Second and third, I go through the theoretical bodies that have informed my analytical approach to the empirical material: “Sensemaking in organizations” (cf. 2B) and “Actor-network theory” (cf. 2C).

Chapter 3 explains the methodological approach I applied, in order to undertake the study. Here, I describe my process of entering the field and designing the research project. By methodology, I mean the relationship between the research question the thesis aims to address, the methods I have used in order to explore this question, and the theoretical concepts I have used, as a means to analyze the events. In the chapter I illustrate how these factors might be said to have been interwoven in the project, in the sense that they emerged accordingly, on the basis of the events that took place in the empirical projects. Also, I explain how the methods, not only represented a navigator in the field, but also informed the subsequent analytical process.

In Chapter 4, I make a short introduction to the architecture profession and to how the field of architectural design can be said to be facing substantial challenges in the current climate. Here, organized end user participation might be one of the challenges that appear to involve different viewpoints and certain tensions, which are being indicated in the chapter.

Chapters 5 and 6 represent the analyses of the two empirical projects, upon which the thesis is based (the Town Hall project and the Mikado House project, respectively). Each chapter is divided into three parts: an empirical description (5A and 6A), as well as one analysis based on sensemaking concepts and one on actor-network theory.

In section 5B I focus on the tension between one the Town Hall project's basic premises (the structural principle of an open office layout) and the organized end user participation as a concept. In what way might the participation in fact be said to influence the design of the office building? In section 5C, I illustrate how the participation activities might be said to have influenced the architectural design directly. Through complex processes of negotiation, a staff member succeeds in initiating a redesign of a certain architectural object in the town hall: the entrance counter in the reception area.

In section 6B, I discuss a team of architects and process designers in the Mikado House project in their attempts to collaborate, in a design process that held the outcome of the participation activities as a central input. In section 6C I disclose how an actual architectural design solution emerged in the project; where it came from and how it developed. On the basis of the metaphor of a helix, I illustrate and discuss how the participation activities might be said to have informed and influenced the development of the design concept.

In chapter 7 I discuss what these stories might have told us about the phenomena at stake in the study: organized end user participation in architectural design processes. Here, I go through the central findings and relate the potential contribution to the existing literature in the field.

CHAPTER 2: THE LITERATURE

INTRODUCTION

In this chapter, I aim to describe the literature I refer to in the thesis. I divide the description in three parts. First, I outline some aspects of the area within organization studies that the thesis aims to contribute to, that of 'Space in organization studies' (section 2A). Second and third, I go through the theoretical concepts I have applied in analyzing the empirical material in the subsequent chapters. These are primarily brought in from the areas of 'Sensemaking in organizations' (section 2B) and 'Actor-network theory' (section 2C).

As pointed out above, my primary aspiration with this work is to contribute to the area of 'Space in organization studies'. Space might, as a phenomenon, be said to represent a broad field that holds many potential perspectives. A number of contributions have been made, in order to bring this phenomenon into organization studies. On this basis, the outline below should be seen as a provisional description of a few approaches to how space can be brought into organization studies, rather than that of a regular overview. Also, the section holds a brief introduction to the area of organizational design, and to one of the more recent approaches to capture this potential link between organization, design and architecture: The conceptual idea of Managing as Designing.

After this provisional outline, I turn to the two theoretical concepts that have particularly inspired my approach in this study. In my attempt to discuss and comprehend a few of the implications that organized end user participation activities seems to provide to these concurrent processes of organizational and architectural design, I have found clues and provisional answers in the areas of

‘Sensemaking in organizations’ and ‘Actor-network theory’. It is important to note that these two approaches substantially differ. The sensemaking approach is based on a cognitive foundation, in which meaning is something that is established in people’s heads based on their experience of the social events they are subjected to in their practice. Actor-network theory, on the other hand, is rather focused on the relationships between the human and so-called non-human “actors”. Here, meaning might be said to be formed in the contextual relationships between these, while the components themselves do not contain “essence” or independent meaning.

It should be noted that the phenomenon that makes up the primary scene of this study: organized end user participation in architectural design processes, also refers to a substantial body of literature. In the two empirical projects, the participation activities seem to be inspired by several methodological and/or theoretical traditions. Some of these are scientific areas, while others are rather methodological concepts or practical tools. A few of the central traditions that have informed the development of such a phenomenon seem to be ‘participatory design’ (e.g. Greenbaum and Kyng 1993, Schuler and Namioka 1993), ‘human computer interaction’ (e.g. Anderson 1994, Dourish 2006), ‘ethnography’ (e.g. Blomberg 1993, Forsythe 1999, Ivey and Sanders 2006), ‘new ways of working’ (e.g. Duffy 1997, Bjerrum and Nielsen 2003, Duffy and Worthington 2004), ‘user-driven innovation’ (e.g. von Hippel 2007). Several of the approaches take the user perspective as a point of departure, focusing on how especially the design of computer systems may enhance workplace conditions, practices, processes and collaborations. In this study, the design objects that were developed by the means of the participation activities were not computer systems, but rather organizational and architectural design constitutions. When I mention these sources here, it is thus with reference to the background of the participation activities in the empirical projects.

SECTION 2A: SPACE IN ORGANIZATION STUDIES

Space as a means to inform management and organization

"Space has always been a fundamental dimension of living beings and, of course, of the human experience. As a locus of biological survival, psychological existence and sociability, space is a key issue for human organisation" (Chanlat 2006). Despite this fundamental position, it is also acknowledged that space has not been properly recognized in organization theory (e.g. Gagliardi 1991, Hatch 1997, Yanow 1998, Burrel and Dale 2003, Hernes 2003, Clegg and Kornberger 2006, van Marrewijk 2009). And as managers seem to have found increasing interest in the spatial structure of organizational practice, scholars within the field of organization studies have also come to focus on the issue (e.g. Becker 1981, Hatch 1987, 1997, Zahn 1991, Gagliardi 1991, Becker and Steele 1995, Yanow 1995, 1998, Horgen et al. 1999, Weick 2003, Burrel and Dale 2003, Kristensen and Grønhaug 2003, Boland and Collopy 2004, Kornberger and Clegg 2003, 2004, Hernes 2003, 2004, Dale 2005, Clegg and Kornberger 2006, Yoo et al. 2006, Ewenstein and Whyte 2007, Taylor and Spicer 2007, Elsbach and Pratt 2008, van Marrewijk 2009).

These contributions seem to represent different approaches to how space matter to management. Some studies focus primarily on the spatial layout of the building (e.g. Becker 1981, Hatch 1987, Zahn 1991, Becker and Steele 1995, Horgen et al. 1999, Hansen 2007) and on how knowledge about the physical setting can support a more thorough understanding of behavior and relationship within organizational contexts. Others attend to space as symbolic carriers of meaning that produce organizational identity (e.g. Gagliardi 1991, Hatch 1997, Yanow 1995, 1998, Buhl Pedersen 2006), and others again suggest that space and architectural aspects can be used as means to communicate and thus support legitimacy in decision making (e.g. Trexler Proffitt and Zahn 2006). The argument here is that coherence between the spatial layout that accommodates practice and the organization's aspirations and strategic messages, will support credibility for the latter. Elsbach and Pratt (2008) provide a helpful overview of the contributions that concern aspects that, among other things, regard the relationship between "open-plan office" and

“cubicles”. Here, the literature, in different ways, concerns factors such as privacy, exposure, noise and the use of physical barriers or partitions (Oldham and Brass 1979, Zahn 1991, Bjerrum and Nielsen 2003, Amhøj 2004, Duffy and Worthington 2004, Hansen 2007).

Some contributors focus on space as a constituting factor in the power structures in organizations, often based on sociologist traditions (e.g. Foucault) and architectural theory (e.g. Hillier or Markus) (Clegg and Kornberger 2006, Amhøj 2004), while others attend to how the use of a material perspective can offer an extended understanding of control in organizational contexts (e.g. Dale 2005). Moving towards a more ‘philosophical’ approach to what space means in organizational contexts, some contributors approach it as a broader concept, which offers different ways of perceiving organizational life and practice (e.g. Hernes 2003, 2004, Kornberger and Clegg 2003, 2004, Hernes et al. 2006). Here, the focus is not only on the physical, but also on the social and mental levels. Based on the inheritance of sociologist Henri Lefebvre and also architectural theorists Bill Hillier and Julienne Hansson space is perceived as a continuous process that “embodies duality between becoming and being by being both the object and the means of construction” (Hernes 2003: 279). A part of this tradition might be said to indicate that space and social relations might mutually constitute each other in a closer relationship (Burrell and Dale 2003). Here, it is suggested that “architectural arrangements actively construct the experiences and subjectivities of different groups of people in different ways” (ibid: 179). But with reference back to the symbolic approach and also to the power structure tradition, they consider the relationship between space and social relations as being based on manipulation.

Moving towards the architectural perspective, in regards to what architects do and how this might inform organizational practice, architectural scholars have also shown increasing interest in the organizational perceptive. In his draft for a contribution to the bridging of architectural design and management, Tzonis acknowledges that architectural design tools can generally be perceived as esoteric and as “notoriously idiosyncratic working traditions that engage very little understood intellectual tools […]”. Despite of this observation, he points out that these very same design skills are unique, and should be applied and cultivated within other fields. He suggests that architectural ways of working could be beneficial in management and organizational development. Here, the establishment

of metaphors and analogies ("analogical reasoning") is proposed as an approach to problem solving in organizations, in regards to power structure and control (Tzonis 2001: 5). Also, he suggests that the development and usage of architectural sketches can be helpful to managers, through the concept of "visual reasoning". He points out two problems in regards to working more closely with sketches. First, he acknowledges that the complexity of translating sketches and diagrams would represent a substantial challenge to managers or others in the field of organizational practice. This is an ability that has evolved within architectural design for centuries and that represents accumulated knowledge, difficult to disseminate to laymen such as managers. Added to this comes the fact that sketches are "fuzzy". They demand a substantial overview from those who use them, with regards to how they correspond with functionality and actual practice. However, he also indicates that such tools can be used as conversation pieces: As points of departure for conversations and other types of developmental processes. Here, sketches can be seen "as instruments for design debiasing" and also as means to compare and evaluate different phases of a project (Tzonis 2001: 6).

The lack of empirically based studies

As for methodology, an approach that seems to lack in the literature is empirically based case studies that look into the spatial perspectives of how practice actually happens in organizational contexts. Here, ethnographically based studies might provide an opportunity to explore the intersection between space and architecture, on the one hand, and organizational practice, on the other. Yanow has contributed to this through her empirical studies of museum spaces (Yanow 1998). In these studies, she explores space as a producer of stories and the link between texts and buildings. In the relationship between work space and organizational practice, "space stories" contribute to produce knowledge about organizational contexts (Ibid, 1995). Also, her studies contribute to reflect on the researcher's role as ethnographer in such settings of story production and of how the researcher in this way might be said to contribute to and/or constitute organizational meaning (Yanow 1998).

Another approach that aims to bring architectural aspects into organizational contexts is provided by Ewenstein and Whyte, who explore the concept of "aesthetic knowledge" through an ethnographic study of the practice in an

architectural firm. Here, they discuss how knowledge that is embodied and based on the senses can represent ways, through which an organization learns to organize its professional practice, build up competencies, and more (Ewenstein and Whyte 2007). By proposing a link between theoretical concepts like “aesthetic knowledge” or “aesthetic reflection”, on the one hand, and “the lived experience” of what people do in an architectural practice, on the other, they discuss how knowledge and learning is produced in these types of organizational contexts.

In their empirical study of architectural firm Gehry Partners LLP’s approach to client collaboration, Yoo et al. suggest a link between the emergence of an architectural design solution and the organizational design of the client organization. Here, it is suggested that the combination between these two processes develop a “design gestalt” that potentially form a “generative force through which organizations can simultaneously pursue variety and unity in their organization designing practices” (Yoo et al. 2006: 216). The study proposes a number of general principles of how organizational designing can come about, in the realm of architectural projects, and is closely connected to the conceptual ideas described below as ‘Managing as Designing’.

Van Marrewijk also takes an empirical point of departure in his study of the potential link between the architecture of corporate buildings and cultural change in the organizations that inhabit them. In an ethnographic study of three headquarter buildings he argues for a “hermeneutic relationship between elements of spatial design and the meaning-making of their designers and users” (van Marrewijk 2009: 295). In the study, he illustrates how the shape of corporate buildings reflects the changes that a client organization experiences in the course of a building project, and suggests a stronger collaboration between designer and client in the course of the design process.

It should also be noted here that Gagliardi’s volume of articles that discuss how different types of artifacts hold symbolic meaning that should be considered in an organizational perspective is indeed based on empirical studies (Gagliardi 1991). Here, corporate architecture, private houses, interior office layout, computer systems and more are used as frameworks to illustrate and discuss the relationship between artifacts and organizational life.

The organizational design tradition

The increasing interest in space and architecture within organization studies might be said to link back to a general interest in design. Considering the concept of design as concerning how organizations are established and structured, the area of organizational design seems a relevant place to start.

Weick provides one approach from 1965, which as he says "remains accurate" (Weick 2003: 93, Romme 2003, Garud et al. 2008), and that also points to some of the challenges that the concept generally seems to hold: "The design of an organization refers, of course, to its structural characteristics, i.e. those elements in the total picture of an organization's functioning that (a) remain unchanged over a sufficiently long period of time to be describable and (b) influence or constrain important aspects of the organization's total behavior. The use of the word "design" implies a focus on aspects of structure that are prescribed by or at least acceptable to the formal authority of the organization" (Haberstroh 1965: 1171 in Weick 2003: 93-94).

Substantial developments have taken place within the area of management and organizational development since this definition was established, and the focus on change as a precondition for organizational life has become broadly accepted by practitioners and scholars alike. However, the gap between stable ("unchanged") or unstable (changing) continuously seems to pose a challenge.

The area of organizational design might thus be said to lead back to some of the significant developments within the area of organization theory and economics, undertaken in the late 1950's and throughout the 60's and 70's by scholars like James G. March, Herbert Simon and Johan P. Olsen. Here, concepts like bounded rationality (March and Simon 1958, March 2005), satisficing vs. optimal solutions (ibid.) and ambiguity and choice (March and Olsen 1976) might be said to have radically changed the approach to the management assignment and thus to developments within organization theory. Still, decision making can be said to have remained a substantial hurdle, in regards to how choices are made and developments can be kept up and continued. From the 60's and onwards, scholars like Karl E. Weick have contributed to the discussion by considering life in organizations as consisting of ongoing events that are naturally changing by having

discontinuities as a central characteristic. Here, behavior and developments in organizations are considered as processes, that is, continuous exchanges between smaller and larger events that mutually influence one another, according to the people involved and their perception. Weick calls these processes "double interacts", where an act gets responded to by another act that changes it, which leads to new acts and new responses – exchanges that continue in ongoing loops. Weick's approach to life and developments in organizations basically takes a cognitive point of departure, based on traditions from social psychology and organizational behavior (Weick 1979). Also, his approach to organizational development processes can be said to refer to organizational design as being unstable and perpetually changing (ibid, 2001, 2003).

One way to address this perception of organizational design as continuously evolving is by considering the double connotation that resides within the concept of design itself. Here, design might be seen as a noun or as a verb (e.g. Weick 2001, 2003, Boland and Collopy 2004, Yoo et al. 2006, Garud et al. 2008). While the noun refers to the traditional perception of design as a product, the verb rather attends to design as a process – of designing. In correspondence with his general view on development in organization (cf. section 2B), Weick perceives a design as a complex set of interactions that take place continuously and where "attention rather than intention drives the process of designing" (Weick 2001: 61). While the common driver in the classical approach to decision making may be that of intention and thus of the future as a condition that is known, the focus on attention rather calls upon the exchanges between different interests and perceptions that constitute a development process. Here, the future discloses unknown factors and the design process represent the events, through which potential opportunities occur. In this setup design as a product versus that of a process are seen as opposites.

Managing as designing

One of the more recent approaches that take design in its capacity of being a verb further, is the conceptual idea referred to as "Managing as Designing" (Boland and Collopy 2004). In this approach, a key to innovation and creative problem solving resides in the process perspective – of designing. Here, a group of scholars from different fields, but with a mutual interest in organization studies,

discuss how methodological approaches that traditionally characterize development processes within the design industry might be beneficial in management contexts. Two overall approaches to innovation and problem solving are particularly exposed: the decision- and the design attitude, respectively. The first represents the traditional management perspective, which presumes that there are several known alternative solutions to a problem and that the challenge is to choose among them, whereas the latter focuses on problem solving as an ongoing development process towards a solution that works (ibid.). The design attitude indicates that good solutions are not necessarily known to us, and that the task of facilitating a process through which different opportunities can occur, can be seen as a central vehicle. In this perspective, the current management assignment is suggested as a practice of designing, in which the act of designing organizations serves as the primary purpose.

According to the "Managing as Designing" approach, designing is a continuous and iterative activity, which might be said to pick up on Weick's conception of development processes as emergent. In the "new vocabulary" suggested in this approach, this designing activity is referred to as being "liquid": "During the liquid state, a design problem is open to many possible directions in its solution and serves as a vehicle for wide-ranging explorations and dialogue. Keeping a design problem in a liquid state is difficult but essential if a best design solution is being sought. Without an effort to the contrary, a design problem will too quickly become crystallized, and inquiry into the best solution will be constrained." (Boland and Collopy 2004: 273). Here, not only the liquid state is being discussed, but also its contrary, "the crystallized". The balance between these states appears to correspond with the relationship between design as a product and that of a process. It is presented as an ongoing friction between matter that is kept in a fluid condition, and situations, in which closure is either clear or indicated through prior decisions or defined goals (Suchman 2004, Gehry 2004). Also, the relationship between the manager (traditionally considered the organizational designer) and the staff member (in this approach considered a co-designer) is discussed further. Suchman challenges the traditional conception of the designer as the natural keeper of defining value in design, by discussing the general conception of how a design emerges and how it is being implemented. She suggests that the developments that necessarily take place subsequent to the emergence of a design should be thought of as a part of the design itself, and she thus acknowledges the idea of the end user

as co-designer: “What would it mean then, to reconfigure management and design discourses so that the inevitable re-workings involved in implementations or use would be seen not as design failures and user resistance but as realizations of the design? One key move is to shift from a view of the manager/designer as the origin of change, or of new things, to an understanding of the manager/designer as involved in the *circulation* of ideas and objects” (Suchman 2004: 170).

Here, Suchman might be said to take a step towards a combination between a cognitive and a material perspective. While her point of departure is within an organizational context that involves the manager and her comprehension of the management assignment, she also suggests other things (“ideas and objects”) as the looking glass, through which new understandings of the management assignment could come about. Again, the proposition of bringing the notion of “*circulation* of ideas and objects” into play seems to correspond with Weick’s general approach to processes of development in organizations. They happen in loops that are genuinely reciprocal and continuous (e.g. Weick 1979). In these continuous processes of enactment and interpretation, something that was meant for one purpose might not get into play as such, but instead become a contributor to something else. In such a perspective of iteration, a design is continuously made subject to a potential process of redesigning.

SECTION 2B: SENSEMAKING IN ORGANIZATION

The theoretical concepts that constitute the area of sensemaking in organizations might be said to stem from the longitudinal discussions within organization studies that regard the balance between the stable and the unstable in management and organizational development (cf. 2A). The sensemaking literature is, from the late sixties onwards, particularly delineated by Karl E. Weick and his suggestions of how these cognitive processes of change and development take place in organizational contexts (Weick 1979).

Basically, the sensemaking concepts describe how people in organizations attempt to comprehend and explain the many change events they are subjected to

in the course of their practice. It is a way to "'structure the unknown'" in order to be able to respond to it and thereby to be able to keep up the action (Waterman 1990: 41, in Weick 1995: 4). It describes the way through which "people put stimuli into frameworks" in order "'to comprehend, understand, explain, attribute, extrapolate, and predict'" (Starbuck and Milliken 1988: 51, ibid). The organizational activities that represent end user participation as a method to inform design developments might be seen as such a framework. Here, staff members of an organization are invited to participate in organized workshops in order to discuss – and thereby shed new light on – their professional practice in a spatial perspective. The purpose of these processes is not only to describe the current work practice, but also to explore ideas and considerations that regard future practice – catalyzed and identified by the conversation between the participants. The organized workshops are thus one level of the framework, within which sensemaking activities can take place. But as will be illustrated and discussed below (cf. sections 5B and 6B), the outcome of such processes is voluminous and messy. It needs to go through certain processes of interpretation and translation, in order to serve as an actual input to inform an actual design process. These processes of interpretation might be said to be another level of framework, within which stimuli are placed, in order for situations to become comprehensible.

In processes of sensemaking, words and language serve as the central vehicle to enhance and support them. People talk the events they are subjected to "into existence", in order to comprehend them. (Weick et al. 2005: 409). The layout of such an articulating process involves retrospection. Weick's general "sensemaking recipe" states that: "How can I know what I think until I see what I say?" (Weick 1979: 155, 165, 1995: 12, 2001: 189, 2002: 9, Weick et al. 2005: 412). Here, he refers to Mead's remark that we are "conscious always of what we have done, never of doing it" (Mead 1956: 136, in Weick 1979: 194). People in organizations talk forth their actions and the events they are subjected to, in a retrospective process. They discuss, converse, document, evaluate; not only to get their heads around what is going on in the present situation, but also in order to be able to continue their action. To prepare for what will happen next and to figure out how they can contribute to these further movements. There are many contributors to the sensemaking literature and also different perceptions of some of the central concepts (Weick 1995). In the following, I will outline a few of the headlines, as

they are emphasized and explained by Weick (Weick 1979, 1995, 2001, Weick et al. 2005).

Change as the point of departure

In organizational life, the conglomerate of events that form daily practice, are frequently characterized by change: discontinuities that are equivocal by nature (Weick 1979). We are often not sure of their meaning, as their content might change according to the situation, in which they appeared, and the people involved in them. They are ambiguous: indistinct in purpose and thus difficult to understand. Engaged in organizational contexts, we thus try to comprehend such change events, in order to reduce their equivocality and secure our ability to continue the action that constitutes our organizational system. As mentioned in the previous paragraph, the process of comprehending and responding to this type of stimuli is usually done by talking. We talk our way through such change events, in order to understand and respond to them (e.g. Weick 1995, Weick et al. 2005).

When we perceive something as a change event, it is basically because it differs from the practice or the types of situations we know. When people regard a condition or situation as different to something they are familiar with, the sensemaking process sets forth. The question: “same or different?” is thus central in sensemaking (e.g. Weick et al. 2005: 414). As will be illustrated and discussed in Chapter 6 below, the architects and process designers involved in the designing of Arkitema’s domicile The Mikado House attempted to collaborate, as a means to get the project into motion. Here, organized end user participation served as a central part of the framework, from which the design process was supposed to evolve. The setting clearly differed for both parties. The architects struggled to get their heads around how to respond to the material produced by the end users in the participation activities. The process designers, on the other hand, struggled to find a way to outline the framework, in order to get the collaboration to work and the design process to progress.

Weick explains such attempts at sensemaking in organizational contexts through three main concepts: enactment, selection, and retention. These are motions we go through, in order to respond to the changes at stake and keep on moving (e.g. Weick 1979, 2001, Weick et al. 2005).

Enactment

The central point in the process of enactment is that it involves interpretation. By interpreting the circumstances and events around us, we attempt to make them our own. We enact a situation by trying to make it more orderly: We categorize and organize the issues in question, in order to understand them better. Among other terms, Weick calls this notion of categorization "bracketing" (e.g. Weick 1979: 154, 1995: 35, Weick et al. 2005: 411). Bracketing practically means that we carve out and categorize some aspects of the issue at stake (text, task, event, or other), as a means of getting an overview of its content. We break the content up in pieces and give them names, in order to attach meaning to them. In this process, we bring some things forth and leave others out. Weick says that "people choose their own constraints" (Weick 1995: 164). Here, he indicates that conditions for action reside, rather in the interpretation, than in the actual material, upon which the conditions might be said to be built. This process of choosing can be located in the interpretations that constitute the process of enactment. Based on processes of engagement and interpretation, people in organizational contexts contribute to shape the results of the events to which they are subjected, and thus the environment in which they are part.

In the process of enactment, people look for plausible answers in order to produce meaning. Here, plausibility basically means people's search for "common ground", things to agree on, as a means to understand the events they are subjected to and to keep the action going: "[T]he ways in which events are first envisioned immediately begins the work of organizing because events are bracketed and labeled in ways that predispose people to find common ground. To generate common ground, labeling ignores differences among actors and deploys cognitive representations that are able to generate recurring behaviors" (Weick et al. 2005: 411). Again, the process of interpretation (enactment) represents ways, through which people attempt to assemble the factors that characterize a situation into a format that make sense to them. As will be illustrated and discussed in Chapter 6, the people involved in the process of designing the Mikado House, might be said to have experienced severe difficulties in finding such "common ground". But the story of the Mikado House project also presents a particular instance, in which an architect and a process designer established such foundation, from which their interpretations could be made and the sensemaking process could continue. In this

collaboration, the process of sensemaking might even be said to reach next level, that of selection, which will be introduced shortly below.

Sensemaking is continuous

The sensemaking process may be seen as iterative, in the sense that it is continuous and reciprocal. With different people involved, different interpretations would be made (enactment) to make sense of the matters at stake, and different things would be seen (selection). In this way we may say that "sensemaking never stops" (Weick 1995: 107). The result of an interpretation is thus specific for a particular situation. With other people in the lead, other interpretations would be made. Also, interpretations are continuously made subject to new interpretations as the sensemaking process continues. Recalling Weick's general understanding of development processes in organizations (cf. 2A), these are seen as continuous exchanges between events and actions that mutually influence one another, according to the people involved in them. Here, an action catalyzes new actions that change it, which again catalyze actions and responses to those actions. These exchanges continue in the ongoing loops that Weick characterizes as "double interacts".

These continuous interactions, exchanges and interpretations that influence and change conditions in organizational settings, indicate that "[s]ensemaking is not about truth and getting it right" (Weick et al. 2005: 415), although people often try to be right in order to maintain their motivation. Rather, the processes exemplify ongoing attempts to make the situation at hand possible to respond to, and thereby the effort to keep the action going. This happens as the exchanges continuously contribute to change the story about the issues at stake. But as Weick et al. point out: "People may get better stories, but they will never get *the* story" (ibid.). In organizational life there isn't such a thing as 'the story'. Although a basic sensemaking question may be "What's the story here?" (Weick et al. 2005), a more correct question might rather be "What's *a* story here?" (Weick 2001: 462). There can never be one story in an organizational context: Several people are involved, who represent, not only themselves, but also different groups. What a manager considers plausible is often not plausible for other groups represented in the context: employees, stakeholders, the board, or others (Weick et al. 2005).

Selection

Weick is generally cautious about pointing out how the concept of choice is often connected to models of rational decision making, and that organizational contexts cannot be said to be built on stable conditions. However, the process of selection explains how the enacted interpretations are subsequently made subject to choice. Selection means that certain aspects of the enacted change events might get 'chosen' by the people subjected to them. Weick et al. explains it the following way: "The number of possible meanings gets reduced in the organizing process of *selection*. Here a combination of retrospective attention, mental models, and articulation perform a narrative reduction of the bracketed material and generate a locally plausible story" (Weick et al. 2005: 414).

In explanations of the sensemaking process it is often pointed out that a central reason for sensemaking to take place is that people in organizations want to be able to act. They are brought together through certain actions that constitute the product or service they represent as an organization, and their general inclination is to keep such action going. Their continuous attempts to sensemaking are thus efforts they make, in order to keep the wheels going. "Sensemaking is about the interplay of action and interpretation rather than the influence of evaluation on choice. When action is the central focus, interpretation, not choice, is the core phenomenon" (Weick et al. 2005: 409). The point here is that the interpretation made in the process of enactment is the first instance of creating "common ground" (ibid: 411), and on that basis action can potentially be upheld. But it is important to note that, as Feldman says, attempts at sensemaking often do "not result in action" (Feldman 1989: 20, in Weick 1995: 5). They influence the subsequent situation, but the optional interpretations may not be followed by a changed practice.

In this way, the process of selection might thus be said to involve a new layer of interpretation. By choosing (as in sorting) the bracketed and interpreted material, "a narrative reduction" is made by selection (Weick et al. 2005: 414). Weick unfolds the point by explaining that "Selection occurs on the sense that many of the possible meanings that are tried simply fail, either because they are not useful or because the present data is inconsistent with them" (Weick 1979: 175). Most of these meanings and data are thus abandoned, while a few might be brought forth as a map or a template that can be used in subsequent action.

Retention

Finally, the process of retention describes how such preferred aspects, e.g. brought forth as a template through the process of selection, subsequently get integrated in the organization's daily practice. Retention involves implementing the phenomenon through a continuous process of establishment: "When a plausible story is retained, it tends to become more substantial because it is related to past experience, connected to significant identities, and used as a source of guidance for further action and interpretation" (Weick et al. 2005: 414). This means that retention represents the organization's ability to repeat or recall that, which was selected. Weick quotes James, explaining that "'retention means *liability* to recall, and it means nothing more than such liability'" (James 1950: 654 in Weick 1979: 207). Retention happens when the selected map or template is continuously revisited in future actions. It does not mean that it should be recalled as something specific – just that it is recalled. Organizations have "bad memory surfaces" as Weick points out (ibid: 208), and he emphasizes that this is good. Because sensemaking processes are necessarily continuous and reciprocal, the continuous process of retention provides yet another layer of interpretation. In this way, we might say that implementation in organizational practice happens through repeated action.

These three general steps to describe how organizational sensemaking takes place and develops can be perceived in a sequential structure and can thus be discussed as such. On the other hand, they should also be seen as concurrent, in the sense that they are ongoing loops of action that do not have clear beginnings and endings, but are continuous, reciprocal exchanges that people in organizational settings undertake in order to keep up their practice (Weick 1979, 1995, 2001). The sensemaking literature is particularly being used in the analyses in sections 5B and 6B.

SECTION 2C: ACTOR-NETWORK THEORY

Finally, actor-network theory has been a source of inspiration in the process of analyzing the empirical material produced in the study. Actor-network theory can be characterized as an empirically based methodology (e.g. Law 1992, Latour 2005, 2006) that is based upon the general idea that reality is made up of relationships and the way, in which these are formed and established. Here, the focus is on how the components that make up these relationships engage and mutually influence each other, and it is from this point of departure that reality should be comprehended and analyzed. In this perspective, relationships are not seen as the result of interactions between cognitive subjects that form social networks, but rather through the complex of different components that are involved in interaction. When people engage, they do not only engage with other people. Rather, the long range of factors that influence and affect their engagements are at stake; factors that actively mediate the interaction and thus become "active". In this way, reality can be said to be formed by the connection between humans and non-human components, where the material is seen as that which keeps the social together (e.g. Latour 1991, Law 1992). In actor-network theory, these components are characterized as "actors".

In the empirical projects that have formed a point of departure in this study, a substantial amount of actors are involved. There is a range of human actors: individuals and also groups that constitute professional trades such as architects, process designers or managers. Also, there are the broader categories of end users (of the building) or citizens (in a municipality). In addition, a large number of non-human actors are involved: texts, drawings, sketches, diagrams, pictograms, 3D renderings, models, cardboard plates, PowerPoint presentations, phrases and questions that structure the participation activities, and more. It is the ability for these contributors to connect and thereby form networks, capable to act and influence the context, they refer to, which makes up the central constituents of actor-network theory. When I have been inspired by actor-network theory as an approach to analyze this material, my inclination has thus been to explore how the relationship between these human and non-human/material actors can be said to contribute to the emergence of a design solution.

By removing the traditional priority given to human perception, actor-network theory mark that an actor does not hold an intrinsic meaning, but can rather be characterized by a general absence of essence. The meaning that an actor might hold thereby lies in its relationship with other actors, not within the actor's own constitution. Here, actors connect and form relationships that can establish into networks. It is the network of relationships that holds the capacity to act, not the actors themselves (e.g. Latour 1999).

There are several intertwined concepts that actor-network theory aims to explore as a methodological approach interested in how change takes place and thereby constitutes the emergence of the social. In the following, I have but focused on a few such concepts, all of which have been important sources of inspiration in the process of analyzing the empirical material that has been produced in the study. The concepts are: network, translation, spokesman, inscription/inscription devices and circulating references. Although actor-network theory is today represented by quite a broad group of scholars, I have primarily focused on the concepts as they have been discussed by sociologists Bruno Latour, Michel Callon and Madeleine Akrich.

Network, translation and spokesman

The concept of network and the capacity to establish networks represent a foundation in actor-network theory. Networks are made up of relations between actors. It is the links that form the relations that constitute the network and thereby the ability to act. Here, one actor can never act alone. Action is catalyzed through the support that is established through the network, and it is the relations between actors in the network that are continuously influential. The actors involved in the network can thus be said to impose ongoing change on each other. They are not either static or stable, but perpetually transforming and emergent – in the cause of their interaction (Akrich 1997, Latour 1999, 2006).

The concept of network is closely affiliated with that of translation. A network is made up of actors that connect, and in every encounter between such actors, a translation takes place. This process might be said to form an epitome of actor-network theory as a methodological approach. Actors form a network, and this formation happens as a result of translation processes. Based on these interactions

(and mutual processes of translations), the actors involved change, accordingly. The concept of translation thereby extends the classical understanding of the term, as a way to secure lingual communication. Latour suggests that we need to accept translation, not as "a shift from one vocabulary to another, from one French word to one English word, for instance, as if the two languages existed independently. I used translation to mean displacement, drift, invention, mediation, the creation of a link that did not exist before and that to some degree modifies the original two" (Latour 1999: 179).

Rather, and in alignment with the point above, translations should be seen as the modification or change that the actors involved are subjected to, in the course of their interactions. In these encounters, the involved parties mutually affect one another as a result of the very confrontation. They mutate and thus become something or someone else (e.g. Latour 1991, 1999, 2006, Akrich 1997). These mutual changes are characterized as displacements (Callon and Latour 1981, Callon 1986).

But it is not only the ability to form connections and catalyze displacements that is central in the establishment of a network. It is also the ability to form *many* connections, in order to strengthen the network. The more actors there are to be traced in a network and the more threads or relations there are between these actors, the stronger the network becomes (e.g. Latour 2005, 2006). A network becomes stronger through its density: Volume creates stability and thereby a stronger 'argument' or ability to act (e.g. Callon 1986). Here, the idea of produce volume in the network is explained through the concept of a spokesman: "To translate is to displace. […] But to translate is also to express in one's own language what others say and want, why they act in the way they do and how they associate with each other: it is to establish oneself as a spokesman. At the end of the process, if it is successful, only voices speaking in unison will be heard. […] Translation is the mechanism by which the social and the material worlds progressively take form. The result is a situation in which certain entities control others" (Callon 1986: 214-215).

In this quotation, it comes forth that the strongest actor is the one that succeeds in forming a unison voice, through which it can act on behalf of others (Callon and Latour 1981, Callon 1986). If an actor gains the ability to say "'[o]ur interests are

the same'" it becomes the spokesman of the network. Here, the actor mobilizes a network of supporters that makes it possible to speak as "'us'". In this way, spokesmen translate "other actors into a single will" (Callon and Latour 1981: 279). They are entities that "control others" (Callon 1986: 215).

In this way we might say that the process of translation not only has the capacity to catalyze change through encounters between actors that form relationships in networks. Also, the process involves a connection between units that were previously considered different (Callon 1986, Latour 1999). Here, the spokesman speaks on behalf of others by assembling all into one voice. This process of mobilizing a network of actors to form a unison voice, in order to support a certain idea, is complex and full of challenges. Here, all kinds of actors to support or obstruct the idea can potentially engage. In order to explore how one particular viewpoint can be said to succeed in such a process, it is the relationship between such supporting and obstructing entities that should be considered and analyzed. An example of this process will be illustrated and discussed in section 5C.

Inscription and inscription device

Another concept or conceptual pair that I have found helpful is the concepts of inscription and inscription device (e.g. Akrich 1997, Latour 1999). Here, an inscription device might be said to be a vehicle, apparatus or framework, through which new material to can be produced, while the inscriptions are such new material. Through these inscriptions "an entity becomes materialized into a sign, an archive, a document, a piece of paper, a trace" (Latour 1999: 307). Inscriptions do not hold a clear meaning or content. Rather, they materialize as entities through the subsequent context (of relationships) within which they involve. They get into shape through processes of translation. Through being subjected to translations, inscriptions can be said to be "mobile, they allow new translations and articulations while keeping some types of relations intact" (ibid). Here, Latour also uses the conceptual term of "immutable mobile" (ibid.) to describe what an inscription is. This contradictory setup combines several actor-network theoretical concepts: Through the process of translation, an entity necessarily changes in the encounters with other entities. However, it is also in this process that connections can be formed between things that were previously considered as being different.

An inscription is thus “mobile” in the sense that it can contribute to transform something, into something else, while at the same time being “immutable” – ‘unchangeable’. In this way, an inscription concurrently invokes same and different. Here, the “mobility” contributes to form continuous change, while the “immutability” represents the idea that an entity can emerge in different versions: it can travel and take on different shapes and formats, in the course of its changes.

In both of the empirical projects that form the point of departure in this study, the method of end user participation has formed a central analytical object. Among other things, I have aimed to explore how the outcome of such interactive processes with end user representatives can be said to inform the emergence of a design solution. With these two concepts (inscription device and inscription) in mind, we might say that the conceptual framework of the interactive workshops (constituted for example by certain workshop exercises and/or questions) can be seen as an inscription device, through which various inscriptions can be formed.

But these exercises and questions did not only contribute to produce inscriptions. Also, they were already inscribed by various inscriptions – conceptual ideas that represented the projects’ different and often abstract aspirations. In the course of the participation workshops, new inscriptions were produced: material that went through several levels of translation, in order to inform the continuous design processes. The workshop framework represented an instrument (inscription device), through which the end user representatives were given the opportunity to provide information (inscriptions) that was brought through processes of translation and subsequently inscribed into the design process. Here, the participants were influenced by the initial inscriptions that constituted the workshop, while they also contribute to form new inscriptions. In this way we might say that inscriptions change actors and are being changed by them.

Bringing the concepts of inscription one step further, Latour says that “When immutable mobiles are cleverly aligned, they produce the circulating reference" (Latour 1999: 307). This idea of a circulating reference, and of how an inscription can move and change while keeping a general shape, has been the last central actor-network theoretical concept that I have applied in my process of analyzing the empirical material.

Circulating references

Latour has explored this concept in the essay 'Circulating Reference: Sampling the Soil in the Amazon Forest' (Latour 1999). Here, he illustrates how the soil in this particular part of the savanna is being described and thereby constituted, through the collaboration between three scientists in a research team, each representing different professional fields. The essay is an example of how "the world gets packed into words", as Latour calls it (ibid: 24), in order for us to comprehend and understand the phenomena that come to represent them. Through a detailed description of how the matter at stake (soil) travels through processes of translation in the course of the exchanges between the members of the involved research team, Latour discloses how knowledge about the phenomenon is being established – to form what he characterizes as soil science. This establishment does not happen as a result of logical or causal connection between the components that constitute the soil and the words used to articulate and thus activate it. Rather, it occurs through the way that this particular phenomenon is being transferred and transformed by the use of a certain reference.

What Latour indicates through his use of the concept of a reference is that the traditional attempt to build a bridge between language and nature is irrelevant: "I want to show that there is neither correspondence, nor gaps, nor even two distinct ontological domains, but an entirely different phenomenon: circulating reference" says Latour (1999: 24). By this remark he characterizes the concept of a reference, which comes from Latin and means "to bring back" (ibid: 32). A reference is not something that represents itself, but rather a description of the journey of changes, displacements, negotiations and stabilizations that a phenomenon goes through from one stage to the next, in order to reappear in a new format (e.g. Latour 1991, 1999). Despite substantial changes, the continuation of the phenomenon is maintained through the chain of associations that come to represent it. In the essay, Latour demonstrates how such phenomena go through processes of change and modification that we connect to the original version –through a mutual frame of reference. The reference keeps up continuity, and on that basis, the phenomenon can unfold and develop. "The circulating object continues to circulate and continues to gain its isotropy by what other actors do to it" (Latour 2006: 225). Here, a chain of actors or events are linked together via the reference. It is the reference that allows the diagram, text or other, to travel. In the analysis in section

6C, I illustrate and discuss how a particular reference seems to circulate and thereby inform not only the architectural design solution, but also the organizational design solution. The analysis discloses how the reference keeps circulating, but also how it breaks when not being kept up in the chain of associations.

In this chapter, I have aimed to present the literature I refer to in the thesis. First, I provided a brief and provisional outline of some of the approaches that are currently in focus within the area of 'Space in organization studies'. Second, I described a number of central concepts within the areas of 'Sensemaking in organizations' and 'Actor-network theory'. In the analyses that constitute chapters 5 and 6 of the thesis, I user these concepts as a means to discuss the events at stake in the projects.

CHAPTER 3: METHODOLOGY

INTRODUCTION

In this chapter, I aim to describe the methodological approach I have used in the study. By methodology, I mean the relationship between the research question that the thesis aims to address; the theoretical approaches I have used to unfold this question, and finally the methods applied to undertake the actual inquiry. The analyses I present in chapters 5 and 6 are based upon the study of the two empirical cases: Hillerød Municipality's new town hall and Arkitema's new domicile The Mikado House. As the case-organizations were substantially different in structure and constitution and the two cases were based on rather different general outlines, the research design I have used to approach them has also differed. However, the methods I have used in order to support the accumulation of empirical material have been the same in both cases: participant observation, interviews and document analysis. Below, I first introduce the methodological point of departure. Second, I briefly indicate the three methods I have used and the connections between them. Third, I introduce my approach to the field. Finally, I describe the methods in more detail, according to how I have engaged with the empirical projects.

THE METHODOLOGICAL APPROACH: A GENERAL OUTLINE[2]

"Data are not given by experience, but by the concept of the language used to interpret it. Observational language imposes discrete boundaries on the continuity of the phenomenal world so as to define concrete, individual events in that world. Such events may be simple, solid objects like snowballs, or complex, nontactile events like behavior sequences. Whether simple or complex, phenomenal events possess two properties whose significance for scientific inquiry cannot be overstated: They are unique and transitory." (Freese 1980: 28, in Weick 1995: 107)

In the project, I have studied organized end user participation in processes of organizational and architectural design, and the relationship between some of the players involved in these processes. The study has generally held a process perspective, not only in regards to the research objects as such, but also in terms of the way I have explored them. Inspired by the quotation above, I have considered the empirical material that the two cases have been represented by as being generated in the relationship between the events that have taken place in the project and my engagement as a researcher. The study has aimed to disclose and discuss a few of the features that these phenomena or practices seem to represent, based on the empirical events – as I have seen them. It is in this exchange process that the study has evolved. Järvinen and Mik-Meyer capture this perspective by asking: "Is the analytical object regarded as a more or less stable unit (which might, from a process perspective, undergo change over time) or is the analytical object per definition a fluid, unstable and ambiguous phenomenon that gets formed in the exchanges with the researcher?" (Järvinen and Mik-Meyer 2005: 9).

My approach might thus be said to be based on a constructionist perspective (e.g. Berger and Luckmann 1967, Collin 2003, Esmark et al. 2005). It might also

[2] In the study, I have focused only on office buildings and projects, in which the client and the end user represent the same organization. The building sector is a highly complicated industry with a myriad of different constellations, where many players can be involved in the project from the design process sets forth until occupation. In the study, I have exclusively focused on four roles that partake in this process, and on the relationship between them. The four are: the manager or management team as the formal client, the staff member as the end user and thus also client representative, the architect responsible for the architectural design solution, and the process designer, responsible for planning and facilitating the end user participation.

be said to draw upon the tradition of symbolic interactionism, which claims that the meaning of a social action or a phenomenon is situated in concrete interactions between people (e.g. Blumer 1967, Rock 2001). Finally, it is inspired by the methodology of actor-network theory (cf. section 2C) that claims that the construction of meaning is based on the interaction between people and things, and their ability to connect and thereby to act (e.g. Callon 1986, Latour 1991, 2006, Akrich 1997, Collin 2003, Elgaard Jensen 2005). As opposed to the naturalist approach that tends to seek the objective truth through the subjective experience, this approach does not aim for objectivity. Rather, it aims to create new knowledge about the phenomena at stake through the interactions between the research questions, the occurrences in the field, my participation in these, and my interpretations. Here, knowledge is not considered something 'out there', but something that is being produced.

An ethnographic point of departure

My approach to the empirical field has been based on ethnographic traditions (e.g. Atkinson et al. 2001). Ethnographic research can be said to be based on participant observation, supplied by additional methods such as interviews, textual analysis, video and more. It is "firmly rooted in first-hand exploration of research settings" (ibid: 5).

There are different perceptions of how ethnographic research should be conducted and to which scientific tradition the methodology refers. It has, as Atkinson et al. point out, "never been a stable entity" but has rather been "marked by contrasts and tensions" (ibid: 4). As a methodological approach, ethnography seems to have gone through substantial developments over the years. Traditional anthropology aspires to understand a culture by engaging with the life and worlds of its members (e.g. Spradley 1979, Geertz 1993, Tedlock 2000, Atkinson et al. 2001, Esterberg 2002, Järvinen 2005, Eriksson and Kovalainen 2008, Myers 2009). In this tradition, the anthropologist observes what natives in a culture do in their practice. By actively engaging in this practice, the anthropologist learns from (and thus about) the native (Spradley 1979). Throughout the years, the researcher's position in the engagement with the field and with the production of the empirical material seems to have gradually reinforced, for example with regards to the process of writing the research (Atkinson et al. 2001, Van Maanen 1988).

I have used the ethnographic approach as a means to get to know the field (or rather combination of fields) that I wanted to explore, and some of the actors that represent these: architectural design as a field; the process designer as a new player in the building industry, the process designer's methodology, and so forth. My aspiration has thus been to produce knowledge that can unfold the link between these design fields, and to explore how knowledge about this intersection can mutually contribute.

However, I have mainly chosen not to use the term 'ethnography' when describing my own interactions with the empirical context. The primary reason for this is found in the research object itself. As a method, organized end user participation can be said to be based upon several methodological characteristics, some of which can be categorized as ethnographic (doing observations, undertaking interviews, and so forth). The concept has thus repeatedly been referred to in the empirical contexts. In Arkitema, the terms 'end user participation' and 'ethnography' were sometimes used synonymously (planning and executing participation activities was referred to by some of the architect as *"doing ethnography"*). Here, the term ('ethnography') was also used to describe the methods that represent the process designer's portfolio. Although I used the term to describe my approach in the beginning, I eventually found it easier to differentiate myself and the empirical contexts by not using the term and instead plainly describe what I was doing. This choice also made it easier for me to see what *they did* and how they used the ethnographic methodology, as opposed to what *I did* and how I used it.

As for some of the other concepts often linked to the term 'ethnography', I have used some of these to characterize my approach. I have used the term 'field work' to signify the period of time (extension) I spent in the field. On a more general level, however, I have described my actual exchanges with the projects rather as 'participant observation'. In the literature, these two concepts (participant observation and field work) are often seen as equivalent (e.g. Myers 2009). I have used the term 'field' not only as a phrase that refers to the empirical projects, but also as a means to characterize architectural design as a business area. As for the term 'field notes', I have also found that this has represented the openness that I wanted my approach to be characterized by. Here, I have perceived my field notes

not as closed and completed texts, but rather as inputs that can be subjected to continuous reading and interpretation (Altinson et al. 2001). I have generally used the term ‘empirical material’ instead of ‘data’. Again, this refers to the open-ended approach I have aimed to take: I have not gathered ‘data’ as an enclosed entity of what happened in the field. Rather, I have contributed to ‘producing’ the empirical material that accumulated, in the course of the project.

I understand the term ‘context’ on two levels. First, with reference to the events as they happened in the field: the participation activities; the process designers’ translation of the produced materials; the architects’ effort to involve the user input in the process of designing (and the translations thereby involved), and many other events. Added to this comes the impact that my own participation have had, while the empirical material was being produced. It is in the interim between the two that the context should be understood. The empirical material can thus be said to have been characterized by “ambiguity, context dependency and productivity” (Järvinen and Mik-Meyer 2005: 15). Here, the findings have been produced in the relationship between the events in the field; the players involved in them, and the vehicles I used as a researcher.

THE RESEARCH DESIGN

I see the methodology as an outline of the project’s research design (e.g. Myers 2009), made up by the relationship between the research question, the theoretical approaches I have used to discuss this question, and the methods applied to undertake the actual inquiry. In the study, these factors have been developed and stabilized, not as a linear, but rather as a circular process. They have mutually informed each other and thereby developed.

The research question

My research question has served as a point of reference in regards to the issues I have aimed to explore in the study. The question has stabilized the object of analysis, and represented the core, to which the accumulated material has referred.

Also, it has developed and thereby slightly changed over time during my engagement with the two projects (e.g. Eriksson and Kovalainen 2008). As the projects developed, my research interests gradually identified, and the questions to accommodate those interests gradually stabilized.

As I have outlined in Chapter 1, my aspiration in the study has been to explore the link between organizational and architectural design processes and thus between organizational and architectural design. The way I have studied this is by looking at how organized end user participation has been applied in these design contexts. Here, I wanted to explore how these processes seem to mutually influence and thereby constitute each other, in the course of their exchanges. The participation activities are practical in the sense that they produce concrete material. I have thus seen the participation as a way to produce what I have characterized as 'connections' between these two design processes. On that basis, my research question has been:

How does organized end user participation in architectural design processes generate 'connections' between organizational and architectural design?

The question points toward the study's overall focus on process. It is a 'how-question' that suggests a 'circular' touch: It generates input that emerges according to the continuous developments that take place in the projects. Although the question might be characterized as concrete in the sense that it refers to actual activities, it is still rather general. It has thus accumulated several sub-research-questions, more closely connected to the events that have taken place in the empirical studies.

The methods

The methods I have applied in order to gain access to the events in the field might be characterized as being ethnographic and based on a constructionist perspective. In terms of participant observation, this method has formed a general research setting, from which the focus of the study has emerged (e.g. Silverman 1993). Here, I have particularly focused on the different viewpoints at stake in the interaction between the involved players (e.g. Järvinen and Mik-Meyer 2005). As

for the interviews, the concept of active interviewing has been central (e.g. Holstein and Gubrium 2004), in which the material produced is based on the actual interview situation and the relationship between the players involved. Finally, with regards to the document material, I have particularly focused on these, not as being “fixated” in the sense that their meaning is determined and integrated, but rather as being “situated” in the sense that they should be read through the context, in which they appear (e.g. Priors 2003). The documents are thus perceived as productive.

The theoretical concepts

Considering the theoretical concepts that primarily have inspired the thesis, ‘Sensemaking in organizations’ and ‘Actor-network theory’, these represent rather different approaches to understanding social reality. Sensemaking is a cognitively based approach, in which people and their perceptions of the world form a central point of departure. Actor-network theory, on the other hand, focuses on how networks of actors establish and thereby gain strength and ability to act. Here, the material components in these associations are just as influential as the humans. What the two theoretical concepts have in common, however, is that they focus on events in social contexts as being “unique and transitory” (Freese 1980: 28, in Weick 1995: 107). Here, interactions between actors are seen as mutually influential and continuous. They have no clear beginning or end, but rather take place in the middle, as part of an intersection (e.g. Weick 2004).

The two approaches have contributed in quite different ways, in accordance with their conceptual constitutions. As mentioned above, sensemaking processes are complex cognitive endeavors. These concepts have helped me disclose the extensive communicational challenges that people involved in the participation activities were subjected to, in their efforts to engage. However, the empirical projects were both substantially material in the sense that material factors such as sketches, documents, models, and more, played an important role as to how the designs evolved. Here, actor-network theory represented a way to give this material aspect a substantial voice. Through certain ANT-concepts, it became possible for me to explore the relationship between material factors, conversations and people, and thus discuss the way they imposed upon each other, in the course of their interaction. But because of the basic ontological difference between the

two approaches, I have separated the analyses in the thesis sharply. The two empirical projects each represent one chapter (chapters 5 and 6) that each holds two analytical sections: one that refers to the sensemaking literature and one based on actor-network theory.

Method combination

Before I turn to each of the three methods in more detail, I will provide a brief outline of the way they interrelate in the study. My purpose of combining three methods has been that the different methods hold different qualities that, in different ways, can inspire and unfold the material (Silverman 1993, Mik-Meyer 2009 forthcoming). In order to be able to explore how the organized participation activities might have produced 'connections' between the two design processes, I have looked for approaches that could help me embrace both fields and uncover the intersection between them (Miller and Fox 2004). In order to interact with and thereby interrogate the empirical material, I have thus combined the three methods. This approach has provided me with a complex and ambiguous material, generated in a reciprocal process between myself as a researcher and the research objects I have been engaged with. Based on these methods, the phenomena addressed in the study have been identified and explored.

The way of applying the methods and engaging with the field might be said to have differed from that of method triangulation. Triangulation also focuses on the use of different methods (e.g. Silverman 1993, Esterberg 2002, Eriksson and Kovalainen 2008), but it holds the primary focus on securing research validity. As several scholars thus have pointed out, triangulation often looks at the analytical object as referring to "one empirical reality" (Miller and Fox 2004: 35 referring to Denzin 1978), a point also made by Silverman (1993) and Mik-Meyer (2009 forthcoming). In such a perspective, the phenomenon is explored in its 'entirety', searching for the truth about this particular event or object. The way I have used the combination of methods is rather as a means of identifying and exploring the analytical object. In this context, validity has not regarded a search for the truth about the matters at stake, but rather to seek findings that may be considered trustworthy, interesting and consistent (ibid.).

An example from the field

I would like to briefly illustrate an example of the interchanges between the research question, adjacent sub-questions, methods, and theoretical concepts, as it happened in my study of the Town Hall project (cf. Chapter 5).

As mentioned above, my basic research question held a complexity that made it necessary for me to form sub-research questions in order to get closer to the events that took place in the empirical projects. Here, the basic question: How does organized end user participation in architectural design processes generate 'connections' between organizational and architectural design?, catalyzed adjacent sub-questions like: 'How did the conversations in the participation activities affect the way that the staff referred to their practice?', or: 'How was the outcome of the participation activities transformed into a format that could serve as an input to the architects in the architectural design process?'. These helped me remind myself of the focus by unfolding some of its complexity.

In terms of searching for response to such complex questions in the empirical context, I formed more concrete, empirical questions in the interview guides. Here, I focused on issues such as how the daily practice would change as a result of the new town hall and how the staff had experienced the participation activities. My interviews held a semi-structured format, which made it possible for me to pursue different leads that occurred in the concrete interview situation. In the particular interview situation described below, in which I engaged with the department manager of the *"Citizen Service Center"* in the municipality administration, the interviewee started out by telling me about how the center had grown as a result of the merger between the two municipal administrations. On that basis, I asked: 'What does such an enlargement mean to the daily practice?' To this question the department manager replied that

"It means that we've gotten a much larger visibility in the administration, as we now interface with more or less all the departments. So it has meant that the staff had to become more broadly informed [about the work going on in the administration, with regards to the client]".

As it turned out, this enlarged *"visibility"*, due to the enlargement of the department also included an expectation for the administration *"to signify openness"* and *"a sense of community"* towards the clients, according to the department manager. Based on this piece of information, I let a substantial part of the remaining interview revolve around this issue: the relationship between the department's ability to uphold a high degree of *"visibility"* and *"openness"*, on the one hand, and the spatial features that should accommodate this work, on the other. During the conversation, it came forth that the department manager had been greatly involved in a negotiation between client, architect and process designer, with regards to the shape of the town hall's entrance counter: a central piece of furniture in her unit. Here, the shape of the entrance counter got substantially modified through a complex process of negotiation: from a shape the department manager considered 'too closed' to one she regarded as adequately 'open'.

This empirical experience made me focus more closely on the concept of *"openness"* and also more generally on the notion of 'open'. I began to consider this a result from the participation activities with implications, not only on an organizational level (that the organization wanted *"to signify openness"*), but also in regards to the emerging architectural design. Based on this I formulated a new sub-research-question: 'How did the concept of 'open' appear within the framework of the project?'

I searched the document material I had accumulated throughout the project: I looked for how phrases like *"open"*, *"openness", "dialogue"* or other, appeared in the official texts and presentations involved in the project. As for the interviews, I included questions about the entrance counter instance in subsequent interviews, and also searched for similar phrases ('open', 'openness', 'entrance counter' and more) in already conducted interviews. Finally, in the analysis (cf. section 5C), I applied actor-network theory as a means to discuss how the actors involved in the process: people, drawings, diagrams, documents, and more, seemed to influence, inform and form each other as a result of their exchanges. In this way we might say that through my exchanges with the field and my subsequent handling of the empirical material, certain stories were 'produced' that gave way to new understandings of some of the phenomena at stake in the study.

It is important to note that many different angles could have been pursued in the project. If my focus had been different and I had used other theoretical approaches, other actors had come closer to or further away from my exploration. Hereby, different findings may have occurred (Van Maanen 1988). I have studied organized end user participation in architectural design processes in two specific empirical cases. If similar processes took place in a different empirical context, the outcome might have differed. However, having studied a profession that is based on such strong traditions as the architect profession, results from other empirical cases but within the same national context, might be expected to come out similar.

APPROACHING THE FIELD

Prior to the establishment of the project, I did a general search into the idea of an increased focus on space in organizational development, within a Danish context. My aspiration was partly to identify the architectural firms that were focused on organized end user participation as an integrated part of the architectural design process. Also, I looked for organizations with a particular focus on the organization's spatial structure; for example projects that involved the establishment of a new building or the refurbish- and refurnishing of existing premises. Based on this search, I contacted and met with a number of people and organizations.

I had a particular interest in the Town Hall project, based on this municipality administration's tradition for a certain focus on the physical environment. Here, Hillerød's MD had an interest in involving the organization closely in the building project, partly due to the forthcoming merger between the administration itself and the adjacent municipal unit, Skævinge. Also, it came forth that Signal Arkitekter would be involved as the process designer in the project. I outlined my general interest in the notion of a closer link between organizational and architectural design processes to representatives from the municipality administration as well as to Signal Arkitekter. Parallel to this development, I contacted Arkitema, a firm that had shown a substantial interest in end user participation as an integrated part of the architectural design process. I was informed about the upcoming Mikado

House project, and was shortly after invited to study the project as a case in my PhD project. Arkitema's interest was apparent: the firm aimed to explore the potentiality of organized end user participation as a means to designing architecture. Here, the Mikado House project served as the context, through which such an exploration could evolve.

Hillerød Municipality, Signal Arkitekter and Arkitema have all supported my study financially. I brought the issue of financial support forth already in my initial exchanges with the organizations. The purpose was not only in regards to securing the opportunity to undertake the study as such. More importantly, I thought that financial commitment would strengthen my opportunity to get access to the fields and to form a firm affiliation between myself as a researcher and these empirical contexts. As it turned out, the projects fell into place, financially, during the same period. Although fascinated by both projects with regards to my basic research interests, I also realized that two projects of such magnitude and with such substantial structural differences were a bit of a mouthful within the framework of a PhD project. But I decided to proceed with the setup based on the argument that both projects delivered significant input to the scope of potential issues that was included in my initial research interest. Also, I considered their differences to potentially contribute to the understanding of both.

When I first approached the field, I was not entirely clear of what the focus of my inquiry would be. I knew that I was interested in the relationship between architectural design and organizational practice, and that the increasing interest in end user participation in society at large (including the area of management), could represent a potential way into this connection. In both projects I was given the opportunity to engage in the field before the project was financially secured and I was formally enrolled in the PhD program. During these approx. 6 months of preparation, I engaged in a substantial number of activities in the two projects.

Because the initial participation activities (workshops with staff representatives and also interviews undertaken by the process designers) in both projects started during this – to me – premature period, I felt impelled to follow as much of the activity that I could surmount. Here, my aspiration was to let the research object be revealed from the events that took place in the field, rather than through my preset convictions. With a complex of many activities and many potential phenomena at

stake, but without a clear focus as of yet, I decided to make participant observation a central method as a means to get closer to the research object. Participant observation can thus be said to have launched the process of identifying the research focus. From this premature period onwards, the research question and the adjacent sub-questions evolved, the interview guides were made and the interviews undertaken, and finally, the theoretical approaches were chosen as a part of the analytical process. In terms of the document material, my general rule was to assemble everything that was made available to me by the case organizations. In both projects, I have had easy access to document material. But as an actual contributor to the productions of the research outcome, the documents did not become 'active' until the analytical process started and the analytical points emerged. Here, the document material ended up being an important contributor in the process of analyzing the data (cf. chapters 5 and 6).

PARTICIPANT OBSERVATION

Not entirely clear of what my focus would be, I used participant observation as a way to get into the field and also to identify my research interests. By closely following the developments in the empirical project, the scope was gradually narrowed down and my focus became clearer. The method thus served as an approach that allowed the focus to evolve over time, while empirical events, potential research questions and theoretical considerations were discussed accordingly. For a period of approximately 1 year I used participant observation as my primary method in the field[3]. Järvinen and Mik-Meyer point to some of the method's advantages: "In studies that focus on the interaction between actors (including the interaction with text material), observations are obvious, as their primary advantage is to give the researcher an access to the different actors' position, social identities and strategies" (Järvinen and Mik-Meyer 2005: 118). Here, the approach gave me a unique opportunity to observe, discuss and comprehend the relationship between the players and their actions, while the

[3] That said, I did undertake a few initial interviews in Arkitema in the initial period, in order to get an overview of the firm itself and the current tendencies in the contemporary field of architectural design.

empirical events evolved (e.g. Silverman 1993, 2004, Järvinen and Mik-Meyer 2005, Eriksson and Kovalainen 2008).

Volume and selection

Participant observation holds the advantage that it allows dislocations: it offers an opportunity to change focus underway (Silverman 1993: 43). I did not, as such, *change* my focus. Rather, I developed it alongside the establishment and development of the empirical projects. But as Silverman points out, the opportunity for dislocation and change in focus also contains the potential problem of volume. The engagement might accumulate a material so large that it becomes difficult to undertake the analysis without producing more anecdotes than actual findings (ibid). This problem has indeed been apparent in the study, which produced a material that at one point seemed immensely rich with reference to the two main fields it addressed (architecture and organization). For a while, I found it challenging to undertake the process of selection, because by selecting certain aspects, I necessarily had to neglect others.

To provide an example from Arkitema: I had 8 months of full time fieldwork in the firm, in which I primarily studied the design of the Mikado House. But there were also other in-house activities during the same period that I considered potentially relevant. Because the study took an open point of departure in regards to focus, I found it important to follow some of these activities from a close range, in order to support my search for a clear focus. Although this engagement gave me a broad overview of Arkitema's culture; the field of architectural design at large, and some of the particular implications in the Mikado House project, it was also substantially time consuming. In this process, I found it challenging, both practically and mentally, to keep on engaging with the firm and their various activities. I will return to this point of engaging and withdrawing from the field in a later paragraph.

As the focus emerged and the events in the field developed, there were two other elements that helped me make the choices. One came from the field: I kept having short conversations with the MD's of the organizations involved in the project: Hillerød Municipality, Signal Arkitekter (hired as the process designer in the Town Hall project) and Arkitema, during my main period of participant

observation. I had usually not formally asked for these meetings. Rather, I let the interaction happen ‘accidentally’ in the hallway immediately after a project meeting or during a break in one of the participation workshops. Here, I tested my ideas and got immediate response from the MD. I used these reactions as inspiration in the process of sharpening the focus.

The other element that helped me to form a stronger focus came from my engagement with the research community: Coming from the practice field myself, I initially found it easier to identify with people in the field than to those in the research community[4]. This viewpoint changed once I got more established in the research community. Gradually understanding the shape that such empirical research studies hold, the choices became easier to make. This establishment eventually made it easier for me to contain the ambiguity and complexity that the study held, and to accept to keep the focus open. .

The balance between inside and outside

Long periods of participant observation often hold a general dilemma about the researcher’s position (e.g. Silverman 1993, Esterberg 2002). While my engagement in Hillerød Municipality was largely observational in terms of partaking in formal project meetings and conducted workshops, my engagement with as well Signal Arkitekter as Arkitema was participational and interactive.

The participating staff in Hillerød thus never seemed to doubt that I was an external part in the project, while my relationship with people in Signal Arkitekter and Arkitema grew much closer. This condition made it increasingly important for me to handle the fine balance between being an outsider and an insider in these firms. When I have participated on a reasonably active level in meetings, workshops and other types of events in both firms, the purpose has been to keep up the access to the empirical projects and to continue the production of empirical material. As the confidence between myself and some of the people closely

[4] As a point of departure this might be seen as an advantage: It gave me a way into the field and an opportunity to establish a relatively strong position while being there. Also, it gave me the opportunity to return to the field, accordingly when I found it necessary. On the other hand, I had to make a conscious decision to leave the practice field in order to be able to study it. My personal journey from the practice field to the research community might thus be seen as a part of the actual development of the study.

involved in the project established and matured, I made sure to point out my position as a researcher on occasions where I experienced that the line became blurred. My purpose was not to seek "shared experience" between them and me, but rather a "described experience based on mutual participation" (Mik-Meyer 2004: 41). Here, my aspiration was to get closer to the field and thus to an opportunity to explore the analytical object at stake in the project. The ambition was not to become a native.

But the balance wasn't always easy. Particularly in Arkitema, where I did the longest full time fieldwork, I had to make conscious considerations about my engagement. I was enchanted by the firm, and by the apparent challenge between the MD's articulated visions and the staff's struggle to comprehend and relate to these aspirations. Here, I continuously needed to clarify my position as an external researcher, and not an internal member of the Mikado House project team. The balance became easier once the focus of my study became clearer. In Signal Arkitekter, similar considerations were necessary, but here my period of fieldwork was shorter, which made the boundary clearer. Also, the Town Hall project was more distinct in its project structure, which made it easier for me to appoint my role as a researcher, as opposed to the other players involved.

Field notes

To account for my challenge of finding the balance between inside and outside and other challenges that participant observation contain as a method, I kept a reasonably clear structure of my field notes. During my periods of participant observation, my primary vehicles have been my black note books and my laptop computer. My notes have mostly been "descriptions" rather than "impressions" (Silverman 1993: 39). I took notes from all meetings I attended (formal project-meetings, developmental design-meetings, and more), describing what people said and the discussions that came up. In these descriptions, I also pointed out my own contributions (when I said something). I only rarely made analytical comments in the notes. When I did, I marked them with brackets and my initials: '(MSV: XXX)'. But such 'premature comments' can also permeate the subsequent analytical work by anticipating a certain direction. In the analysis, I have thus only rarely used these comments, in order to avoid my own prejudice (Silverman 1993). That said, such comments can also stimulate creativity: the thoughts and ideas that

come up through the close engagement with the field can be form a constructive input to the subsequent process of analysis.

Informal conversations

My periods of participant observation have also involved numerous informal conversations in Arkitema as well as in Signal Arkitekter. My approach has mainly been to take down notes into my black notebook while conversing, not only to memorize the points, but also to make the main purpose of our conversation clear to my conversation partners. This became a way to differentiate my own role from that of the participants in the field. If the notebook wasn't at hand, I would mostly recapture the conversation shortly after, often directly into the computer. Although the notes in the notebook largely went into the computer after these encounters, I have also consulted the notebooks actively in the subsequent process of analyzing the material.

Many of my notes included drawings and small sketches that were used in the informal conversation, as means to explain the issues in question. My general ambition was to go through the notes the same day as I took them, in order to memorize the events that continuously added onto the empirical material. There have been times when I didn't succeed in doing this, but returning to the notes subsequently, I have mostly found them readable. The dating of the notes has also helped this process. In the process of analysis, I have often compared the notes in the notebook; the accumulated documents on the computer and the document material produced by the participants in the process. This approach gave me a rich material, upon which my analysis could be built.

Awareness of being studied

Studying people in the field can have the potential challenge that people may change or adjust their behavior when aware of being studied (e.g. Esterberg 2002). In this regard, we might say that the people involved in the study were divided into two main groups. The first group involved managers, architects or process designers. Most of these (whether or not having experience in engaging in these types of design processes) seemed pleased that someone (in this case me) attempted to *"make sense out of what happened underway"*, as it was described by

one of the architects in the Mikado House project. Here, I was occasionally asked to *"just say something"*, in order to ease up the tension in the room and provide some cues to what was going on. These players appeared to be generally interested in my engagement, based on the prospects of gaining a clearer picture of the process, to which they were subjected.

The second group was the end users, invited to engage in the participation activities. These had a more reluctant response to my engagement. When I circulated among the groups in the workshops, I experienced a shift among the participants at the moment I entered the group. But as Esterberg points out: "Over time, those in the setting become habituated to her or his presence" (Esterberg 2002: 71). When I stayed with a group for an extended amount of time in the actual workshop, their interaction seemed to return to a certain flow of conversation. If I interacted directly with the group in the conversation, they also seemed to get used to my engagement, not as a regular colleague, but as an external party. If I did not engage directly in the conversations, but rather observed, I somehow seemed to become invisible after a while: when they got used to my presence (with my notebook or laptop) they returned to their internal conversation. Also, as I engaged in most workshops in the projects, they generally seemed to become accustomed to my longitudinal involvement.

Leaving the field

Establishing and developing a research project with participant observation as the central development arena, potentially includes a challenge in regards to eventually withdrawing from the field (e.g. Esterberg 2002). As my relationship with Arkitema as well as with Signal Arkitekter can be characterized as comprehensive in the sense that I established quite close connections to the people involved in the projects at stake, I also got used to 'the life inside'. Here, I interacted with the players involved and thereby contributed to produce empirical material. As my strategy was to let the research focus emerge through my interactions with the field and through the knowledge that accumulated in the projects, I first found it difficult to decide when to leave. Especially in Arkitema this was a challenge. The Mikado House project went through major developments, with reference to the project that I initially set out to study. These changes continued to produce new perspectives and opportunities, and made me

consider ‘to hang in there’ as the developments emerged. So although the research focus that had established seemed relevant, in the sense that certain answers to my questions were repeated and given more depth in informal conversations and interviews, the field notes also kept revealing new material as the project itself continued to develop.

But as Esterberg (2002) points out, external factors often contribute to decide when to leave. This also happened here. The framework of my study held the timeframe of a doctorate. This helped me decide to leave Arkitema when the project went into the second phase of development (cf. Chapter 6).

INTERVIEWS

It is often argued that observational studies leave behind an unreliable empirical material as “different observers may record different observations” (Silverman 1993: 9). For the observational material to “become data” it is important to support it with methods that can produce material that can give a more precise outline: “However sophisticated such recording devices [used to produce observational data] may be, they cannot offer the detail found in transcripts of recorded talk” (Silverman 1993: 117). I thus turned to interviews as the second primary method, in order to contribute to producing empirical material. This method gave me the opportunity to dig deeper into certain themes that the participant observation had identified.

Although the method of interviewing might allow the researcher to inquire into certain themes with more depth, the approach can also been seen from a critical viewpoint. Here, “the interaction in the interview can be seen as a result of the research project’s perspective, primarily focusing on the categories pointed out” – prior to the interview situation (Mik-Meyer 2004: 33). In this way, the method might be considered predetermined. As Järvinen points out, however, the constructionist perspective rather sees the outcome of an interview as a result of “socially situated activities” (Järvinen 2005: 28), where interviewer as well as interviewee form their responses based on the interview situation. The outcome

should thus not be seen as independent from the situation within which it was created (ibid.). Along the same lines, Denzin refers to the interview as what he calls "an observational encounter. An encounter… represents the coming together of two or more persons for the purpose of focused interaction" (Denzin 1970: 133, in Silverman 1993: 94).

Semi-structured interviews

I have mainly conducted what Gubrium and Holstein call "semiformal guided conversations" (Gubrium and Holstein 1997: 141), also known as semi-structured interviews (e.g. Kvale 1997, Esterberg 2002, Myers 2009). This approach has provided me with "some structure, while allowing for some improvisation" (Myers 2009: 125). Here, I developed interview guides and used them in accordance with the way the interview situation developed. These were guidelines that partly suggested certain issues to be touched upon during the exchange, but that also allowed the conversation to wander, in the course of its own development. If we look back at the example from the Town Hall project that was illustrated above in this chapter, I was not aware of that the entrance counter had been redesigned in an interactive process that involved end user representatives when the interview was set forth. This information was proposed by the respondent as an example, and as I realized its illustrative potential with regards to my research interests, I let this particular story take up a large part of the conversation.

With regards to the type of questions asked and the type of response received, I experienced that if my initiation included a concrete question (e.g. 'In what way did you find that the competition brief differentiated from more traditional briefs?) the replies usually referred directly to the question. Based on this reply, I often made a reflection upon its content, sometimes indicating further elaboration on certain of its parts. In this way, the exchange continued. If the issue was broader, however, (e.g. 'Tell me about the architectural design process as you generally approach it') it usually required more involvement by me as an interviewer, in order to set forth the interviewees response. It often led to an initial exchange between us, so as to sort out a way to approach such a broad area. Also, it should be noted that many architects are not very verbal in their communication (cf. chapters 4 and section 6A). In all interviews I have thus brought my black note book, A3 paper and a recorder, and in many of the interviews with architects, the

paper was used to illustrate what they meant. I will return to this point in the discussion of document material as a method, below in this chapter.

Active interviewing

In my approach to interviewing I have been inspired by Gubrium and Holstein's concept of "active interviewing". They focus on the "activeness" of the interviewer and on the interaction between interviewer and interviewees (or as they call it "respondents"), and consider the material generated in an interview situation to be co-produced (Holstein and Gubrium 2004: 140). By applying a strong focus on the interaction, the approach also differentiates from the notion of an interview as an opportunity to merely collect information about the respondents; their practices and feelings. Here, the traditional approach to an interview as "a one-way pipeline for transporting knowledge" (ibid: 141), in which the interviewer aims to take on a subtle and neutral attitude, is left behind. Instead, it is the exchange between the two parties that generates the results. In this way, the stories that the interview reveals might be said to emerge in a mutual effort and thus as institutional stories made up by institutional bodies rather than by individual selves (Gubrium and Holstein 2002). "Meaning is not merely elicited by apt questioning, nor simply transported through respondent replies; it is actively and communicatively assembled in the interview encounter" (Holstein and Gubrium 2004: 141).

In the study, Arkitema's MD often called me *"the talking researcher"*, during the time I undertook my participant observation. My impression is that this was meant as a friendly comment to how the interactions between myself and the firm took place in meetings and interviews, but it also reflects that he found my engagement untraditional. His comment somehow seems to capture the idea of the active interview. I also found the active approach helpful, with regards to the fact that the study focused on a link (between the two design processes) that was new to most of the respondents and thus often difficult to respond to and articulate. Because of this, I often responded to their responses, so as to check whether I had understood their expounding, and to allow them to further their reasoning.

As pointed out above, I waited relatively long before I started to undertake interviews, as I needed the research focus to mature and establish. The result was

that the main part of the interview sessions took place subsequent to the participant observation. The timely distance between these two methods allowed me to use the interview situations as an opportunity to return to the empirical fields and thus to revisit the setting. In Arkitema as well as in Signal Arkitekter, I used these occasions to have coffee with staff members that were closely involved in the projects while I did the participant observation. Here, my purpose was to hear how things in the projects progressed. We might thus say that the interview situations provided an opportunity to revisit the field.

The interviewees

As mentioned above, four of the groups that are involved in this type of building project have played a central role in the study. The respondents have thus represented these four: architects, process designers, managers (who represented the client organization) and end users (who were staff members in the client organization). This choice reflects the overall focus of the study: organized end user participation in architectural design processes, as a means to explore the link between organizational and architectural design. As for the first two groups, I considered the methods and work processes that they represented and the relationship between them as highly relevant, in order to understand how the client organization could navigate through these types of participation activities. As for the managers, I particularly focused on the MD level, in order to be able to discuss how strategic aspirations developed in the projects. I undertook several interviews as well as numerous informal conversations with the MDs of the primary organizations (Hillerød Municipality, Signal Arkitekter and Arkitema)[5]. Finally, the end users have played an important part in the project. Except for the interviews with staff from Signal Arkitekter (process designers in the Town Hall project) and KHR Arkitekter (architects in the Town Hall project), all of the respondents have represented the client organization. In Arkitema[6], this concerned in principle all of the respondents, although none of these were invited to the interview situation in their capacity of being end users. Rather, the interviews focused on their positions as architects, process designers or managers. In Hillerød

[5] It should also be noted that several other interviewees were middle managers that were also, in various ways, involved in the strategic decision making in the projects.
[6] Arkitema held many roles in the Mikado House project: as architects, process designer, end user and client.

Municipality, on the other hand, all interviews represented the end user perspective apart from that of the MD.

Analyzing the interviews

The process of analysis might be said to be divided into two main parts: First, I read through the interviews when they returned from the transcriber, which was generally prior to the process of analysis. This first run gave me an overview of the material on a theme level, with reference to the questions I asked in the interviews. As I read, certain points of references and particular stories emerged, some of which illustrated these general themes. I marked these passages yellow (in electronic interviews or electronic observation notes).

Returning to the interviews in the second run, I was more focused. Here, I used the yellow marks for inspiration, with reference to the general themes that the thesis aimed to address. However, I also found the yellow marks annoying in the second run, as I, at this point, searched for particular stories and occurrences that could strengthen the points that the material seemed to produce. As the interviews were made over a substantial period of time, I often used points from previous interviews as inspiration when planning and undertaking the next. With regards to the four stories that are illustrated and discussed in the analyses below (cf. sections 5B, 5C, 6B and 6C), I have used the interviews actively in the process of analysis, in order to provide perspectives and depth into these stories. In the actual text that makes up the thesis, I have used a few practical rules, with regards to how the material is brought forth in the text. Quotations from the empirical field are marked with "quotation marks" and *italics* (*"The architect has always talked with the users!"*). Quotations from books and papers are marked only with "quotation marks" ("That's why sensemaking never stops"), while my own conceptual considerations are marked with 'single quotation marks' (I aim to explore how organized end user participation can produce 'connections' between organizational and architectural design processes).

Transcription

All interviews have been taped on a digital recorder, brought onto a CD and sent off to a professional transcriber, shortly after. She transcribed the interviews,

and returned them as a transcribed text in a word document attached to an email. She would also return the CD for me to reuse it for the next interview. The same person has transcribed all interviews, except from the first four I did in Arkitema, which were made on a non-digital recorder, a format the transcriber refused. I have listened through these, but not written them up.

The transcriptions have been made without factors like pauses such as *"eh.."* or *"hmm"*, and without laughter. When laughter appears in the following text (*"[laughs]"*), it is made by me, based on my subsequent revisit to the audio file of the interview.

Passages not possible to hear have been marked with "*...(?)*" and interruptions have been marked with "*.../*". In regards to the specific themes and particular stories I have pursued in the analysis, I have returned to the audio file in order to hear through these in the live version.

DOCUMENT MATERIAL

The last of my primary methods has been that of document material. Documents and texts have increasingly become a central methodological approach to study social contexts (e.g. Smith 1984, 2001, Prior 2003, 2004, Atkinson and Coffey 2004, Justesen 2005). Today, various types of documents form an important way to communicate, visualize and discuss not only an organization's products and services, but also its practice; work processes, routines and relationships (e.g. Smith 2001). The organization's constitution might thus be said to reside in the relationship between human activity and central concepts or phrasings from documents (Smith 1984, 2001).

In the constructionist perspective, focus is placed on the documents' material status: Their concrete physical appearance and textual quality (texts, drawings, etc.), rather than the perceptions that the people involved in the production of the documents, represent (Justesen 2005). Here, the document material is seen as a component that contributes to action, not in a precise and unambiguous format, but

rather with reference to the contexts in which it appears (e.g. Smith 1984, Gubrium and Holstein 1997, Mik-Meyer 2005). Because documents are durable in their material constitution, they have traditionally been considered as having an ability to bring us closer to the truth. Here, it is important to note that the documents' capacity of being material, do not make them 'objective' (Smith 2001, Mik-Meyer 2005). Again, it is in the interaction between myself as a researcher and the documents that the results of the analysis emerge.

Documents as actors

In the thesis, documents play a central role in each of the four analyses that constitute chapters 5 and 6. It has been particularly apparent in two of these, which are inspired by and informed by actor-network theory (cf. sections 5C and 6C). As mentioned above, actor-network theory is an analytical approach that rather attends to the relationships that forms a phenomenon, than to its intrinsic substance (e.g. Callon 1986, Latour 1999, Akrich 1997). Here, it is thus in the relational setup to which they refer, that the documents get their strength and their ability to "act". Prior outlines this point as a need to "recognize the quality of documents as things – as things that can act back on their creators – very much as Dr. Frankenstein's monster sought to act back on his creator. Indeed, one interesting feature of documents in action is their tendency to exhibit what we might call such 'monster-like' qualities" (Prior 2004: 77). She remarks that documents are not only produced in social contexts, they also contribute to *produce* such contexts. This influential quality cannot be controlled. Documents can 'strike back' in the sense that their material constitution contributes to influence different players they get in touch with. It is a mutual relationship, and it is this reciprocal quality that characterizes the way that documents have been used as a method.

Examples from the cases

In the analyses of the Town Hall project, I illustrate and discuss how documents: texts as well as sketches and diagrams, might be said to be active participants in the design developments. In the project, document material supported a particular viewpoint that resulted in a redesign of a particular architectural object: an entrance counter. Here, the term *"openness"* was used as an epitome of how the organization aimed to be seen by the public, and the

document material (initial project outlines, questions posed in workshops, speeches and other types of presentations) was used as an argument to consolidate this perspective. The documents became an active part in one version the organization's identity development, not only through written texts, but also through sketches and diagrams. Here, the documents were used to explain a potential organizational change, which might be what Prior refers to as the "'monster-like' quality" that characterizes documents (Prior 2004: 77).

In the Mikado House project, documents produced by the end users in the project's initial participation workshops seemed to keep reappearing throughout the design process. Here, sketches, diagrams and models that in various ways took the shape of a helix were used as the point of reference, from which the design representation progressed. But the initial sketches also contained written texts, which subsequently turned out to trace even further back than the initial workshops. Repeated terms in these texts were for example *"intersection"*, *"across"*, *"meetings"*, *"flow"*, and more. In the context, they referred to ideas to inform the architectural design process. But as it turned out in the process of analysis, they might also be seen as adaptations of the firm's strategic aspirations outlined in earlier project descriptions, in which concepts like *"knowledge sharing"* and *"cross disciplinary collaboration"* were prominent. Here, the documents become an active partner in the development of certain concepts: from an abstract organizational aspiration in the written document, to the numerous sketches and diagrams to represent the architectural form – and back.

Prior captures it like this: "How documents place things, how they make things visible, and how such systems of visibility are tied into social practices can form a guiding theme for social research. […] Naturally, in order to make things visible, human actors and agents have to translate ideas into images and traces. Such processes of translations are various, and what is supposedly the 'same' object can be translated (Serres 1995) into a number of alternative forms. How the forms relate to the other and how they act back on their creators is, however, always a matter open to empirical research" (Prior 2004: 80). Documents are situated, not fixated units. Rather than having a predetermined meaning attached to them, they refer to the institutional context into which they occur.

Access to document material

A substantial number of documents have been present and available from the beginning, and also subsequently accumulated, in both empirical projects: written notes and statements; essays; manifests; printed and/or electronic versions of PowerPoint presentations; sketches; diagrams; pictograms; booklets, and more. Not really aware of what role these would play in the subsequent process of analysis, if any, I continued to pick up and/or ask for a copy of the documents that developed. In the Town Hall project I also requested the existing documents that were produced prior to my engagement.

The document material were brought into 6 large folders, 3 for each project, and categorized by basic headlines such as "Background material for the Town Hall" and "Tools and concepts, Signal Arkitekter". The document material thus accumulated, and although my actual interaction with it might be said to have come later, I expected the material to play a central role in the analysis all along. I found this likely, as documents were actively involved in the progression of both projects. Also, there was a substantial use of sketches in the architectural design process, or of board games, pictograms and other things involved in the participation activities. "People think with things as well as with words" Prior points out, referring to the substantial impact that artifacts have on the way events form and change in the realm of the social (Prior 2004: 77, Latour 1986, Weick 1995, Collopy 2004). For architects this might be particularly true, as their primary way of professional expression is represented by sketching and modeling, rather than by saying or writing. *"It's difficult to explain in words"* as one of the architects involved in the Town Hall project remarks, a point that was repeated many times across the two projects. Rather, they make numerous sketches for the shapes to find their format, and often discuss these internally as a means to test and further inform these. In her discussion of how processes of architectural design progress, Yaneva argues that "architects involve themselves in a comprehensive dialogue with materials and shapes" (Yaneva 2005).

As with the interviews, I consulted the document material with more focus as the research question emerged and my approach became clearer. Here, I categorized the material I found particularly central with reference to the stories that emerged, and marked important sections with my yellow pen.

THE EMPIRICAL CASES

The Town Hall project (cf. chapter 1 and 5)

As mentioned above, my initial and establishing method in both projects was participant observation. In the Town Hall project, my point of departure was to study Signal Arkitekter, the firm of process designers involved in the case, and their approach to the organized end user participation.

Participant observation in the Town Hall project

I partook in most of the development meetings, in which process designers from Signal Arkitekter planned the participation activities, as well as in many of the preparation meetings between Signal Arkitekter and the municipality administration management. Also, I attended the first and second series of workshops in the project. As the municipality is located outside of Copenhagen, I travelled to the workshop destination with the team of process designers from Signal Arkitekter. These trips gave me an insight into the team's considerations, prior to and after the workshops.

However, I did not partake in the third series of workshops in the Town Hall project. In this period I had leave of absence, due to jaw surgery and I was thereby away from the project for 6 months. This absence deserves a short comment: It was a crucial period of the project, as it represented a series of participation workshops, to which the staff at large was invited to partake. I have read the material that prepared the activities and also some of the translated outcome, produced by the participants in the workshops. I have also brought the event up in subsequent interviews with end user representatives. Still, the perspective from which I access this material is likely to be different than had I been directly involved through participant observation[7]. My analysis has thus emerged in the interaction between the written material that was produced in these workshops, the interviews I subsequently made, the theoretical concepts I have applied to explore these issues, and more.

[7] This particular point will be discussed in the analysis in section 5C. Here, it is not my own situation that forms the point of departure, but a staff member that returns from a leave of absence.

The following are the events I partook in as a participant/observant in the Town Hall project:

- Full time participant observation at Signal Arkitekter from May through September 2005
- Participation/observation in workshop series 1 (2 workshops in 2005) and workshop series 2 (3 workshops in 2006)
- Participant observation in two 2-hour plenary meetings with the administration's staff at large in November 2007
- Participation/observation in most preparation meetings that regarded the project, in which the municipality administration's management and Signal Arkitekter partook
- Participation/observation in most preparation meetings internally in Signal Arkitekter
- Observation of one strategy meeting with top and middle management in the municipality administration
- Occasional 1 day visits at Signal Arkitekter with involvement in various internal meetings from October 2005 onwards
- Participation in Signal Arkitekter Christmas Lunch in 2006
- I have done two internal presentations of my PhD work at Signal Arkitekter

Interviews in the Town Hall project

I have undertaken 20 interviews with staff from Hillerød Municipality (client), Signal Arkitekter (process designer) and KHR Arkitekter (architect), in the course of the Town Hall project. The interviews were undertaken between January 2007 and December 2008. All interviews held the duration of 1-1.5 hours. The following matrix illustrates the number of interviews and the positions held in the three organizations:

Hillerød Municipality	**Interviews**
Managing director	3
Staff member, department manager	1
Staff member, department manager	1
Staff member	1
Staff member	1
Staff member	1
Staff member	1
Staff member	1
Staff member	1
Staff member	1
Staff member	1

Signal Arkitekter	Interviews
Process designer (MD, architect)	1
Process designer (architect)	1
Process designer (architect)	1
Process designer (architect)	1

KHR Arkitekter	Interviews
Architect (partner)	1
Architect	1
Architect	1

Document material accumulated in the Town Hall project

- Preparation papers for the Municipality merger, some internal working papers, some available for the staff and some for the general public via the website (www.hillerod.dk)
- Strategy paper/vision paper: "Det Gode Arbejde", developed by the top and middle management, and made official on the website
- The architectural competition brief
- The 5 incoming proposals in the architectural competition
- The assessment committee's comments to the proposals
- All minutes from meetings between the process designer (Signal Arkitekter) and the client (Hillerød Municipality)
- The requirement analysis made by Signal Arkitekter on the basis of the first series of workshops
- All PowerPoint presentations from Signal Arkitekter that regarded the workshops and requirement analysis
- A few sketches from the project I particularly asked for
- Minute/brief on the conditions for the Citizen Service Center

The Mikado House project (cf. chapters 1 and 6)

Also in Arkitema participant observation formed the overarching method I applied in order to study the Mikado House project. Based on my longitudinal engagement with the firm, I partook in most development meetings that regarded the project: preparation meetings between the process designers, design development meetings between architects and process designers, presentation meetings with Arkitema's group of partners, and more.

Participant observation in Arkitema/the Mikado House project

I have participated in most of the activities that represented the first phase of the Mikado House project:

- Preparation meetings for the Vilnius workshops
- Arkitema's 4 day teambuilding trip to Vilnius, Lithuania in October 2005.
- 8 months of full time fieldwork, in which I engaged with the design team of the Mikado House project on a daily basis (November 2005 – July 2006). During this time, I was involved in the following events:
    - Preparation for workshops and participation activities for the Mikado House project (November through December 2005)
    - The Mikado House design team at work in the first phase of the project's design process (January through June 2006)
    - Project meetings that regarded the Mikado House project (with e.g. the group of investors, the external advisors, potential collaboration partners)
    - Monthly strategy meetings with top management and middle management
    - Monthly plenary session with the firm at large Between October 2005 and July 2006
- After the fieldwork: Occasional participant observational visits when I engage in the monthly strategy meeting; the monthly plenary session, and two internal workshops that regarded the second phase of the Mikado House project
- Participation in Arkitema's Christmas Lunch in 2005 and 2006
- I have done two internal presentations of my PhD work at Arkitema

Interviews in Arkitema/the Mikado House project

I have undertaken 20 interviews with staff from Arkitema. Four of these took place in the initial period of my study (between November 2005 and February 2006), as a means to give me a thorough impression, not only of the firm, but also of the field of architectural design in Denmark at the time. The rest of the interviews were undertaken as the project progressed, between August 2006 and April 2009. All interviews held the duration of 1-1.5 hours. The following matrix illustrates the number of interviews and the positions held in Arkitema:

Arkitema	Interviews
Managing director (partner, architect)	3
Architect (department manager)	3
Architect (partner)	1
Architect	1
Architect	1
Architect	1
Architect	1
2 architects (in group interview)	1
2 architects (in group interview)	1
Process designer (dept. manager, architect)	3
Process designer (anthropologist)	1
Process designer (architect)	1
Communication manager	1
HR staff member	1

Document material in Arkitema/the Mikado House project

As for the document material, the Mikado House project and adjacent events that took place in Arkitema during the period produced substantial document material. I have categorized the documents in the following way:

Documents in Arkitema at large: Background material and internal strategy papers:

- Arkitema's Knowledge Report 2004-2005 (Arkitema 2005)
- www.arkitema.dk in regards to historic outline; organizational and geographical structure; professional profile, and staff
- The managing director's Master Thesis from CBS 2004 (Feldthaus 2004)
- External user survey (Hedegaard Jørgensen 2005)
- Internal strategy documents (preparation papers and minutes) developed in the period from October 2005 – January 2007
- The managing director's PowerPoint presentation from his inauguration speech as adjunct professor at Aarhus School of Architecture, 2006

Documents produced in the Mikado House project:

- Preparation material for the Vilnius workshops (minutes from meetings, program and workshop material)
- Results from the Vilnius workshops: posters, photos, sketches, shorter essays and written descriptions
- Two essays from the Managing director on 'the state of the firm' and its forthcoming challenges
- All documents that regarded the development of the Mikado House project were made available to me during my fieldwork (November 2005 – July 2006). I assembled this through my participation in the events or through subsequent requirement inquiry: sketches, essays, PowerPoint presentations, board games, and other workshop material, minutes from meetings and more. After this date, I received much material about the development of the project while still in the first phase of the project. When the design team changed and new people were put in charge, the material ceased to be forwarded spontaneously, but I could easily return to the firm for more information on particular cases, meetings, events and more.

ETHICS AND VALIDITY

The methodological approach I have taken in the study has not aimed to obtain a true picture of the complex phenomena under study. I have provided a micro-study of two empirical projects, in which organized end user participation as a methodological approach to inform the architectural design process, has formed an important part. My approach has been based on a constructionist perspective, in which the empirical material might be said to have been produced in the interaction between the empirical events and my participation as a researcher. In terms of ethics, there are a few conditions that I have aimed to meet in order to keep the study rigorous.

First, I have aimed to separate the process of analysis from the actual encounter with the field (Silverman 1993). My field notes have mainly been descriptive, and when I have stated my opinion or impression, I have marked this clearly in the notes. The point might be said to mismatch the constructionist idea of the empirical material to be generated accordingly and thus be situated, but it is still important in order not to predetermine the analytical result (e.g. Mik-Meyer 2009 forthcoming). Second, I have used method combination in order for the methods to challenge and support each other, and thereby to offer a rich material, from which I could base

the analyses. Third, I have attempted to secure transparency throughout the text, in terms of my engagement in the field, the way that the empirical material has accumulated, and the way the analysis has subsequently been undertaken. Fourth, I have attempted to make my approach systematic, with reference to the production and handling of the field notes; the interviews, and the subsequent analysis of the involved documents. Fifth, my empirical material can be said to be substantial, and I have tried to use it actively in the thesis. By using many quotations from field notes, interviews and documents, I have tried to make the thesis a worthy representative of the empirical events – and thus also of some of the aspects that it aims to address.

Finally, it should be noted that the study may be considered interesting and important, in the sense that it reflects a complex of issues that appears to require increasing attention on a societal level, but where research hitherto seems to be scarce. As I have described in section 2A, the area of 'Space in organization studies' has met growing interest in the research community, but it seems to lack empirical studies that describe how the complex of issues in question can be said to intersect.

CHAPTER 4: THE ARCHITECT PROFESSION: PAST AND FUTURE CHALLENGES

INTRODUCTION

A closer link between organizational and architectural design processes contains a number of challenges for the parties involved in the link: the client organization (manager and end user representative), the process designer and the architect, to mention just those in focus in this study. When it seems important to identify ‘connections’, it is because these might serve as intersections that make it possible for us to explore some of the challenges that are at stake.

To the manager, workspace and architecture have traditionally been treated as infrastructural aspects of organizational life. The idea of giving space a more strategic position seems to be a rather uncharted area, in which the building can be seen as a dynamic unit to support processes of change. Although increased involvement of staff in such strategic processes has gradually established within management over the years, the spatial context represents an approach, to which contemporary managers are unaccustomed. The end users might be considered experts in their daily practice and the way that it currently relates to spatial factors. But they are naturally ignorant of the actual complexity involved in architectural features. That is why we hire professional architects when we plan substantial spatial changes in our spatial environments.

For the architect, the potential link to the organizational design process and the closer relationship with the client as a ‘compound body of users’ (cf. chapter 1) contain several significant challenges. If the two design processes are taking place in a parallel structure, we might say that the client will represent ‘a moving target’ to the architect, due to the changes that the organization will go through as a result of the design process. Here, end user participation can serve as a central method to organize this (mutual) process. The architect is inexperienced as to handle this type of dynamic input as a potential resource to support the architectural design process. I will also return to this point in section 5B and in Chapter 7.

Finally, the process designer represents a new player in the building industry, partly based on the inexperience of the other parties. Aiming to facilitate and support the link between the two design processes, this role still seems unclear with regards to professional constitution, methodological rigor and contribution. It will thus need further investigation. But although the link is new to all four parties and it would be appropriate to investigate the implications it represents to each, I have chosen to focus on one role in particular in this chapter: the architect. The reason for this choice is first that the link between the two design processes takes an ‘architectural situation’ as the point of departure (for example through the establishment of a new building or the restructuring of existing premises). It is the spatial context of organizational life that sets the link into motion. Also, and as I indicate above, the parallel organizational design process will involve substantial changes to the architect’s traditional perception of and relationship with the client organization. Not that the architect is unaware of usage and the functional aspects of the architectural product. The profession has a long tradition for handling the tension between form and function and for communicating with client representatives. However, the implications that increased involvement of end users as active and continuously changing contributors, seems to have left the architect with some confusion. By taking a look into a few features that characterize the architect profession, my aspiration in this chapter has been to learn more about the existing precondition for an extended collaboration between client and architect – and thus about some of the implications that the link is likely to represent.

As a point of departure for this glance into the architect profession, and the challenges that the closer link to the client organization might mean to architectural

practice, I want to bring forth a quotation from an interview with Arkitema's former managing director:

"We now see the seed of new types of methods, where end users are more extensively involved in various phases of the design process, which take place as integrated and synchronized activities. This gives way to a new combination between the technical, aesthetical and social aspects of the building process. The work of an architect will thus not only include the creation of an exact and well-defined architectural piece, but also an understanding of this creative conception as a social process and the perception of the architectural product as a social object – a framework for alternating activities."

In the quotation, the managing director (from here onwards entitled the MD) indicates that current societal tendencies might represent certain challenges for the contemporary architect, with regards to production and collaboration. He points out that increased influence will be given the end users of the building, as an integrated part of the design process. Also, he questions the traditional understanding of the architectural product by proposing a new type of design process that he characterizes as *"social"* and *"synchronized"*.

As this study addresses how organized end user participation in architectural design processes can produce 'connections' between organizational and architectural design, it seems important to consider the profession's preconditions for involvement in such supposedly mutual processes. In the following, I aim to discuss a few of the current challenge that the MD outlines above and why a closer link might be challenging for the architect to handle. I first outline a few features that traditionally characterize the profession. Here, I focus on some of the characteristics that qualify the trade as a profession according to what a profession is, and on the traditional heritage that still seems to saturate the professional identity. Second, I take a provisional brief glimpse into what architects do in their design practice, in order to address some of the emerging challenges. Here, examples from the two empirical cases are used to illustrate the situation from the architects' own perspective. In the last part of the chapter, I return to the prediction outlined in the quotation above by Arkitema's former MD, in order get a clearer image of what the these challenges might mean to future architectural design practice.

THE VITRUVIAN HERITAGE: A PROFESSION LEFT BEWILDERED

There is a large body of literature that addresses professions. Studies of occupations and their potential establishment into professions and theories about what such an entity actually consists of: How they are defined and structured; the factors that constitute them; how they develop, expand or decline (e.g. Larson 1977, 1993, Abbott 1987, Cuff 1991, Brint 1993). On a general level, it seems that theorists largely agree on a few very basic and relatively loosely defined factors that contribute to delineate what a profession is. A profession is a category or framework for a group that represents certain knowledge and skills, often obtained through formal education and training. It holds a certain authority and status in a societal context (Larson 1977, Abbott 1987, Brint 1993). Abbott refers to the levels of abstraction in the body of knowledge that the group represents as the central features that characterize a profession (Abbott 1987). The point of departure in the discussion of professions basically involves interrelations, in which the competition between one group and other groups makes it necessary to demonstrate territory. The framework around a profession is its jurisdiction; that which brings the profession into power within a certain area. The constitution of a profession has thus to do with its ability to maintain control of this domain. It is when "jurisdictions become vacant" that the profession has an opportunity to extend and further develop (Ibid: 3). It is through such vacancies rather than within the professions themselves that changes occur and developments take place.

Abbott divides the way that occupational groups aim to control their knowledge and skills, into two main groups. One is represented by the sheer technique that is the group's common trade or craft, whereas the other involves what he calls "abstract knowledge": "Here, practical skill grows out of an abstract system of knowledge, and control of the occupation lies in the control of the abstractions that generate the practical techniques. The techniques themselves may in fact be delegated to other workers" (Abbott 1987: 8). Here, the level of abstraction is seen as a necessary signature for the profession, in order to maintain control. This is the currency used in the competition with others, and thus the main feature that upholds the profession's subsistence.

If we confer with the literature on the architect profession in regards to identity and professional practice, some of the basic principles set out by Vitruvius some 2000 years ago, might still be said to hold. According to Markus and Cameron, the impact that this heritage has had on the profession's development, is unmistakable (Markus and Cameron 2002: 21- 26). In order to understand some of the challenges that the profession today is faced with, it seems necessary to revisit this legacy. In one of his definitions of the profession's general body of knowledge, Vitruvius states:

"Let him be educated, skilful with the pencil, instructed in geometry, know much history, have followed the philosophers with attention, understand music, have some knowledge of medicine, know the opinion of the jurists, and be acquainted with astronomy and theory of the heavens" (Cuff 1991: 84).

Reading through the statement, it appears that the boundlessness of prerequisites that the profession seems to have grown up with, might well have left it somewhat confused. Although Vitruvius' initial purpose has been to provide clarity (Markus and Cameron 2002), the result seems to be a profession that appears eclectic and contradictory, with regards to knowledge and method as well as to the relationship and responsibility towards society and clients. As it is pointed out in the literature and also illustrated by the empirical data, the architectural design process is difficult for architects to talk about and thus difficult for outsiders to comprehend. One of the features that the Vitruvian heritage appears to have left behind is a particular concealment (Cuff 1991, Fisher 2000), which also seems to constitute an important part of the profession's sense of identity:

"The tacit or ill-defined aspects of the profession's knowledge, skills and talents provide a kind of secrecy about the profession, which in turn contributes to the profession's ability to remain self-regulated and self-evaluated" (Cuff 1991: 36).

These first few characteristics seem to indicate several dilemmas that form important clues in order to understand more about the present situation. In the following I attempt to comment briefly on a few of these. First, the actual content of the profession's obligations appear to have a double connotation to it. On the one hand, it represents an artistic contribution that is difficult to appoint and

describe, as art often is. On the other, buildings or spatial layouts usually hold substantially functional purposes. In this way, the ability to meet functional requirements is also a significant aspect of the profession's constitution. Here, there seems to be a certain contradiction between artistic profession and craftsmanship, which forms a central part of the profession's complexity (Markus and Cameron 2002).

Second, there is a dilemma related to the profession as being avant-garde: on the forefront and crossing borders. This aspiration somehow seems in opposition to the concealed signature that architects are surrounded by as a profession: the closed unit. The dilemma somehow involves the difficulties within the profession's language and method, a point that will be revisited on many occasions in this thesis. Being on the forefront involves crossing borders, which often means working with new people and that is likely to involve significant communicational challenges. Architects aim to cross such borders (and they do so), but the aspiration might also be said to be prevented by the profession's methodological concealment. The collaborational challenges between architects and the new role of the process designer that is provisionally discussed on various occasions in this thesis (cf. Chapter 1, sections 5A, 5C, 6B and Chapter 7), might outline a few aspects that the dilemma holds.

Third, there is the architectural assignment and the relationship with the client. Here, the architectural design process might be seen as the conception of a unique (art) product. On the other hand, architects increasingly find themselves in professionally compromising situations, in which they feel trapped in obligations toward the client or sponsor. Also, architectural firms are businesses that need to be able to navigate the market. This involves a fine balance between the architect's professional perspective, on the one hand, and the ability to meet the requirements from the client, on the other. Scholars are currently discussing how new approaches to design practice now seem to establish. Here, different concepts such as "artful" vs. "scientific" are used to describe how design work is predominantly based on intuitive approaches and/or involve other means, in order to inform the design practice (e.g. Darsø 2004, Beim and Vibæk Jensen 2006, Friis 2008).

Fourth, architectural practice is characterized by the contradiction between the profession's societal responsibility on the one hand, and the professional

recognition, on the other. In the field of architecture, the main sense of credit is kept up, not through recipients, client and the general public, but rather internally, by the profession itself (Cuff 1991, Hill 1999, Fisher 2000). I will return to this point below in this chapter.

Fifth, there is a historically constructed dichotomy between architectural product as a piece of art and an architectural product as an ongoing result of a process of iterative change. Although architectural design products are most often subject to subsequent usage and thereby to modification and change, the product's further journey is rarely in focus. We often hear stories about how architects cannot bear to see how end users apply grim curtains or other features into an architectural framework that was originally considered *"strong"*. With reference to the quotation above by Arkitema's former MD, the concept of architecture as *"a social object"* still seems to need further discussion. For various reasons, writings that have discussed this aspect of the architectural product have not as such been involved in the debate on architectural quality. Here, the field appears to divide into segments: Those interested in the architectural product as a piece in its own right, and those interested in the architectural product and its quality, with regards to context (e.g. Brand 1994). Some architectural scholars have pointed out the importance of expanding the approach to the design process by introducing new methods and focus more on the intersection between architect and user in the emergence of the design solution (e.g. Alexander 1979, 1981). But the division between *"the piece perspective"* and *"the process perspective"* in architectural production still seems substantial within the field, which will be illustrated and discussed in section 6B below.

These dilemmas and contradictions are central, in order to discuss the establishment of organized end user participation as a potential approach to inform the architectural design process. If such methodological vehicles are increasingly defined as a requirement from society in general and from the client in particular, it becomes crucial for the professional architect to discuss the implications and opportunities that these approaches can hold.

THE CONTEMPORARY ARCHITECT: THE CURRENT SITUATION

Returning to the general characteristics of a profession, there are several aspects that seem to challenge the contemporary architect, with regards to for example market vacancy, societal responsibility, methodological approaches and professional language.

1. The architect's position, with regards to vacancies in the market

Current tendencies indicate that the scope, within which the field of architectural design can operate, has expanded throughout recent years. The expansion has put forth new opportunities and professional implications (e.g. Cuff 1991, Leatherbarrow 2001). It has given way to a number of potential vacancies in the market, but also to a number of potential new players, who are trying to establish their currency in the competition. Several of these changes are caused by technical developments, but softer products have also found their way into the building industry. Such new hard and soft technologies might represent opportunities for the contemporary architect. It doesn't necessarily mean that the architect herself should be capable of taking on a new role. But it might be relevant for an architectural firm to consider its position, with regards to such potential vacancies or expansions that currently seems to be emerging. Here, the vacancy of organized end user participation represents a new approach to design development and coordination in architectural design processes. If we add to it the more technically oriented vacancies that are presently developing in the field, these include new methods that require new players and specialists. In this climate, Leatherbarrow suggests a preservation of the differences between the fields involved: to hold on to professional responsibility in order to support the development of novel design results that are based on cross disciplinary collaboration (Leatherbarrow 2001). As contemporary building projects represent substantial complexity, the contributors that can support this process should thus aim to collaborate, but also maintain professional integrity. Contemporary

architects seem to struggle to find the balance in this setup. As an architect closely involved in the Town Hall project points out in an interview:

“All in all, more and more advisors seem to be molded in, especially on the technical side. So you could perhaps wish for – just for the sake of balance – a bit more of the other side, the softer part, a bit stronger represented in this whole setup of advisors. In these types of projects, I sometimes find myself in meetings, where I’m one architect surrounded by twelve engineers. It speaks for itself: you’re getting behind in that situation.”

2. The architect’s societal responsibility

The statement above might be seen as a comment to the increased complexity that constitutes contemporary building projects. But it might also indicate that the architect has bypassed some of the current vacancies, and that this has left her in an intricate position. Several scholars point out the tendency towards the architect’s marginalized position (e.g. Gutman 1988, Cuff 1991, Fisher 2000, 2001, Hill 1999, Leatherbarrow 2001). One reason for this might be the point I have indicated above; that recognition within the architect profession is based upon peers, rather than upon the feedback from clients and society (Cuff 1991, Brand 1994, Fisher 2000). In a societal context that is generally constituted by a balance between supply and demand, and with a strong focus on the purchaser, this approach seems contradictive. Referring to Larson (1977), Cuff points out that the traditional relationship between training, knowledge and market contributes to form an ideology: “Ideologically, professions are bound in a social contract with the public: they retain certain rights and privileges in society in return for bearing certain responsibilities” (Cuff 1991: 23). The architect profession does not correspond with such an ideological point of departure. It forms an inner conflict by moving the architects “further from their idealized professional role” (Cuff 1991: 24).

The complexity in the link between societal responsibility on the one hand, and professional recognition, on the other, is reflected in the profession’s institutional framework. There is a significant difference between the area of architecture and for example the visual art scene. In art, there is a clear distance between artists, arts institutions and the ongoing debates, which makes the artists more detached and individual, and thus more accustomed to partake in discussion among peers (Hill

1999). Architects, on the other hand, get their recognition internally. Here, the relationship between the individual architect and the architect profession is a strong indicator for identity and commitment. Discussions are thus rather between the profession and the public than internally between architects. In this way we might say that the profession is conservative, secret and self-protective (Cuff 1991, Larson 1993, Hill 1999, Fisher 2000). Architects have historically avoided unions, which have been perceived as unprofessional, while at the same time working for low wages and without organized rights (Larson 1977, 1993). Architects use internal leverages to judge status and to keep up control, and the idea of being organized in a union has thus traditionally been seen as a threat to the breed. By and large, the profession seems to have kept control over its territory, despite of, or perhaps rather because of- its occupational concealment. But in the current climate, the secrecy might be substantially challenged, with reference for example to the phenomenon addressed in this study: organized end user participation.

3. The architectural language: maintaining control by keeping others out

Having studied the architectural design process in an empirical context, I have experienced the outsider's impression of the mismatch between the level of abstraction in the body of knowledge, on the one hand, and the architect's explanation of what happens in the design process, on the other. But although the complexity of what architect's do in their practice seems inscrutable to strangers, it comes forth that they do understand each other and that they share a particular professional language. During an interview with an architect closely involved in the Mikado House project, I asked him about the language gap between the inside and outside of the profession:

Marianne: Does it make sense to you when I say that I – as an outsider – sometimes find it hard to understand the conversation between two architects?

Architect: I understand that perfectly.

Marianne: And if we look at some of the things being said in the conversations, it doesn't really make sense, even grammatically.

Architect: No (laughs).

Marianne: Why is this?

Architect: I don't know. It's something we have all the way back from school. I don't really know.

Marianne: But it doesn't sound like you have any difficulties in understanding one another?

Architect: Not at all.

As it comes forth in this small dialogue, the professional language shared by architects is often indecipherable to outsiders (e.g. Hill 1999, Fisher 2000) and also difficult for members of the profession to articulate. Recalling Abbott's outline of the central features that characterize a profession, it seems to be accurate within the field of architecture, in which the level of abstraction is high and the body of knowledge can be characterized as esoteric. In this way, the territory is kept in control. Steiner points out that a central purpose of a language is that it consolidates a group's sense of identity. We tend to think that language serves the more general purpose of communication with other groups, but it is in fact a "secret towards the outsider and inventive of its own world" (Steiner 1998: 243). Fisher acknowledges this verbalizing difficulty, and the apparent trouble that architects seem to have in articulating the value of architecture as contributions in larger societal contexts. He emphasizes the general lack of interest that professional architects seem to have in words and articulation, simply because their focus is on the design itself, not on how it is being phrased:

"[The] misunderstandings remain, in no small part because of the very different cultures that we've cultivated within our industry, and which we perpetuate through the language, or rather languages, we use. We rarely think of these languages as a problem, perhaps because words interest us less than the things we build" (Fisher 2000: 104).

Several scholars relate the language challenge closely to the increasing distance between architect and client, due to the growing number of parties involved in the contemporary building project (e.g. Gutman 1988, Cuff 1991, Fisher 2000, Leatherbarrow 2001). Fisher argues that the client and the larger audience will be more inclined to listen to and communicate with for example engineers, who communicate their plans and proposals in a more decipherable language (Fisher 2000). This point, which also refers to a tradition for competition between architects and engineers in regards to vacancy and control, is also pointed out by several architects involved in this study. One of the architects in the Town Hall project describes it like this in an interview:

"[T]hey [the engineers] are perhaps also better at communicating what they do, what they bring in, because it's more precise knowledge. Or at least are they phrasing it as such."

The quotation might be seen as a comment on the balance between the actual content of a practice and the way it is being communicated, and on the architect's ability to undertake this balance. Cuff points out a few difficulties, in terms of describing the architectural design practice: "The architect finds it difficult to explain how to persuade a client, recognize an acceptable compromise, work within the budget – these are things you 'just do'. Such routine actions, which undergo continuous development, are meaningful components within the particular setting of architectural practice. But they are exactly the elements of which outsiders have no inkling and so develop distorted images of architects and their work" (Cuff 1991: 5). With the current requirements of a closer involvement of the client organization through organized end user participation, however, the issue of language and communication seem relevant to discuss and investigate.

4. The architectural design practice: multiple and embodied

Although it is commonly acknowledged that design processes are difficult to capture, many studies have addressed how these processes develop and how different types of designers work (e.g. Zeisel 1984, Norman 1988, Cuff 1991, Lawson 1997, Stankiewicz 2000, Beim and Mossin 2004, Lotz 2005). Some of these highlight the architectural design process, although it is pointed out that these do not substantially diverge from other related design areas (Beim and Mossin

2004). Referring to Cooper and Press (1995), Beim and Mossin describe the design process as a dual process: a combined endeavor between an internal and an external process. The internal process refers to the designer's creative process, while the external rather refers to the actual product and the market to which it refers. Focusing here on the designer's internal design process, Beim and Mossin characterize this as "an iterative process that cannot necessarily be organized as a logical, linear sequence" (Beim and Mossin 2004: 19). They emphasize that the reason that these processes are difficult to manage is that there is not "one particular answer to the design problem" (ibid.). The answer is rather hidden in the relationship between the many factors involved in the particular situation it refers to: the context. Having discussed the architectural design process with architects involved in this study in formal interviews as well as informal conversations, my experience is that the points are repeated: There are multiple ways to go about this process, and the language used to articulate it is inconsistent. In an interview with an architect involved in the Town Hall project, he attempts to describe his design practice:

"[...] we make a range of analyses to begin with, where you analyze the place, analyze the technical requirements, analyze the lighting conditions. Things like that. But it's not very scientific – it's more of a feeling, a sensing way, so to speak. And then, it's out of that analysis, that some ideas, and sketches, and form manifest themselves. And that's what generates a new draft, and then you do the [process of] analysis once more, or go back and test the draft. […] In a way, you work in circles or spirals. […] You try to identify, you try to get all the way around. You do one round, and then something falls off through the centrifugal force, and thus the circle eventually gets smaller and smaller. It's really difficult to explain in words."

The quotation seems to mix two approaches, both of which are central to the architectural design practice: *"to analyze"* and the *"feeling"*/*"sensing way"*. While the first may appear more systematic, the latter might represent the more intuitive aspect. The combination between the two is not unusual among practitioners in the field. It is often appointed as an intuitive process, in which certain ways to *"get all the way around"* are established through experience. It is embodied in the practice, a point that not only characterizes the field of architectural design (e.g. Cuff 1991), but also other design areas (e.g. Blomberg 1993, Dourish 2006).

In the same interview, the architect from the Town Hall project emphasizes that there isn't one way to approach these things:

"*We give it some kind of shape and sketch up some spatial frameworks, some correlations and some diagrams, through which we get all these things tested: ping-pong. Try some, sketch some, try some, 'how does that work?' […] There are a lot of leads to pull at the same time, so it's not really something that can be brought into a general format, I don't think."*

Again, he underlines the complexity of factors that are involved in this process of designing. It is context dependent, collaborational, intuitive, practical, and many other things. A common feature seems to be that it is *"difficult to explain in words"* and also to bring *"into a general format"*. We might thus say that architectural practice is characterized by visualizing rather than verbalizing skills and that architects communicate through a language of form. As I have outlined in Chapter 3, I have undertaken a number of interviews with trained architects. Many of these drew during our conversation, as a means to explain their points.

5. The architectural profession towards a crisis

Leatherbarrow questions whether the architect has been made redundant in the design process, and if so, how the profession's identity can regain strength. "For architecture to remain significant in our time, it must redefine its basic subjects" (Leatherbarrow 2001: 83), a point that is also made by other scholars (e.g. Crosbie 1995, Fisher 2000, 2001). Here, it seems to be acknowledged by practitioners and scholars alike that the profession is at a critical juncture. The unfortunate circuit that seems to be suggested is that architects might currently be pushed down the line of influence in the design process. Here, the lack of verbalizing capacity, with regards to the actual design contribution is pointed out as a potential threat to the architect's position. As one of the architects involved in the Town Hall project points out:

"We have to realize that completely different demands are placed on architects today. And if we're not able to listen to those signals, […] this stuff about the architect as playing a much more extroverted role. If we're not capable of facing

that, I think we have a problem. […] I'd also say that we as architects are faced with [an expectation of] being much more involved in the debate and in communicating with clients and the general public about the role we should actually be playing.

In the quotation above, the architect reflects on several challenges that the profession is currently facing. The increasing sense of diminishing authority is pointed out, due to societal tendencies such as an increased involvement of the client organization. Here, language as a verbalizing capacity comes forth, with reference to the architect as playing a *"more extroverted role"*, being *"more involved in the debate"* and *"communicating with clients"*. Recalling Cuff's outline of the contradiction between the profession's idea of the ideal and that of societal ideology, this architect seems to acknowledge the dilemma. To the professional architect, the situation is difficult on both levels: they lose recognition among peers by relating more closely to society, and are faced with requirements that they are not trained to handle.

6. Organized end user participation: potentiality and threat

What will a closer contact with the client through extended end user participation mean to the architectural design process? Does it provide the architect with – or deprive the architect of – an opportunity to regain authority? One of the architects in the Town Hall project considers the challenge that end user participation might reflect:

"Within the last 15 years, there has been a boom of understanding architecture as having a greater significance than being just a lump of stones. And that has come about in these types of post modern times, when people have realized that they, in principle, can take on different roles. You have the opportunity to act in different ways. […] [End user participation] comes in as a natural consequence of the fact that you can contribute to shaping your own world. I think it's good that people have become more conscious about what architecture is, as the decisions about the things being built have been based on pure financial terms for way too long. And the architect, with himself to blame, has been lead by the nose by contractors and developers. Now we can shed some light on that, which makes it easier for the architect to come forward."

The quotation might be seen as a comment to a few of the aspects that were pointed out in the introduction to this thesis, with reference to the increased focus on individual needs and wished in processes of organizational development. Here, the architect in fact identifies a part of the potential that the closer link between the two design processes might involve, where architecture is seen as a way to express individuality and identity in an organization. This increased interest in architecture might help the architect back on center stage in the building process. Gutman pointed out the increasing role of clients already back in 1988, discussing how developments within the building sector "produced clients who are reasonably articulate and explicit in stating the criteria for evaluating buildings and the services of architects, even the procedures and methods according to which a building should be designed" (Gutman 1988: 54). The tendency towards more client involvement seems to have increased over the years, with reference to the desire to engage in processes that include change and organizational development (Yoo et al. 2006).

But as it has been pointed out multiple times through informal conversations I have had with representatives from the profession in the course of this study architects generally emphasize the long tradition for a close and persistent dialogue with client and user by stating that: *"The architect has always talked with the user!"*

The claim appears reasonable as the production of an architectural product involves substantial contact with the client who purchases the commodity. However, it demands a closer look at the nature of such a relationship. An important point here is that the role of the client can be represented by different perspectives. It could be a developer, who has purchased the site for development purposes – in order to sell off the properties to subsequent vendees. In such a setup, the end user will be unknown to the designers whilst designing. But the client might also be a top manager of an organization that aims to use the building to support organizational development. This is the situation in both of the cases in this study. The type of collaboration at stake here seems to represent a substantially extended version of the architect's traditional contact with the client. Such enlarged involvement of end users seems to occur increasingly, especially in larger building projects (Gutman 1988). Informal conversations I have had with

architects within the organizations involved in this study confirm this tendency, but they also emphasize that the architects often do not partake in these processes of client involvement. Here, the close contact with the end user representatives is generally taken care of outside of the firm. The architect may thus always have talked with the user, but the type of extended participation activities that is at stake in this study might be said to involve a different type of conversation. One of the architects involved in the Town Hall project describes the present situation in the following way:

"[T]his end user participation has always been here, because a gifted client knows his organization, that is, ideally, and knows where it's going and has a sense of what it wants, and [how to get] this workplace to function well, and says: 'we're going in this direction, and we're doing it in such and such way [...] So that is articulating why. What has now become what I would call an industry [...] is that user participation has become prioritized, where you ask all the staff about their requirements. But the actual shift is that this inquiry gets a priority or authority that we might discuss whether is good or bad."

Participation *"has always been there"*, he says, referring to relationship between the client and the architect. What characterizes the current conditions, however, is that it *"has become prioritized"*. In the quotation, the architect indicates that there is more of it, and that this volume represents authority. But he also indicates that *"the gifted client"* knows where his organization is going and how to get there. Later in the same interview, he points out that a building project has always represented a vehicle to enhance (known) alterations to organizational contexts. The position brings us back to the discussion proposed in the introduction to this thesis (cf. Chapter 1) and to what the basic purpose of organized end user participation in architectural design processes might be. Is the purpose to support coherence between the forthcoming spatial framework and the organizational practice it is supposed to accommodate? Is it to support discussions about organizational practice in a spatial context in order for new knowledge about such work processes and relationships to occur? The first approach focuses on the known (the present practice), while the latter rather focuses on the unknown, as a design catalyzer (the future practice).

An architect in Arkitema, not directly involved in the Mikado House project, but accustomed to working with end user participation as an integrated part of the architectural design process reflects:

"[I]f we rewind the tape, we had this dialogue with the managing director in the old days. […] [Here] you trusted that the director had a clear image of his organization and where he wanted to go. In our society today, staff demands to be more involved. […] Also, [the director] doesn't really know all the things going on in his company. Directors admit that openly today. To their staff too."

With reference to how a forthcoming relationship between architect and client might form, this notion of the gifted client seems important to address. Is the gifted client, in fact, one who knows – or doesn't know, where she is going? The latter approach might indicate a closer contact between the two parties. Here, the client *"doesn't really know"* and *"the staff demands to be more involved"* and it is to this situation the architect is subjected. The discussion potentially reflects the architect's apparent need to regain authority in the architect/client relationship. The two quotations above might not be seen as opposites, but rather as representing a tension that might be useful to explore in further studies and debates.

Moving to my final comment to this provisional outline of the current situation, a few architects I have talked with in the course of the study also emphasize that a closer contact with the client organization not only serves to describe the types of activity that the space is supposed to accommodate. Also, the extended dialogue between architect and end user representatives might bring about thoughts and ideas that the traditional architectural design process cannot provide with. The input given by the end user is here seen as a potential catalyzer to produce new architecture. An architect involved in the Mikado House project explains:

"I talk about anchoring the things we saw in the process, to get them anchored into the architecture, so that it became consequential on a spatial level […]. [T]hat it not only came down to…a question of interior design in the very end: 'get us some green walls and some funny furniture'. But that it, to a much higher extent became a way of approaching [the design process], that it was brought into the whole structure of the house, and especially the way you move around in it, because that's very regulating."

Considering the current situation, it is not clear whether organized end user participation is about to establish within the field of architectural design. It appears to be establishing as a societal requirement, but its status among architects is unclear. This indistinctness might be based on general hesitation, due to that all parties involved in these processes are inexperienced. As pointed out above, the architect profession holds a highly individual approach, which resides in the intersection between intuition, abstract knowledge and systematic tools. The ways of doing things differ from architect to architect and does not seem to hold many general guidelines. It is from this point of departure that the notion of integrating organized end user participation needs to be considered. It provides substantial challenges, as the input from the end users is also likely to be highly complex and indistinct. I will return to these dilemmas, which involve the collaboration between architects and end users, and also that between architects and process designers (cf. sections 5C and 6B, and Chapter 7).

CHANGES AHEAD FOR THE ARCHITECT PROFESSION: LOOKING FOR THE NEW APPROACH

Recalling the quotation in the introduction to this chapter, the former MD of Arkitema proposed a number of challenges that, from his viewpoint, will increasingly characterize the forthcoming work of professional architects. Here, he predicted that a relocation of the architect's position in the design process is at hand, and that conditions for architectural production will change. Among other things, he suggests that the design process will include a more significant involvement of the end users of the building.

What do his propositions mean on a practical level and how might these affect the way that professional architects work? The MD's focus on aspects like *"new types of methods"*, *"where end users are more extensively involved in various phases of the design process"*, and where these efforts are seen as *"integrated and*

synchronized activities". As I will return to in Chapter 6, these aspects serve as examples of Arkitema's general focus on some of the current tendencies that are likely to influence, not only the trade of architectural design as a business, but also architectural design practice. Several of his predictions were challenged and tested in the course of the development of the Mikado House project. In the remaining part of this chapter, I attempt to let the MD discuss a few of the implications that the professional architect may expect to be subjected to shortly. I will only comment briefly on his statements here, but the phenomena he refers to will be revisited in the forthcoming chapters 5, 6 and 7.

1. Reconsidering of the architect as a professional advisor

[There were] at least two things we found particularly interesting [...] regarding the [architect as an] advisor. One was that an advisor is independent and objective: that the image of an advisor is [someone that is] objective and able to propose an objective reality to a customer or client. [...] The other thing about the advisor was an assumption that the advisor enters the collaboration saying: 'Based on what I know, I will now tell you what's best for you. I know more about your own daily life than you do'. Meeting these clients and customers and giving them our good pieces of advice that we then found they didn't use, became frustrating. This made us start looking for a new way to understand ourselves [in order to see] if we could engage in a different type of collaboration."

In the quotation, the MD points out that the professional architect's conventional way of proposing a design solution no longer seems to have the desired outcome. The times of the expert architect who knew her client's best are gone. Also, he seems to indicate that architects are not trained to comprehend, let alone handle what goes on in organizational contexts. He calls for new methods that would require *"a different type of collaboration"* between the architect and the client. What do these new methods contain on a more practical level?

2. Increasing the focus on the user

"The way I think we've tried to position ourselves.., the method of uncovering the client's uncharted requirements is something that can only be done together with the client. For two reasons: one is that we need to get much deeper into an

understanding of what the client's requirements are and how we can create added value to them. But also [that we secure] that the client produces the same type of logics, in order for the final design solution to make sense to them [...]. This means, that the client's actual participation in disclosing the uncharted requirements, has been crucial to us."

The particular methods that have been used in Arkitema, in order to secure what the MD characterizes as *"the client's actual participation in disclosing the uncharted requirements"* is interactive workshops, interviews and surveys. In the statement above, the MD indicates that the contact with the client in this design practice is closer than in traditional architectural design processes. It involves direct participation by an extended group of end users and it happens as an integrated part of the development of a design solution. Not detached from it, but rather attached to it. But what is more, it also indicates that the client organization itself goes through a certain process in the course of the design process *"in order for the design solution to make sense to them"*. This involves that the client organization becomes what I characterized as a 'moving target' in the introduction to this chapter. I will return to this point in Chapter 7.

3. From the goal to the needs and from the linear to the circular

"What we've said is that we don't start by trying to identify the goal, but rather by trying to identify the needs. It is the needs that guide the goal, not the attempt to find the goal and then to head towards it."

The quotation represents a central shift in perspective. Instead of approaching the design process from a *known* point of departure based on certain conditions depicted by the client, he suggests that the requirements are uncovered in a mutual process *together* with the client. Again, a close and continuous attachment between client and designer seems to be highlighted. In a traditional architectural design process, the conceptual design idea would be identified based on some *defined* client requirements, from which a main design concept would emerge. As an architect involved in the Mikado House project explains: *"The way a lot, lot of*

architects work is by saying: first we need to know what our basic concept is going to be. We need the overall idea."

The novelty in the MD's approach is that the architectural design concept should emerge by uncovering various aspects from the *inside of* the organizational framework (from *"the needs"*). Here, the collaboration with the client appears to be more comprehensive, in the sense that it is becoming an integrated part of the design process.

The MD elaborates further on this change in perspective by proposing an additional shift: from a linear to a circular approach to the design process.

"It is in fact a break with the building process as a linear process… When you start to identify the requirements and […] [the client] says: 'This is what I want, design me one!'…Towards a circular process where [the client] says: 'Hmm, this is one of my needs, try to make me a sketch.' And when [the client] then says: 'OK, I see […] that gives me the opportunity to do so and so, so now I'll redefine my requirements'. So this is the first thing: that you go from a sequence with a chronological perception of how a project emerges, to a circular, an iterative work process, that is, and that this is not only something that happens in the office – where the architect has worked with iteration on her own – but that you involve other actors as well. […] In fact you help the client to produce knowledge."

In this quotation, the MD puts an additional level into the new perspective, from which the architect can approach the design process. Not only are the requirements identified in an interactive process with the end users, but these requirements are also likely to change, expand and relocate as a result of the collaboration. He suggests a metaphorical shift by approaching the design process as a circular rather than a linear process. In a circular process you feed into the next phase in a loop that the MD characterizes as *"an iterative work process"*. And as he also points out, such an ongoing endeavor has implications not only for the client, but also for the architect. The notion of iteration might also recall the quotation that introduced this chapter, in which the MD perceives the work of an architect as *"a social process"* and the architectural product as *"a social object"*. In such a setup, the architect seems to have merged the design process – that traditionally takes place at the architectural office – into the practice of the client's.

That it occurs in the intersection between the two practices. The client and the architect thus draw closer in a collaboration to which both parties are new. The expert-expert relationship, where the client knows her organization and its forthcoming direction and the architect knows her method as a creative endeavor that takes place back at the architectural office, thus seems to cease.

CLOSING COMMENTS

In the last section of this chapter, we have heard Arkitema's former MD comment on some of the profession's current challenges. With reference to the research question proposed as my guideline in the study and the general search for 'connections' between organizational and architectural design processes, we might say that his proposals contribute to identify a few such 'connections'. For example, he addresses the idea of the client as 'a moving target' by suggesting the client brought more directly into the architectural design process. This closer link between the two parties not only suggests concrete changes to the architectural design practice. Also, the collaborative process of identifying the client's requirements has an impact on the client organization as ongoing organizational change events. The architectural design process might thus initiate developments within the client organization, which mutually influences the architectural design practice.

It should also be noted that the MD's reflections destabilize parts of the structural hierarchy that has traditionally organized the architect profession, and that still seems to represents the trade's general point of departure. Although societal requirements such as the client organization's increased involvement in the (architectural) design process are acknowledged by many representatives in the field today, not many projects are set out to test these aspirations. Many contemporary architecture firms state that they focus on approaches like user-driven innovation, but not many firms concretely explore what such an approach might entail. When The MD's statements above are important, it is because he confronts the trade and its challenges, not from a societal perspective, but from

within the trade itself. In chapter 6, I will discuss how these ideas were tested and trialed in the Mikado House project.

CHAPTER 5: THE TOWN HALL PROJECT

INTRODUCTION

In this chapter, I aim to illustrate and discuss how organized end user participation was used as a vehicle in the establishment of a new office building, a municipality town hall.

In the course of a large organizational restructuring of the Danish public sector, municipality Hillerød, north of Copenhagen was merged with geographically adjacent unit, Skævinge. Not only did two administrations turn into one. Also, municipal activities previously located on five different addresses in the region, were now physically joined. Although the planning and preparation for the new town hall had started prior to the public reconstitution, the building project was seen as an opportunity to set forth and establish the organizational redesign that the merger represented. Here, the organized participation served as a vehicle to induct developments within the organizational design, while the same processes were also seen as a way to inform the architectural design of the building. The two design initiatives were thus considered integrated; a reciprocal resource from which both could benefit. In this way, the project might be seen as an attempt to explore and enhance a link between architectural and organizational design. If we recall diagram 2 (cf. Chapter 1), the notion of organizing the organizational and the architectural design processes in a concurrent structure, might reflect some of the events at stake in this project. As I will illustrate and discuss in the forthcoming sections (5A-C), a substantial number of participation activities took place in the project, in which a large group of end user representatives were involved.

The text is structured in the following way: Section 5A presents the case in two stages. First, I provide a short sequential outline of some of the main events as they took place in the project. Second, I describe some of the aspects that characterize the process designer's approach. Here, the participation activities are scrutinized in more detail, in order to illustrate how the organizational and the architectural design processes might be said to have been connected in the project.

In the subsequent two sections, 5B and 5C, I discuss a few specific aspects that seemed to challenge the closer link between the two design processes. Section 5B focuses on a dilemma that is related to organized participation as a method. If the participation activities are used as a means to support organizational development (cf. Chapter 1), it is important to discuss the correlation between the decisions made prior to the participation (that may favor a certain developmental direction), and the ideas and expectations that the participation actually unfolds. Here, the staff's articulated resistance of the open office layout – one of the project's general preconditions – forms the central story in the discussion. This apparent worry seemed to endure throughout the project, but the continuous discussions that took place in the course of the participation, might also be said to stabilize and thus catalyze a certain perceptional displacement among the participants.

In section 5C, I present a particular story from the case, through which I aim to illustrate how the link between the architectural and the organizational design processes might be said to have influenced the development of the architectural design solution. Here, the continuous developments of a particular architectural object – the entrance counter in the town hall's reception area – makes up the main example. A staff member who has been away on maternity leave returns to work and to a town hall building that is emerging from the ground. Based on her perception of the organization's central aspiration with the town Hall project, the staff member objects to some of the design sketches presented to her.

In order to support these discussions, I draw on the same basic bodies of literature as will also be applied in Chapter 6 about the Mikado House project. In section 5B, I use sensemaking in organization as my main source of inspiration (Weick 1979, 1995, 2001, 2003, Salancik 1977, Staw 1982, Gioia and Chittipeddi 1991), while actor-network theory serves as theoretical guidance in section 5C

(Callon 1986, Callon and Latour 1981, Latour 1991, 1999).

SECTION 5A: THE PARTICIPATION ACTIVITIES IN THE TOWN HALL PROJECT

INTRODUCTION

In this section, I first aim to provide a sequential outline of some of the central events as they took place in the Town Hall project, with regards to the organized end user participation, and next to look into the process designer's approach in more detail. Diagram 3 illustrates the project's timeline, with reference to the sequential organization of the project's central events. Here, a number of the participation activities are presented: various series of workshops, interviews, plenary meetings with the users and more. The activities took place at a continuous pace throughout the project, concurrent to that the actual building project evolved.

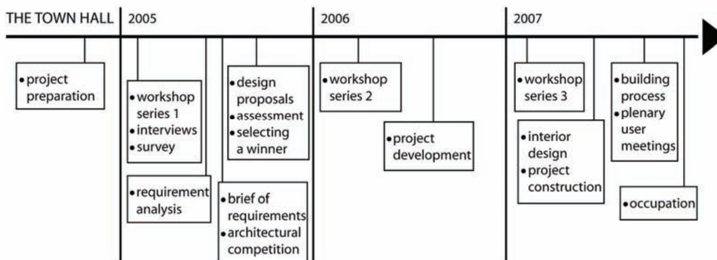


Diagram 3 illustrates the project's general timeframe and primary activities, with reference to the organized end user participation. In the following text, some of these events are briefly presented.

A SEQUENTIAL OUTLINE OF THE CENTRAL EVENTS

1. Hiring a process designer

The Town Hall project was based on an architectural competition: a public tender, to which five consortia were invited to participate. Each consortium consisted of a contractor, an engineering firm and an architectural firm.

Already prior to writing the brief of requirements, which served a point of the departure in the consortia's development for a design proposal, the participation activities were set forth. In order to organize these events, the municipality administration hired consultancy Signal Arkitekter. Signal Arkitekter is a firm that had *"process design"* in architectural design processes as one of its main services. Here, the focus on process was constituted by the relationship between the client organization as the end user of the forthcoming building, on the one hand, and the development of the building's architectural design, on the other.

2. The first series of workshops

The events that took place prior to the architectural competition were as follows: First, Signal Arkitekter had developed and accomplished a survey, in which the client organization's use of current spatial facilities were outlined and categorized. Based on these data, two interactive workshops were planned and executed, to which some 50 out of 575 municipality administration staff members were invited to participate. Within the framework of these activities, the staff got the opportunity to discuss the spatial organization of their current, and also their forthcoming work processes. Here, issues like collaboration, proximity, acoustics and concentration were central.

Between each workshop, Signal Arkitekter translated the material produced by the end users, and the results of these translations were discussed and negotiated with the municipality management team. After the first two workshops, Signal Arkitekter produced a *"requirement analysis"* that formed an input to the actual phrasing of the brief, upon which the architectural competition was built. The brief

was subsequently described as *"untraditional"* and *"different"* not only by the process designers, but also by several of the architects from KHR Arkitekter; the architecture firm in the winning consortium.

3. Picking a winner among the competition proposals

Five proposals were submitted in the competition, and a winner was appointed by an assessment committee of external as well as internal members. In the subsequent reflection with regards to the assessment criterion and the winning proposal, the managing director (from here onwards entitled the MD) remarked:

"[…] the central reason [that this proposal won the competition] wasn't as such that they had outlined a really stimulating house – which I think it is, also based on some aesthetic considerations – but because [they] had been faithful to the assignment. The guy that lead the team […] responded that this was exactly what they had made their success criteria: to translate our process, the user oriented process, in a way that made it visible in the house."

The quotation reveals the essential factor that distinguished this particular proposal from the other competitors and made the selection process approachable. The team had, as the MD put it later in the same interview: *'succeeded in [...] translating our written propositions and transformed them into an architecture that assigned organizational understanding'*. The quotations show that the winning proposal aimed at reflecting the input from the end users in an architectural format and that it succeed to meet this aspiration. In this way, we might say that the ability to respond to the input from the end user seemed to serve as an actual assessment criterion in the competition.

4. The second series of workshops

After the competition, the winning consortium started the long and complicated journey that most architectural projects go through: from design representation in a proposal to an actual building. Parallel to and as an integrated part of this complex development process, another series of interactive workshops with end user representatives were carried out. This included three workshops that focused on the departmental location and the spatial layout of the house at large. Based on these

workshops, an outline of the building's interior layout began to emerge. Again, Signal Arkitekter was responsible for the planning and facilitating the workshops, and also for the translations of the material produced by the end users. These translated versions of the input were discussed with the top management, and subsequently brought to the architects, at this point working with the further development of the design solution for the building construction.

As Signal Arkitekter's translations and contiguous recommendations often made it through the managerial decision making process, we might say that the input from the end users somehow influenced the emerging design solutions. In one of the workshop exercises, the participants were asked to provide suggestions for the departments' placement, with regards to the spatial relations between the departments. Based on this input, Signal Arkitekter produced a proposition to the top management, in which 4 scenarios of the departments' spatial layout were presented. One of these was particularly recommended – a proposal that the management team subsequently accepted.

5. The third series of workshops

The last series of workshops involved the staff at large. At this point, the design of the building as a construction was settled, as was the interior layout and the spatial affiliation between the department units. It was thus time to focus on the interior layout of each of these units, according to the actual tasks and obligations that represented the departments' professional responsibilities. The workshops were organized as *"tests"*, in which future spatial conditions were explored in the format that architects characterize as 1:1: in the actual size of the space in question. Here, the municipality administration provided a large empty location. The exact size of the various departmental areas was then marked with tape on the floor, while several plane foam bricks, each with a color code, made up a number of furniture substitutes (desks, archive, soft furniture, lamps, etc.). In this workshop, the participants were asked to first discuss, later concretely experiment with, different spatial setups, in order to get a more realistic image of size, distance and proximity in their forthcoming office area. Here, the staff discussed how the different layouts would support the professional obligations that the unit was expected to fulfill in the future.

The design process of the Town Hall project was thus organized in a parallel structure, where two distinct lines of development might be said to have influenced each other. As results from the participation activities were translated and negotiated, they were sent to the architects as input to inform particular areas of the house. Here, the process designers appeared to represent a mediator between the client organization, on the one hand, and the architects, on the other. Although not a part of the winning consortium, the process designers were generally present at the meetings between the consortium and the client. In a traditional setup for a complex building project of this magnitude, a so-called building consultant would be representing the client's interests in these meetings, as was also the case here. But added to this, the setup involved the process designers, who represented not only the client but also the end users, in these development sessions. Here, the process designer responded to the drafts and sketches presented by the architects, with reference to previous results from the participation activities.

6. The plenary meetings

During the last period of the building project, two large plenary meetings were held, to which the administration staff at large were invited, and a substantial group turned up. Here, central players in the project presented a general status of their work, and the staff got a chance to inquire into the project. The MD, the project manager, the head architect and the head process designer were all on stage presenting their versions of the central aspects of the project, for which they were responsible. Added to these plenary sessions was *"the staff party"*, a social gathering, to which the staff was invited into the emerging building. The empirical material produced in the project shows that this particular event seemed to have had a substantial impact on the staff's sense of how the new house would function in regards to the daily practice: The size and format of the actual workspace areas; the structure of the front office; the acoustics that was supported by a certain type of material in the ceiling, and more. On January 1st. 2008, the municipality administration moved into the new premises of the town hall.

THE PROCESS DESIGNER'S APPROACH

In order to understand more about how the link between the two design processes might be constructed, it seems necessary to describe the process designer's method in more detail. I would thus like to repeat the overview of the events and processes at stake in the project, with a particular focus on the responsibilities of the process designers from Signal Arkitekter. These events are highlighted in diagram 4. Here, it comes forth that the process designers were involved *throughout* the project: from before the architectural competition until shortly before occupation. Below, I will go through some of the activities that represent the process designers in more detail.

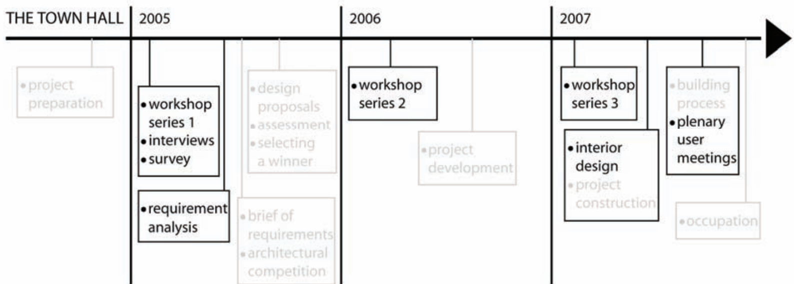


Diagram 4 illustrates the process designers' responsibilities in the Town Hall project.

In the following, I aim to describe how architectural and organizational design aspects seemed to intersect in the Town Hall project. In order to do this, I start by providing a more thorough outline of a few of the elements that constituted the interactive workshops in the project. As the empirical material that describes these events is substantial, I only focus on the first series of workshops (in diagram 4 above entitled workshop series 1 and in the following text characterized as workshop 1 and workshop 2). These were the workshops, upon which the requirement analysis was based, and that took place prior to the architectural competition.

1. Workshop 1: mapping out concerns

The purpose of the first workshop was to map out the staff's general reservations and concerns with regards to the establishment of the new building, and also to discuss the opportunities that such a venue could generate. The MD introduced the session by pointing out the importance of securing a link between the design of the building and the forthcoming organizational practice it was expected to accommodate:

"At this point it is important that we identify what kind of building we aim for, what we need in our building. [...] In this workshop and the next, it is important to bring all opinions forth. The reason why we have hired a process designer is to secure the connection between the physical framework and the activities that are supposed to take place inside the building. This is a marvelous opportunity for us. Most of us have never tried to influence our workspace to such an extent."

In this quotation, the MD points out that the participation represented an opportunity for the staff to influence the design of the forthcoming work environment. He introduces the process designer as the warrantor for the creation of coherence between the building and the organizational practice, and thus as a client representative in the forthcoming design process. But who are these process designers? On their website, Signal Arkitekter outlines the firm's vision in the following way:

"Signal advises within process- and spatial design. We are on the market for dreams and visions about working and learning environments of the future. We connect people and working cultures to an organization's vision for the future, and form spaces that promote well-being and mutual sympathy between people."

But what does this mean in practice? The complex seems to be based on the combination between a client's *"dreams and visions"*, *"working and learning environments"* and *"spatial design"*, and the purpose seems to be to form coherence between these.

Through my empirical study of Signal Arkitekter's practice in the Town Hall project and elsewhere, I know that a series of *"tools"* form the point of departure

in their client assignments. Some of these are already a part of the firm's general product portfolio, while others often emerge in collaboration with the client, in the course of the particular project in question. The *"tools"* thus represent a number of facilitative concepts, which involve different exercises that are applied in the different phases of the project. Based on the aspiration outlined in the quotation above, these exercises seem to reflect the notion of a potential link between the organizational and the architectural design processes. In this way, the process designers might be said to facilitate processes, in which the spatial structure of the client organization's practice emerges through the staff's discussions. The client organization is thus brought into reflection, in the course of the architectural design process.

Workshop 1 consisted of two sections. The first section contained two plenary exercises, in which the participants were asked to express their general level of expectations with regards to the establishment of the new town hall. In the "Vision exercise" the participants were asked to take position along a large rope based on their immediate answer to the question *"Do you believe in the vision?"* Here, one extremity represented the highly encouraged viewpoint, while the opposite represented the highly skeptical. In my field notes from this exercise, I report that:

"There are two total skeptics. They express concerns about office conditions, the lack of privacy in the conversations with the clients [and that] an open office layout can only work in an entirely plane organization."

As will be illustrated and discussed in the analysis in section 5B below, the concern about this structural principle of the open office layout, played a central role from this early stage of the project, onwards.

The second section was organized as a *"café seminar"* (Brown, Isaacs, Wheatley 2005). Here, dialogue sessions took place in groups of approximately 5-8 people, who conversed around tables – like in a café. The groups/tables had different themes/questions as the conversational point of departure, and the participants were mixed across departmental affiliation and professional status. The questions primarily addressed the participant's general perception of their present and future work processes and routines, as well as of their expectations,

concerns and hopes in terms of the physical structure that would accommodate these activities in the future:

"How do you envision the optimal future work processes in the new town hall, with regards to aspects like competence-clusters, departmental areas and project areas?", "What opportunities and threats do you see in an activity based work environment?"[8], and so forth.

2. Workshop 2: mapping out the work

We might say that workshop 1 served as an introduction to the participation activities: as a vehicle to support, not only the design of a new town hall, but also the design of the new organization that was to inhabit the building (as a result of the merger). The purpose of workshop 2, however, was to map out how work actually took place within the municipality departments. Here, it was the relationship between work processes, responsibilities and competencies, on the one hand, and the spatial framework to accommodate these, on the other, that was in focus. Again the event was structured as a café seminar, but this time the groups/tables were organized departmentally. The participants were provided with questions such as:

"What are your main tasks?", "Select competencies and collaboration partners that are necessary inside of your own department, outside of your department and outside of the organization as such in order for you to solve your tasks."

The workshop also attended to more abstract issues such as the notion of *"atmosphere"*. Here, the participants were asked about the kind of ambiance they thought their current and future work processes would benefit from. The questions were supported by equipment such as posters, and pictograms to go with the posters, upon which different spatial facilities and atmosphere characteristics were printed. The 'game' was followed by written instructions:

[8] The term "activity based work environment" represents a kind of conceptual framework for Signal Arkitekter's product portfolio. The concept contains a certain notion of flexibility in the physical structure of a work environment, in which the way that spatial facilities are being used change accordingly, in order to accommodate the activities' altering needs and requirements. One consequence of a more flexible setup is that certain traditional layout structures (e.g. one workstation per staff) dislocate and take on different shapes.

"Select a space: which type of setup would you prefer in order to solve each task? Use the pictograms to describe the different spatial facilities – what facilities do you need? You might supplement with several different types", or: *"Select an atmosphere: what kind of atmosphere characterizes the spatial facilities you call for?"*

Issues like proximity, relationships, competencies and atmosphere were debated in the groups as the posters were completed. The results were presented and discussed in a plenary session at the end of the workshop.

As mentioned above, the material produced by the participants generally went through a process of translation by the process designers between each workshop. These processes seemed to run in the following way, with reference to workshops 1 and 2: First, the process designers undertook a translation of the material produced in workshop 1, which was used as an input to the planning of workshop 2. In this way, each participation activity served as inspiration to form the outline of the next activity. The results from each activity were thus used to inform the subsequent design process, not only in regards to the architectural design expression, but also in terms of the organizational structure. But what happens on a practical level in such translations processes?

3. The translation process: forming the requirement analysis

The process of translation represents a central part of the process designer's methodological approach. If we look at the requirement analysis that was produced on the basis of the results of workshop 1 and 2, this material seems to have gone through a complex process. Here, the process designers transformed large amounts of material, produced in the workshops: factual and/or technical information that described the client organization's current and future practice. The output of this process was then applied as an input to support the progression of the forthcoming design solution. In this particular example from workshops 1 and 2 it was used as an input to the brief of requirements that outlined the architectural competition. The material thus seemed to form a continuous chain of transfers: from input (produced by the participants in the organized participation) to output (produced by the translation undertaken by Signal Arkitekter) and then back to input (to the brief of requirements), and so forth.

In this process of translation, the process designers reduced the compound amount of material made available through the participation activities. As one process designer explained to the participants in the introduction to one of the workshop:

"*Our method is to take all the input and material you produce [in the workshop] and boil it down to an extract."*

When asked about what the process of translation consists of, another process designer involved in the project emphasizes the importance of categorizing the input and discussing the patterns that thereby emerge:

"We arrange it after under headlines that we think represent what the workshop is all about. [...] Based on the wording, we go in and process it according to these categories. [...] we make a vast spreadsheet that says: what has to do with their locational utilization, what has to do with their support rooms, what has to do with IT, what has to do with...etc. a whole lot of categories."

A third process designer, who also played a central part in the Town Hall project, points out the notion of a *"strategic relationship"* between the aspects that appeared through the participation activities, on the one hand, and the aspirations defined in the client's overall vision, on the other:

"[W]e take the [material] we have from the workshops, through the observations, through the survey, through factual bits and pieces from the organization. We bring all this back home and assemble it into a requirement analysis that is being benchmarked with the vision. And then we ask: what is possible, and which elements need to be reshuffled in order for this [vision] to succeed?"

In this quotation, the process designer reveals the tension between asking staff representatives for their input and staying loyal to the preset vision. It is within the framework of this *"strategic relationship"* that the process designer builds her business: Between the pragmatic transference of data in the process of categorizing; the interpretative conception of the user's articulated requirements in the analysis, and the loyal reference back to the client's overall vision. If we recall

the outline in Chapter 1, a basic idea here seems to be that a building project may represent an opportunity to alternate certain aspects that involve work processes, professional relationships and structure in an organization. In the Town Hall project, the coherence between vision, participation, translation and design solution attempted to be secured through continuous discussions and negotiations between the process designers and the management team. These processes will, in different ways, be illustrated and discussed in the forthcoming sections, 5B and 5C.

4. The brief of requirements: different and rough

The results from workshops 1 and 2 were turned into a requirement analysis that was used as an input to inform the written brief that set forth the architectural competition. In order to bring this untraditional material into the brief, the process designers were involved in the actual phrasing.

The brief itself included an outline of the general precondition of organizing the project in a partnering structure, a description of the technical specifications of the building site; an overview of the existing buildings on the site; an outline of the project's climatic conditions and ambitions; factual information about the municipal context that the new town hall was supposed to accommodate, as well as key financial figures, upon which the project was being based. Added to this, the text contained a part, which might be characterized as 'the organizational input', which seems to have been informed by the results from the organized participation activities. This description, which covers 8 out of 104 pages, strongly highlights the type of clients and guests that the building is supposed facilitate: local citizens, politicians and administrative staff. Here, it is the correspondence between the building's intentions and the needs of these user groups that are in focus. In the following quotation from a subsequently published article, one of the process designers involved in the project explains how the requirement analysis influenced the competition brief:

"The requirement analysis was reflected in the brief and in a tender-material that was differently configured than in a traditional setup. In the brief, the human relationships that the house was supposed to accommodate, as well as the desired connections between the work processes and their spatial contexts, were described. It thus […] took some of the soft, human factors and translated these into spatial

requirements. The brief also indicated the type of ambience that the locations should support, according to the activities. The relational descriptions were supported by the traditional part of the brief, as we know it [from conventional programs], in which a range of factual conditions that the competing firms are supposed to address, were listed. The competing teams have defined solutions and visions in an unconventional manner that have made them more open towards opportunities than in traditional competitions, and which made them produce unusual proposals." (Andersen 2006: 65).

Again, the process designer defines her product as one that resides in the crossroad between vision, participation, translation and design solution. In the quotation, the intersection is exemplified by how the brief was supplemented by certain "relational descriptions", which differentiated the project from that of traditional competitions. According to the process designer, the result was that the competing consortia produced "unusual proposals". Also one of the architects, who represented the winning consortium, acknowledged that the competition brief was different:

"There was something about the format that struck me. You could easily see that it was someone with a different viewpoint that had written this brief than had it been an engineer or [a contractor]. They would have used a different angle, that's for sure. [...] It also had to do with the content and prioritizing, what's important and what isn't."

In this quotation, he not only recognizes that the phrasing was untraditional, but it also points to the fact that the aspects that are being prioritized are not the same as in traditional projects. In the same interview, he also reflects upon the implications such differences might have in the actual design process:

"Those things [factual information such as the amount of staff] are very loosely defined. [...] Don't ask me why. But they are very vague. And I can perhaps also allow myself to say about the whole brief [...], it was very rough, and rougher that they usually are. [But] having said that on the one hand, we would have liked it to have been more firm [...], it also allows for a certain freedom to the process of designing; that we can indirectly influence the programming with our tools. That our design can contribute to bring opportunities across that we might not have

seen without [the roughness that characterized the brief]. This is often the problem with the very dry engineer based briefs; you put up so and so many square meters of this and so and so many square meters of that. Such a setup locks you in the creative process."

Here, he points out the paradox that this type of input seems to produce: it might be perceived as difficult to work with for an architect, as it appears imprecise in terms of concrete spatial requirements, while at the same time including a lot of indications. On the other hand, he finds that this ambiguity gives the architect an increased freedom in the actual act of designing. Another architect involved in the project, points out how the input from the end users were included in the brief. Here, he explains how the architects from KHR Arkitekter worked with the material in their creative process:

"As for the brief, I think [it illustrated] how they wanted to work, and also how they, in fact, perceived the citizen in this setup. This was specified in a number of splendid diagrams. […] We read them quite literally [and] used them as a means to establish our concept. And it was a great help. We applied the titles they had brought into the diagrams and also the sizes. We used them almost as a map, which we then dissolved and brought into a tight framework [the conceptual design proposal] that of course needed to correspond with the lighting conditions, electricity, financial conditions, and more. So this challenge of bringing the project into the real conditions, that's the big trick. But in that sense the brief was brilliant. Every now and then we struggled, 'cause when we wanted to go back and consult the brief, we asked: but does it say anything concretely? It didn't. So you might say that it was advantages and difficulties. But I think it had more to do with that we weren't used to that type of brief."

My aspiration in this section has been to provide a general overview of some of the main events that took place in the Town Hall project, with the organized participation activities as a central part of the project framework. A few aspects of the work of the *"process designers"* have been described, and I have pointed out that the results of the initial processes of end user participation served to inform the project's architectural competition. Also, I have emphasized that the organized participation carried on throughout the project. I will return to these points in the forthcoming sections of this chapter and in chapter 7.

SECTION 5B: THE OPEN OFFICE LAYOUT IN THE TOWN HALL PROJECT

INTRODUCTION

While the previous section outlined some of the events that took place in the project in regards to the content of the participation activities, this section aims to discuss how the participation became influential, in regards to organizational as well as architectural aspects. The point of departure in the following story is the municipality administration staff members' apparent resistance to the open office layout as the building's general spatial structure. Although the open layout represented a general premise in the project, the issue persisted as an interest among the staff throughout the project. In this way, it kept returning as a central issue, in the course of the participation activities.

The setup seems to reveal a tension between two central principles in the project: The notion of the open layout as an outline to guide the architectural design process, on the one hand, and the participation activities as an opportunity to contribute to the very same process, on the other. As I will illustrate and discuss below, both factors may be seen as representatives to support the municipality administration's aspiration to develop as a modern public organization, where flexibility and engagement are considered central aspects.

Already as the participation activities were set forth, the staff clearly objected to

the open layout, a sentiment that remained throughout the project. But at the same time, the empirical material indicates a slight shift in the staff's approach to the open layout, in the course of the participation. The reasons for this shift can in principle be multiple: increased interest, general acceptance, resignation, or other. But during the project, the open layout seemed to consolidate as a (conversational) framework, through which the staff advanced their capacity to navigate and thus comprehend their own practice. Through continuous discussions about the spatial structure of work processes, routines and relationships, the staff's perception of the open layout seemed to stabilize and thereby slightly to modify. They did not end up embracing the structure, but their continuous discussions about this (and also numerous adjacent issues) gave way to central exchanges about their future work practice.

The discussion below thus has a double connotation to it. First, it concerns how the participation activities might affect a design solution: How can the participation activities contribute to modify or change the premise of the open office layout? Second, it involves how such conversations about spatial design might influence the participant's experience: How can the participant's perception of the open layout modify or change, in the course of the very same process?

In order to explore the tension between these two principles: the open layout and the participation, I have been inspired by certain theoretical concepts that represent the sensemaking literature (e.g. Weick 1979, 1995, 2001). Below, I start by exploring whether the open office layout in fact can be said to have formed a design premise in the project. Here, I illustrate how it was introduced and presented to the participants in written documents and oral presentations. Based on that, I discuss the participant's incitement to keep discussing the open structure, and the management's tactical inducement to hold on to it as a precondition. I attend to the concept of commitment (e.g. Weick 1995, 2001, Salancik 1977, Staw 1982) and enactment (e.g. Weick 1979, Weick et al. 2005) as entries, through which the staff make sense of the potential implications that the new spatial layout could comprise.

In the Town Hall project, the users played by the rules that constituted the participation activities by actively engaging in the workshop discussions and other participation activities. But as pointed out above, they also kept emphasizing that

they found the open layout incompatible with their professional practice. The motive to use the participation as an opportunity to get the premise changed or modified thus seems to have been present. Although the continuous participation and the input that these activities produced, in various ways seemed to influence the department's spatial structure, the open layout remained as the basic structure of the building's interior design. As for the participants, they also seemed to go through certain alterations. Although their overall (negative) view on this spatial layout was sustained and the structure itself remained as an organizing principle in the final design solution, both parties seemed to go through slight modifications, in the course of the design development. The participation might thus be said to have allowed the participants to influence the design – and to get influenced by it. In order to illustrate these modifications, I briefly describe four events in the project that might have influenced this change. In this discussion, I have been inspired by Gioia and Chittipeddi's approach to organizational development and strategic change as reciprocal processes of sensemaking and sensegiving (Gioia and Chittipeddi 1991).

THE OPEN LAYOUT AND THE PARTICIPATION: CENTRAL EVENTS AND CHALLENGES

With regards to the open office layout, several studies have, over the years, focused on this structure and its potential implications and opportunities for collaboration and development in organizational contexts (cf. chapter 2A). The concept seems to cover several aspects of the spatial organization of the workplace, the issue of the absence of walls as being a central issue. While the traditional office layout is usually represented by individual cubicles that mark the physical boundary between personal and public space, the open office not only involves various sizes of shared office space, but also often shared workstations[9].

[9] The concept that is referred here is called *"the activity based work environment"* or *"new office"*, which involves the relationship between the staff member, her workstation and the nature of her work. Here, the staff member, who spends a certain amount of time away from her workstation, shares the facility with another or other colleagues. The purpose is to utilize the opportunities that the spatial resources can offer and to use the spatial layout to enhance the organization's ability to for example collaboration and knowledge sharing (e.g. Bjerrum and Nielsen 2003, Hansen 2007).

1. The initial dialogue sessions: resistance

In the Town Hall project, the conflict between the open layout and the participation activities, as the staff's opportunity to inform the architectural design process, was apparent from the very beginning. Long before the project set forth as an actual design process, the MD went on a promotion tour around the organization, to provide information about the prospects of the new town hall. In these dialogue sessions, the open layout was presented as one of the project's central preconditions, and the staff's resistance towards this layout was obvious. But what was all the worry about? The MD reflects upon its practical content in an interview:

"I think it is the fear of too much noise, the fear of too many disruptions, the fear of an omnipresent glass construction that makes it too cold in the winter and too hot in the summer and those kinds of things. So I don't think there is anything new about it. Not that it makes it less important."

The MD's remark on the problem's somewhat prosaic nature might indicate that available knowledge on the subject does exist, and that – as he points out – the repetition of concern itself is important. If many people keep noticing a certain problem, it is likely to imply that there is something to it: practical, emotional or otherwise. On the other hand, his comment on sheer repetition without *"anything new about it"* also indicates that the discussions perhaps don't go very far and that there might be a general unwillingness to engage in the opportunities that such a project could represent. The MD might thus have had a certain image of the potential advantages that the structural changes would cause, but for the staff these might seem overwhelming and confusing. To them, the new layout would potentially involve substantial changes to the daily practice, work processes, routines and relationships. At this early stage of the process, the staff thus seemed to show basic resistance to these possible changes. As one staff member points out:

"It's no secret that we, the staff, have been really, really worried, because we think that our work is very well suited for small offices, where we can sit with the clients and discuss things, etc., keep our work to ourselves and talk on the phone, etc."

2. Participation as a means to enhance and prepare for a changed practice

In the quotation above, the staff member describes why she doesn't find the open layout suitable, and indicates that she expects her present work processes and responsibilities to continue in the new building – after the merger. It indirectly illustrates a challenge that the notion of a closer link between the architectural and the organizational design processes seems to entail. Here, an aspect of the link's potential could be that a new spatial framework can support new ways of working and new professional relationship. One way to enhance such developments might be through inviting the staff into the architectural design process. The idea is to create a closer link between the architect and the end user, in order to secure coherence between the architectural design and the activities that the building is supposed to accommodate. This desired proximity, however, is not only between client and architect in the actual design process. It also seems to regard the relationship or transition between present and future work processes.

But how can the users have an opinion of the space that is supposed to accommodate their future work practice? As we know from several studies, users who are invited to contribute to an architectural design process are likely to suggest disguised versions of their present workspace (e.g. Weick 2003, Gehry 2004). It is difficult for staff to envision a work practice they don't know – especially when the future involves a merger between two organizations. They don't have the prerequisites to go beyond the conditions that constitute their present practice.

The problem can be considered through the concept of enactment (cf. sections 2B and 6B). We make sense of the changes we are subjected to in retrospect – subsequent to the actual events that constituted these changes. Reality is perceived and negotiated on a cognitive level among people in a social context. Here, they base their perception and negotiations on experience: They cannot know what they think until they see what they say, as Weick repeatedly outlines (e.g. Weick 1979, 1995, 2001). We might thus say that people in an organization can and should discuss what they do and have done, and thereby indicate opportunities to modify their practice, which they can subsequently act upon (Weick 1979). But they cannot anticipate their future practice (and the spatial consequences of such) on the

basis of change events that are hitherto not comprehensible to them. Recalling the outline of the Town Hall project, the change events that the open layout of the workspace represents is still unknown territory to the staff members. Their initial response to the layout is thus based on the spatial structure they have knowledge of – and also on what is said about the open office in the public debate. The participation might thus be said to further contribute, in order to discuss existing practice and thereby comprehend this through producing "shared experience" (Weick 1995: 188, Smircich 1983). Here, talk is the vehicle, through which practice can be understood and modified (e.g. Weick 1995, Weick et al. 2005). The participation activities in the Town Hall project are sensemaking processes, which often go through certain steps of evolution, in order to establish and proceed. In the initial discussions of the participation, the resistance towards the open layout might have seemed substantial. But as I will discuss below, this resistance might eventually reveal further perspectives to it, and even be considered somewhat constructive.

3. Two opposite logics: the open layout and the participation activities

From one viewpoint, we might say that the premise of the open layout and also that of end user participation may represent a fruitful combination that can support both design processes. The conversations that the participation activities catalyze among the staff might provide them with new insight into current work processes and thus give them indications, upon which their forthcoming practice can be discussed. Here, the open office layout can be seen as representing the new, and the participation activities a way for the staff members to comprehend its implications and opportunities.

To the architects, the results of the participation activities might provide relevant information: factual pieces of information as well as more abstract considerations, which can support the development of the design solution. In addition, the open layout may seem productive to the architects. First, it serves as a general requirement in the competition brief, upon which they can build their design concept in accordance with the client's general needs and wishes. Like a

budget, a building site, or other inbuilt preconditions. Second, the open layout is 'open': it involves a lot of space that calls for a design. In this way, it provides the architect with a design opportunity. Third, the open layout is what architects know from their own work environment: Architecture firms traditionally work in open offices. In this way, the two premises of the open layout on the one hand, and the participation activities, on the other, can be seen as a way, through which the organizational and the architectural design can progress in reciprocal exchanges, and thus a way for a closer link to emerge.

From another viewpoint, however, these two organizing principles can be seen as incompatible, in the sense that the participation activities would enhance and facilitate discussions about decisions that are already made. Here, the participation is perceived as an opportunity to undertake organizational developments, with reference to for example the merger between the two municipality administrations. In this perspective, certain strategic directions for change seem to have been proposed, for example through a new interior layout as a means to enhance new ways of working. The substantial amount of participation activities could thus be perceived as a way to implement these changes. Such an approach might leave not only the participants, but also the participation activities as a method, in a weak position. As pointed out in the paragraph above, it is generally difficult for the staff to foresee their future work practice. Here, their input might be seen as redundant, with reference to the indicated strategic directions. A staff member actively involved in the participation activities describes her understanding of the open office layout and the opportunities that the participation seemed to entail in an interview situation:

"[W]e had some meetings about it, and the staff did come with some statements, but it was made clear very quickly that it wasn't going to be like that. [...] The staff could kick and scream – management had already decided that we would have these open offices."

Based on these two viewpoints, we might say that end user participation as a method involves a contradiction between being on the one hand generative and on the other, premediated. It is generative, in the sense that it enables the staff to involve in important discussions about their present professional practice and its possible future developments, with reference to the forthcoming spatial framework.

But by introducing the open layout as an integrated premise, it might also be said to premediate and thus undermine the end user's influential opportunities.

4. The open layout: a mechanism to sort the input produced in the participation

In the Town Hall project, as in most building projects of a certain size, several practical, financial and technical decisions were already made, prior to the actual design process. These decisions formed a framework of restrictions, upon which the project could be conceived and subsequently emerge. As will be described below, one of the documents that described these conditions contained a set of *"interior design principles"*, defined by the municipality management and presented in one of the internal project descriptions. These principles outlined the preset decisions that regarded the interior layout of the house, and could thus be considered a way to sort the forthcoming input from the users. A filter, through which the material produced in the participation activities, could be organized. It may remind us of the concept bracketing (cf. sections 2B and 6B): "Schemata constrain seeing and, therefore, serve to bracket portions of experience" as Weick explains it (1979: 154). Such premediated conditions often influence our perception in a certain direction. The consequence of the project outline in the Town Hall project is that although the participants repeatedly pointed out that they preferred individual offices to the open layout, this input would not result in a traditional office layout as the output. The staff member in the paragraph above illustrates this by stating that the participants *"could kick and scream"* but the premise of the open layout would still remain. The *"interior design principles"* might thus be said to have represented a set of rules, within which discussions about the forthcoming spatial structure could be organized.

5. The open layout and the participation as means to form a modern organization

Turning towards how the open layout might be seen as an opportunity for the management to enhance a certain strategic direction: How did the MD consider the open layout and its role in the design process?

"The first part of the process was actually about getting a grip of the type of requirements that an administration building is supposed to honor, that is, if we want to develop the municipality in the way that we – after I was appointed managing director – had tried to describe in various discussion papers. This becomes a kind of requirement to the building: about its spatial proportions, about its ability to support, about mobility, that it is flexible and easy to restructure, etc."

In this quotation from an interview, he indicates a link between the architectural and the organizational design processes by appointing how the municipality administration's strategic aspirations might be supported through the forthcoming spatial framework. In this *"first part of the process"* the open layout was naturally enrolled in *"the type of requirements that an administration building is supposed to honor"*. It served as an integrated part of the design solution, rather than a potentiality in the process of developing the design. One of the results was that the open layout was included as a precondition in the brief of requirement that initiated the design process in the first place. By proposing that the layout should be *"flexible and easy to restructure"*, he indirectly assumes that the open layout would represent the most flexible structure. In this way, he suggests a link between the municipality administration's strategic aspirations and the qualities that the open layout can provide.

But how would the MD know that the open layout is the most appropriate structure to accommodate a merged organization that contained two municipality administrations? He aimed to set forth certain processes of organizational change (for example the merger itself, and the open office layout as means to support it), in accordance with contemporary societal requirements that involved structure and service in large public organizations. His approach to this was a bottom-up, rather than a top-down process, and the central vehicle to accommodate the process was organized end user participation. In this way the substantial number of dialogue-based activities, in which the staff got involved in the design of the forthcoming building, becomes a representative for a modern organization. Here, the open office layout might be perceived as a means to support such societal prerequisites and thus as a way to signalize modernity. It is characterized by open areas, within which the proximity between the staff can alternate, and where moveable partitions can be applied if necessary. The concept also involved the idea of providing different spatial facilities (lounge areas, small coffee stations and more), in order to

support the staff in exploring new ways of working and enhance communication (e.g. Duffy 1997, Bjerrum and Nielsen 2003, Duffy and Worthington 2004, Hansen 2007). The participation activities might thus have been facilitated and premediated (in order to suit the open layout as a basic premise), but they were still open in the sense that that it was based on exchanges between the different parties involved. As one staff member, actively involved in the participation activities describes the tension in an interview:

"We were heard and we were allowed to speak. But it was decided that it was supposed to be a modern town hall, in that way. The fact that it was open offices."

The quotation outlines the potential mismatch between organized participation as a method to enhance engagement, on the one hand, and the open layout as a fixed structure that indirectly constrains the very same engagement, on the other. The MD thus finds himself between two central perspectives: of decisions as fixed and of decisions as emerging.

ON HOW THE OPEN LAYOUT AND THE PARTICIPATION WERE INTRODUCED TO THE STAFF

In the paragraphs above I have illustrated the somewhat complex relationship between the open office layout as a premise and the end user participation as a method. Because the staff kept discussing the open office structure, while the layout as a structural principle remained, I have been interested in how these factors were introduced to the staff as a part of the project outline. In the following, I will look into how this seemed to have been done in the project. First, I approach the available written documents from the case, and second, I look at my own descriptive field notes from the MD's oral introductions to some of the participation workshops.

1. The open layout as a premise: the written documents

Prior to the participation activities and the architectural design process, more than a year of preparation had gone into the Town Hall project. During this time, politicians and managers had discussed how a new spatial framework could create extended opportunities to the municipality administration as a service provider. The discussions resulted in several texts: internal documents that appoint overall aspirations and restrictions, in order to get the project into progress. The three documents briefly presented below refer to the open layout as a premise in the project.

The first document is dated shortly after the MD's promotion tour around the organization, in which he had described the project's prospects to the staff at large, in a series of dialogue sessions. The document recaps the outcome of the sessions, and with regards to the open office layout, it reflects that the reactions were negative:

"Management also notes the explicit skepticism in terms of the open offices. Management is still of the opinion that the advantages attached to the open office and its adjacent common facilities (such as meeting rooms, contemplative spaces as well as phone- and conversation spaces) weighs more heavily that the disadvantages, and should thus still be pursued. We focus on collaboration in a learning organization, and call for a physical framework that can accommodate this type of organization."

In this quotation, management acknowledges the staff's anxiety towards the open layout. Here, the strategic aspiration of being *"a learning organization"* is used as a means to explain why the setup is considered the best structural solution.

The second document is dated a month later. Here, the Town Hall project at large is being presented under headlines such as *"Purpose"*, *"Process"*, *"Idea"*, *"Economy"*, *"Tender format"* and *"Interior design principles"*. Under the heading of *"Process"* it is explained that:

"During 2004, Hillerød has been working with the project in order to determine the process, the economy and the interior design. Although this work

has come far, no steps have been taken that locks the process or the new town hall into a particular solution."

The statement might somehow be seen as a contradiction in terms, with reference to the reflections in the first document. It makes it clear that substantial decisions have been sought and executed along the way in the process. On the other hand, however, it also explicates that none of these developments should be seen as constituents to a fixed solution: that *"no steps have been taken that locks the process or the new town hall into a particular solution"* as described in the quotation above. In the same document and under the heading of *"Interior design principles"*, the latter message is repeated, with direct reference to the open office layout:

"The interior design principles should, however be reconsidered, when Skævinge [neighboring municipality and part of the merger] has become integrated in the project organization. It should be clear that the principles of 'new office' and open office should be nuanced and further developed, according to functionality [...] in the new joint unit."

In this quotation, it seems more unclear whether the open layout will in fact form a basic structure in the project. This blurriness still seems to increase as the project developed. In the third document, a committee to support the building's interior design process had been appointed. The committee members included the MD, the project manager of the Town Hall project and several staff representatives. The minutes from one of the committee meetings that focused on the development of the interior design states that:

"Everything is up for grabs and no stone should be left unturned."

Considering the open layout as a basic point of departure in the project, these descriptions might have left the alert participant confused. Was it, or wasn't it, possible to influence the open office layout? As the participation activities served as a central vehicle to support the design progression, the question seems relevant. In the project, participation was not only seen as a means to inform the architectural design solution. It also involved the organizational design, with reference to the merger and to the MD's ambition "t*o develop the municipality in*

the way that we […] had tried to describe in various discussion papers". Several documents included details about how the staff at large would be involved in the design of the forthcoming workspace area. Again with reference to the notion of the modern public organization, we might say that the MD used the organized participation as an opportunity to introduce the open layout, which represented not only a new spatial framework, but also a new organization. The boundary between what could- and couldn't be affected through the participation activities might have been somewhat unclear, but the purpose of preparing the organization for the new, was maintained.

2. The participation activities as an opportunity to influence: the oral introductions

Turning from the written documents to the MD's oral introductions to the workshops, the focus is on the participation as an opportunity to influence the design solution. Here, the open layout was not mentioned as a particular issue to be negotiated. But the participation activities were brought forth as opportunities to contribute to the development of the design in all of these introductions. In his introduction to the very first participation workshop, the MD launched the event by the words:

"At this point it is important that we identify what kind of building we aim for, what we need in our building. […] In this workshop and the next, it is important to bring all opinions forth. The reason why we have hired a process designer is to secure the connection between the physical framework and the activities that are supposed to take place inside the house. This is a marvelous opportunity for us. Most of us have never tried to influence our workspace to such an extent."

Here, the potential confusion from the three documents presented above, seems to be kept up. From one viewpoint, we might say that the MD strongly indicates that this is a design process, to which the participants are invited to contribute. With phrases like *"that we identify what kind of building we aim for", "to bring all opinions forth", "to influence our workspace"* he describes the participant position as that of a co-designer. Not only does he point to the process of identifying a set of requirements in order to inform the subsequent architectural design process. He

also emphasizes that this should happen in a collective practice, by using the pronouns *"we"*, *"us"* and *"our"*. The staff's responsibility thus appears as more accurate as it is articulated as a shared responsibility (Weick 2003). Here, the participants (approximately 50 staff representatives) represent the users on behalf, not only of a large group of staff members (approximately 500 at the time), but also of local citizens and politicians. The MD repeats the focus on co-designing by emphasizing the situation's uniqueness (*"Most of us have never tried to influence our workspace to such an extent"*). Here, the very last part (*"to such an extent"*) also indicates that the project expands the idea of a traditional relationship between designers and users in architectural design processes.

Moving on to the second series of workshops, the participants' position as co-designers is again emphasized. In his introduction to this event, the MD repeated the influence and responsibility that the participation implies:

"The requirements you have pointed out have had strong impact on the competition brief [and] were of major importance for the winning proposal. We keep pulling colleagues in and make demands on the form and function of the building. You may see yourselves as representatives for certain municipal service areas, environments, etc. It is a big responsibility to represent someone else, and you need to be in correspondence with your backing group in this work. You are also advisors to those who are designing the building. But you will not be taken hostage: you can bring in ideas and opinions and needs, but you won't subsequently be held responsible. Management will work further on the suggestions with the winning consortium."

Here, he points out how the participant's contribution from the first workshops influenced the project's initial design process by informing the competition brief that served as a point of departure to the architects in their developments of the initial design proposals (cf. section 5A). He gives the participants an active role as being *"representatives"* and *"advisors"*. But with regards to the participant's actual opportunity to influence in the design process, the confusion from the written documents seems to continue: In the second part of the quotation, he ruptures the image by stating that they won't *"be held responsible"* and that *"Management"* will further develop their ideas.

3. Decision making: between open layout and participation

What is at stake in this setup? The contradiction pointed out in the paragraph above might represent a central cue to this complex. Here, responsibility seems to be given and withdrawn by the same means and on the same occasion. The open layout seemed to have existed as an idea that was meant to support certain strategic aspirations, decided prior to the participation activities. At the same time, the invitation to the staff to participate in the design process also represented an opportunity to influence the development of the design and to become *"advisors"*.

One of the quotations above by an end user representative, who participated in most activities throughout the project, indicates that although the outline for the open layout might have seemed blurred in written documents and oral introductions, the participants knew that the decision about the structure was definite: They *"could kick and scream – management had already decided that we would have these open offices"*. However, the fact that the staff kept revisiting the issue in each and every workshop might indicate that they still saw an opportunity to influence the general design solution. On the one hand, they claimed the open layout as a final decision, while they, on the other, kept discussing it as if such discussions would make a difference to the design solution. The setup indicates that the relationship should not be considered a serene association, but rather as an active tension between two stances.

If we return to the idea of using the participation activities as an opportunity to support the development of a modern organization, we might say that there is an inbuilt tension between some of the central factors involved in this setup. Here, the indirect involvement in complex decision making about central issues (for example through workshop discussions), potentially jeopardized other basic conditions (for example the structural principle of the open office layout), upon which the project was based. In order to understand more about how organized end user participation can contribute to these complex design processes, it seems that this tension needs further exploration. The point was briefly indicated in section 2A through the conceptual idea of 'managing as designing'. This concept presents an approach to decision making as a process that takes place in a concurrent and continuous process ("the design attitude"), and where the focus is not on choosing the best solution, but rather on producing solutions that may work. However, the focus on

continuity does not mean that decisions aren't made. How can the MD balance this complex tension between two representatives for the modern organization? In his response to how this balance of decision making might be handled, he remarks in an interview:

"[T]here has been votings for and against the chosen concepts. To this I have said from the start: it is after all a management decision how you design the interior of your building. We would like to hear your advice. We would like to engage in the debate. But at a certain point you have to say 'thank you for the contributions. Now we think the town hall is going to look like this and this. This has happened. It has been taken a step further through political decision, and these requirements will lead to a town hall that to a large extent has been based on an open approach.'"

4. Organizational design through behavioral commitment

As indicated above, the substantial amount of organized participation in the project might represent an opportunity for the MD to establish an organization, prepared to meet new strategic ambitions and thus fitted to inhabit an open structure. How could the MD support these aspirations, with reference to how processes of organizational sensemaking take place?

"One way to focus interpretation is through the use of behavioral commitment" (Weick 2001: 74). The idea of behavioral commitment involves how managers can enhance commitment among the staff, as a means to implement certain decisions. Weick explains this by recalling basic characteristics of the management assignment, discussed by Smircich and Morgan, who argue that "leadership lies in a large part in generating a point of reference, against which a feeling of organization and direction can emerge" (Smircich and Morgan 1982: 258 in Weick 2001: 75). Here, the notion of "a point of reference" might be perceived as what we in Scandinavia would call 'the red thread': the point or idea that runs through a story or occasion like a spine that makes it coherent. Weick's message is that if this point of reference can be produced through the establishment of commitment – then redesigns, changes and further developments can evolve. By giving the staff the opportunity to discuss certain issues at stake in regards to the changes, the

chance that they would subsequently explore or support these, might also be likely to increase (ibid).

Behavioral commitment involves the creation of certain beliefs among people in an organization, which help them comprehend the actions, in which they are involved. Salancik characterize this as binding people to their actions and thereby to a set of beliefs that make them contribute to the maintenance of such actions (Salancik 1977). When staff members are invited to partake in workshops and other participation activities in the Town Hall project, the involvement is likely to connect them closer to the developments that emerge in the project as a design process. "Binding occurs when the behavior is explicit (there is clear evidence that the act occurred), public (important people saw the act occur), and irrevocable (the act cannot be undone). These three factors combine to construct the reality that the action did occur." (Weick 1995: 157). We might say that the participation was explicit in the sense that the staff not only accepted the initial invitation to participate, they also continued to engage in the activities as the project proceeded. It was also apparent that their approach towards the open office layout was negative. The activities were public, in the sense that they were generally debated in the administration in the period of time when they took place, and that several of the activities included the staff at large. Here, Weick also points to volition as a way to enhance the establishment of commitment. Although the staff in the Town Hall project may have found it hard to reject the invitation to participate in a project that was given such much focus by management, the workshops were still voluntary.

As we have seen above, the MD might also have attempted to establish such sense of binding and commitment through his balance act of giving and taking responsibility in his introduction to the participation workshops (*"You may see yourselves as representatives for certain municipal service areas, environments, etc. It is a big responsibility to represent someone else, and you need to be in correspondence with your backing group in this work")*. But as we have seen above, he also repossesses the responsibility later in the same quotation, by emphasizing that the participants *"will not be taken hostage: you can bring in ideas and opinions and needs, but you won't subsequently be held responsible"*. As a concept, responsibility plays a significant part in the establishment of commitment, and it involves consequences. Increased knowledge about certain

issues indirectly includes an extended understanding of the implications that this might lead to (Staw 1982). In the Town Hall project, the MD highlights responsibility several times, and by doing so he attempts to create commitment among the participants – to whatever result the design may bring. In this way, his approach might be said to have been "visible, volitional and irrevocable" (Weick 1995: 159).

Organizations choose who they want to be through choosing a set of central actions, which they relate to and consolidate through certain explanations (Weick 1995). In the Town Hall project, the definition of the organization as *"a learning organization"* is made prior to the many events that constituted the project as a design process. But the characteristic of being *"a learning organization"* is also an abstract description of a larger strategic aspiration. Here, the participation activities in this architectural design process become an opportunity to explain and consolidate these strategic aspirations. The open office layout might thus be said to represent a way to implement the strategic aspiration of being *"a learning organization"*. If we consider the open layout as an "inherited explanation" (Weick 1995: 160) to explicate the ambition of being *"a learning organization"*, the organized end user participation might be seen as a vehicle, through which such an explanation can become sensible. Through participation, the inherited explanation thus gets to suit the current events.

Weick proposes that "beliefs make sense of the irrevocable action and the circumstances within which it was generated, even if all of this was only vaguely clear when the action itself became irrevocable" (Weick 1995: 156). We might say that the open office layout became an irrevocable circumstance, and that the participation activities contributed to form the belief that could make sense of it. Although it was somewhat indistinctly outlined as an actual premise in written texts, oral introductions and also in the competition brief, the open layout became an organizing principle, upon which many other aspects of the project were being based. For better or worse, it became a catalyzer in the project. It kept up the budget: the open layout does not only provide an opportunity to prioritize diversity in the spatial facilities in a building. It is also a potential way of saving money, by utilizing the spatial resources in a more exhaustive way. In addition, the prospects of the open layout might be said to have kept up the staff's thoroughgoing concern in the project. The interest in participating across the organization seemed to have

sustained throughout the project. Although the issue of the open office layout was perceived as generally unpopular, it concurrently seemed to maintain the participant's attention. In this way, the resistance and struggle might also be seen as constructive (Weick 1995).

STABILIZING THE APPROACH TO THE OPEN LAYOUT: FOUR STEPS OF PARTICIPATION

As mentioned in the introduction to this section, the continuous discussions of the open layout and its potentially negative consequences did not modify, with regards to it its basic quality of being open. However, the layout did modify in various ways, as most designs do, in the course of complex building projects. These modifications happened, not only due to financial and technical challenges that occurred in the project, but also due to continuously produced input from the end user representatives, based on their perception of their future work practice.

In the following, I will look into how the end users' perception seemed to alter in the course of these ongoing participation activities and negotiations. Here, I first aim to illustrate how the general approach to the open layout seemed to stabilize (and thus somehow undergo a certain change) among the participants. I outline the story in four steps that each represents a central participation activity. Based on this outline, I aim to discuss the changes that seemed to have taken place in an organizational perspective.

1. The first series of workshops

In the initial series of workshops, the critical approach towards the open office layout came forth in the discussions between the participants. My field notes from these workshops with quotations from the participants, show substantial resistance to the concept. The following are example of statements from the participants:

"Confidentiality in work processes and responsibilities - can that survive in the type of layout pointed out here?", "What is our actual right to privacy?", "We just

want to hold on to our individual offices", "Why do we choose this layout; because it is cheaper, because it works better, or because we can't see other options?"

As outlined in the previous section of this chapter, this particular series of workshops seemed to serve as a kind of preparation: An introductory dialogue about the staff's general expectations with regards to the conditions of their workspace in the new town hall. Also, the dialogue provided an opportunity to contribute to a debate that already had many stakeholders, not only among the staff in this organization, but in society at large. The open office layout was (and still is) under substantial attention in the Danish public debate, which might have supported the staff in putting the subject on the agenda in the Town Hall project.

But as we can see from the statements above, they show little reflection about the layout's implications, with regards to the actual work practice. Below we shall see how more reflective capacity seemed to merge among the participants in the project.

2. The second series of workshops

The second series of workshops focused on the Town Hall's forthcoming interior structure: on the layout with regards to departmental location, the proximity between colleagues and also that between staff and clients. These workshops were rather concrete in terms of content: to produce scenarios for how the departments should be spatially organized. What did the participants say on this occasion, with regards to the open office layout? According to my field notes with quotations from the participants' discussions in the workshops, it comes forth that:

"I worry about the passageway traffic – that to get through to the appendages of the building you have to pass through certain hallway zones and that this will cause disturbance.", "Even though we have individual offices today, we always keep the doors open in order to secure connections and knowledge sharing.", "There will always be 10-15% who don't want to engage in it. They don't like it and they will probably never will. So they should probably also think about whether it is the right place for them to be."

Also, my own descriptive remarks in the field notes also illustrate the participants' reflections on the theme:

"They talk about experiences with 'new office' and about how the 'rules of conduct' might help them to adjust behavior and navigate through the environment."

These excerptions from the field notes show that the anxiety persists, but also that the level of reflection seems to increase along the way in these exchanges. While the quotations from the first series of workshop predominantly involved statements, these rather seem to reveal a higher level of reflection. Here, the participants for example ask how correspondence with the remote parts of the building might be upheld – without causing interruption for certain staff groups, and whether an open door might support knowledge sharing between colleagues. One of the quotations even adds a different aspect to the discussion. Here, the participants discuss whether the implications involved in the new town hall might potentially exclude certain staff members from being part of the organization in the future. These exchanges seem to involve a certain shift in the discussions, compared with the statements that appeared in the first series of workshops.

3. The third series of workshops

In the third and last series of workshops, all staff members were invited to partake. In 19 departmental workshops the staff gave their input to the organization of their own department's forthcoming workspace – in an open office layout. Here, the staff went through various exercises and questions, in order to produce input to the departments' actual spatial organization – in a 1:1 scale. The events took place in a large, empty hall, in which the departments' actual size was simulated with chalk marks on the floor and where different foam replica were used to represent the furniture. With reference to the open layout, the exercises addressed issues such as how the physical setup of the workstations should be arranged in order to secure good collaboration opportunities; how a quiet work environment could be secured, and more.

In retrospect, the process designers found the high level of tangibility in these workshops a disadvantage, in the sense that the exercises became too detailed and

life-like. The result was that the subsequent changes that were made in regards to the final design layout, due to the practical adjustments that are so common in complex building projects, lead to considerable disappointments by some of the participants. What seems to be at stake here is, that the realism that these workshops represented and the decisions made during the course of the workshops was experienced as so genuine by the participants that they 'became designers'. The arrangement somehow deprived the designers; architects and process designers alike, of their responsibility and created commitment breakdowns in the other end. As one participant remarks in an interview:

"Then two weeks went by and the whole thing was thrown out, and we were told that [our department] wasn't going to be in that space after all. So the good effort was just wasted."

The quote illustrates that while the MD's responsibility distribution might have induced commitment among the participants on the one hand, it is also likely to have caused considerate expectation, on the other. Ordinary people, who are not professional designers accustomed to the complex process that constitute the development of a design constitution, are likely to take the invitation to contribute as co-designers as a quite literal call. But the concreteness also gave the process life, and generated a tangible sense of the new building's conditions. By using concrete material that represented actual furniture in an area that was measured to fit the actual future workspace, the participants' responsibility seems to have been further established. As one participant remarks in an interview shortly before the organization moved into the building:

"You have to make it visible. In that way it was quite an enjoyable process. I think it was good that the last [series of workshops] took place. If it hadn't, I think it had left me frustrated. […] So I think that, all in all with the process with those bricks we moved around [the furniture replica]… And then we got a proposal [back from the designers] and responded to that, and then we got to the last negotiation – it became a good process. […] [H]ere, we got to influence it, and you probably can't prevent that such things happen in the process; that some conditions get changed. After all, we don't build town halls every year. These are things we realize on the way."

Here, a further shift seems to have taken place. First, the staff member acknowledges the idea of visibility and materiality as a means to understand more about the social context at stake in the situation. Second, she emphasizes that the importance of *"the last negotiation"*, not only represented by the workshop itself, but also by the succeeding discussion. Here, workshop results had first been brought through a process of translation and then transformed into a design representation by the designers[10]. The term *"negotiation"* here refers to the subsequent dialogue between participants and architects, upon which the final decisions about the layout were being made. In the last part of her comment, the staff member also acknowledges the balance between the opportunity to *"to influence it"*, on the one hand, and *"that some conditions got changed"*, on the other.

4. The staff party

Finally, at a staff party organized subsequent to the workshop activities, the progression of the house had come so far that the carcass of the building was safe to enter. The party itself was held in a pavilion in front of the building, but the participants were offered guided tours around central parts of the house. Here, the project's actual conditions became even more real: distances, acoustics, floor to ceiling height, and more. In a subsequent interview, a staff member who was closely involved in the building project reflects on the clarifications that the party seemed to have provided:

"It is a bit real estate-like, I can hear that, but it gives people a sense of the upcoming space. Also, [...] we took them up on the second floor, where the sound insulation was up, and I said: 'try to listen. And if we go downstairs where the insulation isn't yet up, you can hear the difference in the acoustics.'"

In another interview, a department manager reflects on how the tangibility of the actual building contributed to modify some of the staff's continued negative approach to the project in general and the open layout in particular:

[10] When I use the term designer, and not architect here, it is because the responsible interior designers in the project where Signal Arkitekter, the process designers in the project, and not KHR Arkitekter, who were the responsible architects on the exterior design of the building.

"In fact, the first time I experienced a widespread positive approach was in relation to [the] staff party [...], where we had a guided tour [around the house]. There were some people that came to the party that evening that I didn't know before and who came over and told me that they'd been really skeptical, but after having been on the guided tour, they looked forward to moving in. And with those kinds of things, I just know that when you do that off your own bat, you really do mean it."

Looking back at the four stages provisionally outlined on the previous pages, it seems that the staff did go through certain changes in the course of these events: from strong resistance to limited hesitance and possible susceptibility, resignation, or other. But as I indicated in the introduction to this section, shifts like these can hardly be said to be consistent in a complex organization like a municipality administration. As one staff member remarks in an interview:

"There were many people who were happy to get that guided tour [at the staff party]. But it hasn't removed the.. It hasn't made them look forward to moving in."

Design is a process before it is a result (cf. section 2A). The four steps outlined above might be perceived as an example of an organizational design process, which produced input to inform an architectural design process. Here, the staff member's ability to discuss and comprehend the open office layout as a concept seemed to mature as the participation activities evolved. Their arguments became more complex as they became accustomed to converse about the spatial organization of their practice. Although the open layout was not intentionally brought up as questions in the workshop exercises, it always came up, on the participants own initiative. In this perspective, the open layout might be said to have formed an important point of reference in the process. It caught the participant's interest in the project, and maintained to their attention throughout.

THE FOUR STEPS AS DEVELOPMENTS IN A PROCESS OF STRATEGIC CHANGE

Looking at this from a management point of view, we might consider the four steps of organized participation as steps in a process of strategic change. With reference to the merger between the two municipalities, and also to the somewhat ambiguous outline of the open layout as a premise, the participation activities might be seen as the MD's attempt to implement certain organizational adjustments of strategic observance. In the following, I have been inspired by Gioia and Chittipeddi's approach to the establishment of strategic change in organizational contexts as reciprocal processes of sensemaking and sensegiving (Gioia and Chittipeddi 1991, Wright 2004). One of Gioia and Chittipeddi's central points is that processes of strategic change are based on some kind of vision. It is in the ability to negotiate, establish and continuously adjust this vision that the success of the change process resides.

Recalling the events of the Town Hall project, we can recognize this idea of a somewhat abstract vision that evolves and stabilizes through the process of participation. It can be seen on several levels: The idea of the municipality administration as *"a learning organization"* could be perceived as a vision that the open layout structure could enhance. Also, the aspiration of developing into a modern organization could form this kind of abstract vision, potentially supported by the open office structure, the participation activities and the establishment of *"a learning organization"*.

In this process, the staff was continuously involved in the different stages of development, not only in order to produce inputs to inform the architects in the architectural design process. They were also involved, in order for themselves to comprehend and digest the development of the design. The process might thus be seen as reciprocal: the participants produced input to inform the (architectural) design process, while concurrently being informed by the same production process (and thereby affecting the organizational design). It is in this reciprocal process of participation that the staff's provisional acceptance of the open layout seems to establish and stabilize. Although the MD emphasizes that he sees the final management decision as his own (*"We would like to hear your advice. We would*

like to engage in the debate. But on a certain point in time you have to say 'thank you for the contributions'"), he makes sure to give the staff an opportunity to influence and also comprehend these decisions. By inviting the staff to continuous conversations about their work processes and relationships in a spatial perspective, the vision seems to mature and establish. Not in direct transference, but in an adjusted version, in which the organizational and the architectural designs develop in a mutual process. Gioia and Chittipeddi characterize this type of reciprocal exchange as processes of sensemaking and sensegiving, through which "the original abstract vision is likely to become more well-defined and undergo some modifications" (Gioia and Chittipeddi 1991: 434).

These reciprocal processes might be said to take place in an exchange between sensemaking and sensegiving 'movements', which might contribute to explain a few of the developments in the Town Hall project. First, the MD establishes an impression of the organization's perspective by undertaking the promotion tour, in which he informs the staff about the prospects of the new town hall. This is a sensemaking process, in which he developed "an overall impression about [the organization's] history, culture, strengths, and weaknesses" (Ibid.: 442). At the same time these initial dialogue meetings produce sensemaking on the staff level. Here, the staff tries to comprehend and respond to the information given to them on the MD's promotion tour, "trying to figure out the meaning of the proposed strategic change effort, what its effect on them would be, and what their role in it would entail (which in some cases led to resistance to the proposed changes)" (ibid.). We might say that the open office layout represented one of these "cases".

After the promotion tour, the MD took on what Gioia and Chittipeddi call "a sensegiving mode" (ibid: 443). He captures the results of the promotion tour in a brief report, and uses this as a means to inform the staff about the sense he has made from their input. Here, he returned their message (sensegiving) by "supplying a workable interpretation to those who would be affected by his actions" (ibid.). We can recall the outline of his report from a previous paragraph in this section as being such "a workable interpretation":

"Management also notes the explicit skepticism in terms of the open offices. Management is still of the opinion that the advantages attached to the open office and its adjacent common facilities (fx. meeting rooms, contemplative spaces as

well as phone- and conversation spaces) weighs more heavily that the disadvantages, and should thus still be pursued."

Based on these initial processes of sensemaking and sensegiving, the participation activities provided the staff with an opportunity to make sense of the message from the MD, a sequence that continued in several steps. Each participation activity might thus be said to represent an instance of sensemaking and sensegiving, where the participant made sense of the message given to them, and returned a message based on their interpretation. Here, the input from the users first goes through a translation undertaken by the process designers, responsible for organizing the participant activities. Second, this translation is brought to the MD and the management team. Third, it is brought to the architects as an input to inform the development of the design solution. Forth, it is returned to the users as sketches from the architects or process designers, or else as strategic messages from management. Gioia and Chittipeddi characterize these processes of give and take as processes of understanding/cognition (sensemaking) and influencing/action (sensegiving) (ibid. 444).

Looking at the developments that the staff might have gone though based on the four steps of development outlined above in this section, one quotation seems to capture some of the complexity that emerges in these reciprocal processes of sensemaking and sensegiving. Here, a staff member remarks that she appreciated the negotiating exchanges with the designers:

"And then we got a suggestion [back from the designers] and responded to that, and then we got to the last negotiation – it became a good process".

She outlines the sensemaking and sensegiving processes as being exchanges of interpretation and negotiation between client representatives and designers. Also, she indicates that her approach has modified along the way:

"After all, we don't build town halls every year. These are things we realize on the way".

Not only did the participants' ability to discuss the open layout develop underway. Also, the MD modified his approach to the structure, accordingly. In

this way, we might say that the outline of the vision emerged on the basis of these continuing exchanges:

"After all, it's not a laboratory we run. It is professional, social work place. So there will be some who say: 'We can't thrive in such an exposed environment. We can't make it work when being watched over all the time'. But then we have to find out how many they are and what we can do to protect those people. We have had the discussions about steady work stations or shifting work stations. Here, we have shifting work stations, battling to get a table every morning. Well, if one department says: we get much more peace and quiet if we have steady work stations. Great! Give them steady work stations. You can choose. If we then experience too few work stations [...] well, then we have to handle that by some kind of alteration agreement."

In this quotation, the MD seems to emphasize that change can only take place in collaboration with the people that constitute the organization. Gioia and Chittipeddi explain it like this: "Understanding and action, including strategic action, thus derive from the framework of meaning ascribed by the organization's members" (Gioia and Chittipeddi 1991: 435). In the Town Hall project, this was done through the participation activities. Here, the response from the participants was used as a catalyzer to secure progress in what the MD characterized as *"a double design process"* (cf. Chapter 1). Without the staff on board, a mismatch between the strategic organizational aspirations – communicated through the architectural design of the new building – might have been more likely.

CLOSING COMMENTS

In this section, I have aimed to illustrate some of the tensions and dilemmas that organized end user participation seems to produce. In the following, I will briefly go through a few of the analytical points that have emerged on this basis.

The point of departure in the project was a number of upcoming change events: There was the merger, the new physical workspace, and also the potential changes that this new environment would entail. Through extended processes of end user

participation, the potential implications of these change events were discussed among a significant group of staff representatives. The outcome produced was substantial and indistinct: concerns, preferences, new ideas and more were brought forth, in order to inform the architectural design process. With reference to the way these processes were being organized and the magnitude of its results, we might say that the participation activities produced an experience of increased complexity among the participants. But it might also have reduced the sense of complexity, by the same means: As the staff got more involved in the design process through the continuous participation, the chances that their interpretations got influenced by the knowledge they obtain in the participation, might also have increased. If we look at it through an investment perspective, the participation activities clearly represented a substantial expenditure for the organization, on a financial as well as on a mental level. But if the investment produces an increased understanding of central organizational aspirations, it might be said to overshadow the initial costs. Here, the continuous exchanges that constituted the participation activities might have caused an extended understanding of the complexity that necessarily surrounds organizational development and strategic change. Returning to my research question of how organized participation can generate 'connections' between organizational and architectural design processes, this tension between increase and reduction of complexity might be said to represent such a 'connection'.

The organized participation produced stability, with regards to the participants' perception of the open layout as an organizing principle. Initially, the participants were distinctly reluctant towards the structure, based on their previous experience of having individual offices and on the contemporary public debate on the issue. Here, the changes that the open layout would induce were difficult to comprehend for the participants. As the story developed, the resistance towards the open layout on the one hand seemed to persist among the majority of the participants. However, it also kept up their engagement and thus their opportunity to discuss the implications that such a spatial arrangement might have on the forthcoming practice. Although the participants didn't end up embracing the open structure, their approach might be said to have stabilized, in the course of their participation. This process of stabilization might be said to represent a change, caused by the discussions in the participation activities. The tension between change and stability might thus represent another potential 'connection' between organizational and architectural design processes.

Another point that might grow from these types of sensemaking processes, in which behavioral commitment is produced through the establishment of a bond between the participants and the emergence of a design solution, is that the participation produces streamlined perceptions: That we end up perceiving the world in the same way. In this perspective, the continuous participation activities in the Town Hall project can be said to have repeated certain messages and avoided other issues – and thereby to have instigated manipulation. However, an issue that these organized activities invariably avoided (in the questions and exercises that constituted e.g. the workshops) was that of the open office layout. But this particular issue always came up on the participants' initiative, all the same. In every single event, the participants brought it up as a relevant subject, in regards to the context. So although the questions asked in the exercises and the general preconditions that characterized the project might be said to have informed the results of the design solutions, these activities must also be regarded uncontrollable. The participants continued to talk about their concerns for the open office layout because they kept worrying about what such a new structure would entail. By holding on to the issue in the conversations that took place in the participation activities, the participants may not have brought forth a positive approach to the open layout – still not acquainted with the challenges such a structure would cause. But the conversations seemed to generate a certain capability to reflect upon such new work conditions. Looking back at the events in the Town Hall project, the result might be perceived as the establishment of an organization, capable of navigating their own work conditions: That extended conversations cultivate people's capacity to articulate and thereby comprehend some of the complexity that their professional practice represent. Here, we may recall Weick's description of the part of a sensemaking process he refers to as retention. In the project, the participants recall the open office layout in every instance of participation in the design process. It represents an opportunity to "thinking it again" (James 1950: 654, in Weick 1979: 207). These (sensemaking) processes seemed to form a continuity, through which the participants learned to handle – articulate and comprehend – the implications in question. To keep up the engagement in this type of design process and to enhance the ability to discuss the potential implications and opportunities that such a new structure could generate might be seen as central features sought for in the aspiration of becoming a modern organization.

The implications of the open office layout might serve as an example of that the participants' perception slightly modified, in the course of the participation. But as will be described in the next section, stability is also likely to break in organizational contexts. In this section, I have illustrated how architectural design components were used as a means to develop: change and stabilize organizational design features. In the next section, I will pursue this idea of bringing architectural means into organizational conversations further. Here, I will also look into how the (organizational) exchanges with the architectural might have implications for the architectural design.

SECTION 5C: THE ENTRANCE COUNTER IN THE TOWN HALL PROJECT

INTRODUCTION

In the previous section, it was described how the participants' approach to the open office layout seemed to undergo a certain shift, in the course of their participation. They did not end up embracing the open structure as such, but their continuous interest in this particular feature appeared to maintain their attention. In this process, their ability to discuss their future work practice appeared to grow and their view on the open layout began to stabilize. In the following section, I present a story from the case that illustrates interruption to this stability, while also providing an example of how the link between architectural and organizational design processes might be said to influence the development of the (architectural) design solution.

In the following story, the physical context at stake is the Town Hall's reception area, in which a central architectural object – the entrance counter –went through continuous developments in the course of the design process. The story outline is this: A staff member, who had been actively involved in the organized participation activities, returned from her maternity leave to see the new town hall emerging from the ground. Confronted with sketches of the physical area of her department, she found the illustrations of the entrance counter incompatible with the headlines for the project, as she had perceived them during her participation. Having adapted the idea of the closer link between organizational practice and

spatial framework, she found that the sketches disclosed a disconnection between the two. On this basis, she contacted several of the project's central players to discuss the matter: the MD, her close colleagues, the architects, the process designers, and more. Through a series of negotiations, the entrance counter was redesigned, according to her objection.

In the analysis below, I discuss how this could happen. First, I briefly attend to how certain idiomatic phrases and overall organizational aspirations were used in the written project outline. Here, I discuss the potential relationship between these documents, the participation activities, and the organization's sense of identity. In the second and predominant part of the section, I look at how the actual negotiation of the redesign takes place. Here, I discuss how a staff member could manage to mobilize a network of contributors that together got the shape of the entrance counter modified. In this design process, the participation activities seem to have contributed to the construction of a link between the architectural and the organizational design processes. Here, participation became a medium, through which organizational change took place – an adjustment that subsequently led to an architectural redesign. The incident serves as a point of departure, not only to discuss how architectural contexts can be used in order to discuss and support the organizational design development. It also represents an opportunity to explore how different media that represent organizational practice (for example conversations and documents) can inform the development of an architectural design. Concepts that derive from actor-network theory and in particular that of translation and spokesman (e.g. Callon and Latour 1981, Callon 1986, Latour 1986, 1991, 1999, cf. section 2C), and also from document analysis (e.g. Smith 1984, 2001, Prior 2003, 2004, cf. Chapter 3) have served as sources of inspiration in the discussions.

CHARLOTTE'S STORY: REDESIGNING THE ENTRANCE COUNTER

"It has been redesigned as a result of a real battle. [...] I had [the MD] and [the project manager] involved in a dialogue where I told them that this simply doesn't support what we want. So we got it [the entrance counter] opened."

As we have seen above in section 5A, an extended amount of organized end user participation activities were seen as an integrated part of the Town Hall project as an architectural design process. One staff member that was an active participant in several workshops was Charlotte, the department manager of *"The Citizen Service Center"*. *"The Citizen Service Center"* represents the administration's interface with its clients, namely citizens in the municipality and other visitors. After nine months of maternity leave, Charlotte returned to work to find the town hall emerging as an actual building. She reengaged with the project and found the already approved sketches of the area that covered her unit, necessary to interrogate:

"[W]hen I returned in April, there were things that would soon be too late to change, including the design of the entrance counter, which I didn't like: it was a counter with the worst thinkable connotations. [With such a setup] we would get very much separated from our clients."

As Charlotte indicates in this quotation, she finds the shape of the entrance counter unfortunate with regards to some of the municipal administration's central aspirations for the new town hall. One of these aspirations was an attentive relationship to clients. Recalling the discussion in the previous section, the aspiration might remind us of the notion of becoming a modern public organization. Later in the same interview she explicates:

"[W]hen we build a town hall that in every other way aims to signify openness, to signify a sense of community, I don't think we can leave the clients on the other side of a very distinctive counter, with fifteen of our staff behind it."

In this quotation, she indicates that one of the project's central purposes has been for the municipality administration to convey *"openness"* and *"a sense of community"* – through the medium of the new building. But where did this perception of purpose come from? Charlotte had been actively involved in the project as a participant since the second series of workshops and had read many of the documents, upon which the project was built. Through these activities, she had been a part of the extended exchanges between management and staff that occurred in the course of the project. As will be described in the discussion below, there were several factors that potentially could have influenced this perception of *"openness"* as a central aspiration. The orchestrated conversations in the workshops may have been one. The number of official documents that described the project may have been another. In the quotation above, Charlotte emphasizes that the aspiration to express *"openness"* was not only indicated in one way, but *"in every other way",* which seems to indicate a general focus on openness in the project. On that basis, we might conclude that certain messages are likely to have been repeated, in order for the project to develop in correspondence with management's overall sense of a vision[11]. The MD confirms this point:

"[...] there have been those points of reference that you could refer to, that were to be communicated again and again – which they have indeed been. They have repeatedly been put out in new versions, etc. 'This is what we're aiming at. This is what this house is supposed to accommodate'."

Charlotte took on this message and kept engaging in the project. The organization's obligations and aspirations served as her general point of departure in the engagement: externally, with reference to the clients, and internally, with reference to the staff's sense of identity. Here, she experienced a fundamental

[11] As it was suggested in section 5B (with reference to Gioia and Chittipeddi's approach to implementing strategic change through processes of sensemaking and sensegiving), this vision might have started out as an abstract idea and then developed accordingly. But we also know from the MD that certain strategic aspirations did exist prior to the design project and the participation activities (*"[...] to develop the municipality in the way that we [...] had tried to describe in various discussion papers."*). Also, if we recall the outline of the process designer's general method from section 5A, we remember that the loyalty towards the client's overall vision served as a guideline in the translation process: In the process of bringing the 'organizational input' into a shape that could be read by the architects in the architectural design process, the client's vision is being used as a *"benchmark"*. We might thus say that the process designer contributes to form a link between the client organization's overall vision and the participant's input, and that the participation activities were used as an opportunity to discuss issues that regarded the organization's strategic direction.

disconnection between the messages she had received through the organized participation, on the one hand, and the design abstraction in the sketches of the entrance counter, on the other. If we recall the MD's general ambition of securing the link between the design of the house and the practice it was supposed to accommodate, Charlotte's argument seems to be that these two components should reflect one another. It should be possible to recognize the message in the entrance counter and conversely, that the expression of the entrance counter should be reflected in the organizational practice. In the following quotation from an interview, this attention to organizational identity, through the means of an architectural object comes forth:

"[...] while the old draft went all the way up to here [she points on a sketch]: it followed this line all the way around. What we have done now is to tip it in. [...] so staff don't stand on the opposite side and 'look out'. In this way, we terminated the petty official image we so unfortunately struggle with here."

In this quotation she elaborates on the idea of *"openness"*. While the old version of the sketches separated the inside from the outside, the new version equaled out the levels and secured a softer transition between those behind the counter and those facing it. The point is outlined in diagram 5 below:

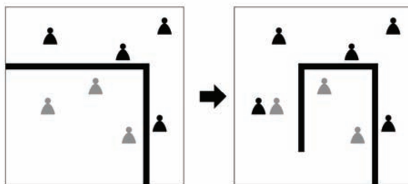


Diagram 5 illustrates one of the substantial changes that the shape of the entrance counter went through, initiated by Charlotte. The first diagram represents the architect's draft of the design of the entrance counter, while the second represents the result of Charlotte's initiation. Here, the grey characters represent the staff and the black represent clients.

On the basis of Charlotte's unfavorable reaction to the shape of the entrance counter, the design process continued to develop, regardless of the fact that the draft was already approved by management. In this process, she discussed the

sketches and diagrams of the entrance counter and the reception area with various relevant people. First with the MD and the project manager of the Town Hall project, next with colleagues from her own department, and finally with the architects and process designers involved in the project. Based on these meetings, Charlotte ended up providing a sketch for an alternative entrance counter. Based on the meetings with her superiors (the MD and the project manager) and her colleagues, she eventually met with the architects and the process designers: *"So what we did was to try to draw it up in a mutual process, with both Signal [the process designers] and KHR [the architects]."*

She explains this collaboration as a somewhat surprising experience. While the affiliation between architects and process designers and their division of labor was distinctively outlined in the project at large, none of the parties were prepared for this unexpected appendix, not entirely clear whose responsibility it was:

"There was some friction in terms of who should take on this task [that regarded the entrance counter], as the fixture was KHR's [responsibility] and the furniture around the counter was Signal's. I was thinking 'throw me 3 sketches in return [to my input] to see if that is what I want… But that didn't happen. I did the drawing myself, with a funny feeling thinking 'this is not what I'm educated to do'. But we did find a solution."

Several things are at stake in this quotation. The professional advisors seem to be confused as to how the situation should be dealt with. Not aware of how the task should be divided between them, and thus leaving the actual drawing for the client representative herself. The situation might be perceived as unlikely, as architects are traditionally interested in keeping the architectural part of a client assignment close at hand. But in this situation, they seemed to have been unaware of the code of conduct. In accordance with this point, Charlotte also acknowledges that she is not a designer, in the last part of the quotation. Here, she indirectly remarks that although the participation activities required the staff's involvement in conversations and exercises that regarded the spatial aspect of their organizational practice, they are not designers and should not act as such. But based on the unfamiliarity of the situation, Charlotte ends up drawing the lines herself in this process of redesigning.

Charlotte's response might thus be said to have resulted in new interactions, through which the entrance counter was renegotiated and consequently redesigned. The incident serves as a point of departure to discuss how designs evolve, establish and continue, when end user participation is brought in as a means to inform the design process. If we recall the thesis' aspiration to explore the closer link between the architectural and the organizational design processes, we may well perceive the redesign of the entrance counter as an opportunity to do so. Here, the conversations between people in the client organization and the documents that describe the project's general outline, serve as powerful vehicles that can influence the architectural design process – and also the actual design solution.

DOCUMENT MATERIAL AS MEANS TO INFLUENCE PERCEPTION/DESIGN

In the Town Hall project, written texts, particular idiomatic phrases and also sketches and drawings, played an important part. The point was also illustrated in section 5B, in which the documents that outlined the building project came forth as somewhat indistinct, with regards to defining the open office layout as a design premise. Also in this present section, the document material contributes to describe and illustrate the situation. In Charlotte's story, it seems that the decisive factor, which catalyzed her distinct translation of the entrance counter, was an architectural sketch. On the basis of this document, she starts exploring opportunities for modifying the design of the entrance counter. On this journey of exploration, several other documents were actively engaging on the scene.

If we recall Charlotte's reaction to the sketch, she found that the shape of the entrance counter explicitly counteracted the municipality administration's overall aspirations of what the new town hall should convey. But again, where did she pick up that the municipality administration aimed *"to signify openness"*? As mention above, she had been actively involved in the project as a staff representative since the second series of workshops was set forth. Through her participation, she had in various ways engaged in the extended exchanges between management and staff that took place in the project. Here, the written texts that

outlined and documented the project's progression might be seen as a central part of these exchanges. In order to understand Charlotte's reaction to the sketches of the entrance counter, the document material could thus be a relevant place to look.

Documents and texts have increasingly become a central methodological approach to studying development and behavior in social context (cf. Chapter 3). They play a central role in organizational life in the sense that they form an important way to communicate, visualize and discuss products and services. Also, they signify a way of unfolding organizational practice, work processes, routines and relationships (e.g. Smith 2001). In organizational life, actions, relations and communicational patterns are what Smith calls "textually mediated". She suggests the role that texts and documents play in our interactions to be made more visible, in order for us to comprehend social reality (Smith 1984). Turning to some of the document material available in the Town Hall project, with Charlotte's focus on the phrase *"openness"* in mind, several potential versions of the organization's central aspirations appear to be revealed. There is a particular focus on the merger between the two municipal units; on the importance of securing a link between the architectural design of the house and the forthcoming organizational practice; on the participation activities as a central vehicle to inform the design process, and more. The particular term (*"openness"*) that was used as a central argument in Charlotte's objection, is also apparent in some of the texts. It comes forth through expressions like "open", "dialogue" or "dialogue-oriented", but perhaps more importantly, it seems to be included in a number of more substantial aspirations that the project seemed to hold. Here, the participation activities are central, as part of the municipality's attempt to a dialogue-oriented approach. These were regarded an integrated part of the design process and a backbone for the project for strategic reasons, in order to undertake and implement the merger. Based on open dialogue sessions and seen as a strategic vehicle, the participation activities appear repeatedly in the document material, and might thus be said to support Charlotte's arguments. If we explore the material over time, a document from 2005 seems to indicate that that management acknowledged the end user participation as a potential opportunity to undertake certain organizational changes, with reference to the merger:

"The [...] management team aims to actively use the town hall project both as an integrated framework to support professional/social interaction in the work

processes, and as a management tool to emphasize the organization's values, including an open and dialogue-oriented approach to collaboration, problem solving and conflict management."

Moving on to 2006, the management team presented an extended proposal for the organizational restructure. Here, the participation activities seem to play a significant role in defining the implementation of the merger:

"The involvement of the staff is seen as particularly important to the development of the new organization [...] The new town hall will be actively used in order to support a holistic approach, through the physical layout, focused communication, knowledge sharing and exchange of experience."

Finally in 2007, the extended group of top- and middle managers directly points out end user participation as a means to ensure coherence between processes, products and physical framework:

"Staff are invited to participate as co-contributors in order to secure the connection between the forthcoming interior design and the practice that the new house is expected to accommodate."

In these samples from the document material, it not only appears that the staff get more actively involved in the development of the project, from *"an open and dialogue-oriented approach"* in 2005, to an invitation as *"co-contributors"* in 2007. Also, *"The involvement of the staff"* is seen as an important part of implementing the merger, while the building is seen as a way to secure *"a holistic approach"*, which includes strategic organizational issues such as *"focused communication"* and *"knowledge sharing"*(2006). These documents were publicly available to the staff and thus to Charlotte, who might (consciously or unconsciously) have used them as a reference to form and support her objection to the sketches of the entrance counter. By emphasizing how the participation activities are expected to play an active part in the project, we might say that the documents are active players in the social interaction between the management and the staff (Mik-Meyer 2005). As will be discussed below, the relationship between these active players (the documents, the MD, Charlotte, the sketch, and more)

might be said to form networks of components that, in various ways, interact and undergo changes (Justesen 2005).

CHARLOTTE'S TRANSLATION OF THE SKETCH: OPEN VS. CLOSED

As mentioned in the paragraph above, the document material should be considered in relation to the context, in which they appear. In the following, I will thus explore Charlotte's objection in more detail, as one particular translation of an organizational aspiration.

Considering the phrase (*"openness"*), it is not obvious what it means. Charlotte's translation refers to the context in which it appears and the references that she represents. It is on this basis she gives the term its meaning. Her use of the documents might thus be said to be situated, rather than fixated (Prior 2003). In the actual situation, she had been away on maternity leave for nine months. During this time, she had not been in touch with the project. When she returned to the field, she returned on the basis of how she had left it, and her translation was based on the outlines and descriptions as she remembered them nine months earlier. Charlotte's story thereby illustrates a translation that was necessarily informal and possibly obsolete. Based on her experience prior to her leave of absence, she held certain points of reference (for example the attempt *"to signify openness"*) to represent one of the project's overall aspirations. In the encounter between the available sketches and her readings of what they meant, this reference seemed to collapse. And on the basis of this collapse, she initiated the process of redesigning.

1. The symbolic meaning of open

Charlotte succeeded in carrying her translation through to form a redesign of the entrance counter. As will be outlined in the discussion below, she became the "spokesman" of one particular viewpoint (e.g. Callon 1986): that the shape of the entrance counter could be characterized as 'closed' and thus as disadvantageous in regards to the organization's aspiration *"to signify openness"*. In one of the

quotations above she proclaims that *"this simply doesn't support what we want"*, that is, what the municipal administration wanted to represent as an institution. Here, Charlotte represents but one translation of the sketch. From a different viewpoint, her reading might have been perceived as a conventional translation of this particular design representation: the understanding of an entrance counter as a symbol of distance, protection and exclusion. She illustrates her standpoint in one of the interview quotations also presented above:

"[...] while the old draft went all the way up to here [she points on a sketch]: it followed this line all the way around. What we have done now is to tip it in. [...] so staff don't stand on the opposite side and 'look out'. In this way, we terminated the petty official image we so unfortunately struggle with here."

Recalling diagram 5 that illustrated the two versions of the entrance counter, her perception might be based on the following argument: To many people in western cultures, the interpretation of a service assistant or receptionist as that of a *'petty official'* is negatively charged. Here, a *'petty official'* would be one who sustains a distinct distance between the clerk and the client. But if we consider the functions of an entrance counter once more, we can easily come to think of the several purposes that such an object serves: As a passage point to provide clients and guests with information and services in order to accommodate their particular business concern in for example a town hall; as a physical distance between staff and client that can serve as protection or security; as a table upon which bags and other belongings can rest while the client is being assisted, just to mention a few. If we didn't have it, we would need to consider other ways to accommodate these functions. The entrance counter demarcates a gap between something and something else. It dissociates and disjoints; a point that might serve as an argument in Charlotte's translation of the sketch. In order to account for the overall purpose of an entrance counter, the notion of 'open' seems to require the opposite condition of 'closed'.

With this in mind, I turn to the field of geography, in order to understand more about why we might perceive the entrance counter in this way. Tuan (1977) offers an explanation of the concept of 'open' in association to physical space: "Space is a common symbol of freedom in the Western world. Space lies open; it suggests the future and invites action. On the negative side, space and freedom are a threat.

A root meaning of the word ‘bad’ is ‘open’. To be open and free is to be exposed and vulnerable. Open space has no trodden paths and signposts. It has no fixed pattern of established human meaning; it is like a blank sheet on which meaning may be imposed” (Tuan 1977: 54). This quotation provides an opportunity to consider a potential paradox that Charlotte’s translation of the sketch of the entrance counter seems to hold. As I illustrated and discussed in section 5B, a predominant debate in the project has been the open office layout. Here, staff members have been exceedingly worried about the implications that this physical structure might imply on their work practice. Among the primary fears are concentration insufficiency, noise and transparency, caused by a reduced level of division and an increased prospect of proximity. The notion of ‘open’ thus represents a potential threat to the parties involved, translated along the lines that Tuan seems to indicate in the quotation above. In this way, we might say that the notion of ‘open’ needs to be perceived and discussed embedded in and in balance with its counterpart. To introduce ‘open’ as a way of working or a general aspiration, demands some level of closure, upon which the notion of ‘open’ can find its structure and function.

Looking at the physical space that constitutes the town hall’s reception area as it comes forth in the finished building today, the environment can indeed be characterized as open. But it also includes a number of demarcations to emphasize the various functions that the house accommodates: certain floor materials (e.g. wood vs. stone) that mark the boundary between the staff’s area and the client’s area; particular furniture that distinguishes the waiting line; a significant banister on the first and second floors (visible from the reception) that prevent full transparency between particular staff groups and external visitors, not to forget the entrance counter itself. Even after the redesign, the entrance counter still marks a substantial partition between the staff and the client.

2. The architect’s version of the ‘open’ entrance counter

How did the architect translate the notion of ‘open’ as opposed to ‘closed’ in this particular context? In an interview, one of the architects involved in the project recalls their initial drafts of the entrance counter, based on the brief of requirements that initiated the architectural competition:

"I remember the competition brief, where our general approach was not to see it as an entrance counter at all. We rather saw it as a serpentine – as a red line that ran through the underworld of this town hall and was supposed to be this multifunctional furniture, which represented everything, from being something you could sit on, you could get brochures from, you could talk with people from each side of it – and at some places [the red line] was completely wiped out, to avoid signaling this unfortunate phenomenon, where you have a partition between one side and the other. The fact that you, in municipal contexts, have to put up an increasing amount of buffers, due to various unfortunate episodes, that's a whole different story."

The quotation puts Charlotte's translation into perspective. The architect indicates that the early stages of the project provided original drafts of the entrance counter that was, in a conventional manner, significantly more 'open' than the final version, initiated by Charlotte. Diagram 6 below illustrates some of the changes the counter went through. Here, the diagram to the left shows the design of the entrance counter as what the architect above characterizes as *"a serpentine"* or *"a red line"*. The version in the middle represents the modified version that Charlotte perceived as 'too closed' and signifying an unfortunate image. Finally, the diagram to the right illustrates the entrance counter after the additional changes, initiated by Charlotte.

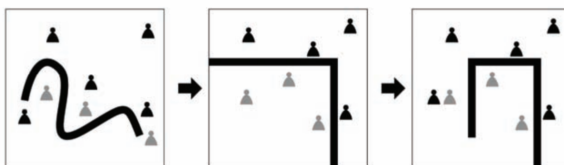


Diagram 6 shows three different versions of the entrance counter. Again, the grey characters represent staff while the black represent the clients.

But due to security requirements in contemporary public buildings it became necessary to maintain the traditional borders between the clerks and the clients in the municipality town hall. In the quotation above, the architect acknowledges a

central challenge that public service institutions increasingly struggle with, that of security. But he also indicates that public organizations might need to reconsider their approach to the relationship between the different players who interact in and with the building. Later in the same interview he remarks:

"[Y]ou might also imagine the contemporary office building, like public buildings…by making them attractive to the citizen. It might create a more healthy dialogue. I understand her [Charlotte's] concern, but that's because she – just like a traditional architect, who wants to have it very distinctly outlined – had an idea with this, and in her perspective, only one version would do."

Here, he points out a bit of the complexity that design matters seem to include. In one translation of the issue, design might be said to be perceived and comprehended on a cognitive level. In this perspective, its meaning becomes contextual and personal. When Charlotte translates the shape of the entrance counter as being 'closed', someone else is likely to make a different translation. What the architect indicates in the quotation above is that the notion of only one particular version might seem outdated. Here, it seems central to emphasize that the understanding of 'open' or 'closed' is not something that can be taken for granted. It depends upon the perspective, the viewpoint or context, which forms as the point of reference in the given situation. In the story of the entrance counter in the Town Hall project, it was Charlotte's particular translation that pulled through. Charlotte became the spokesman for a certain viewpoint that came to represent the organization at large. Below, I will explore how she gained such spokesman-ship. Based on the mobilization of a complex network of actors that seemed to support and thereby stabilize her translation (of the sketch), her viewpoint created the necessary strength for the sketch to get redesigned.

3. Charlotte as spokesman: building strength to obtain a redesign

When Charlotte found it appropriate and necessary to object to the design of the entrance counter, the empirical material shows that the unit she spoke on behalf of was the organization. Based on her translation of an overall institutional purpose (*"to signify openness"* and *"a sense of community"*) she initiated a renegotiation

of this particular architectural object. In this process she became a spokesman, who is someone that can speak on behalf of others – in this case a substantial group of colleagues and other forthcoming users of the town hall.

Behind Charlotte's ability to act as a spokesman there is a multitude of actors that constitute the network that gives her argument its strength. When she first objected to the sketch of the entrance counter, a long chain of events were started, upon which she could build her case, accordingly: First, she looked at the sketch and recalled the many documents and PowerPoint presentations that described the project: the conversations she had engaged in, in the course of the participation activities, and more. She then talked to the MD and some of her colleagues, and on that basis she engaged with the architects and process designer. In this process, she discussed and drew and negotiated, and eventually *"we got it opened"*, as she remarked in one of the quotations above.

These components were but a few of those that were involved in Charlotte's endeavor. Charlotte challenged the accepted sketch of the entrance counter, by forming an alternative network of actors that could support her translation of the sketch. It is the association between these actors that makes up the ability to act and that eventually get the entrance counter redesigned. In this network, each relationship was based on a meeting between the involved actors: for example between Charlotte and the sketch of the planned entrance counter. Here, each of these encounters represented an act of translation. Translation can thus be seen as the vehicle, through which change and progression establish in such a process. When Charlotte was confronted with the sketch, she undertook a certain translation that was based on her previous encounters with the project (conversations; documents; other sketches, and more). She felt obliged to object, in order to support a larger cause: the municipality administration's aspiration *"to signify openness"* through the medium of the new town hall. Charlotte initiated the process of redesigning the entrance counter, but it was the network of actors that supported her viewpoint, which eventually got the design of the entrance counter renegotiated and changed.

Callon explains the concept of translation with reference to the establishment of a spokesman: "To translate is to displace. […] But to translate is also to express in one's own language what others say and want, why they act in the way they do and

how they associate with each other: it is to establish oneself as a spokesman. At the end of the process, if it is successful, only voices speaking in unison will be heard. […] Translation is the mechanism by which the social and the material worlds progressively take form. The result is a situation in which certain entities control others" (Callon 1986: 214-215). In the project, Charlotte was the entity who gained control. She did not act alone, but on behalf of a broad network of actors. She denotes this sense of community directly by stating that *"we [plural] got it [the entrance counter] opened"*.

4. Charlotte's translation: based on the breakdown of a reference ("openness")

Returning to the notion of the spokesman, Charlotte thus established a unison voice on behalf of her network. As it was indicated above, her particular perception of the sketch was thus based on a broader network of intertwining actors: fellow staff members; external advisors such as architects or process designers; local citizens and clients; local politicians; phrases in documents and speeches; discussions in dialogue sessions; sketches and diagrams of design representations; questions asked in workshop events, and more. Charlotte's translation and subsequent action should thus not be seen as an isolated act, but rather as the result of how these various components or actors got to support her cause. Here, these components form a chain, which emerged as a result of their interactions. As spokesman, Charlotte articulated a point of reference (the term *"openness"*) that tied these actors together. But for such a reference to be maintained, the links in the chain need association. With lack of association, the reference breaks, and the chain loses cohesion (e.g. Callon 1986, Latour 1999).

Although each relationship in the chain necessarily involves modifications, as a natural result of the translations that constitute their encounter, veritable dissociations can cause a reference breakdown (Latour 1999). When Charlotte's perception of the project's overall aspiration (*"to signify openness"*) meets the architect's sketch of the entrance counter, the reference breaks. It is on this basis she objects, and from that point she starts to build a network to form and eventually stabilize her argument.

An alternative translation of the situation would be to see Charlotte's translation itself as a reference that breaks. As mentioned on several occasions above, Charlotte's translation is based on an experience that goes back a long way. She had been actively involved while working, but she had not been in contact with the project during her leave of absence. In that way we might say that she potentially based her translation on an outdated premise. As will be outlined below, there are several arguments to support Charlotte's approach. But if we recall the outline of the previous section (cf. 5B), we also remember that the staff kept arguing against the open office layout. Here, the participant's resistance towards the open layout seemed to stabilize through the continuous participation activities and thereby somehow to modify. But their resistance did persist, and in this sense, Charlotte's objection to the design of the entrance counter might seem as a contradiction. In this perspective, it might be Charlotte's success in getting the entrance counter redesigned that should be seen as the real reference breakdown.

5. Shaping the argument: creating stability in the network

We might say that the material devices and the relationship between the many involved actors appear as stabilizers, through which relatively indistinct organizational aspirations (*"to signify openness"*) might gain their strength. The more interaction between the actors, the more encounters take place and the more translations are made. Together these form a network of associations, which potentially create the durability that might stabilize and strengthen Charlotte's argument (e.g. Latour 1991). To understand how Charlotte established her position as a spokesman, we thus need to explore the translations that constituted the associations that stabilized, supported, obstructed and thus formed her argument. In the paragraphs below, I aim to briefly outline Charlotte's argument as a program of supporting and obstructing contentions, as it is illustrated in diagram 7 below. These might be perceived as two competing approaches, both of which are central to the negotiation that eventually resulted in the redesign.

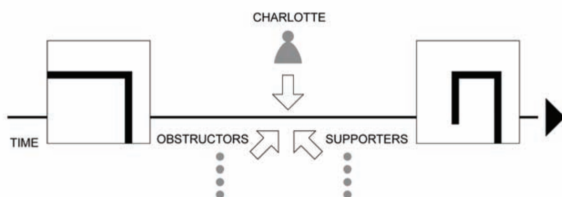


Diagram 7 illustrates the competing approaches in Charlotte's path towards spokesman-ship. Initiating a renegotiation of this particular architectural object, various contentions that supported and obstructed her argument were brought to the scene. Some of these are outlined in the paragraphs below.

CHARLOTTE'S ARGUMENT: THE PROGRAM OF SUPPORTERS AND OBSTRUCTERS

There are several constituents that were particularly helpful to Charlotte in establishing her argument towards a renegotiation of the entrance counter. Her argument was based on the notion of a mismatch between particular messages that the building aimed to signify, on the one hand, and the architectural representation of such messages, on the other.

Supporter A: documents and participation activities

As has been illustrated and discussed above, there is an extensive amount of texts that may have been helpful to Charlotte's translation of the sketch and the subsequent process of renegotiation and redesign. These documents represented various versions of the central organizational aspirations, with which Charlotte was acquainted. Here, the material quality of the documents might also have been advantageous, as a concrete device and thus as a potential point of reference.

The participation activities might also be seen as central to enhance Charlotte's argument. Such involvement, engagement and discussions in interactive workshops and also other events (cf. 5A) were seen as significant vehicles to support the implementation of the municipality merger. In these, certain messages and points of reference were repeated and thus potentially heard by an increasing

number of staff members. Also, a number of commissions were appointed throughout the project, in which a considerable amount of the staff was involved. As I discussed in section 5B, we might say that continuous participation activities in the project contributed to produce commitment and responsibility among the staff, a point that may have supported Charlotte's argument. Here, the ongoing dialogue sessions served as an opportunity to consider the implications of the organization's central aspirations, for example with reference to the merger and thereby the new organization that would inhabit the building.

Supporter B: the financial aspect

Another aspect that might support Charlotte's attempt is the financial aspect of her argumentation. In the context of an extensive building project such as the construction of a town hall, an entrance counter can be regarded as a minor fish in a large pond. Compared with the discussion about the open office layout in the previous section (cf. 5B), in which major changes would cause substantial financial implications, the entrance counter is easier to manage. If kept within the original budget and time schedules, changes to such a distinct object might be considered not only financially possible, but also a regular opportunity to establish behavioral commitment. However, the object might be minor in size, but it is still a significantly exposed part of the building, and this position might in itself have supported Charlotte's argument. The entrance counter is the feature that first meets the client as she enters the town hall. Charlotte's line of reason could thus include that the open approach she perceived as a central representative of the organization's overall aspiration, should be particularly apparent here. The financial aspect was mobilized in Charlotte's establishment of a network in the sense that her crusade didn't have financial consequences. She gained the MD's support by assuring that the potential renegotiations and changes would not affect the budget.

Supporter C: Charlotte's position in the organization

There is also Charlotte herself, her position as department manager and her general approach to problem solving. Charlotte was the manager of *"The Citizen Service Center"*, which is a highly notable department in the municipality administration in terms of size, visibility and direct client contact. Her professional

identity and hierarchical placement in the organization, made it possible for her to mobilize the MD, a relationship which might be said to represent substantial impact, with regards to strategic issues.

Also, my field notes reported that Charlotte was actively involved in these events. Not only did she act as her group's representative in the plenary sessions of submission and feedback in the workshops. She also made substantial comments to the other group's results in the feedback. In such situations she might also be characterized as an auxiliary arm to the MD. By articulating significant organizational modifications of strategic observance through her adaptations of arguments already presented in various versions – written or oral – by him, she might be said to carry the torch. Here, we might recall the MD's notion of the repeated points of reference from an interview previously presented in this section:

"[...] there have been those points of reference that you could refer to, that were to be communicated again and again – which they have indeed been. They have repeatedly been put out in new versions, etc. 'This is what we're aiming at. This is what this house is supposed to accommodate'."

We might say that Charlotte employed and habituated these points of reference, not only by her active involvement in the participation activities, but also through her subsequent response to the sketch of the entrance counter. Here, she literally accepted management's written invitation *"to participate as co-contributor"* as it was defined in one of the official documents, by reframing a somewhat indistinct outline of a central organizational aspiration.

Supporter D: Charlotte's leave of absence

Turning from Charlotte's presence and active participation to the opposite position, it might be considered a support to her argument that she had been absent from the organization and from the project for nine months, due to her maternity leave. She points out:

"She [the temp, who held Charlotte's position during her leave] has had more than enough to do with the merger [between the two municipal units], so she hasn't had the same focus on the building project [...]. So what I said [when I

returned] was that that the counter is still as it has been throughout the whole process, which no one had questioned at the time. They've probably thought it was just fine."

This seems to be a type of 'cannot see the woods for the trees' argument: when deeply involved in a matter, we may overlook obvious peculiarities or disruptions. Charlotte had the project at a distance in terms of time as well as space. But as it came forth in the quotation above, she had in fact seen other sketches of the entrance counter prior to her leave of absence, without reacting to them at the time. Not until she returned could she see the sketch more clearly and undertake the translation, upon which she could act.

Supporter E: the notion of 'the competent citizen'

Finally, there might also be certain general societal tendencies at stake in Charlotte's account, based on a complex of concerns associated to globalization. Here, keywords like diversity, multiplicity, relationships, collaboration and cross-disciplinarity can be seen as mutually influential within issues ranging from business to religion. In this perspective, an *"open"* approach might be perceived as a sense of receptivity, in which a willingness to face the new and confront the unknown is central. The aspect involves not only an internal context, within which the end users are represented by the staff and their approach to work processes and collaboration, but also by the external community that potentially include municipal citizens and their increasing involvement in the service production. In such a perspective, the perception of *"openness"* as an idiomatic concept might indicate a much larger purpose: a program with a broader educational intention of creating the open/competent/capable citizen (Latour 1991). The establishment of the department that Charlotte was in charge of (*"The Citizen Service Center"*) is a part of this tendency in the Danish public sector. In these centers, clients are increasingly invited to partake in and gradually take over certain parts of the community service (www.indenrigsministeriet.dk/publikationer).

Such developments of the public sector, which might include concepts like 'the competent citizen' or 'the open municipality', might bring us back to the balance between open and closed as perspectives or viewpoints. Here, the mutual dependency of these positions again seems relevant to consider, with regards to the

spatial organization of a work environment and its functionalities. The opposite of an entrance counter as material object, could be its absence: an open area or a void. Dislodging the entrance counter by removing certain of its traditional codes and artifacts might thus challenge some of the well known demarcation lines that characterize the conventional relationship between staff and client and thus the general idea of community service. However, a different approach to the entrance counter in a municipality town hall is still likely to reproduce many of its basic functionalities – in a new format. My field notes from one of the participation workshops outline a discussion about such possible new approaches to the entrance counter as a passage point:

"Participant NN remarks that the clients often need a personal contact when entering the town hall: many people are not entirely aware of the purpose of their visit or the kind of help they can get to match their problem. The idea of a host or a hostess: a person to meet the clients as they enter the town hall is being discussed. At first, the other participants in the workshop are skeptical towards such an approach, which is being compared to a clothing store, where the consumer is being approached immediately when entering the store. But the point is subsequently brought into the final presentation in the workshop, as a future option."

Here, one of the basic attributes that an entrance counter traditionally holds is being challenged. The counter itself appears as absent while the contact between the clerks and the clients is suggested to take place in a more direct form. Before discussing how the relationships between these 'supporting' actors might have contributed to Charlotte's aspiration to redesign the shape of the entrance counter, I will turn to some of the actors that potentially obstructed her on the journey.

Obstructer A: the fixtures

In terms of the resistance Charlotte may have experienced in the process, there are certain aspects that need attention. First, there are certain practical matters involved in the renegotiation that would have had financial implications to them. When Charlotte returned from her maternity leave and saw the sketch to which she objected, the sketch had in fact been approved for a while. But more importantly, at the particular time when her objection was set forth, the fixtures of the building

were being planned. Substantial changes were thus hard to manage, with regards to legal contracts and technical coordination with various subcontractors. Also, the new town hall was perceived as a substantial investment within the public sector system, and it was crucial that the time schedule and the budgets were being kept[12].

Obstructer B: the collaboration between Charlotte and the designers

The collaboration between Charlotte and the project's various designers might not necessarily have supported her aspiration, with regards to general differences in method and language (cf. Chapter 4). Here, it seems that organized end user participation (with the client as 'a compound body of users') could potentially represent a substantial challenge to the traditionally ambiguous outline of architectural design practice. The renegotiation of the shape of the entrance counter, as an additional design process, is thus likely to include complications, linguistically as well as with regards to content. When Charlotte thought her initiative of a redraft would cause the architects to respond, she was taken by surprise, as we have seen it in a quotation above in this section:

"I was thinking 'throw me 3 sketches in return [to my input] to see if that was what I want… But that didn't happen. I did the drawing myself, with a funny feeling thinking 'this is not what I'm educated to do'. But we did find a solution."

Here, all of the involved parties seem to be treading through unknown territory. Charlotte responded with reference to her perception of some of the project's central aspirations. In her view, the shape of the entrance counter disregarded the organization's ambition *"to signify openness"*. Based on this, she used her obligation as a *"co-contributor"* in the design process. The architects, on the other hand, were most likely confused by her initiative. According to Charlotte's quotation above, they didn't act as architects in this situation. In architectural

[12] A general argument in the discussion of the new town hall as an investment, however, was that the expenses of the building would compensate for the substantial costs of the municipality administration's many expensive leasing agreements. Due to general growth in the municipality, the organization's activities had expanded and had been spread out on five different addresses in the area. With a new building, the activities would be assembled and the leasing expenses avoided.

design processes, conversations with the client that lead to redrafts and redesigns are not unfamiliar. What seems to have made this situation different was rather the inappropriate timing with regards to the planned fixtures, and also the dislocation in responsibility between the architects and the process designers that the incident seemed to cause.

Obstructer C: Charlotte as designer

The level of detail in Charlotte's intervention might also have confused the architects. Here, she interfered directly with their work, trying to come up with a better version. This is a point that might characterize a more general challenge between participation activities and architectural design. In an interview, one of the architects in the Town Hall project points out that:

"[V]ery few ordinary people are capable of comprehending how they would be well seated in a spatial layout: where to sit, whether the tables should be circular or square. So I basically mean that you pull the wool over their eyes by saying that 'let us go out [...] and draw up a few chalk lines so you can show us how you'd like to sit'."

His point has been outlined several times above in this thesis. It questions the level, to which users, *"ordinary people",* are fit to contribute to such complex processes as the development of an architectural design. As discussed above in section 5B, one suitable answer might be that they are not fit for the task, due to the lack of experience necessary to understand the work practice that the future building would actually accommodate. Another answer could be that it refers to a contemporary shift in the relationship between architect and client, due to certain societal tendencies, and that this shift has implications. One of these implications is the increasing tendency for clients to require a closer involvement in the emergence of the actual design solution (e.g. Yoo et al. 2006). Here, it seems important and necessary to discuss whether a closer interaction between architect and end user would deprive or provide the architect authority in the design process. If we consider end users as *"co-contributors"* who represent a new type of input to inform the architectural design process, the process through which this input is provided, still seems unclear. When the architect questions the user's ability to comprehend the complexity of the spatial layout in a forthcoming building, he also

questions the process, within which the users are asked to contribute. Here, the *"chalk lines"* may have referred to the demarcation lines, used in the *"1:1 workshops"* in the Town Hall project, where the staff at large where invited to contribute to designing their department's spatial layout.

Obstructer D: the indistinct role of the process designer

In the quotation above, the architect brings the role of the process designer into the lime light. The process designer represents the mediator who, in current building projects like the Town Hall, is meant to secure and uphold the closeness between client and architect. In this project, the division of labor between the process designers and the architects was quite distinct, despite of the untraditional aspects of the setup[13]. Here, both parties stuck to their initial position and thereby secured a stable relationship throughout the project. But in situations like the renegotiation of the entrance counter, the defined division of labor was challenged, which caused confusion for both parties. Charlotte characterized this confusion as *"some friction in terms of who should take this on"*. The point outlines the general novelty that permeates organized end user participation as a method in architectural design processes. The position as process designer represents a different methodological approach, in which the client organization is seen as a primary resource to support and inform the architectural design solution. In Chapter 1 I provisionally outlined this client position as being a 'compound body of users'. To give this 'body' a central role in the design process, potentially relocates the other players in the organizing of a building project. Here, the process designer might contribute to facilitating such relocation, but the role also needs further interrogation in order to unfold.

Obstructer E: the notion of 'open'

As I have indicated above in this section, the notion of 'open' might be considered a paradox in this context. Charlotte based her translation of the project's central aspirations on her experience from the participation activities; internal discussions; official documents, and other things. But as discussed in

[13] In the project, the process designer was hired with direct reference to the MD, outside of the project consortium of contractor, architect and engineer.

section 5B, the implications of the notion of 'open' might indeed be said to have caused substantial anxiety among the staff at large, in particular with reference to the open office layout. What came forth as the epitome of her argument (the organization's aspiration *"to signify openness"*), conversely seem incompatible with the organization's resistance to the open layout as a structural principle.

Design happens in continuous processes of negotiation and change

As indicated in the paragraphs above, the various factors that supported and obstructed Charlotte's argument might be perceived as links in a chain of events. It was this network that made up her ability to negotiate the shape of the entrance counter (e.g. Callon and Latour 1981, Callon 1986, Latour 1999). We might say that the indistinct aspiration of signifying *"openness"* got framed and reframed through Charlotte's emerging argument. Through this process, the aspiration became materially enacted. This idea of reframing is illustrated in diagram 8 below. Here, the network of actors that Charlotte's argument was able to mobilize instigates an interruption to the general design process. This disruption causes a displacement, with regards to the organizational as well as to the architectural design.

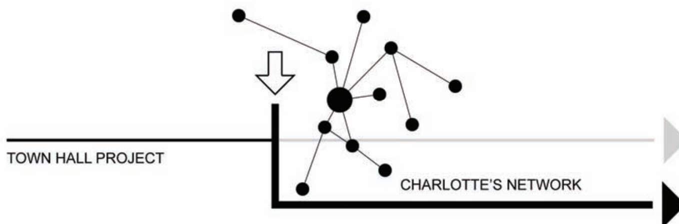


Diagram 8 shows the Town Hall project as a timeline, to which a mobilized network of actors ('Charlotte's network') initiates a particular change to the design(s) at stake in the project.

In an interview, the MD reflects on the design of the entrance counter as a continuous process of negotiation and change:

"The Citizen Service [Center] is a really good illustration: it hasn't yet found its final configuration. Not even with a better entrance counter or with a better queuing system. I think we'll see completely different formats to this coming up – something more open and less influenced by counters. It is a development."

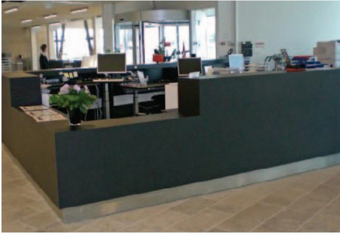
Here, he seems to refer to the idea brought forth by some of the staff: that of a host or hostess as a device to accompany clients as they enter the town hall, mentioned above in this section. Such a social technology to support the relationship between the municipality administration and its clients would indeed be *"more open and less influenced by counters"*. And as it turned out, changes with regards to the reception area and the entrance counter were already underway in the *"Citizen Service Center"*. In a subsequent email correspondence, Charlotte illustrates how the negotiations of these designs continued, according to the organization's evolving requirements:

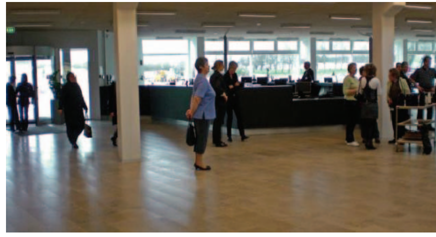
"[W]e have already changed the setup in the reception area and we also got an agreement to make the counter itself 30 cm wider [...] in order to create an increased level of discretion for our clients."

Added to this extension, a distinct level difference has also occurred in the middle of the entrance counter, which was not there in the approved sketches. This *"drop"*, which is illustrated in photo 1 and 2 below, has also been applied at a later stage. Charlotte explains:

"No, the drop hasn't been there all the time. It was made in the new version so that children and disabled can sign their passports. Unfortunately, the drop has become too wide, so that [things behind the counter] have become way too exposed, which is why we are now working on getting the counter closed towards the atrium, with a smaller drop – approximately 1 meter – next to the check-out."

Here, the design process continues and the ambiguity between the concepts of 'open' and 'closed' persists.





Photos 1 and 2 show the entrance counter in the reception area as it appeared at the launch in January 2008. Here, the *"drop"* in the object's physical structure is apparent in both photos.

Through complicated processes of negotiation and decision-making, Charlotte succeeded in getting the entrance counter redesigned, in order for it to become a worthy representative for the project's central aspirations. Based on her translation and subsequent ability to mobilize support for this argument, the physical symbol eventually adapted to suit the cultural. But as illustrated above, the design process continued. In the first of the two quotes above, her translation of the central aspiration might rather be said to move towards prudence. Here, she emphasizes the entrance counter's obligation *"to create an increased level of discretion for our clients"*.

Translations are necessarily open-ended. As was also pointed out above, we can imagine a situation, in which the chain of arguments came out differently: where the physical object would stay put while the cultural interpretation (of the object) would be renegotiated and readapted. Matters obtain meaning through the network of actors that inform their content. In this perspective we might perceive organized end user participation as a situated vehicle: when introduced to new actors that inform new networks, the results could fall out differently. It forms an opportunity to continuously negotiate balance in contexts that are necessarily represented by constant changes and developments, as we know them in organizational life. In the Town Hall project, an extended amount of participation activities were explored as a means to secure a closer link between the design and the activities it was supposed to accommodate. In an interview, the MD reflects on Charlotte's reaction to the sketch of the entrance counter, with reference to how conversations about the architectural might enhance the ability to comprehend the organizational:

“[T]hey experience a clash between the way of thinking that has been fundamental for the whole citizen service concept, that is, ‘the open’, ‘the town hall’s external face’, ‘a helping hand to the clients’ – that this doesn’t get physical support [through the design outlined in the sketch] in a way that makes it possible for them to sufficiently do their job. [...] So I suppose it signals [a need for a] dialogue about how a Citizen Service [Center] should be arranged, when we aim to give it such organizational weight and central location.”

In this quotation, the MD constructs the link between the architectural and the organizational design processes: between the central aspirations (*“the way of thinking that has been fundamental for the whole citizen service concept, that is, ‘the open’, ‘the town hall’s external face’, ‘a helping hand to the clients’”)* and the spatial framework these should be represented by (the *“physical support”*). He connects the staff’s ability to *“do their job”* to the support from the spatial layout, and brings the discussion forth to a more general level with regards to *“how a Citizen Service should be arranged”*. Here, he indicates that one relevant way to discuss the organization of such a department, which is a central hub in municipal administrations in contemporary Denmark, is through the spatial layout. With such an approach, space might be said to gain a central strategic position.

CLOSING COMMENTS

This section has illustrated how organized end user participation seems to hold the potential to mold or influence the emergence of an architectural design. With the sketches of a particular architectural object, an entrance counter, substantial changes were initiated, which involved the organizational as well as the architectural design. On this basis, a few analytical points have occurred.

The story’s point of departure was that a staff member, Charlotte, who had been actively involved in the organized participation, returned after nine months’ leave of absence. Returning to the scene, she found developments in the architectural design that substantially mismatched her expectations, with reference to the participation activities she had been involved in before her leave of absence. In this

situation, participation became a medium, through which Charlotte undertook particular translations of the organization's strategic aspirations. Based on her previous experience, she initiated a substantial change process that not only had implications on the shape of the entrance counter. It also involved the organizational design.

From the discussions in section 5B we know that the balance between 'open' and 'closed' had reached a sense of stability among the staff. Through a substantial amount of participation activities, the organization had talked their way through the implications of the open office layout. Skepticism towards this structural principle persisted throughout the project, but the ability to discuss it and comprehend its content, also increased. When Charlotte returned to the scene after her leave, she disrupted the sense of continuity or stability, with regards to the notion of 'open'. Here, Charlotte's translation of a vague organizational aspiration (*"to signify openness"*) and her ability to gain spokesman-ship made her capable of initiating certain design adjustments. In this way, we could say that her initiative caused a disruption, which again caused a discontinuity, with reference to the stability that had established in the organization. Having been on leave for nine months, Charlotte became the organization's 'wild card', who became able to form 'connections' between the two design processes. Disengaged from the collective sensemaking process, she initiated a change event that reintroduced the idea of the organization as 'open', for example with reference to written project outlines.

Not only did her initiative induce change on an organizational design level. Also, her spokesman-ship involved a complex network of components that together formed the argument that caused an architectural redesign. A central point that this story discloses might thus be that design contexts are unstable. Stability may accumulate as we obtain knowledge and as we modify and change. This goes for the emergence of organizational as well as architectural design. But these design settings are always potentially subject to disruptions and thus to discontinuity; someone or something that turns up and that holds a different viewpoint from the one that is established. When Charlotte returned from her leave, she looked at the events from a different perspective. From this alternative viewpoint, she undertook her translations and started to shape her arguments. Organizational life is full of disruptions and discontinuities of this kind. When Charlotte's story becomes particularly interesting to my purpose here, it is because

it illustrates a link between the organizational and the architectural design process. She applies architectural design features as a means to undertake an organizational translation, and on this basis she initiates an architectural redesign.

In these two sections (5B and 5C), I have illustrated and discussed how organizational issues were brought forth, in the course of organized participation activities. In both stories, the notion of 'open' played a central role. Here, 'open' seems to represent a quality that modern public organizations aim to be represented by, and thus a feature that the recently merged municipality administration was striving for. In the story about the Town Hall project, this feature comes forth through spatial factors (the open office layout and the entrance counter) that become drivers in the narrative and vehicles to discuss various organizational issues. In this way, the design of an architectural object might be seen as an opportunity to explore the assumption that the modern public organization should aim to reflect openness.

CHAPTER 6: THE MIKADO HOUSE PROJECT[14]

INTRODUCTION

In this chapter, I aim to unfold the story of the development of the Mikado House project. Based on this design process, Danish architecture firm, Arkitema attempted to explore organized end user participation as an integrated part of the firm's architectural design practice. The project held several objectives. First, it aimed to design and build a house to accommodate Arkitema's activities in Copenhagen. Second, it aimed to establish a new method to be applied in Arkitema's product portfolio, in which organized end user participation was an important component. The two aspirations might be said to have served as vehicles to support a larger course that involved the firm's aspiration with regards to its future practice. Here, characteristics such as *"knowledge-sharing"* and *"cross-disciplinary"* were repeatedly brought forth. Third, a part of this larger cause was also to undertake a substantial reconfiguration of the organization's structural

[14] Two things should be noted with regards to the Mikado House project. First, the project has been subjected to substantial changes underway. These changes significantly changed the conditions, upon which the project was built. As an architectural design project "The Mikado House" went through at least two main phases. The first phase is the one that has been explored in this study. It was in this phase that the organized end user participation was introduced as an integrated part of the architectural design process and a group of process designers were included in the design team. When I refer to the Mikado House project in this thesis, it is thus the first phase I refer to (unless otherwise is pointed out). Second, the project's official name "The Mikado House" was in fact not established in the first phase of the project, which is the period of time that my study refers to. As the project didn't have a name at that time, but rather many potential names that were used randomly (for example The A-House; The Arkitema-House; The Ørestads-House; The Vilnius-project, and more), I have adopted the name of the Mikado House, which is the name of the final building (due to be launched in 2010).

framework. The purpose of such a rearrangement was not only to develop the firm's general business strategy and to meet current societal requirements. It was also to accommodate organized participation as a method. The following text will predominantly focus on the first two objectives.

It is important to emphasize that Arkitema's own staff members upheld most of the roles in the project (as client, end user, architect, and process designer), a situation that indeed made the setup untraditional and in several ways intricate. The project undertook substantial structural changes during the course of my study, which also changed Arkitema's role. One of these changes involved a large project extension, upon which new investors took over the project and thus also the position of client (as building owner rather than end user representative).

I have organized the chapter in the following way: In section 6A I first present Arkitema, the firm and its architectural design practice. Here, I attempt to explain the latter by suggesting two particular approaches to the design practice that seem to characterize the firm's current way of working. On this basis, I second provide a sequential description of the main events that constituted the Mikado House project, as a design process. Here, organized end user participation was introduced as a method to support the architectural design process. The method was not established in the firm at the time. Rather, the Mikado House project was seen as the framework, within which the method could emerge and be explored. The subsequent two sections, 6B and 6C, form the analytical part of the chapter. Here, I look more closely into some of the events in the project, in order to understand more about the implications that the participation activities might represent for designers, as a method.

In section 6B, I look into the collaboration between the two groups of professionals that formed the project's design team: the architects and the process designers. In the project, the members of the design team aimed to carry out the architectural design process, while at the same time explore end user participation as a method to inform the design solution. Here, they tried to comprehend what went on around them, in order to develop a design concept and to maintain the action of designing. In the text, I present various examples of the design team's attempts to make sense of the events they were subjected to, and some propositions to explain their struggle. I approach these events and efforts as processes of

organizational sensemaking, as discussed by Karl E. Weick and others (Weick 1979, 1995, 2001, 2002, 2006, Weick and Browning 1986, Weick et al. 2005).

In section 6C, I focus on how certain results from the participation activities were brought into the architectural design process, as a means to support the process of designing. The point of departure in the story is how the metaphor of a helix came to form a point of reference in the process, and how this reference seemed to travel. Through extended processes of translations and negotiations, the helix seemed to circulate through different shapes, representing a point of reference to the participants in the project. In the text, I aim to discuss and illustrate what the helix seemed to refer to, and also the various formats that it took on. Due to severe changes in the market for building design, the Mikado House project went through substantial modifications, during the process. In order to meet the project's new financial conditions, the design process was restarted, and the reference of the helix was left behind. In the last part of the section, I briefly touch upon whether the final design of the house – the one that made it through the new conditions and eventually reached the client's acceptance, might be said to have succeeded. In order to discuss these issues of translation and circulation, actor-network theory will serve as a source of inspiration (Latour 1991, 1999, 2006, Akrich 1997).

SECTION 6A: AN INTRODUCTION TO ARKITEMA AND TO THE MIKADO HOUSE PROJECT

THE FIRM

Arkitema seems to be one of the firms in the field of contemporary architectural design in Denmark that is surrounded by ambivalence. Based on a strong tradition for residential buildings and public projects, the firm seems to have kept a strong image as thorough and reliable within these areas, throughout the years.

In 1995, the group of five founding partners extended with four new owners[15], concurrent to that the firm's management structure also changed. With this managerial restructure, Arkitema seemed to launch a new era in terms of the firm's subsequent business development. The new managing director (entitled the MD from here onwards) was also a trained architect, a management principle with strong traditions within the profession (e.g. Gutman 1988, Cuff 1991, Larsson 1993). But in contrast to tradition, the new Arkitema MD had many contemporary interests, within areas like business strategy, growth and globalization.

This turn towards 'the new' might be said to have had significant implications, not only for the firm's design practice, but also on its recognition in the field. For better, in the sense that it has become known as a firm, able to adapt and respond

[15] There have been three partner extensions in Arkitema: from 5 to 9 in 1995; from 9 to 11 in 2002 and in 2005 from 11 to 13.

quickly to new tendencies. For worse, in the sense that the strong focus on the new, might lead to mercenary: That growth and profit rather than architectural quality and respect for the trade, form the firm's point of departure. Boring and daring, traditional and experimenting: Arkitema seems to be surrounded by a certain tension, which might be seen as a part of the firm's problem, but also a part of its success.

In a blunt version, one might say that Arkitema is characterized by two positions that are not opposites, but which involve different viewpoints to architectural design practice. The first position represents the traditional features of the trade: its familiar market areas and design approaches, while the second attends to current tendencies that might influence the trade's forthcoming developments. Here, the implications that such changes might induce for contemporary architects, are in focus. Although Arkitema, as an established company heading toward its 40'th anniversary, might be said to be based in the first position, a lot of attention has been placed on the latter. This focus has taken shape of investments in various experimental issues: The development of organized end user participation as a byproduct to the firm's traditional business portfolio and also the launch of an Arkitema office in Beijing in 2004, represent two different examples of this focus on new market opportunities.

The content and implications that these two positions represent seem to materialize in different ways in the firm's daily practice. When pointed out here as opposites, the purpose is merely to appoint that each position and the relationship between them seems to have had significant impact on Arkitema as a firm: On the internal sense of identity, as well as on the external image (Hatch and Schultz 1997).

TWO DESIGN PRACTICES: THE CLASSICAL AND THE BRICOLAGE

The two positions, provisionally indicated in the paragraph above, have been helpful, in order for me to be able to comprehend Arkitema's design practice as it

was carried out in the Mikado House project. The positions established themselves as a kind of perceptional tool, through which I navigated through various events that took place in the project. Below, I aim to elaborate on the idea of these two positions, by suggesting an analytical distinction between them as two approaches to the design process, both of which seem characteristic of the current design practice in Arkitema.

I suggest the first position be called ‘the classical design practice’, which is broadly divided into two main fractions of professional architects. The first fraction is distinguished by the conceptual work that happens before a project is established, for example in relation to architectural competitions (in Arkitema entitled *“the competition architect”*). The second fraction comprises the activities that take place after a project has come into the portfolio: the multitude of developments and negotiations it takes to turn a design representation into an actual building (in Arkitema entitled *“the project architect”*). Both fractions are predominantly based upon features that might be characterized as ‘traditional’ in architectural design.

The second position differs from the traditional approach by working with design development in a way that is inspired by other professional fields, such as ethnography (e.g. Blomberg 1993, 2005, Forsythe 1994, Crabtree 1998, Ivey and Sanders 2006, Dourish 2006). I suggest this approach be characterized as ‘the bricolage design practice’. By bricolage I mean an approach that is based on a compilation of different material, and on a process that can support the production of such matter. In this practice, the design process might be said to be extended through, among other things, a more integrated dialogue with the client organization. Here, ongoing exchanges between the design team and various client representatives are considered a central vehicle in the creative process.

In Arkitema, the development of the Mikado House project represented the classical as well as the bricolage practice. The purpose of this division is thus not to present the two practices as dichotomies. Rather, it is to indicate that the work of a contemporary architect is currently subjected to an expanding scope of content. All Arkitema architects would most likely represent aspects of both, with the mixture of interests, lineaments and attributes that such design practice appears to represent.

1. The classical design practice: a fixed brief as the point of departure

"It's classic in the sense that you get a brief that you don't as such discuss. […] you just get on with it and start to talk about construction material and fabric and form and function."

In this quotation from an interview, an Arkitema architect points out a few central features to describe the classical design practice. It is based upon a brief from the client; you don't discuss the legitimacy of its content – you *"just get on with it"*, and then you quickly start discussing features of tactile observance, with regards to what the house is going to look like. Having acknowledged a few things about the complex process from which a written brief is transformed into the design of a building, this version might sound simplified. Based on my engagement in the project, however, my impression is that the written brief serves, not only as a significant catalyzer in the design process, but also as a grip to refer to. Another architect in the firm describes this in an interview:

"It has a lot to do with context. You can't escape… there is after all a client. And whether he has ordered [end user participation] or not, that doesn't really matter. He has some requirements. Whether it's economy, appearance or whatever it is […] There are some rules, or whatever you call it, that you use as a point of departure. And of course you try to come up with some kind of concept that you think will fit in, and that's what you try to sell him."

Here, brief and client seem to come out as one unit. The brief represents the client and serves the architect with context, requirements and rules: input the architect is expected to accommodate. I have come across expressions like *"The architect has always talked with the users!"* on numerous informal occasions in Arkitema. Here, the argument seems to be that the relationship between architect and client (as the person or persons responsible for the project and thus for the content of the brief) is a natural point of departure in architectural design. The notion of proximity is thus not considered new, but rather represents the traditional dynamic between supply and demand. The debate on extended contact with the

client that went on in Arkitema during the course of my engagement was, for some, thereby perceived as redundant.

In the quotation above, the architect indicates that it's not pivotal whether the requirements from the client include end user participation or not. As an outsider, I first perceived this as a contradiction: He says that input from the client forms the central point of departure in the design process, but it doesn't seems to matter whether or not the users are actually involved? Later, I realized that the two didn't exclude one another. Architects (for example in Arkitema) are not particularly interested in organizational life and the vast complexity of the social interactions that people undertake within the framework of a building. Their educational program doesn't train them to comprehend such practice. One Arkitema architect explains it the following way in an interview:

"Most architects are, after all, trained to do design, and at the school of architecture, very few of the instructors are interested in the [organizational] part. You are, after all, still trained to be the creative artist or the artist architect, who sits by yourself, sketching the big lines [...]."

In a later informal conversation, the same architect emphasizes that for trained architects to be responsible for the communication and interaction with the client as 'a compound body of users' *"would, in fact, require a whole new [architectural] education."*

With regards to the position of the brief of requirements, it might be relevant to return to diagram 1 (cf. Chapter 1), in which the traditional structure of the design process was illustrated:

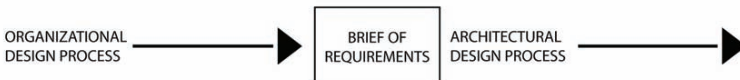


Diagram 1 illustrates the traditional design process, in which the production of the client's requirements and the development of the architectural design solution were perceived as two, sequentially separated processes.

With an extended contact with the users and the idea of an input produced concurrent to the architectural design process, the traditional structure seems to be substantially challenged. These challenges seem to be included in the structure presented in diagram 2 that was also introduced in Chapter 1, in which the two design processes are perceived as concurrent. To manage such a different design process might be what the architect refers to in the quotation above when she initiates that it would *"require a whole new [architectural] education"*.

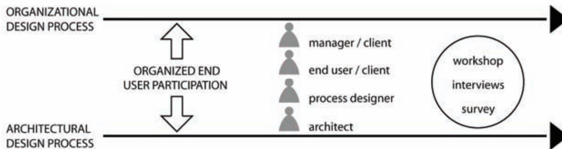


Diagram 2 represents the notion of the parallel design processes, in which organized end user participation is applied as a means to explore the potential link between organizational and architectural design processes.

2. The classical design practice: beyond articulation

One statement I have been subjected to on several occasions in informal conversations as well as in interviews in Arkitema is: *"I don't know how to explain it"*. Architecture is a practice that is difficult to capture, consisting of complex processes of embodied experience, routine, relational conditions and technological skills. As one Arkitema architect remarks in an interview:

"[...] it's not always possible to explain, and during the process things might occur – well, sometimes a bit like an artist, without drawing more of a parallel there – that you make something without really knowing why you do it, but then you begin to bring in some of the arguments and adjust it, so that the things you have made actually fit with what you have kept in the back of your head. This process is really vulnerable, 'cause when you're not rational, you can't always explain [it] to others"

Although the comparison between architect and artist is denied by the architect in the quotation above, he acknowledges that the conceptual part of the design process might resemble the way that artists are known to go about their work. It is

hard to articulate and capture in language, and also hard to generalize. During my engagement with Arkitema, I spent a predominant part of my time together with the design team involved in the first draft of the Mikado House project. For a substantial period of time, I listened to their conversations, exchanges and frustrations. As an outsider, I experienced a considerable mismatch between the apparent richness of these discussions, on the one hand, and the architect's ability to describe to me what their ideas actually meant in plain language, on the other. But although the efforts to develop the design seemed inscrutable to strangers, and also hard (for anyone) to assemble in an extrapolated format, it was apparent that the architects understood *each other*. Informal conversations I had across the firm throughout the study confirmed the impression of a profession permeated by a concealed language and an incomprehensible method (cf. Chapter 4).

The Mikado House project, on the other hand, was characterized by substantial attempts to extend the architectural design team with members from outside of the field. But as it will be described below, these expansions had considerate implications for the process of designing.

3. The bricolage design practice: an open brief in a parallel design process

While the written brief serves as the central point of departure and marks the proximity between client and architect in the classical design practice, the bricolage practice holds a rather different position:

" [In this type of process], you write things down by sketching and drawing while it's in the making, and this is what you can do when you involve the users underway. You can visually test the solutions and say: 'when you say this and this, do you mean like this?' We also test it through 3D drawings of the spatial layouts and say: 'could something like this work?' I don't think you can really do that when the stuff is all written down [as in the traditional brief]."

In this interview, an Arkitema architect attempts to describe one of the central features that characterize the approach that Arkitema attempted to explore, in the course of the Mikado House project. Here, the idea is that the brief of requirements

and the design solution emerge in one concurrent process. In the project, expressions like *"the dynamic brief"* were often used to outline a design process. It is less fixed than that of traditional projects, emerging as a part of the continuous dialogue between the client and the design team (cf. diagram 2).

"The method is different. [...] To me, it is fun to challenge the brief and the conditions that architecture is based upon, and I think it's more interesting to have a client or at least a brief, that encourages discussion. [...] I like to get an assignment that isn't very well defined."

In this quotation, which is taken from an interview with an Arkitema architect that could be said to represent central bricolage features, describes the approach she prefers in her design practice: an imprecise approach that includes negotiation between the input from the client and the creative design process. Such an approach does not only involve an open and concurrent discussion. And as she points out later in the same interview, it might also extend the process:

"If you want to work intensively with that discovery phase, you can't at the same time want a key or a list [of client requirements], as that might not occur in one movement, but over a longer period of time."

In the bricolage approach, it seems that the brief doesn't, as such, represent the key to initiate the creative process. It rather emerges over *"a longer period of time"* that corresponds with the development of the design itself. Compared to the traditional sequential structure of an architectural design process, the approach thus seems to reshuffle the factors that constitute classical design practice. In an interview, another bricolage architect suggests a reversal of the traditional creative process:

"I think it could be really interesting to begin working in a reverse way: to start with the inside of the house or a certain part of the house. But it requires that you sketch in a different way, that you work in a different way than thinking physical space and walls and ceilings and staircases and all those things at once and instead work on a more abstract level to begin with. [...] [Rather] you start on the inside with smaller parts and work your way outwards – so the overall concept doesn't come from the outside, but somehow from the inside."

4. The bricolage design practice: inviting the users into the design process

"When we [as architects] work on projects, we know very little about the users. We don't know them, we don't know what they look like, we don't know who they are. […] As an architect, this has been the expected professional competence; that we're able to relate to people's lives and prerequisites and are able to give them what they need. […] [T]his is what we question and point out: you can't do that!"

In this same interview situation, this bricolage architect points out some of the complexity that architectural work in fact involves. The architectural product mostly refers to people and their social interactions. But as indicated above in this section, their educational training does not provide the architects with thorough knowledge of such social practice. The statement might thus reflect on the natural gap between the architect's classical design practice and the client's organizational practice. It points out that there are aspects of this encounter that the architect is not fit to handle. The bricolage practice seems to point towards an approach to the architectural design process that includes an extended collaboration with other professionals, who can represent a more extended understanding of the client's organizational practice. As I describe below in the outline of various occurrences in the Mikado House project, this type of collaboration might involve substantial challenges, for example due to distinct differences in method and language.

THE MIKADO HOUSE PROJECT: EXPLORING ORGANIZED END USER PARTICIPATION

In the rest of this section, I will provide a sequential outline of what I consider to be some of the main events in the first phase of the Mikado House project.

1. The Vilnius workshops

Shortly before the launch of the Mikado House project, Arkitema went on a 4-day teambuilding trip to Vilnius, Lithuania. Approximately 230 of the firm's 260 staff members participated in the event[16]. Here, a central aspiration was to explore new approaches to conceptual development and collaboration in architectural design practice, in order to produce ideas to support the design of the firm's new Copenhagen office.

The trip was thoroughly planned and prepared, with a tight program of organized exercises that were highly interactive and aimed to challenge the traditional approach to the architectural design process. The staff was divided into competing teams of approximately 20 people. Parallel to, and as a part of these exercises, each team produced proposal for a concept and a physical model for the design of the new office building. On the third day of the event, the models were launched in an exhibition and subsequently evaluated by an internal jury, on site. A winner was appointed and a dinner party closed the event.

2. The constitution of an untraditional design team

Returning to Denmark, the design process of the Mikado House project was formally launched. An unconventional design team was appointed, consisting of classically trained architects and also a new staff category of *"process designers"*. The latter group represented a small department of one anthropologist, one architect and one physicist (with a background in the area of 'user-driven innovation'), and the department held organized end user participation as a central part of its service. These two professional groups of classically trained architects and process designers with various backgrounds might thus be said to have differed substantially, with regards to language and method.

In the first months of the project, the process designers planned and conducted a number of interactive processes of participation: workshops, interviews, a survey and more. A broad range of staff members across the firm engaged in the discussions that these processes instigated. Parallel to, and as a part of these

[16] The average number of staff in 2005 (www.arkitema.dk).

activities, the team also tried to comprehend the ideas conceived in the Vilnius workshops, and discussed how these could be brought into the project as an initial resource.

In this initial period, the design team of the Mikado House project found it difficult to launch the actual design work. My engagement with the firm at large and also with this particular design team revealed that Arkitema architects are team players. But my field notes also show that they predominantly team up with people from their own breed (trained architects), and preferably with colleagues they have worked with on previous occasions. In the Mikado House project, the collaboration between such trained architects and the process designers from other fields and traditions proved to be a challenge, with regards to launching the design process and developing a design solution. The purpose of the collaboration was to contribute to establishing a new approach to the architectural design process, by including methods that were said to be based on ethnographic traditions. But what does the process designers' work in fact consist of in the context of designing architecture? In the following quotation from an interview, one of the process designers describes a few central aspects of the idea:

"I don't think it was merely user participation, I didn't think of it only as that. I thought it had more to do with understanding the user perspective, and I see this as more than just participation. I think that was my take on it from the very beginning: that the users are not one homogenous body, but that there are many perspectives at stake. This was what I tried to reveal. [...] How the world is perceived by the users, that's what I'm thinking about. You can of course never get the complete picture – that's part of the nature of anthropology [...] but that's the goal all the same. It is to question your own perspective – and I think that's basic in my profession, to focus on that."

Here, the process designer refuses that the method contains *"merely user participation"*, referring to the concrete and tangible interactive processes with end user representatives across the client organization. She rather perceives the contribution as one that brings the organizational perspective *into* the architectural design process, in a way that was not familiar to traditionally trained architects. By indicating that the approach gives the architects an opportunity to question their

own perspective, she also points to the fact that it might give access to information, otherwise inaccessible.

3. A parallel design process based on "the process perspective" and the emergence of "The Book of the House"

There were three closely intertwined features that seems particularly central to the way that the organized participation was being conceptualized in the Mikado House project. The first feature was the notion of designing in *"a parallel process"*. Here, the organizational requirements and the architectural design solution were supposed to inform one another in a concurrent and reciprocal process (cf. diagram 2). The organized participation activities thus served as an opportunity to disclose the needs and wishes of the client and to feed into the brief of requirements as a somewhat emerging document. The second feature was the idea of designing from *"a process perspective"*. Here, the concept of 'process' as a central aspect to approaching the creative process of designing architecture seemed to involve a close and continuous dialogue with the end users of the future building. This collaboration was seen as an integrated part of the design process. In this perspective, the end users were perceived as potential co-designers.

Architects generally acknowledge that their buildings go through changes according to subsequent usage, which is seen as a historically integrated aspect of the product. But such an ongoing dialogue between architect and client, as a central vehicle to crack the code of the actual design solution, substantially differs from the way trained architects capture the process of designing. Here, the client is not perceived as a singular person, responsible for the budget, but as a broader unit that I in this thesis characterize as a 'compound body of users' (cf. Chapters 1, 7).

4. A parallel design process: informing "The Book of the House"

As a practical implication of the two first features: the notion of designing in a parallel process and designing from a process perspective, a third feature might be considered. In the course of the Mikado House project, the conceptual idea of *"The Book of the House"* represented the emerging brief of requirements that was being

formed as a result from working from the process perspective. As I will describe and discuss below, this book was conceived as an empty document with pages that were to be filled on the basis of the occurrences that took place in the parallel design process.

The design process that was initiated to constitute the Mikado House project might be said to reflect the bricolage practice that Arkitema aimed to establish as a part of the firm's product portfolio, during this period of time. In the project, the aspiration was to produce a brief that developed parallel to the architectural design solution. *"The Book of the House"* thus came to represent the new method as a conceptual idea. My field notes report of the bricolage architect's explanation of this concept, from the initial meeting in the design team:

"The idea is not only that we sit down and develop a brief and give that to the architects, but that we develop it together throughout the actual process. Brief/house develop simultaneously, and everything is gathered in 'the book of the house' – the point of departure for a new method."

With such a point of departure, the traditional role of the brief of requirements, as a general guideline for the architectural design process, seems to get challenged. In the Mikado House project, results from the participation activities were attempted to be brought into the actual design, not only of the interior design and the building's spatial layout, but also of the exterior design construction. In this new collaborational constitution between architects and process designers, the identification of new spatial opportunities and new ways to utilize workspace were seen as central features.

4. Launching and continuing the Mikado House project: a collaborational experiment

As the Mikado House project was formally launched, the design team tried to find a way to begin the actual process of designing. But the team's internal division of labor and consolidation as a cross-disciplinary group was unsettled when the project started, and the members did not meet until shortly before the initial participation activities were set forth. The team thus found it difficult to get

the process started and to reach a mutual understanding of their obligations and responsibilities. The problem was not only to create an organizational framework that could set the design process into motion. It also involved the question of how to bring results from the participation activities into a format that could serve as a resource in the process of designing. This point thus regarded the process of producing the organizational input: from a myriad of thoughts and ideas from the end users to an actual usable input that could be inform the architects in their process of designing. Several of the problems that occurred throughout this time seemed to be caused by continuous communicational difficulties in the design team. Approximately one month into the design process my field notes report of a *"crisis"*:

"It seems that some sort of crisis has occurred in the team and their collaboration is being put to the test. The division of labor between architects and process designers is unclear and the level of complexity that the architects now get involved in, in terms of planning the forthcoming activities, seems very detailed. The architects seem confused as to what "The Book of the House" contains of and how this corresponds with the project's general idea, [...] and also to the role of the process designers and how they can contribute constructively."

With reference to the classical design practice outlined above in this section, the architects repeatedly called for a firm framework to support the design process: A brief of requirements to be used as the point of departure in the creative process, and an assembly of the material produced in the participation activities. To the architects, it seemed obvious that the process designers should be responsible for translating the material produced in the participation activities. The process designers, on the other hand, insisted that the results from the participation activities should undergo a translation, undertaken by architects and process designers in collaboration. From the process designer's viewpoint, the difference in perspective and the voluminous outcome produced by the end users was seen as a creative leverage. It was thus considered a potential contribution to the emergence of a design solution. As will be discussed in the next section, this notion of volume and translation seemed to involve a continuous discussion within the team. Here, the question was whether to work with many conceptual ideas concurrently and eventually let the solution emerge from that, or to search for one main concept from the beginning.

6. The Mikado House emerging: a helix that informed the exterior and the interior design

Despite the collaborational difficulties that the Mikado House project was subjected to as a design process, new conceptual ideas did indeed occur as a result of the endeavors. Here, new ideas developed, with regards to the exterior construction as well as the interior design. Although several metaphors were involved in the course of the project, both designs (exterior and interior) might be said to have been built upon one main conceptual metaphor: a helix. In terms of the exterior design of the building this point of reference came forth first as one, and eventually as two spirals of curved loops that ran through the house as a building construction. The concept was characterized as *"the double helix"*. As for the interior design of the building, the helix was transferred to the idea of a scenic route, which in Denmark is publicly entitled *"Margueritruten" ("The Marguerite Route")*. In a national context, Margueritruten represents fourteen chosen landscape routes that are meant to cover the country's most scenically beautiful parts.

Based upon her professional training, one of the process designers remarks how the narrow scope on one conceptual idea, upon which everything was based (the helix) can be problematic, when challenged by a project's external reality:

"And the problem was, that once it got challenged, because it was financially undoable, everything was lost, 'cause they had forgotten where all these things came from, and they got them all hooked up on the helix and there was no alternative. And that meant that if you cut off the helix, everything was somehow lost and you were supposed to start from scratch.[...] But if we'd had various possibilities – in fact, I think, the more different, the better - then we'd have had some kind of latitude to it, when we were challenged financially. And we could have taken some of the elements and said: 'there are some good things in these concepts, how can we combine some of these elements in a third concept?' [This] would be something entirely new."

Here, she explains the opportunities that the process perspective might embody: if you have more material, there is more to choose from and more ways to connect

or combine the different factors. By bringing diverging perspectives together, a stock of matter can be produced, in order to form *”something entirely new”* or *“a third concept”*.

7. Breakdown: financial, collaborational, conceptual

As the general market for building design went through extensive changes during this first phase of the Mikado House project, the design solution of the double helix turned out to be financially unfeasible. Eventually, external investors took over the project. The original idea of an Arkitema domicile (approx. 6000 m2) developed in collaboration with the end users (the Arkitema staff) and owned by Arkitema’s partners, thus turned into a large office building (approx. 23000m2), owned by a professional property firm. In this extended version, Arkitema represented only one of the future tenants of the house. The other tenants (and thus end user representatives) were unidentified during the development of the architectural design concept. In this perspective, the participation activities became an impracticable approach.

Based on the developments on the market, organized end user participation became increasingly difficult for Arkitema to explain and justify to clients, as a central service product. Today, end user participation lives on in a revised version in the firm and is being used in fragments by some Arkitema architects. But the general ambition of establishing this method as a part of the firm’s product portfolio was abandoned by the end of the first phase of the Mikado House project. Eventually, the department of process design closed.

In the second draft of the Mikado House, which took place after my field work, a new team of Arkitema architects were appointed to form the Mikado House design team. Most of these were affiliated to the firm’s Aarhus office, so as to detach the design team from the end users (who were represented by the Copenhagen staff). According to subsequent conversations I have had with the staff involved, several attempts were made to integrate the results from the original participation activities into the new project. But due to financial, and possibly also to practical reasons, these efforts of transference do not seem to have been followed through. Several of the staff involved in the project’s first phase had

either left the firm or moved on to new projects, and there were no process designers actively involved in the second phase.

Arkitema managed to develop a design that was aesthetically coherent and in correspondence with the budget. But based on the project's initial objectives, it seems necessary to discuss whether the connection between the participation activities and the design solution of the Mikado House might be said to exist, with reference to the project's final developments. The question seems to be what it takes to secure recognition between such social processes of interaction, on the one hand, and a material representation of a building, on the other.

The link between 'the organizational input' produced by the end users in the participation activities and the emergence of an architectural design solution seems to be dependent on the way this link is being framed, presented and organized. In section 6C below, I aim to illustrate and discuss how the reference of a helix appeared to contribute to maintaining a form of recognition in the first phase of the project: from the trip to Vilnius through the interactive workshops, interviews, conversations and presentations. However, this reference might be said to have broken, based on how the events in the project developed. As one of the architects involved in first phase, remarked:

"What they get now is an ordinary office building. It might be a fine house, but it's hard to catch sight of the process we went through."

This notion of organizing, utilizing and recognizing the participation activities as an integrated part of an emerging architectural design will, in different ways, be discussed in the following two sections.

SECTION 6B: COLLABORATION BETWEEN ARCHITECTS AND PROCESS DESIGNERS: ATTEMPTS AT SENSEMAKING

INTRODUCTION

In the previous section, I aimed to present a provisional outline of Arkitema and the two distinctly different design approaches that appear to constitute the firm's current architectural design practice. In addition, the section provided a brief abstract of some of the central events that took place in the course of the Mikado House project. In this section, I address how organized end user participation was brought into the project as a method and how the design team's managed to collaborate in this process.

The project served as an opportunity to explore a new approach to architectural design development. Here, organized end user participation, as a means to inform and enhance the architectural design process, was seen as the central component. The approach combined classical architectural skills (represented by the architects) with knowledge about organizational practice (represented by the process designers). This experimental combination thus made the design team's ability to collaborate crucial to the project's success.

There were certain central features that constituted the team's task and that made the design process untraditional. The development of the architectural design was expected to take place parallel to – and as an integrated part of – the end user participation activities. In this way we might say that the architectural design solution was supposed to emerge while the brief of requirements was being produced. Here, the organized participation can be seen as a framework, through which organizational practice is identified and thus also as an opportunity to inform the organizational design. Based on this complex setup of intertwined features, the design team attempted to make sense of the events they were subjected to – in communicational efforts that often failed. Interested in exploring the potential link between organizational and architectural design processes and the possible implications that such a link might contain, I discuss why the collaboration between architects and process designers in the design team came out as so difficult. I have approached the events and efforts that took place in the project as processes of organizational sensemaking (Weick 1979, 1995, 2001, 2002, 2006, Weick and Browning 1986, Weick et al. 2005). Here, change is perceived as a point of departure, and language and conversation are seen as an opportunity to make sense of the change. A significant challenge among the members of the design team seemed to be that their professional language and methodological approach to the design process substantially differed. This notion of linguistic challenges will be discussed through the concept of polyphony (e.g. Hazen 1993, Kornberger et al. 2006, Shotter 2008, Belova et al. 2008).

THE MIKADO HOUSE PROJECT: PROCESSES OF ORGANIZATIONAL SENSEMAKING

The Mikado House project was a venture, in which Arkitema as an organization, and also the staff as individuals, were made subject to change events that had significant implications on the firm's professional practice. Here, many of the features that traditionally characterize the architectural design process were replaced by new types of interactions that meant to support the emergence of a design solution. The events that took place in the Mikado House project thus represented changes that could potentially influence the firm's forthcoming

practice substantially. Below, I will briefly indicate various changes that the project seemed to hold and also how these change events seemed to be dealt with.

1. Change as a point of departure

In organizational life, the myriad of events that form the daily practice, are frequently characterized by change: discontinuities that are equivocal by nature (Weick 1979). We are often not sure of their meaning, as their content might change according to the situation, in which they appear and the people involved in them. Involved in organizational contexts, we try to comprehend such change events, in order to reduce their equivocality and thereby secure our system's ability to continue the action. As will be discussed in the paragraphs below, we often do this by talking the content of these changes into existence. These conversations, in which we aim to understand the matter in question through plausible explanations, might be called negotiations. We negotiate the content of the change event we are subjected to, according to context and conditions.

To Arkitema's professional practice, the Mikado House project involved substantial changes in Arkitema. Not only with reference to the unusual situation that the project represented, in which Arkitema held several of the project's most central roles: as client, end user, architect, and process designer. Also, the project outline represented significant changes to the general assignment of producing an architectural design solution. These changes increasingly seemed to be present in various parts of the design field in Denmark, in the period prior to the Mikado House project. They appeared in the market for building design at large, with reference to the growing interest in for example organized end user participation or advanced technology; in academic writings (e.g. Brand 1994, Fisher 2000, Hill 1999, 2001, Leatherbarrow 2001, Beim and Wibæk Jensen 2005); in public exhibits (e.g. Danish Architectural Center's exhibition "Too Perfect: 7 New Denmarks" in 2004), and also in internal Arkitema documents (e.g. Feldthaus 2004, 2006). Some of these tendencies are summed up in the following quotation taken from an interview with Arkitema's former MD, also introduced in Chapter 4. It describes some of the challenges that the profession currently seems to be faced with, from his viewpoint:

“We now see the germ of new types of methods, where end users are more extensively involved in various phases of the design process, which take place as integrated and synchronized activities. This causes a new combination between the technical, aesthetical and social aspects of the building process. The work of an architect will thus not only include the creation of an exact and well-defined architectural piece, but also an understanding of this creative conception as a social process and the perception of the architectural product as a social object – a framework for alternating activities.”

Several of these indications of change were addressed directly in the Mikado House project. The *“new types of methods, where end users are more extensively involved in various phases of the design process”* materialized in the project through the participation activities. Also, the *“integrated and synchronized activities”* can be said to refer to one of the project’s central ideas: to produce the brief of requirements and the architectural design solution in a concurrent and continuous design process. As we have seen above, the outline of the Mikado House project substantially differed from the traditional architectural design process, according to for example the classical design practice in Arkitema. By not providing a brief of requirements, in which indications to inform the forthcoming design solution is defined, the setup seems to represent a broader field of opportunities. This might be what the MD in the quotation characterizes as a shift from *“an exact and well-defined architectural piece”* towards *“a social object – a framework for alternating activities”*.

2. Conversation as a central vehicle

“Situations, organizations, and environments are talked into existence” (Weick et al. 2005: 490). As Weick et al. point out in this statement people try to comprehend the change events they are subjected to in their practice, by talking their way through them. Below, I attempt to explore a few of the events that took place in the Mikado House project, through the way language was used and conversations occurred.

In the project, the Arkitema staff members were made subject to a substantial number of change events. Orchestrated workshops, interviews, a survey, and various plenary sessions were all examples of activities that the participants tried to

understand and comprehend. In these activities, the firm's daily practice was addressed. The aspiration was to use the development of the new office building as an opportunity to create improved physical spaces to support future practice. Here, the input to inform the architectural design of the building was meant to be catalyzed and identified through conversations among a substantial group of client representatives (Arkitema staff members). In these processes, the participants talked their practice forth, in order to comprehend it. On this journey towards articulation, they were not only expected to detect what they already knew about their work from a spatial perspective. Also, the setup indicated that they might develop new ideas about potential advancements to the work.

In the project, language and conversation played an important part on several levels. On the participant level, it involved exchanges between end user representatives in the organized participation activities. The level that is in focus in this section, however, rather involves the process within the design team. Language and conversations were used as a means for the team to get the job done in various parts of the process, for which they were responsible: In the process of preparing and facilitating the participation activities, in the process of translating the material produced in the participation activities, and finally, as a means to organize their own design process. As the design team indeed involved people from different professional backgrounds, these processes contained severe challenges, due to differences in professional language and methodological approach. The ability to exchange perspectives and articulate the issues in question, in the project, thus became a central challenge. Below, I aim to illustrate and discuss the team's attempts to collaborate under the unfamiliar conditions that the project held.

But before I go into the events of the project in more detail, the ambiguity that conversations contain as a vehicle should be briefly noted. Used in processes of social action, conversations are based on continuous exchanges: interpretations and translations among those involved in the particular context. The content of such social conversations is categorized, labeled and articulated in ways that most likely mean different things to different people. The meaning in these exchanges is not unequivocal, but ambiguous. Weick points to these continuous shifts in meaning when he remarks: "There is always a slippage between words and what they refer

to. Words approximate the territory; they never map it perfectly. That is why sensemaking never stops." (Weick 1995: 107). It is an ongoing dialogue, in which ideas are articulated and presented, and perception and references are established and possibly changed. In every conversational encounter, new opportunities are added to the situation: the sensemaking that never stops. Weick refers to Freese, who also emphasizes this necessary gap between a message and how it is perceived: "Constructing sentences to express statements about experience imposes discrete definitions on subject matter that is continuous. One cannot report in a sentence an observation about experience without a concept that structures what one is observing. Observation statements describe not perceptions but planned perceptions. Data are not given by experience, but by the concept of language used to interpret it" (Freese 1980: 28 in Weick 1995: 107). When architects and process designers attempt to collaborate in the Mikado House project, each party lack the basic code to help navigate through how the other half talks and what those words might mean. They don't have each other's structuring concepts.

Weick and Browning describe this process of communication as a "double interact" between the sender and the receiver: a reciprocal exchange between two parties. Again, the necessary gap between the intention of a message, and the way it is received by the recipients, is emphasized. Also, they remark that such exchanges of meaning are reciprocal and continuous (Weick and Browning 1986: 244) and that messages emerge as the parties involved keep forming, informing and transforming them in the course of their exchanges. As mentioned above, the design process in the Mikado House project was an attempt at collaboration across disciplines. To the architects, the project's conditions came across as somehow unmanageable. It involved an absent brief of requirements and the production and translation of a highly complex input from the client organization (Arkitema). They considered the message from the end users quite literally: When end user representatives are invited to contribute to the design process, the expectations produced by this involvement will most likely be difficult to satisfy. The process designers, on the other hand, perceived this framework as one that represented new resources to the design process. Here, the production of an equivocal input provided an opportunity for multiple translations. We might thus say that the two parties perceived the conditions they were subjected to in their own professional perspective (Weick and Browning 1986, Weick 1979), and enacted the situation in

radically different ways (Weick 1979, 1995, 2001). As I will illustrate and discuss below, these different readings made it difficult to keep up the process of designing.

AN UNFAMILIAR APPROACH TO THE ARCHITECTURAL DESIGN PROCESS

In the following, I will discuss a few events in more detail, in order to understand more about the collaborational challenge that the design team was subjected to in the project.

1. Launching the design process: basic discussions that characterized the project outline

As outlined in the previous section, the design team experienced substantial difficulties when trying to launch the Mikado House project as a design process. Their effort had the characteristics of a classical sensemaking situation, in which a group of people struggle to identity the factors that comprise their obligations, in order to be able to start working. The team's internal division of labor and consolidation as a cross-disciplinary group was unsettled when the project started, and the group didn't meet until shortly before the first participation activities were launched.

During this initial meeting, the project was presented as an experiment that involved new approaches to the design process. Here, the idea of *"The Book of the House"* was introduced as a central part of the experiment: To produce the brief of requirements parallel to that of the architectural design solution. In this process, organizational and architectural design components were supposed to inform each other in a mutual, continuous process. If we recall the notion of the bricolage design practice (cf. section 6A), the outline of the Mikado House project might be said to reflect this approach. Such practice had, in fact already been explored in Arkitema in a few previous projects. But it had not involved the integration of staff members with a background in ethnographic approaches, let alone involved

Arkitema as the actual client. While a close involvement of the end users had been organized in previous projects by architects, the introduction of the professional process designers made the situation in the Mikado House project unfamiliar.

At the same initial meeting, the notion of designing from *"the process perspective"* was also introduced as a central point of departure. My field notes from the meeting report on lengthy discussions of the concept of process at large, and it came forth that the concept had complicated connotations within the firm. One of the process designers, who was also a trained architect, underlined that it was important to *"put down the relation between [architecture as a] process and [architecture as a] piece of art in an either/or perspective, which is how many staff members still see it"*.

She encouraged the design team to be *"willing to design a house based on completely different premises and principles"*. It came forth that the firm had a tradition for discussing architecture as that of a *"piece of art"* versus that of a *"process"* – as a dichotomous relationship rather than a necessary interdependency. The Mikado House project was thus presented as an opportunity to explore *"the process perspective"* and bring the perception of such opposite stances, to an end. In this particular exchange, the process designers emphasized that designing from *"the process perspective"* didn't leave out *"the piece of art"*, while the architects formally declared an interest in and an acceptance towards the process perspective.

It seems trivial to emphasize that architectural design emerges from a process of sequential events, and that the aesthetical and functional qualities of the building (as a product) are likely to be evaluated. Trivial or not, the two positions were somehow presented as dichotomies in Arkitema during this period. These were perceived as opposite perspectives, which represented, on the one hand, the profession's strong traditions, and on the other, new types of design approaches that were enhanced by a closer relationship with the client organization. The dichotomy might be said to have set a fruitful and interesting discussion in motion in the firm. However, it also appeared that the notion of such oppositional perspectives was subsequently hard to reverse. According to several staff members I talked with in informal conversations as well as in interview situations, the original presentation of this relationship as a chasm had had an unfortunate

influence on the potential that the tension between the perspectives might have held.

2. Ambiguous design conditions call for sensemaking: *"What are we supposed to do here?"*

During these initial discussions of what *"the process perspective"* might represent in a practical design context, the members of the design team underwent their first attempts at organizational sensemaking. Here, the staff members – and in particular some of the architects, to whom the method of organized participation was new – tried to wrap their heads around two basic questions that characterize processes of sensemaking. "What's the story here?" and "what should I do next?" (e.g. Weick 2001: 462, Weick et al. 2005: 410). In regards to the first question ("what's the story here?"), empirical material from this period shows that the team discussed how this kind of method or approach could represent a practical framework for the design process: What kind of exercises would the participation activities involve? When would they meet as a team in order to coordinate their work? How would man-hours be accounted for in the project?, and more. Through a range of discussions, the team tried to establish a mutual understanding of the conditions they were subjected to, in order to prepare a response. Weick's latter question ("what should I do next?") can thus be seen as a continuation of the first. The team tried, not only to grasp the format of the design process they were about to enter, but also to comprehend what such conditions would mean to the practical process of designing.

The architects expressed particular concern with regards to the material produced by the end users. How would this output be translated into a format that could inform the actual process of designing?

"I worry about what we're supposed to do with all this input, and how we'll be able to proceed after the workshops. How can we secure that it gets assembled and put into a form we can use?"

According to my field notes, this concern was expressed by one of the architects in one of the early meetings in design team, and he repeated his worry

for as long as he was involved in the project. As he was not sure what this kind of design practice would mean to him as a professional architect ("what is the story here?"), he kept bringing forth the aspects he found particularly unclear. Here, the actual material produced by the end users was seen as central, in regards to how it should be handled and how it would affect the subsequent design work ("what should I do next?").

When subjected to considerable change events in an organizational context, we try to reduce the equivocality of these changes by talking them into a format we can perceive as more orderly (Weick 1979, 1995, Weick et al. 2005). As a part of our attempts to enact a situation, we bracket the content of its events, in order to categorize and articulate it. When we bracket, we break the matter into chunks, ignore some of it, and try to bring forth the parts we find particularly important (Weick 1979). This small incident of an architect, who keeps repeating the same concern, in order to comprehend the design conditions and the implications it involved for him as a designer, might be seen as an example of a difficult enactment process. He bracketed and categorized the design conditions by continuously discussing them with his colleagues. But his investigation into their implications also suggests that his uncertainty remained. He didn't succeed in his attempts to articulate these conditions as helpful features in his design practice. In this way, we might say that his sensemaking efforts never reached the level of selection, in which such new design conditions possibly could have formed a template or a mental map (Weick 1979). In the case of this architect, his repeated questions indicate that he couldn't make sense of the response he received.

Still dwelling with the experiences of the first few meetings between the members of the design team, the process designers attempted to limit the architects' apparent worries. First, they let the architects identify and articulate these concerns in the way they facilitated the team meetings. My field notes from one of the initial meetings report:

"Anxiety and concern is given substantial attention in the meeting. The architects comment that there are but two months until the official project proposal [to the authorities] is due. They perceive the design process as tight, in the sense that this type of design approach is new to them. [...] They point out that a brief of requirements that gives general restrictions to the design of the building is usually

provided. They miss what they call ‘the story’, and ask: ‘what are we supposed to do here?’”

In these quotations from my field notes, the architects tried to articulate how the design conditions substantially differed from what they were used to in traditional projects. Although the conditions had been described on several occasions prior to and after the project had been formally launched, initial conversations illustrated that the architects kept on perceiving them as unclear: *“what are we supposed to do here?”*.

Weick discusses what it means when we are thrown into unpredictable situations that are difficult to comprehend and support with an adequate framework of directions. What seems to have happened in the Mikado House project, is that the design process lacked an old-fashion guideline that could “animate people”, “provide a direction”, “encourage updating” and “facilitate respectful interaction” (Weick 2002: 9). The architects felt lost – unable to sense a direction and to understand how action and progression could be kept up within the framework of the conditions. In situations of cross-disciplinarity, respect is particularly important, as knowledge is often mutually in shortage. When we feel insecure and threatened in unfamiliar context, prejudgments between people of different observance tend to increase (ibid.).

3. *“The Toyota Model”* experiment: an attempt to structure the unfamiliar conditions

The process designers did try to provide a sense of direction, in order to support the progression of the design process. In order to reduce the architect’s anxiety, a particular concept referred to in the project as *“The Toyota Model”* (e.g. Fast Company Magazine 2002, May 2006), was suggested as a framework, through which input from the participation activities could be organized. The concept is based on the tradition of Lean Production, originally established by Toyota in the fifties onwards, as a means to increase creativity and efficiency in car production. In the Mikado House project, the approach was presented as a scrutinizing vehicle that aimed to generate multiple ideas to support design development. Here, all kinds of input were considered potentially valuable and thus worth exploring.

Through this process, the material produced was supposed to be scrutinized, and the design solution would emerge.

Finding the design conditions hard to comprehend ("what's the story here" and "what should I do next"), this notion of an actual concept to facilitate the navigation through such unaffixed and unapproachable material was greatly embraced by the architects. *"The Toyota Model"* was thus tested as a process framework in the Mikado House project, for a period of one single day.

During this day, the team worked in an interactive process, lead by the process designer who had initiated the concept. The team used a variety of material produced in the hitherto participation activities, as well as inspirational photographs and images from magazines and books, as inspiration. Concrete ideas produced by the users in the workshops were merged with more abstract notions to form spatial dispositions and layouts that occurred in the conversation between the team members. Here, the balance between concrete images and abstract notions – and how something new could occur in the interim between the two – was discussed and debated by the members of the team. Although being novices to this type of framework and not knowing where it might take them, the team talked, sketched, bracketed, labeled and categorized, in order to inform and add onto the conditions of the design process they had just entered.

But already the next day, this conceptual idea of allowing multiple ideas to emerge as a part of the design approach, was abandoned. Not as a conscious decision. It rather ceased as a consequence of some of the project's practical conditions that were brought forth by project manager, in a meeting on the morning just after *"The Toyota Model"* experiment. In this meeting, aspects such as timeframe, deadlines, budget, and potential external collaboration partners were repeated to the design team: information that in a traditional building project would be seen as a central part of the brief of requirement. But in the Mikado House project, in which *"The Book of the House"* – the emerging brief – served as a point of departure as an empty container that was waiting to be filled, these features were not articulated as brief-material.

"The Toyota Model" experiment might be seen as one out of several efforts to make sense of the project's unfamiliar design conditions. Here, the process

designers aimed to provide a framework to support a new type of design practice – as an answer to the architects' anxiety of not having one. The attempt's almost immediate breakdown seems to hold a certain dilemma. As we have seen above, the architects were confused about the conditions, upon which the design process was based. Without the brief of requirements or another firm structural framework to guide the design process, they felt lost (*"what are we supposed to do here?"*) and not able to answer the two basic questions involved in processes of sensemaking ("what's the story here?" and "what should I do next?"). Here, *"The Toyota Model"* represented a potential answer to these concerns, and the team showed signs of interest throughout the day when the model was in use. It represented structure and firmness: a concept to organize the compound input from the end users, in order for it to inform the subsequent design development. In addition, *"The Toyota Model"* represented *"the process perspective"* and its approach to the design process as one that could encompass much broader input and thereby multiple design opportunities. Although architects are familiar with complex project outlines and cross-disciplinary collaboration through their close collaboration with for example engineers, they kept being wary of the process designer's open approach. Again, we might say that this unfamiliar method of volume and differentiation never reached selection in the architects' sensemaking process.

4. The 'absent' brief of requirement

"The Toyota Model" ceased when factors that represented the traditional brief of requirements, cropped up on the scene. When the architects were met with the project's tough deadlines and financial reality, they returned to the classical architectural design practice, as they knew it. Although the framework itself was reasonably well received (in hindsight considered as one of the more promising initiatives, by one of the architects), the approach broke down when confronted with aspects from the traditional brief.

"I don't want to get anymore shaken up", one of the architects pointed out the morning after *"The Toyota Model"* experiment, in the meeting with the project manager. Realizing the project's factual conditions of deadlines and restrictions, he withdrew from the unknown, returning to the known. Here, the *"shake"*

referred to his experience of the continuous expansion of ideas and volume that developed, in the course of working one day with *"The Toyota Model"*.

On the same occasion, another architect asked for *"some peace and quiet to actually get around to doing some designing"*. So when the new approach was given a concrete format through *"The Toyota Model"* and the production of *"The Book of the House"* in fact began to emerge, the old approach reappeared on the scene through the project's factual conditions. The brief of requirements – or at least aspects of it – were there all the time, in disguise. By framing the design process as one, in which the brief was being developed in the course of designing, the already existing aspects of the brief became invisible. Not as such, but as a part of firm framework of preconditions. Being presented as absent, as a part of the project's conceptual outline, the brief was also perceived as such by the architects – quite literally. In this way we might say that the notion of the absent brief of requirements came to represent the epitome of the new approach, a condition that was perceived as somewhat unmanageable by the architects. Not because of the condition itself, but because of the way it was introduced in this particular project. Instead of providing a design opportunity, this methodological approach came to represent a restriction that was unfamiliar to the architects: that of absence. This particular perception was not produced by the method itself and its actual content (the participation activities and their outcome), but rather by the interpretations it was made subject to by the architects, who were subjected to it.

Whether organized participation as a method can work in the context of designing architecture might thus be said to have as much to do with the way it is framed than with its actual content. It is rather the perspective, through which we look at a phenomenon, which forms its content, than it is the actual content that the phenomenon holds. We choose the constraints we are made subject to, be it a methodological framework (for the architects in the design team) or a design solution (for the participants in the participation activities) (Weick 1995).

"If change is too continuous, it becomes difficult for any one person to make sense of what is happening and to anticipate what will happen *unless* that person is able to freeze, break up, or recycle portions of this flow" (Weick 1979: 117). In the Mikado House project, none of the members of design team seemed to be able to handle and/or respond to this complex process that emerged from the project's

unfamiliar conditions. The general features that characterize processes of organizational sensemaking, in which people aim to find, articulate and repeat components that could help them to comprehend the change events at stake, did not seem to be present. They enacted their different perceptions through their engagement and interpretation, but as we have seen in the examples above, their sensemaking efforts generally didn't make it to selection. The process designers aimed to introduce a new approach to designing and thus to expand the scope, from which ideas could emerge and design opportunities could appear. But the advantages that the approach might have held failed the test when they were confronted with well-known conditions from the traditional brief of requirements. The conditions were, in different ways, new to all parties, which made it difficult for any of them to comply with the opportunities that the process potentially disclosed.

In the Mikado House project, the process designers "spoke differently" (Weick 2006: 1724) about the design process and introduced a series of unfamiliar events, in order to support the emergence of a design solution. Here, it was indicated that the new features involved,, for example represented by the participation activities, would provide the design process with extended opportunities. Not only as a means to generate ideas to enhance the development of the design solution, but also in order to secure a closer contact between the client organization and the design team. But a mutual vocabulary was never established between the architects and the process designers, and the collaborational attempts as well as the design process itself, thus kept its discontinuity.

THE CROSS-DISCIPLINARY CHALLENGE

In the paragraphs above, I have illustrated and discussed a few of the challenges that the members of the design team experienced in their attempts at collaboration. Here, the process designers aimed to provide new opportunities to support the architectural design process by introducing new types of input to inform the development of a design solution. But the process designers didn't seem to succeed in their efforts to communicate the potential opportunities attached to the new

approach, to the architects. In the following, I aim to discuss the communicational discontinuities that the design team was confronted with, using a few of the ideas that constitute the concept of the "polyphonic organization" (e.g. Hazen 1993, Kornberger et al. 2006, Shotter 2008, Belova et al. 2008, Borum and Reff Pedersen 2008).

1. Polyphonic design conditions: substantial differences in language and method

The etymological origin of "polyphony" is Greek. It means "multiplicity of sounds or voices" (Oxford English online dictionary) and is often referred to in contexts that regard music. In organizational studies, however, the concept represents the idea that in organizational life and in organizing, several voices are necessarily involved in the setup. Here, a central point is that none of these voices have precedence (Borum and Reff Pedersen 2008). It is rather the relation between them and the narratives they form that is in focus. Two main strands seem to represent the polyphonic organization as a conceptual approach, both of which are in some way inspired by the work of literary critic and semiotic Mikhail Bakhtin (Belova et al. 2008). The first attends to how different voices represent different positions of authorship, and to the way that meanings are constructed from such different viewpoints in organizational contexts. The second strand rather looks into the actual encounter between these different viewpoints. In this approach, organizational practice is perceived as "complex webs of sensemaking activities between groups and individuals whose understanding do not simply form a logical sequence but intersect, clash and interfere with each other" (Belova et al. 2008: 495 with reference to Hazen 1993).

When I suggest the concept here, my aspiration is not to use it as a means to discuss how the results from the participation activities might be said to produce a compound input that represents a multitude of voices. With reference to the issue in focus in this section, the concept is rather applied as a means to understand the collaborational attempts that took place between architects and process designers in the design team. In what way did their approaches to the design process substantially differ? These two groups might not be said to represent a multitude of voices, but they did represent some voices – and their collaborational efforts did

indeed seem to "intersect, clash and interfere with each other" (Belova et al. 2008: 495). As mentioned in the previous section, the group of process designers did not only count an anthropologist. Also, a trained architect was on the team, and a physicist with a background in user innovation. Already within the group of process designers, several voices are thus established[17]. With professional architects and also a construction architect on board in the team, the attempts at comprehension and collaboration might be said to have gone across professional, linguistic and methodological borders.

2. Aspirations based on polyphony: exploring the notion of cross-disciplinary collaboration

Kornberger et al. discuss such polyphonic conditions as an example of the new types of collaborations we increasingly see in organizations today, and emphasize the particular sensemaking challenge these affiliations involve : "[O]rganizations need to translate internally as well as externally in order to make sense of messy polyphonic situations. Networks, alliances, and project organizations (Castells, 1996; Ebers, 1997; Jarillo, 1993), for instance, can be seen [to be struggling] with polyphonic realities. In their collaboration, they differ in terms of the language they use, the order they impose, the rationality they employ, and the interrelation they maintain internally. Thus, a polyphonic conception of organizations not only problematizes relations between organizations but also relations within organizations" (Kornberger et al. 2006: 7-8). They use the myth of the Tower of Babel as a means to discuss linguistic challenges in organizations and to discuss how more than one dominant voice in an organizational context might be possible.

When Arkitema strived to utilize a potential vacancy in the market for building design (Abbott 1987) by attempting to integrate organized end user participation as a part of the firm's professional product, they went beyond their traditional competency as professional architects. To comply with the lack of experience that such an extension necessarily included, they established the department of process design and hired staff with a background in ethnographic approaches. In the course of the Mikado House project, the newly established group of process designers was

[17] Here, 'a voice' refers distinctly to a professional group or a trade, not to other categories, such as gender, age, etc..

merged with a group of professional architects, in order to form a new type of design team. As has been illustrated above, the encounter was characterized by confusion (the architects), marginalization (the process designers), and frustration (both).

But as Kornberger et al. point out, the diversity that professional crossovers involve can also represent potential: “Organizationally, innovation springs from discourse into existence by imagining meaning hitherto unconsidered. Language both detects and constitutes knowledge possibilities that really make a difference” (Kornberger et al. 2006: 15)[18]. The exploration of such intersecting potential also formed a point of departure in the Mikado House project, through the firm’s articulated ambitions for future practice. Here, an aspiration like *“cross-disciplinarity”* is considered a central goal. But although the empirical material shows that cross-disciplinary approaches to the architectural design process seem to have worked on a smaller scale in subsequent projects in Arkitema (including processes of organized end user participation), it had a hard time establishing in this project. Here, the project outline proposed a collaborational experiment between two groups with substantially different approaches to design practice. By focusing on expansion; volume and diversity, the process designers attempted to unfold the potential of cross-disciplinarity. With more to choose from, conceptual ideas and features can be combined in different ways, and an extended field of possible design solutions, can emerge. But there is a reason that Babel never got built. “If people cannot communicate effectively with each other, then there is more chance that they will fail in task accomplishment; the richness and variety of polyphony is not necessarily good” (Kornberger et al. 2006: 10). Cross-disciplinary collaboration is a highly complicated endeavor, in which people from disciplines of considerably different constitutions aim to interact, exchange ideas and solve some kind of professional task.

As has been illustrated and discussed above, the design team showed signs of substantial linguistic as well as methodological divergence already in the course of their initial meetings. Here, a central challenge was to establish a mutual understanding of what it meant to design from *“the process perspective”*. To the process designer, this perspective was a framework, from which input to inform

[18] The point is also discussed in the innovation literature (e.g. Ijiri and Kuhn 1988)

various design solutions could be produced. The design solution was thus expected to emerge from the input produced in the process, rather than as a result from a predetermined design outline. The framework was based on active collaboration between client organization and designer, in which the client organization informed the design process by bringing forth some of the complexity of its practice. This active involvement of the client organization represented events that were perceived as unfamiliar to most of the architects. To them the concept of process is a natural description of the sequential outline of events that naturally constitute an architectural design process. Everything that happens is a part of this process, and process and product might thus be said to merge into one inseparable unit.

In the initial meeting between the members of the design team, it was apparent to both parties that designing from *"the process perspective"* included organized participation activities that involved a substantial group of representatives from the client organization. Also, it was clear that the outcome of these activities was meant to inform the development of an architectural design solution. But that was about as far as the agreement went. It was unclear what the participation activities would consist of and, in particularly, how the multitude of material produced by the end user representatives could in fact inform the actual design process. As the collaborational attempts continued throughout the weeks, this problem of volume and translation was repeatedly announced. It kept being unclear how this matter could be brought into a format that the architects were able to understand as an actual input. How should it be translated and by whom? This particular instance of disagreement, which never reached agreement among the team members, might be seen as an example of problems that were caused by the clash between voices.

If we compare Arkitema's process with that between architects and process designers in the Town Hall project (cf. Chapter 5), this project held a more distinct division of labor between the two groups. Signal Arkitekter organized and facilitated the participation activities, and translated the results that these activities produced, while KHR Arkitekter designed the house based on these translations. In Arkitema, on the other hand, the closer collaboration between the two parties was considered a central aspect of the method.

4. Translation of the organizational input: a clash between (methodological) voices

With the idea of constructing a link between the architectural and the organizational design processes as a point of departure, the notion of translation plays a central part. In the Mikado House project, the design team was responsible for a number of translations, necessary to bring the material produced in the course of the design process from one level to the next. We might say that the notion of translation represented a mediation vehicle, "between different and contradicting languages and the realities they constitute" (Kornberger et al. 2006: 19). In the project, the "contradicting languages" were particularly at stake in the course of translating the material produced in the participation activities. But based on the idea of the close collaboration between the two groups in the design team, the division of responsibility was continuously unclear, with regards to the various processes of translation. Who was supposed to undertake this first instance of translation? The question is central, with regards to how organized end user participation can be used in the architectural design process as a context.

The process designers opted for this instance of translation to happen in a mutual process, which involved architects as well as process designers. To them, it was in the actual meeting between perspectives that the added value resided. With more perspectives, from which the material could be perceived, more design opportunities could occur. The architects, on the other hand, assumed that the process designers would bring the material through its first instance of translation, as they were themselves unfamiliar with such matter. Presumably looking for a substitute for the absent brief, they openly called for concrete input – a list of *"conclusions"* – from which their process of designing could set forth and continue. Here, the notion of a list seemed to form a sensemaking component in the setup. A vehicle upon which further action could be secured; a "schemata" from which direction could be indicated (Weick 1979: 154).

The situation might be perceived as an example of polyphonic conditions: A cross-disciplinary attempt to collaborate, in which two different approaches to the design process collide. As one of the process designers points out:

"We had no idea what they meant by conclusions. […] I actually thought I'd listed up some of the consequences of some of the things that were brought forth [as a result of the participation activities]. […] [But] they still asked for a conclusion, and I simply couldn't understand what they meant. Later I thought that what they asked for was some sort of spatial brief: 'what is in fact required is such and such space'. Something that resembled the kind of brief they're used to. […] I think they're used to a much more concrete task to solve. What my inputs imply is perhaps rather that you question some of those fixed ideas about spatial outlines."

Here, the brief of requirements is again used as an epitome of the divergence in perspectives between architects and process designers. While the architects are used to a brief with clear requirements to form the point of departure of the design process, the process designers focus on the continuous dialogue with the client, in order to go beyond the *"fixed ideas about spatial outlines"*.

The architects, on the other hand, had a different expectation of the division of labor between the two parties of the team, and also of how these unfamiliar results from the participation activities could be utilized:

"[...] it was clearly our impression that it was their job to gather these things, and I actually think they said they would from the very first day […].The human resources were just badly assembled at this point in the process, 'cause we sat 4-5 architects and 2 from another department [the process designers], who in fact should have done a lot more in order to get all these loose ends together. So in a way I think we [the architects] got frustrated with waiting for the others [the process designers] to get it together."

What the architect in this quotation indirectly remarks is that they were too many architects on the job, not knowing what to do in order to get the design work into progress, waiting for the process designers to hand over the results from the organized participation. In this way, the repeated call for *"conclusions"* came to characterize the design team's general attempt at collaboration. One viewpoint calls for a list of requirements, upon which the creative process of designing could be launched and continued, while the other viewpoint rather suggests a mutual process of translation, from which a new type of input to inform the design solution can emerge. The first emphasizes separation, while the latter suggests that

the translation takes place as a result of the collaboration between process designer and architect. In this way, the latter approach might also be said to indicate a closer relationship between the client and the design team. But it involves a certain shift from the traditional architectural design process.

Substantial efforts were made by both parties, but the team never reached a mutual understanding, with regards to this crucial point in the design process: how the stimulus from the end users got translated into the format of an actual input. Eventually, one of the architects produced his own version of a tentative conclusion of the workshops, as did one of the process designers. Although made in two separate processes, both documents were highly appreciated in the subsequent attempts to designing.

THE PROCESS DESIGNER'S APPROACH

In order to understand more about the collaborational challenge between the architects and the process designers of the design team, I aim to look into the process designers' methodological approach, as it came forth in the course of the Mikado House project. One of the process designers involved in the project, explains the aspiration as follows:

”The best thing would be if it [the material produced by the end user representatives] gave an opportunity to come up with some new spatial categories or spatialities. And this means that you cannot make these kinds of conclusions in advance. I can't do that, saying: 'OK, these are the types of spaces'. That's exactly what we're going to do together. And if we go back to the project outline, there wasn't really… there was too little focus on collaboration and too much on some idea that you could deliver some kind of knowledge for someone else to use. […] If you just pass over these conclusions, I don't think it'll bring about the [result] that people [the clients] ask for. I'm sure they still can use it for something, and it's probably also better than nothing, but I don't think we're exploiting the innovative potential that I believe our methods actually hold.”

Again, the process designer emphasizes the cross-disciplinary collaboration and the different perspectives as central to the method's potentiality. Rather than seeing the clash between different perspectives as a problem, she sees it as resource. "It does not identify or unify, but takes the differences between languages and tries to deal with them in a constructive way. It does not speak for someone else but repeats what is being said in a different language" (Kornberger et al. 2006: 22). Here, the process designer's approach seems to be to find ways to unfold the potential that the different perspectives contain, and thereby contribute to the continuous progress of a design solution.

1. The ethnographic analysis

Dourish (2006) points out that many projects that claim to be built on ethnographic approaches often involve discrepancy in expectations and lack of actual knowledge about the method, which can obscure the contribution that the approach might offer to the design process. He divides the ethnographic approach to design processes into two main positions: the empirical and the analytical. The empirical position perceives the ethnographic venture as scenic fieldwork, in which the ethnographer undertakes a process of observing and reporting: "'I went there and this is what I saw'" (Dourish 2006: 4). Here, results are seen as facts that should be possible to distribute as they appear in the context. The analytical position, on the other hand, indicates a more complex interaction between the parties involved. In this approach, ethnographic inquiry serves as an analytical tool, through which the context and the events at stake can be perceived and interpreted.

In the situation described above that concerned the translation of the results from the participation activities, the process designers aimed to represent the latter, analytical version of how ethnographic inquiry could contribute to develop a design solution. Several scholars seem to emphasize Dourish's point: that the use of ethnographic inquiry in design processes often involve challenges that many designers (for example architects) are not trained to understand. They are thus often unable to utilize the potentiality that approaches, based on an ethnographic tradition, can entail (e.g. Blomberg 1993, Forsythe 1999, Dourish 2006). The point is brought forth by the process designer in the quotation above: "*I'm sure they still can use it for something, and it's probably also better than nothing, but I don't*

think we're exploiting the innovative potential that I believe our methods actually hold."

Here, she emphasizes that if the design process is based on the ethnographic approach (that characterizes the process designer's method), there are certain factors that are crucial, in order to reveal the method's potentiality. To be able to utilize the information embedded in this approach and thus be able to disclose the contribution of ethnography in these contexts, concrete involvement is regarded central. Blomberg characterizes this as embodied experiences: "[…] the insights and understandings, in part, would be embodied in the experiences of the *designers* who were first hand participants in the study" (Blomberg 1993: 143). Her point is that in order to benefit from the richness that this type of information might represent, you have to be involved in its conception. The point also regards the concept of duration. According to the process designers involved in the Mikado House project, the material produced in the organized participation activities aimed to serve as an input that could be utilized *throughout* the design process, not only to inform the formation of the main concept. Here, it was seen as critical that the translation was made by the team at large, which again emphasizes Blomberg's point: Those interested in the material, need to be involved in the process of capturing its message.

2. "Synchronic", "circular", "iterative": ethnography at stake in the Mikado House project

It seems that the process designer's (new) approach to the architectural design process represents a process that is based on complex and miscellaneous input, produced in continuous interaction. Empirical material from the case indicates that the method is described with terms like *"synchronic"*, *"parallel"*, *"circular"*, or *"iterative"*. These characteristics might resemble certain societal tendencies that currently seem to be in focus – also within the field of architectural design. The interest in organized end user participation as a means to engage the individual more closely in various types of client/product/provider relationships is but one example of these tendencies. When a design is characterized as being iterative and continuous, it indicates that the relationship does not stop when the product is

formally handed over. Rather, it necessarily carries on as a result of subsequent interactions. Here, design happens in reciprocal and influential processes.

But if we look at these *"synchronic"*, *"parallel"*, *"circular"* or *"iterative"* tendencies in an architectural design perspective, the characteristics might also seem contradictory. After all, the process of designing necessarily indicates a sequential aspect. If we look at the concept of synchronicity and its opposite, diachronicity, these are connected to various traditions such as linguistics, structuralism, Jungian psychology, functionalism and more. In general, we might say that the synchronic/diachronic relationship has to do with the way we perceive occurrences and the relationships between them. While the synchronic view represents the snapshot, in which several elements occurs in a simultaneous movement, the diachronic rather represents the linear and sequential stretch, in which events can be perceived in a historic time frame.

What the concept of synchronicity seems to represent in the Mikado House project, is that the architectural and the organizational design processes can be considered as simultaneous, in the sense that they take place at the same time. Also, they are facilitated in a way – through the participation activities and the subsequent attempts at translation of the produced material – that makes it possible to mutually inform each other. Such a two-in-one sequence might happen concurrently, but it still takes place in a sequence or sequences. Various inputs are brought into situations, from which sketches and drafts of a design solution emerge. These sketches are then discussed and negotiated with the client, and so forth. The sequence can go on for a shorter or longer period of time and with many or few steps attached to it, but it can still be perceived as sequential. There might thus be several reasons to keep a certain distance in the relationship between the client/user and the architect.

First, there is the necessary time span between the production of the material and the designer's actual design effort. Returning to Blomberg's point above, it might be central for the designer to have been involved in the production and translation of the organizational material. But the time span is there all the same. Second, and as was pointed out in Chapter 5 about the Town Hall project, people change as a result of the participation activities. This means that the input that the end user representatives have produced in the course of the participation activities

might have relocated their actual understanding – in the making. Where does this leave the architect in the synchronized process?

Third, the process designer's approach also indicates another continuous aspect: The input produced by the end user representatives can be used throughout the process. The material has mutual options and long term potential. Here, the argument seems to be that when the material is brought forth at a later date, it forms new meanings – to designers as well as to user representatives. Here, the *"iterative"* and the *"circular"* seem to make sense as perceptional approaches, while *"synchronic"* still seems somewhat inappropriate.

3. The architectural tradition as diachronic and separated

Recalling the quotation above by one of the architects, his viewpoint might be perceived as diachronic, linear or sequential. In his perspective, the contributions represent separate entities, in which the outcome of one part of the process (produced in a participation workshop and translated by the process designers) serves as an input to inform the next (the architects' design process). Here, he distinguishes the responsibilities between that of the process designers and that of the architects. As he remarks: *"I think we just got frustrated of waiting for the others to get it together"*.

From the description of the classical design practice, outlined in section 6A, we know that trained architects somehow recognize the image of the architect as that of an artist, based on their educational background. To many architects, the process of translating the results from the participation activities in collaboration with the process designers does not correspond with their professional recognition. With regards to considering the process designers' approach in the context of the architectural design process, this incongruence between the two perspectives seems central. To the process designer, the process of translating by bringing different perspectives together appears to represent a crucial aspect of the method's potential. The architect, on the other hand, naturally seems to feel unfit for this part of the design journey.

The process designer recognizes that a more separate structure to accommodate the translation process might offer a contribution to the design development (*"they*

still can use it for something, and it's probably also better than nothing"). But she also emphasizes that by doing so, the method's potential does not fully come into play *("I don't think we're exploiting the innovative potential that I believe our methods actually hold.")*. It is in the process of analyzing the material that the approach is regarded ethnographic (e.g. Blomberg 1993, Dourish 2006). Based on their professional training, many architects would reject an invitation to involve in such an approach.

CLOSING COMMENTS

This section has illustrated an attempt at design collaboration that went beyond the professional relationships that usually characterize the development of architectural design. In the following, I aim to wrap up a few of the points that the story about the attempted collaboration in the Mikado House project can provide to our understanding of the closer link between organizational and architectural design processes.

The Mikado House project was framed as a design process, in which the brief of requirements and the design solution to meet these, were supposed to emerge in a reciprocal, concurrent process. The setup caused severe challenges to the design team, with reference to their different methodological approach to undertake (architectural) design practice. However, this idea of establishing the client's organizational input (and thereby the organizational design), while at the same time developing the architectural design solution, seems central, in order to support the link between the two design processes. The brief of requirements in a building project has traditionally represented the separation between these two processes (cf. Chapter 1). With the establishment of organized end user participation as an integrated part of the architectural design process, this separation gets substantially challenged. Here, the process of identifying client requirements, which would traditionally have been established *prior* to the architectural design process, has now been merged into the process of designing. In this way, the notion of the emerging brief might be said to represent a potential 'connection'. It might have had a difficult time establishing in this particular project, but the idea is in itself

central to the discussion of a closer link between organizational and architectural design processes.

Why was it so difficult for architects and process designers to meet under these conditions? The aspiration to change the traditional framework of the architectural design process involved new ways of working and collaborating that were substantially unfamiliar to the architects involved in the project. Here, the design team was cross disciplinary, and as we know from research as well as from practical experience, it is difficult to work across professional boundaries. The Mikado House project exposed a number of attempts at new ways of working with architectural design. Due to a general mismatch of professional languages and methodological approaches, the architects had a hard time understanding the process designers, and vice versa.

As I have described and illustrated in Chapter 4, the architect profession represents a language and a methodological approach to the design process that is difficult for outsiders to comprehend. Because the profession is currently faced with certain challenges that involve new players in the building process, these aspects become relevant. When the architects involved in the Mikado House project found it difficult to engage in the design process, it was not because they were not good architects or because they lacked interest. Rather, it was because they didn't have the experience to take on this shift in perspective. To contain and accommodate substantial professional changes, we need time and resolve to practice. The Mikado House project might be seen as such a training camp.

As for the process designers, they were also faced with severe challenges, with regards to establishing their methods as an integrated part of an architectural design process. The reason for this was not only because the architects found it hard to respond to the process designers' new approach and that the field of architectural design can be difficult for outsiders to enter. Also, the definition of the role and the methods it represented seemed unclear. Being informed by several traditions and represented by people from different educational backgrounds, the role and its position need further consolidation, in order to establish in type of design context.

One of the methodological concepts at stake in the Mikado House project was the idea of a design process that was based on a *"synchronic"* design logic. Here, the parallel production of organizational requirements and architectural embodiments seems legitimate, with reference to current societal tendencies. If we accept this societal ambition, the idea of the synchronic structure might be considered as resourceful. But we should recall that these processes are based on cross disciplinary collaboration. The notion of such a parallel and intersecting design logic needs careful attention, in order for new collaboration partners to form an understanding of their mutual qualities. To explore and utilize new collaborational opportunities and produce new 'connections', we need new methodological and lingual competencies to support such exploration. These were not present in the Mikado House project. As we have seen in the story above, language and conversations are powerful vehicles to support – or prevent – communication. The connotations that the concept of *"process"* had in Arkitema during the time of the Mikado House project, might be an example of how language hindered the collaboration. New concepts need time and effort, in order to get integrated into a practice.

In the next section, I will illustrate and discuss in more detail how the actual design of the Mikado House[19] established in the design team. With reference to the discussions of collaboration and cross disciplinarity that have been outlined above, one particular collaborational attempt that appeared to be unproblematic, will be illustrated. In my exploration of this relationship between an architect and a process designer in the design team it seemed that this success was caused by a combination of personal and professional elements. The two held a general interest in exploring and analyzing a large and multifaceted material (produced by a 'compound body of users' in the organized participation activities). Also, they liked each other. Collaboration is a personal thing that involves fields of interests, ways of working, temperament and more. The discussion below will illustrate a part of their collaboration.

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[19] This draft of the Mikado House represents the first phase of the project, which was the phase that I studied.

SECTION 6C: DESIGNING THE MIKADO HOUSE: THE HELIX AS A CIRCULATING REFERENCE

INTRODUCTION

In the previous section, I aimed to describe and interrogate a few of the collaborational challenges that the cross-disciplinary design team of architects and process designers experienced, in the first phase of the Mikado House project. In this section, the focus is rather on how certain results from the organized end user participation was brought into the architectural design process, as a means to support and explore it.

The story unfolds how the metaphor of a helix came to form a point of reference in the process of designing, and how this reference seemed to 'travel', throughout the course of the project. Here, I aim to illustrate and discuss what the helix referred to, and the various formats that it took on. In short, we might say that the helix became a representative for the link between one of the firm's organizational aspirations (to become a *"knowledge sharing"* and *"cross-disciplinary"* organization) and the participation activities, on the one hand, and the emergence of a design solution, on the other. In this way it secured cohesion between the two design processes. Below, I explore the journey of the helix. I ask several questions along the way, but two seem particularly central. In the first and predominant part of the section I ask: How did the helix travel, and how could it take on such formats?

Due to significant changes in the market for building design, the Mikado House project went through substantial modifications, along the way. Based on these changes, external investors took over the project, and the conditions that informed the design process thereby changed. In order to meet these new conditions, design process was eventually restarted, with new people involved in the design team. With a brand new design team and without the group of process designers to secure the connection between the participation activities and the emergence of the design solution, central parts of the original design concept might thus be said to have been left behind. But although the helix did not as such survive the substantial changes the project was subjected to in the second phase, it seems relevant to ask: Why did the helix surrender, and also: Could it potentially have endured?

In this section, concepts that derive from 'Actor-network theory' have served as a primary source of inspiration. Here, I have particularly looked into the concepts of circulating references (Latour 1999, 2006), inscriptions and inscription devices (Akrich 1997, Latour 1999, Elgaard Jensen 2005).

FROM PARTICIPATION TO DESIGN PROCESS: FROM METAPHOR TO REFERENCE

As we know from the previous section, the various end user participation activities produced a complex outcome that the design team attempted to use, as a means to launch and keep up the process of designing. But as we have seen above, the design team suffered severe difficulties, with regards to getting these results translated. So how did some of the material produced by the end user representatives after all find its way into the design process?

1. The results from the participation activities: illustrations (sketches and ideas) on posters

In a number of participation workshops, an extended group of end user representatives discussed various issues that regarded the spatial organization of Arkitema's professional practice, in order to produce ideas to inform the design of the forthcoming building. The exercises were based on conversations in groups, and each exercise ended with a plenary session, in which the main points from the discussions were brought forth.

As the client organization in this case was an architectural firm (Arkitema), the results from the plenary sessions often tended to contain drawings and models rather than extended amounts of text. Here, it was often a metaphor that formed a point of departure in the presentations: *"spirals"* or *"market places"* that illustrated various organizational settings in the firm and that were accompanied by short, written explanations. These posters were subsequently used by the design team in their efforts to launch and keep up the process of designing. The process of translating the material that was produced in the participation activities might have been difficult for the design team to handle, but the posters were tangible and illustrative. In this way, the results from the participation activities can be said to have worked as central points of departure for establishing the design process. They made up a central source in the design team's attempts to establish the process of designing. With reference to the accumulated empirical material from the case, it seems that a few of these metaphors formed references, which kept the design process going, despite of the design team's collaborative difficulties.

As mentioned above, the metaphor of a helix represented one of these references. As will be illustrated and discussed below, this particular reference seemed to travel throughout the first phase of the project. It started out as a few versions of a similar model produced in the initial participation workshops (at first referred to as a *"spiral"*), and continued to inform different aspects of the design solution in the subsequent process. As time and design attempts went by, the name converged from *"spiral"* to *"helix"*, and through extended processes of translations and negotiations, the helix took on a number of forms, with regards to the exterior as well as the interior design of the house.

2. The notion of a reference: ideas that circulate in continuous processes of change

In my attempts at explaining how the helix was established as a general point of reference in the design process, I have been inspired by a few particular concepts within actor-network theory. Recalling the general outline of this methodological approach (cf. section 2C), it is concerned with how reality is shaped and continuously emerges through the relationship between the "actors" that form its constitution. In the Mikado House project, a lot of components were at stake as potential constituents: drafts; diagrams; sketches; foam models; architects; process designers; end user representatives; written documents; books; magazines, and more. It is in the relationship between such actors that the coherence between the project's initial aspirations; the participation activities; the results that these bring, and the final design solution, reside. But in order to discover the networks that these relationships form, we need to trace their actors and the way they seem to associate.

In the process of analyzing this material, I have attempted to reconstruct the journey of the helix, supported by a few central ANT-concepts: translation, circulation and inscriptions. Below, I aim to discuss how the helix seemed to survive as a mutual reference in this phase of the project: It traveled as a "circulating reference" (Latour 1999, cf. 2C), which changed or moved, according to the relational activities it was subjected to, but still keeping its basic shape. The purpose of bringing this conceptual idea into play is not only to illustrate how the project emerged as an architectural design representation. Also, it is an attempt to illustrate how the potential link between architectural and organizational design aspects was explored, in the course of the project. Here, the helix can be seen as an architectural answer to an organizational problem. As mentioned above in the introduction to this section, the Mikado House project might be said to have been one of the firm's vehicles to serve a larger purpose: to become a *"knowledge sharing"* and *"cross-disciplinary"* organization. In the following, I aim to illustrate how the helix seemed to answer such aspirations. Along these lines, the use of the helix metaphor as a work tool might also illustrate one particular attempt at *"cross-disciplinary"* collaboration that took place between an architect and a process designer in the design team.

The story of the helix illustrates how results from the end user participation activities were brought into the architectural design process as an input. This complex circulation between organizational and architectural features describe the helix' referential capacity, and might thus be said to represent a 'connection' between organizational and architectural design processes. However, the story also serves as an example of how references break if they are not maintained. When the reference of the helix broke, the link between the two design processes also seemed to fall.

THE JOURNEY OF THE HELIX: FROM KNOWLEDGE SHARING ONWARDS

The process of analyzing this empirical material might be said to have been a search for the helix: To explore, illustrate and discuss the design process as links in a chain of association through the various formats that the helix took on. I searched for where it came from and where it seemed to be going. The helix moved from organizational aspirations to architectural concepts; spatial layouts; work processes, and business structures. Diagram 9 below illustrates five different versions that the helix seemed to go through in the course of the Mikado House project: from a document of organizational aspirations in the left version (*"knowledge sharing"* and *"cross-disciplinary"* and more); to the spiral/helix of curved loops that represented design representations of the Mikado House as a building construction; to the double helix of two curved loops that further developed the initial design concept; to the Marguerite route that formed a concept for structuring the interior layout of the building. Finally, the image to the right illustrates Arkitema's new business structure, which was developed parallel to the development of the first phase of the Mikado House project. This structure underlined the architectural production process as circular, iterative and reciprocal. The latter will not be explored in this thesis, but is mentioned here as one link in the chain of association that the helix seemed to represent. Below, I aim to illustrate and discuss a few aspects to the relationship between the first four versions of the diagram.

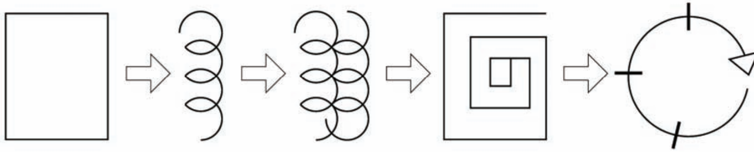

Diagram 9 illustrates five versions that the helix seemed to go through, in the course of the first phase of the Mikado House project.

As for where the helix actually came from, I have been through most of the available empirical material in the case, in order to find answers to this question. As indicated in the introduction to this section, I have found that certain adjectives were repeated, as a means to describe Arkitema's aspirations and with regards to the firm's future practice. Here, features like *"knowledge sharing"*, *"cross-disciplinary collaboration"* and *"visibility"* are but a few of the terms that are frequently repeated. These aspirations appeared in initial documents that outlined the Mikado House project, as characteristics of what the new building was expected to enhance and represent. Here, the project was described as a means to accommodate the firm's future way of working. As it is described in one of the early internal document that presented the idea of the Mikado House project:

"*We want to work project oriented and cross-disciplinarily (internally and externally). We want to develop special competencies and experts that can work across the firm at large. We want to increase the revenue. We want to systematize our knowledge base – (knowledge compilation, knowledge sharing, knowledge creation)"*

This focus on communicating across seemed, not only to be repeated many times in various written documents, but also in formal speeches, organized workshops and informal conversations I was involved in throughout the project. Also, and more importantly, it appeared in several physical versions. In the following, I will describe the journey of the helix as I have been able to trace it. Here, its role as a representative for the *"knowledge sharing"* and *"cross-disciplinary"* organization will be provisionally discussed.

1. The Vilnius workshops

In order to explore the journey of the helix, I will first return to the part of the empirical material that represent Arkitema's teambuilding trip to Vilnius. Here, the staff at large engaged in lengthy workshop discussions that regarded their work processes and relationships in a spatial perspective, while they at the same time produced conceptual ideas and sketches to inform a design proposal for the new house. The trip culminated in an exhibition on the last evening, where a number of design proposals that were produced by the teams of architects, who had participated in the workshops, were displayed.

During the course of this evening, I had several informal conversations with staff across the firm about the fact that most of the proposals in the exhibit involved the format of a spiral, as an apparent source of inspiration. As it seemed, the main structure that characterized several of these proposals as architectural concepts, involved a series of curved loops. Here, terms such as *"intersection", "meeting-place", "interface", "exchange", "mobility-pattern", "non-hierarchical", "verticality"*, were emphasized in the descriptive part of the proposals. Two directly used the word *"spiral"* as a central conceptual idea to form the design proposal, while three proposals used metaphors like *"the möbius strip"* or *"the catwalk"* to present the proposals' primary ideas. The following text represented proposal nr. 5:

"Central concepts and ideas:

- *Spiral; intersection and overlap to create special places*
- *Loop and circulation rather than beginning and end, the movement of the helix reflects work processes that are integrated, a 'landscape', and not linear [...]*
- *Multifarious locations and work situations*
- *Movement through the house; that you get 'forced' through it, more options to get around [...]*
- *Spatialities and work processes in a circular movement*
- *A tight facade system that is in dialogue with the context – forms the framework around the dissolved floor structures [...]"*

The majority of the proposals seemed, in one way or the other to include the helix, either in the model or in the accommodating text. But Arkitema's aspirations for a future practice also came forth in these representations (e.g. *"knowledge sharing"* and *"cross-disciplinary collaboration"*). Here, the proposals' apparent interest in pursuing the opportunity to move around the house and to communicate across seems to continue. In proposal nr. 5 above, we can see how these aspirations were described as a physical pressure: "*you get 'forced' through it"*. Here, the circular shape seems to be perceived as one that supports the occurrence of meetings, sharing and collaboration across. Even in the descriptive indications of the facade system, the communicational ambition seems to stick, where the link between the building's external features (the facade) is seen as *"in dialogue with the context"*: with the organizational practice in the house.

2. Participation activities as inscription devices

What is at stake here? In order to understand more about the establishment of such a reference, we might turn to the interactive workshops, which was a participation activity that was actively used in the Mikado House project. Recalling the concept of "inscription devices" (cf. section 2C), this might help to explain such an activity: as a vehicle, through which new material to can be produced. Here, the framework that constitutes the workshops (e.g. exercises and questions and other vehicles) represents a network of "inscriptions" that stabilize it, in order to be "inscribed" or brought into the design process. As a part of establishing this design process through various participation activities, it seems that a number of organizational aspirations (for example to become a *"knowledge sharing"* and *"cross-disciplinary"* organization) were already inscribed into the process as possible proposals. The exercises in the participation activities then contribute to produce material – new inscriptions. It is in this productive exchange that the network of actors, that eventually form the design solution, can emerge and operate (Akrich 1997, Latour 1999). In this perspective, some of the workshop results that were produced in the Vilnius workshops can be seen as architectural responses to organizational aspirations. Here, proposal nr. 5 pointed to the potential link between the organizational and the architectural directly by emphasizing that (the architectural format of) the helix reflects *"work processes that are integrated"* in *"[m]ultifarious locations and work situations"*.

Akrich explains that when we develop new objects or designs, particular visions are being inscribed "into the technical content of the new object" (Akrich 1992: 208). Again, we might see the aspiration of the *"knowledge sharing"* or *"cross-disciplinary"* organization, merged into the Mikado House project. These aspirations were presented repeatedly throughout the project: in the phrasing of the workshop exercises; in the various written documents; in the continuous speeches by the MD; in the public debate that went on at the time, and more. In that way, they might be said to have been inscribed into the project outline.

There are several layers in this complex. The interactive workshops form an inscription device or an apparatus, through which various inscriptions can be formed, which can subsequently inform the design process. But in the workshop's basic constitution (represented for example by the issues raised in the exercises), certain inscriptions (for example visions or aspirations) are already inscribed into it, as a point of departure in the process. These already inscribed factors might, on the one hand be said to influence the forthcoming inscriptions: the results produced in the workshops. However, the results or new inscriptions might also conversely affect the organizational visions or aspirations. When the participants in the workshops are subjected to certain exercises or questions, they immediately undertake a translation, in order to comprehend what the task is about and how they can go about it. In that way we can say that inscriptions travel forth and back when subjected to new events.

3. The helix: conceived from the tendencies within (and outside of) the field

As I was interested in where the helix came from, I asked the Arkitema staff about the consistent appearance of the helix in the design proposals, in the informal conversations I engaged in on the last evening in Vilnius. I mostly got the following reply or words to that effect: *"It's what everyone in the field is into at the moment. Just look at 'Arkitekten' [the profession's national periodical]: there are helixes everywhere right now"*.

As a conceptual idea that represented features like collaboration and dialogue, the helix did not only reflect the current discourse within Arkitema. It was

apparently also a depiction of contemporary tendencies at stake in the field of architecture, at large. In this way, we might say that the concept of a helix formed a reference that reached inwards – towards the profession. But at the same time, the organizational aspirations that the helix seemed to refer to (*"knowledge sharing"* etc.), were also very much present in the public debate at the time, as general societal tendencies.

4. The helix: a point of reference in a chain of associations

Although the Mikado House project as a design process wasn't formally launched until after the return from Vilnius, the project clearly used the Vilnius workshops as a means to kick-start the project as a collective venture. In Vilnius the firm at large was involved. Everyone heard the speeches; everyone was engaged in the exercises, and everyone was producing ideas to inform the forthcoming design project. As we have seen above, the event might have served as an opportunity to inscribe certain messages into the forthcoming design process. In this way, the reference seemed to appear in the project even before it turned up as an actual shape of a helix in the architectural sketches. In the introduction to the Vilnius workshops, it took the format of a repeated vision of the practice that the new house was expected to accommodate. Based on the participation activities that took place in Vilnius, it then started to appear in architectural diagrams that represented variations of curved loops. Also, the texts and keywords that represented these models and diagrams reflected the reference in various ways. Not only through the actual term (*"spiral"* and/or *"helix"*), but also through a range of associated expressions that represented different versions of the same idea of crossing connections in a building structure.

In the field notes I took during the Vilnius workshops, I have made numerous remarks on the apparent focus on how the future building should promote different types of meetings. Not only as actual encounters between people, but also architecturally, in terms of how the building construction could support the emergence of new connections. Quotations like *"We want to stimulate communicational patterns in the building. Connection, movement, interaction: how does this influence our way to conceptualize and develop space?"* illustrate how the staff attempted to further the articulated interest in notions such as *"knowledge sharing"*, *"cross-disciplinarity"*, and more.

Latour explains what happens when we make such short-cuts between things that in principle have a very different meaning to them. Here, we form a chain of associations that can hold – across meanings and traditions – as long as the links in the chain are kept affiliated. In a complex setup like an architectural design process, such chains contribute to keeping the process in progression. Latour describes our ability to accept these constructed associations: "We never detect the rupture between things and signs, and we never face the imposition of arbitrary and discrete signs on shapeless and continuous matter. We see only an unbroken series of well-nested elements, each of which plays the role of sign for the previous one and for the succeeding one" (Latour 1999: 56).

Below, diagram 10 illustrates a chain of links as such "an unbroken series of well-nested elements". These elements are not (necessarily) similar in shape, but they hold a story of association that keeps them together. We can accept a constructed association between things that are obviously different, but it requires a point of departure that makes it possible for the links to connect.

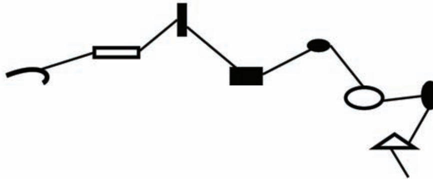

Diagram 10 shows elements that are not similar but kept together, in a chain.

The Mikado House project might be characterized as a highly difficult and untraditional project, in which a cross-disciplinary design team experienced severe problems with getting the design process into motion (cf. section 6B). Here, the architects preferred working with one main concept, as opposed to working with several conceptual ideas concurrently, which was proposed by the process designers. To them, the sole focus on *one* conceptual idea made the project vulnerable to external problems (financial, technical, practical or other). On the other hand, the mere establishment of the helix as a point of reference and the number of versions it took on, also indicates the strength that such a reference can

hold. In this way, the helix might be said to have contributed to establish a chain of associations, during the first phase of the project. During this time, the firm's articulated aspiration to use the project as a vehicle to support the establishment of Arkitema's future practice, seemed to work. Before the metaphor of the helix was established as a point of departure, from which the design process could emerge, the architects felt lost. With the helix as a catalyzer, the chain of associations started to form, and a design solution began to emerge.

In this project, the establishment of a chain of association may seem helpful, in the sense that the venture openly involved not only architectural, but also organizational efforts in a concurrent process of designing. The extended amount of participation activities and the continuous production of organizational requirements (*"The Book of the House"*), parallel to that of the emergence of the architectural design solution, might be seen as an example. Based on this idea of a potential link between organizational and architectural factors that would mutually inform one another, the firm's attention was not only on the emergence of the building as an architectural construction. Also, the building was seen as a lever for social activity. With this double aspiration in mind, the helix seemed to travel once it had established itself as a reference: from workshop discussions between people, through phrases that appeared in written descriptions and presentations, to a variation of curved loops in order to inform the house – not only as an architectural construction, but also as a framework for social interaction. Below, I will look into how the helix continued to travel from Vilnius onwards. How did the designers use it?

5. The helix in motion: conceiving The Marguerite-route

Returning from Vilnius, the design team attempted to launch the development of the Mikado House project in a more focused form. Based on the material produced in Vilnius, the process designers planned three additional interactive workshops, and already in the first of these, the helix reappeared on the scene. Not in a direct form, but in a translated version: as a scenic route, entitled *"The Marguerite-route"*.

When *"the Marguerite-route"* appeared as a conceptual idea in the project, it was with a reference to the notion of a guide through the interior structure. The

purpose was, not only to secure the physical connections throughout the building, but also to create an awareness of the activities that the house aimed to support. Here, different routes were defined to represent its spatial opportunities. My field notes describe the idea as it was presented in the midst of the design process, first by myself: *"[...] the group worked with the metaphor of the house as a landscape: the Marguerite-route"*, and then by the process designers in their aggregation of the material produced in one of the workshop: *"The experience detour, 'the Marguerite-route'. Of importance to clients as well as to staff, in regards to knowledge sharing and identity".*

Again, we see a referential link between *"knowledge sharing"* as a particular activity that the firm wanted to prioritize, and the paths through the house as ways, through which such an activity might be accommodated and supported. These paths were inspired by the metaphor of the helix. Although other metaphors were at stake in the project during this phase, variations of the helix continued to crop up as the mutual point of reference. It was given different architectural expressions and verbal articulations. But looking through the empirical material; sketches, diagrams; texts, and other material, the notion of contact across the house that aimed to enhance communicational and collaborational opportunities, seemed to stick. As a concept, we might say that the helix succeeded in mobilizing and thus stabilizing its strength through the various versions it was represented by in the project (e.g. Latour 1991, 1999).

The helix and The Marguerite-route are not one and the same. They don't even resemble one another. But they represent different aspects of the same idea, and thereby support the construction of the Mikado House. Here, the helix creates a link between things that are in principle different: the architectural building; the framework to support social interaction, and the story of Arkitema as an organization (e.g. Latour 1999, Elgaard Jensen 2005). In this way, we might say that the helix went through "series of transformations" that had architectural as well as organizational connotations to them, while keeping the chain of associations *"constant"* (Latour 1999: 58).

6. The helix in the exterior design: from single to double helix

In terms of the exterior design of the building as an architectural construction, the spiral of curved loops seemed to establish and consolidate as a source of inspiration to the design team. Despite of the complicated efforts to launch and establish the design process, the helix survived the motions that the design team seemed to go through: of testing the conceptual ideas against the conditions of the building site; merging different conceptual ideas that were conceived in the participation activities; solving substantial technical complications, and more.

A few concrete events particularly seemed to have helped the metaphor to stabilize. One important event was Arkitema's provisional collaboration with the acknowledged and highly experimental English engineering consultancy, Arup. Through the collaboration with Arup, the helix was rapidly established as the project's primary conceptual driver. The name of the conceptual idea changed from *"spiral"* to *"helix"*, and before long, the design of the building construction had developed into a *"double helix"*. The double helix represented two large spirals of curved and intertwined loops that ran through the building and constituted its basic structure. In the official project proposal that represented the Mikado House project in its first phase, the project was described in the following way:

"The vision is to create a house to support Arkitema's organization – creativity, collaboration, knowledge sharing, personal and social relations, coincidence and flow [...]. The vision's spatial expression has the format of a spiral that cuts its way throughout the house [...]. It is displayed as spaces of double vertical extensions, which create 2 diagonal spatial structures [the double helix]. These 2 spatial structures connect the building's levels and form the point of departure of Arkitema's spatial organization."

In this quotation, the idea of a reference seems clear: "not simply [as] the act of pointing or a way of keeping, on the outside, some material guarantee for the truth of a statement; rather it is our way of keeping something *constant* through a series of transformations (Latour 1999: 58). Here, the helix comes forth as an architectural concept ("*the format of a spiral that cuts its way throughout the*

house"), and also as organizational aspirations ("*creativity, collaboration, knowledge sharing, personal and social relations, coincidence and flow"*).

In the next paragraph of the same project proposal, the combination between the two designs becomes even clearer, as it describes how the spatial format directly refers to the organizational aspiration:

"The area of the double vertical extensions represents the open, dynamic plane with departments located around [the spiral] from the start in the reception area, through the end in the canteen. These are the open project zones, where each department is exposed with its own identity, work method and project. Here, people meet across the departments for collaboration and discussion. [...] If you follow this "marguerite route" you pass through every department of Arkitema."

Here, the link between organizational and architectural design is exposed. To explain this intersection, Akrich point out that "both technical and social elements were simultaneously brought into being - a process that moved far beyond the frontiers of the laboratory or the workshop. The fact that the importance of these characteristics only became evident in the interaction between designers and users was not the result of change or negligence. Each decision actually taken, made sense in terms of design criteria." (Akrich 1997: 210). Akrich's indications of the mutually dependent emergence of social and technical objects might be a way to describe what happened in this part of the design process in the Mikado House project. As a reference, the helix was conceived through the exchanges and interactions that took place in the course of the participation activities. It was the details that had emerged in these conversations that gave life to the helix as a forthcoming framework for social interaction and organizational practice. Here, the organizational and the architectural seemed to have converged, and the decisions "made sense in terms of design criteria" (Ibid.).

The period of time when the design team explored and transformed the reference of the helix as the main conceptual idea, might be said to be the least conflicting period, in the part of the Mikado House project that I had the chance to study. As we might recall from the previous section about the design team's attempts at collaboration as processes of organizational sensemaking, people in organizations want to keep up the action. During the time when the reference of the

helix kept traveling as a design catalyzer, the members of the design team seemed to know what they were doing, as they had returned to a design process they were more familiar with. Here, they had largely separated the process: one team of architects working with the exterior design of the Double Helix, while one team consisting of an architect and a process designer worked with the interior design of the Marguerite Route. The exclusive focus on the helix as the sole point of reference might not have revealed the potential that a concurrent design approach perhaps could have held, according to the process designer (cf. 6B). But the design process maintained action and the design solution evolved during this part of the process.

The 'formal' establishment of the helix as an articulated reference in fact seemed to happen through the project's tentative collaboration with Arup, mentioned above in this section. When entering the design project as an external partner, the consultants from Arup took on the design team's versions of curved loops in the proposals as an inspiration, and developed them further. To an outsider like myself, it seemed that Arup came into the process at a point when the project (as a collaboration experiment) had reached exhaustion. Although a concrete proposal for a design solution had conceptually materialized at this time, Arup brought it further (eventually to form The Double Helix). Also, they provided an actual name for the concept (the *"helix"* as opposed to the original *"spiral"*). Arup was a neutral party, who entered the process at a critical point. From this point onwards, new energy was brought into the design and process. Although the collaboration didn't last very long, due to financial restrictions, we might say that Arup and the helix became a turning point in the process: 'a mutual third' that produced a new opportunity to communicate and coordinate.

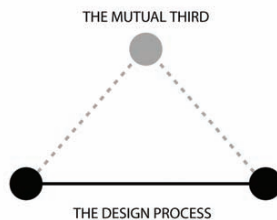

Diagram 11 illustrates the notion of 'the mutual third' (Feldthaus 2004): A third party that enters a complicated process and brings forth new strength, by being neutral.

The collaboration with Arup was abandoned after months of efforts at finding a solution, within which the technically complex (the design) and the financially viable (the investment) could correspond. The breakdown of this collaboration came to represent the subsequent collapse, not only of the helix as a mutual point of reference, but also of the chain of association that might be said to have kept the first phase of the project going, as a design process.

6. The helix in the interior design: continuous transformations based on a cross-disciplinary collaboration

Turning to the interior design of the building, two conditions seemed particularly significant in the process of stabilizing the helix as point of reference to support the emergent design solution. The first was The Marguerite-route, as an interior transformation of the helix metaphor. The second was a particular collaborational effort between two members of the design team: an architect and a process designer.

This collaboration might be seen as an epitome of several of the aspirations that characterized the Mikado House project. Here, the two designers worked from the so-called *"process perspective"*, by exploring the results and thereby unfolding the emerging brief of requirements (*"The Book of the House"*). In this attempt at *"knowledge sharing"* in a *"cross-disciplinary"* collaboration, the closer link between the architectural and the organization design processes was interrogated.

In the course of this alliance, the architect and the process designer worked together, in order to develop a design solution for the interior layout of the Mikado House. If we recall the concept of enactment as a central phase of the process of organizational sensemaking, the two designers bracketed, froze, articulated, recycled and renegotiated the material that was produced as a means to inform the design process they set out to handle. The material was miscellaneous: produced by the end users in the course of the various participation activities (workshops, interviews, a survey and more). But their exchanges also responded to the work done by the different contributors involved in the project: by process designers, in their organizing of the participation activities; by the architects, in their attempts to

develop a design solution; and finally by management, with regards to reflecting the project's central aspirations.

As the collaboration that primarily focused on the interior design of the house, the team actively used the organizational aspects (work processes, professional relationships, proximity, distance, and more) that were addressed in the organized participation, as a source of inspiration. Here, the notion of designing from *"the process perspective"* seemed to materialize. Like the architects, who had reassembled the conceptual ideas conceived in Vilnius and also in later workshops (based on the conceptual idea of a helix), this team tried to translate the same material to form a spatial disposition of the interior layout.

The outcome of the organized end user participation was brought directly in as an input to this design development. With a special focus on the organizational requirements, the team went through all material: ideas; considerations; sketches; visions; needs and wishes, produced by the end users in the participation activities. Based on this material, the team assembled a document under the headline *"The building should: [...]"*, which held a range of sub-headlines: *"Enhance creativity", "Support learning and knowledge sharing", "Enhance organizational changes", "Be a workshop", "Enhance the work process"* and several more. Each point disclosed concrete ideas and initiatives that described its potential content – as features that characterized the future work environment.

The material held substantial complexity, and the conceptual directions that could have formed on this basis, were, in principle, many. But the team took the same point of reference (the helix) that had already established within the design team and that also materialized in the establishment of the exterior design. What the team seemed to have found, was that the curved loops indicated *routes*, through which the building could be navigated. The conceptual idea of "The Marguerite-route" was thus used metaphorically as an alternative version of the helix: an adequate organizing principle, through which the spatial plan could be organized.

Based on two particular routes (with reference to the *"double helix"*: *"the Marguerite route"* and *"the Underground route"*) they introduced the idea of different *zones*, in which Arkitema's diverging practice could be distributed. Here, the zones represented different types of practice that was distributed in a spatial

format. With this structuring principle as a point of departure, the team produced various versions of how such practice should be spatially organized. They developed three overall organizational models, within which these practices were supported in various ways. The models were: M1 (*"the production hall"*), M2 (*"the home office"*) and M3 (*"the project square"*), while the zones were: *"the individual zones"* (closed/blue), *"the departmental zones"* (stable/red), *"the project zones"* (unstable/yellow), and finally the *"communal zones"* (open/green). Each zone was marked with colors that represented the activities that constituted the models.

After the three models were presented to and discussed with Arkitema's group of partners, it was decided to further develop M3 (*"the project square"*), as the type of organization the new building should accommodate. As indicated in its title, the model used *projects* rather than *departments* as the point of departure in the spatial organization of the firm's activities. This organizing principle might be considered a substantial shift, with regards to Arkitema's traditional structure, where projects were included in the departments, which formed the firm's overall structural spine. M3 indicated a focus on *"the project zones"*, described as *"unstable and changeable"* and also on the *"communal zones"* characterized as *"open"*, which stretched through the work area. Both zones might connect to the general notion of projects as being temporary and complex in their constitution, in which *"cross-disciplinarity"* and *"intersection"* might be considered central lineaments.

The example illustrates how the process designer and the architect attempted to bring the material produced in the participation activities into play. This material was brought forth by the Arkitema staff, in order to describe their practice in a spatial perspective. Here, the team tried to go from the produced material to the translation process and back: to translate the result from the participation activities on the basis of the project's basic conditions. Akrich characterizes this continuous crisscross between the different layers in the relationship between designer and user in the following way:

"We have to go back and forth continually between the designer and the user, between the designer's projected user and the real user, between *the world inscribed in the object* and *the world described by its displacement*. For it is in this

incessant variation that we obtain access to the crucial relationships: the user's reactions that give body to the designer's project, and the way in which the user's real environment is in part specified by the introduction of a piece of equipment" (Akrich 1992: 209).

Here, it is indicated that the user necessarily changes in the course of the participation activities. That the input from the user may contribute to inscribe the (design) object, which is produced by the designer and informed by the user. But also, that "the real user" necessarily represents continuous displacements, based on the exchanges it is made subject to.

The team translated this complex material and formed it into a spatial disposition, parallel to, and in correspondence with the concurrent development that took place in the exterior design process. They added onto the circulation of the helix, and allowed various versions of this metaphor to take shape in an interior layout that could support some of the prioritized ideas that Arkitema as a firm aimed to pursue (*"knowledge sharing"* and *"cross-disciplinarity"*). Also, they attempted to support the experiment that the Mikado House project aimed to address, with regards to the architectural design process. Here, they undertook translations of the material in a mutual process, where their different perspectives were brought into play. Through this approach they aimed to expand their capacity to understand and explore different concepts and ideas, and thereby to form inputs to a design solution.

As we have seen above, the organized participation activities involved a range of actors that, in different ways, contributed to produce material, all of which can be seen as a part of the design process. These actors formed various networks, and a particular chain of association seemed to have played a special role in the emergence of the design solution. The point of reference in this chain was the helix, which took on different shapes and positions throughout the course of the project. Here, the helix came to represent a number of aspects that the organization wanted to be associated with: *"knowledge sharing"*, *"cross-disciplinarity"* and more. The image is banal: by walking the helix, as a structure that consists of continuous series of loops, crossroads and intersections, you meet people and engage in events on the way that you wouldn't have met in a traditionally

distributed office building. Hereby, the notion of sharing, crossing, intersecting, can be envisaged.

THE CHAIN OF ASSOCIATIONS REVISITED: WITHOUT CONTINUATION, THE REFERENCE BREAKS

As indicated in the previous sections (6A and 6B), not only did the collaborational problems in the design team continue, the general market for building design also changed substantially during the course of the project. New investors were brought on board and the project as a unit was enlarged: from a 6000 m2 domicile where Arkitema was the client, to a large 23000 m2 office building with several future clients and potential end users.

As mentioned on several occasions above, the extension radically changed the project. The design prospect with the double helix as the point of departure turned out financially infeasible, and the original design team was dissolved – to be replaced by other Arkitemian architects. In the second phase of the Mikado House project, the process designers were not involved as a part of the design team, and the department of process design, eventually closed. Although a few attempts were made to bring results from the original participation activities back into the new project, the connection between these factors and the subsequent design process, based on essentially different conditions, did not seem to hold.

1. New investors

What happened with the design itself in the second version of the Mikado House as a design representation? With a new investor and also a number of unknown tenants due to the project's extension, the conditions of the project might indeed be said to have changed. In this new context, Arkitema was no longer the client, but 'merely' the architect and also the tenant/user of one part of the house. Such changed conditions are likely to have caused reconsideration, with regards to

the idea of a closer relationship between architect and client in the architectural design process. However, Arkitema (as the responsible architect in the project) still might be said to have had substantial knowledge about one of the future tenants/users: themselves.

Here, it is interesting to consider whether the reference of the helix could have been kept up based on the new circumstances that constituted the project. Do changes in the design conditions necessarily change the point of reference, upon which a conceptual design idea is being built? Could the material from the original participation have been brought into the second phase of the project and thus maintained the helix as a mutual reference? Do alternations in a design expression necessarily mean that the way we see the building also changes? Latour notes that the way that references work is not through transference, but rather through transformations. Here, the object at stake goes through series of translations in the course of the encounters they it is being subjected to, in the process.

2. The chain of association must be reversible

In this project, the design team went through a substantial struggle to reach a mutual understanding of the helix as a central point of reference in the conceptual development. When the helix was identified, it relocated and mutated through numerous versions, as I have illustrated above in this section. In these processes of translation that occur in the relationships between designers and users, the material naturally suffers reductions. These reductions change the material's appearance, but they also give way to numerous new versions. "What we lose in matter through successive reductions of the soil, we regain a hundredfold in the branching off to other forms that such reductions – written, calculated, and archival – make possible" says Latour (1999: 55). He proposes that these processes form a chain, stages that the matter runs through in the course of their development. An example of such a chain could be seen in the outline of The Marguerite Route, produced by the architect and process designer, based on the material from the participation activities.

An important aspect of this chain is its bilateral quality: "An essential property of this chain is that it must remain *reversible*. The succession of stages must be traceable, allowing for travels in both directions" (Latour 1999: 69). In the Mikado

House project, the reference of the helix might be said to have had the "reversible" quality, called for. It reached backwards to certain Arkitemian aspirations (*"knowledge sharing"*, *"cross-disciplinarity"* and more), and to contemporary tendencies and challenges acknowledged by the field of architectural designers. Also, it took up and further explored ideas and considerations articulated by the end user representatives, in the course of the participation activities. It was a reference that could mobilize enough strength and support to reach forward and continue to develop.

3. The chain breaks

But the chain can only maintain as long as the reference continues to circulate. As electricity through a wire, it only works if the circuit is not interrupted (Latour 1999). In the Mikado House project, however, it seems that a number of more or less concurrent instances caused a breakdown of the helix as a general point of reference. There were the factual changes that the project outline went through, when the investment of the building went from Arkitema to external property managers. Here, Arkitema's original aspirations and the commercial ambitions of the new investors did not, as such, correspond. As one Arkitema architect, closely involved in the first draft of the Mikado House project, points out in an informal conversation:

"The new investors were not interested in user participation and what it takes to get that perspective involved. So they made a clean cut."

By the expression *"a clean cut"* she indicates that the design process started from scratch when the new investors took over the project. Here, this architect knew that the helix had previously gone through various transformations. She also knew that the helix reached back to the Vilnius workshops, the subsequent participation activities, the attempts to get the design process into motion, and more. These were all links in the chain. There might have been coherence between the aspirations, upon which the project was set out, and the design solution that eventually emerged. But with the *"clean cut"* made by the new investors, the chain got disrupted:

“What they get now is an ordinary office building. It might be a fine house, but it’s hard to catch sight of the process we went through” the same architect remarks later in the same conversation, where she refers to the final design solution.

Diagram 12 illustrates how the chain of reference seems to break by the end of the first phase of the Mikado House. As the diagram indicates, certain elements might be brought over from the first phase to the second, but the overall aspiration of a mutual and reciprocal design process between the organizational and the architectural, established through the organized end user participation, was gone.

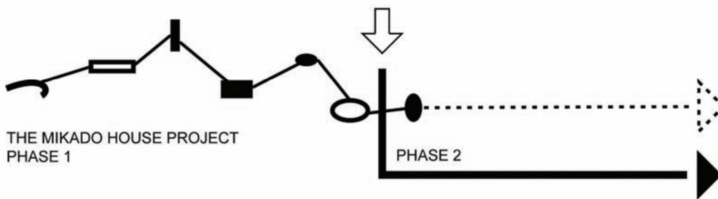

Diagram 12 shows the break between the two phases in the design process.

After the formal takeover of the Mikado House as an investment, the original design team eventually dissolved. The architects involved in the project withdrew and it was decided that the building would be designed and developed from Arkitema’s Aarhus office. Here, the argument was that the forthcoming users and the responsible architects shouldn’t be represented by the same group of people.

There were also other factors that may potentially have contributed to break the helix, as one of the project’s general points of reference. The complicated collaboration between architects and process designers of the design team discussed in the previous section might in itself represent a reason. Their collaborational experiment was an endeavor that was difficult to plan, execute, document and evaluate. The documentation material that represented this first phase of the Mikado House project might have been substantial in regards to volume, but it might also reflect the difficulties that occurred in the actual events. As the material was difficult to translate and categorize, it might also be said to have been dependent on the people involved in its production process. In this way

a transference from the first phase of the project to the second, may have been hard to organize.

Also, external factors such as the market situation might have contributed to breaking the chain of associations. First, the financial changes that the project went through have clearly influenced the focus that the participation activities were given. Here, the substantial cut back might also have meant an increased distance in the attitude towards the kind of experiment that the Mikado House project represented internally in Arkitema. Second, the new investors had other ideas for the house. These were property investors, with a commercial purpose, not with aspirations to expand the architectural product by organizational means. All in all, we might say that the network of factors that made up the chain of association that made the helix circulate, crumbled.

Another condition that might have influenced the reference breakdown was that Arkitema's department of process design closed down as a unit shortly after the first draft of the design solution was rejected, and the external investors had taken over the project. Although the new design team made certain efforts to reintroduce some of the results from the original participation activities, these attempts seemed difficult to manage without a 'messenger' to get the matter back into circulation. As we know from the previous section, the process designer's approach to the design process involves that the material produced by the end users should, in general, be 'lasting'. By that I mean that the material could be used again – in a new phase of the project. Here, Arkitema would still be the tenant, whose organizational practice would be at stake in the building. The fact that the architects, who drew the lines of the building as a construction, changed in the course of the project, would – in this approach – not mean, that the material was unusable.

In Arkitema today, facilitated workshops with end users and the potential resource that such processes might represent, have become a part of the general design practice for some of the firm's architects. But for most of the staff, extended contact with the client as a 'compound body of users' has not yet been established as an integrated part of the general practice.

4. Story matters: talking the association into being

Would it have been possible to have kept the circulating reference going on the basis of the new design conditions? In complex contexts such as organizations, the establishment of a link or an association does not so much regard an actual resemblance or what something looks like, but rather the way these are being framed or enacted. Based on the final design solution, Arkitema staff did not associate the participation activities they were involved in with the design solution that is now emerging as the Mikado House as I write this. But the question is whether the reference could have been kept up in a continuous circulation.

As I pointed out in the introduction to this chapter, story matter to perception. In this project, the conditions, upon which the design process was being based, changed. But the way that such conditions, requirements and terms are being framed, also significantly influence the way they are comprehended and enacted. The possible directions any phenomenon can take in the course of such translation are numerous. The structure, organization and facilitation of a design process also mold the way, in which references can circulate and sensemaking can take place. Considering the final sketches of the Mikado House and the building construction itself as it now materializes, it seems that the helix could have remained as the central metaphor if framed as such.

CLOSING COMMENTS

This section has unfolded the story about how the design solution for Mikado House emerged in the first phase of the project. As the project held organized end user participation as one of its central design preconditions, the participation activities took place continuously as a part of the project. Because Arkitema is an architectural firm, the situation might be said to have been unorthodox, as the firm played the roles of client and architect, and also that of the process designer, which might be said to represent an indistinct group of professionals, introduced to the firm on the basis of this project. Because I am looking for ‘connections’ between organizational and architectural design processes, this aspiration of integrating a

new role into the architectural design process might thus in itself represent a 'connection'.

The story illustrates how a particular metaphor, which came forth in one of the first participation activities, was established as a point of reference in the project. To the design team, who were subjected to significant collaborational challenges, the helix came to represent one of the central catalyzers that set the design process in motion. It didn't as such represent itself. Rather, it seemed to advert to central aspirations that were appointed in early documents that outlined the project, which described the firm's future practice. These organizational aspirations were first translated into curved loops in architectural sketches and models. The helix might be said to have traveled through the project as a catalyzer – a red thread – that took on different forms as the project developed. It appeared as organizational aspirations and architectural shapes, which together may be seen as links in a chain of associations. The different versions did not look the same, but in different ways they seemed to refer to the helix as a representation. In this way, the helix came to represent 'the mutual third', through which communication and coordination could take place. It represented a 'connection' between the two design processes and also a way to accommodate the challenges that occurred in the project.

When the helix was explored as an architectural shape, it was informed by the firm's organizational aspirations and work processes: routines; relationships and different ways of working. It produced an ambitious exterior design (the double helix) and an untraditional interior design (the Marguerite route), which also indicated new ways of organizing the firm's daily practice (the M3 model). In this way we might say that the organizational and the architectural design features came to mutually represent each other, in the course of the project. Although the collaboration in the design team was a difficult endeavor (cf. section 6B) and these two design representations (The Double Helix and The Marguerite route) emerged in somewhat separate processes, the helix might be said to have been the reference that kept them together. Here, the particular collaboration between the architect and the process designer that led to the idea of the *"Marguerite route"* might be seen as a representative for the link.

However, the Mikado House went through substantial structural changes, as organizational development projects and contemporary building projects often do.

Based on this structural change, the helix collapsed as a point of reference. And with the helix, the link between the two design processes also seemed to crumble. As the design team eventually got replaced with new staff, it became harder to keep the emerging architectural design and the material produced in the participation activities, together. Again, the chain of associations is not kept up by resemblance. But looking at the (emerging) building today, it indeed seems possible to imagine the second version of the Mikado House as a link in the chain of association that pointed back to the helix. In this way it could potentially also have kept up the association between the participation activities and final architectural design solution. When this didn't happen, a central reason rather refers to the way the design process was framed, than to the actual design result. The 'connection' does not reside in the design itself, but in the perspective, from which we view it.

CHAPTER 7: DISCUSSION AND CONCLUSION

INTRODUCTION

How does organized end user participation in architectural design processes generate 'connections' between organizational and architectural design? This was the research question I proposed in the introduction to the thesis, and that I have attempted to discuss in the course of this text. As pointed out in Chapter 1, organizational and architectural design processes have traditionally been considered as separate units, in the sense that they have been organized in a sequentially detached structure. Today, certain societal tendencies and requirements indicate that the two design processes could potentially form a closer link. As we do not yet know enough about the implications and opportunities that might hide in their mutual influence, the aspiration of this study has been to provide a platform to further investigate the link. Several 'connections' between the two design processes and thus between the two design constitutions, have been pointed out throughout the text. In this final chapter, I aim to provide a more condensed outline of some of these.

My general interest in the potential link between the two design fields made me realize that the area of 'Space in organization studies' does not sufficiently explore the implications that space and architecture might have on organizational life. It has thus been an ambition for me to contribute to this research area. As pointed out in section 2A, the area of space and architecture is in itself large and complex, and the research contributions that discuss space in an organizational context, represent a substantial variety. These writings cover areas such as office space as symbolic

meaning carrier in regards to issues such as organizational identity, power structures and control, or as a means to support legitimacy in decision making. Also, they provide extended reflections on how space may be explored as a conceptual tool, through which life in organizations might be comprehended. However, not many studies as yet seem to take an empirical point of departure in the discussion about how processes of architectural and organizational design might in fact interact. These design processes run prior to and as a part of the establishment of a physical space, acting as scenes for organizational culture and development. The study's focus on these design processes is unique. It aims to understand organizational development on the basis of architectural design processes that emerged through organized end user participation.

In the study of two contemporary building projects, my focus has been on the actual exchanges between representatives from each of these design fields: managers and staff representatives from the organizational, architects from the architectural, and finally process designers, who we might say reside somewhere in the middle. The study is based on a longitudinal micro-study, within which organized end user participation has been integrated as a way to inform the emergence of the two designs, as concurrent and reciprocal processes. By discussing various events that have taken place in the projects, I have aimed to unfold some of the implications that the link between the two design processes may contain. The study's premise can thus be said to be strongly empirical, and concerned with the complex intersection of two large design fields. Focusing on the complexity of the events has made me apply theoretical concepts in a somewhat eclectic manner. My aspiration has been to discuss and explain the empirical events that constituted my object of analysis, rather than to further the bodies of theory I have used in my exploration. The empirical material that evolved in the projects was large, and on that basis I have rather attempted to scrutinize the complex that was assigned by the research question: the identification of the 'connections' between the two design processes. In this way we might say that my contribution to theory development lies in my demonstration of selecting and applying specific concepts and constructs in this kind of detailed empirical work[20]. Here, the empirical approach has enabled me to discover central

[20] On the basis of the empirical findings and some of the indications that the study holds, there are, however, several theoretical discussions that should be addressed in subsequent writings. The conceptual idea of Managing as Designing would be but one example of such further discussions.

‘connections’ that emerged between the two design processes. These ‘connections’ might be attached to the particular settings at stake in the two projects under study, but they have also allowed me to undertake reflections that point out issues that seem to involve features that characterize these types of projects on a more general level.

It should be repeated here that the concept of organized end user participation might be well integrated across the design industry, while having a harder time establishing in the field of architectural design. But as I have pointed out on several occasions, current tendencies substantially seem to challenge this situation. Building projects that involve extended, organized end user participation are today emerging in Denmark, even in times of financial decline. However, there has not yet been established rigorous empirical research on the implications that such activities might have on the two design contexts involved. As for research on the architect profession and the current challenges that contemporary architects seem to be faced with, a stronger link to the organizational field might potentially contribute to this area. Based on experiences from my own study, I propose that an extended collaboration between organization studies and architectural theory would be appropriate.

In the following, I aim to revisit the initial research question by going through some of the central dilemmas that the ‘connections’ between the two design processes seem to hold. I thereby aim to point out some of the study’s contributions. But before I go through these, I would like to repeat three basic notions that were indicated in Chapter 1 and discussed throughout the chapters. In projects where organized end user participation forms a point of departure in the design process, these factors are essential:

First, I have suggested that we, in design projects that hold end user participation as a part of the project outline, consider the client as ‘a compound body of users’ rather than a (singular) client representative. This setup involves a general shift in the perception of the client role, which holds substantial implications for client and architect alike. For the client, it generally means that the building project involves organizational design aspects and also opportunities to further develop the current organizational design. For the architect, it means that organizational design indirectly becomes a part of the architectural design process.

Second, and as an implication of the first point, this structure involves participation activities that are *organized*. When the organized character is important to emphasize, it is because end users have always been part of the client organization and could thus potentially have had an influence on the client's decisions - also in traditional architectural design processes. This kind of informal and random influence is not denied in this study. What the study points to, however, is that when participation is meticulously planned and continuously executed, new types of 'connections' between the two design processes can emerge. We cannot know what they bring, but certain issues are indicated through prepared exercises and questions. This act of organizing the participation mostly seems to be undertaken by *"process designers"*, a role I have described and discussed only provisionally throughout the thesis (cf. sections 5A and 6B). As we have seen through the empirical stories (cf. sections 5B, 5C and 6C): when end users are invited to talk about space, they end up talking about a whole lot more, not easily controlled by anybody. We might perhaps say that the process designer is meant to guarantee that the process does not get out of hand. However, the role does not seem to have been thoroughly interrogated, let alone accepted in the field of architectural design, as of yet. It seems to represent a potential, in regards to producing 'connections' between the two design processes, but to integrate such methods in the field of architectural design also involves substantial challenges. The role and its implications should thus be further explored in forthcoming studies. The empirical material that has emerged in this study might contribute to such investigation.

Third, and as an implication of the second point, organized processes are likely to produce some kind of an outcome. As I have indicated throughout the thesis, this outcome might be characterized 'an organizational input' that is emerging, in the sense that it is developing as a result of the participation. If the client organization becomes involved in the design process through extended processes of organized participation, the outcome of these efforts can, in different ways, have consequences for the architect in the process of designing. Not only does the client become more active in the process of designing by continuously partake in the discussions that inform the design solution. Also, she is developing – changing – as a result of this involvement. This was apparent in the Town Hall project. Here, the participation activities started prior to the architectural competition and the

outcome of these processes was brought in as an initial input to form a part of the brief of requirements. Based on that, the seeming ability to incorporate this input in the design proposal was used as an assessment criterion to select a winner in the architectural competition (cf. 5A). But the engagement did not stop there. The participation activities carried on throughout the project, and the participants developed accordingly. In the current climate, architects still predominantly relate to the client as a classical decision maker, in which the architect operates isolated from the client's internal decision making processes. But if the ability to handle such ongoing development processes (of organized participation) becomes a criterion, with regards to the architect's chance of obtaining assignments (for example to win architectural competitions), it should be considered a conditional change with substantial implications. If the participation activities create a closer relationship between client and architect, such a shift is likely to affect decision making as well as designing. In this way, the shift will potentially change the foundation of the architect's way of working. These tendencies might strengthen if the client becomes more familiar with the role as a 'compound body of users' that is active and developing, and also if the role of the process designer gets thoroughly explored and established on the market for building design.

In the next paragraphs I will go through some of the 'connections' that were shown to exist between the two design processes, as they have been illustrated and discussed throughout the thesis. I have studied specific empirical instantiations of a general phenomenon: the concurrent development of architectural and organizational designs, mediated through organized end user participation. In this way, I consider these findings as general features that can be relevant to other projects. In the text below, I have attempted to address the points that particularly refer to the organizational design process first, while subsequently turn to those that reflect the architectural design process. However, as the notion of these 'connections' is rather to connect than to divide, the organizational and the architectural aspects also intersect, as I revisit the points throughout the text.

PARTICIPATION ENHANCES TALK AND ARTICULATION

In the participation activities, an extended group of staff representatives are invited to interactive workshops, in which they are given particular questions to discuss and tasks to solve. Here, the exercises hold the spatial structure of the organization's current and future work practice as its central nucleus. Not only are the participants asked to reflect upon current work processes and relationships, they are also asked to predict future practice. As we know from the sensemaking literature, people cannot know what they think, until they see what they say (Weick 1979, 1995, 2003). That is why talk is good: it can help us navigate the things we don't yet know. The participants try to comprehend the complexity involved in the questions asked and the exercises proposed, by talking their way through their practice, work processes and relationships. They converse about their work processes as they experience them, which not only make them touch upon the things that work, but also on those that don't work and that perhaps should be changed in future setups. This process of articulation contributes to categorize and understand practice. Also, these conversations had a particular spatial focus and used different types of visualizing devices to support them. The participants were given exercises, in which they discussed and scrutinized the spatial organization of their practice, via for example different types of board games. In these games, a range of aspects were involved, through which the practice was characterized: professional relationships, atmospheres, physical attributes and more. By playing these games, the participants talked forth perceptions of their work practice. Here, the organized participation seems to have contributed to form intersections – 'connections' – between current and future aspects of the professional practice.

Many of the issues that occur in these processes, in which people that work together talk about their professional engagements, are well known issues that have been discussed on earlier occasions. The point is that the participation activities "shove things around and change their emphasis" (Weick 1979: 209). Although many of the same things may come up, they come up in different ways because the context upon which they are based, go through continuous changes. If we recall the title of this thesis, we might say that when we talk about space, many other issues may emerge. People in organizations might thus not know their future practice, but

the participation activities may give them an opportunity to get closer to it by talking it into being. Here, the consequences of the organized participation substantially differ from the more spontaneous, informal processes that traditionally characterize the relationship between client and architect.

It should also be noted that workspace and physical layout generally seem to have people's attention in organizational contexts, and to create engagement. Staff members who were invited to workshops, interviews and other participation activities in both of the empirical projects generally accepted this invitation, and kept on engaging in these processes as long as the invitation kept coming. My point here is twofold. Space matters to people in many aspects of life. In an organizational perspective it makes good invitational material in order to enhance engagement. The fact that the staff wants to engage in processes that regard spatial issues of organizing, might thus itself forms a basic 'connection'. Also, the material quality of the issues at stake seems to have an articulating effect. While work practice might be said to be highly embodied, consisting of small exchanges of interaction between people that can be difficult to articulate, materiality can contribute as a medium. By putting space and materiality onto it, as a means of articulating the practice, the conversations obtain a medium that can enhance comprehension. Both empirical cases in this study show that organizational visions are aspirations, often vaguely formulated by the manager. Here, the material quality of the context supports the process of bringing vague ambitions into concrete changes that regard work practice, articulated by the participants.

An important point is thus that organized end user participation that focuses on the spatial organization of work practice can potentially support the establishment of an organization that can comprehend its own activity. By engaging in these conversations, the participants continuously test and trial their capacity to contain the complexity of their professional practice. It is important, however, to emphasize that processes of talk, categorizing, naming and positioning also include leaving (most) things out. In principle, we do not know how the enacted environments, envisioned on posters and board games, will work when they are brought into architectural configurations. This is a difficult intersection in the relationship between the two design processes. People do not know of their ability to enact a space before confronted with it. End users do not hold a language to discuss new spatial configurations of their work practice. They can talk their way

towards it, but we cannot know if and in what way it can hold in an architectural perspective.

PARTICIPATION ALLOWS FOR DISPLACEMENT AND STABILITY

The participation activities give way to an intricate outcome that I have above characterized as 'the organizational input'. Produced by a 'compound body of users', who represents a multitude of different voices, the result is irregular and incoherent. As the questions proposed to guide the participation activities are complex in content, the interpretations and meaning exchanges they produce are also necessarily multifarious. The ideas and considerations outlined by the participants can take many formats and point in many directions. In this way, we might say that the participation produces increased complexity. Here, the participants attempt to 'grasp what they are thinking by seeing what they are saying'. In that sense, the combination between talk and complexity is often good in organizational contexts: although complexity increases as a result of the conversation, it is also likely to reduce by the same means. On the basis of the participation, people come closer to understanding the complexity they are subjected to, in the course of their practice. This paradox between increase and reduction of complexity forms a 'connection' between the two design processes that also catalyzes another paradox of a similar constitution; that between displacement and stability. The concept of displacement contributes to describe how participation takes place in these contexts. The point can be seen as an extension of the previous notion of how articulation can support comprehension. In the participation activities, things are "shoved around", and this jostling activity also affects the participants' perception. In this way, we might say that the participants' viewpoints are displaced as a result of their very participation. The displacement might be difficult to identify in the course of the processes. As I have illustrated and discussed in the story about the open office layout in the Town Hall project, the participants kept talking about the open layout, even though they were informed that the structure was a basic design precondition. Here, we might think that the discussions about – and thereby the attitude towards – the open layout kept

its exact shape throughout the participation processes. But we know from the data as well as from theoretical concepts that things are not untouched by the contexts, in which they appear.

When we revisit a concept or a meaning in the discussions we engage in, we often tend to think that we know it – that we know where it comes from and where it is going. But considering the concept of retention, which means to implement or hold on to, "'retention means *liability* to recall, and it means nothing more than such liability. The only proof of there being retention is that recall actually takes place" (James 1950: 654 in Weick 1979: 207). The story of the open office layout illustrates how such a recall to discuss this matter indeed took place, but it also showed how the conversations about the open layout changed over time. In this way, participation activities not only cause displacements, they also stabilize an understanding of a subject matter. Because these processes are situated and contextual, their contents also change. Even the meaning of things that do not seem to be changing does change in the course of these processes. The notion of an open layout as a structural principle in an office building like the town hall can serve as an example, as the interest around this particular issue seems to be general, internally within organizations as well as externally in the general debate. To repeat my point above, the conversations that organized end user participation can offer as a method, might represent an opportunity to establish an organization capable of encompassing – and thus further developing – its own activity. End user participation is not only a process of influencing design decisions. It is also a learning process, through which we can unfold and comprehend the intricacies of organizational design. Finally, the participation is also a process of socialization, in which reality becomes shared and coordinated across the organization.

PARTICIPATION AS A MEANS TO CO-DESIGNING VS. PRE-MEDIATED DESIGN SOLUTIONS

Another central tension in this setup is that between the participation as an idea of co-designing, on the one hand, and the various preconditions that form the project's basic outline, on the other. The tension holds a general challenge in projects that have organized end user participation as a point of departure, not only in settings that regard the establishment of an architectural design, but also in other contexts. For a designer, to whom the participation is supposed to represent a point of departure, this is a central balance to be able to navigate. When staff members are indirectly invited to partake in making decisions about design, we need to discuss this inbuilt contradiction between inputs produced by the user representatives and the project's already settled preconditions.

As pointed out throughout the thesis, building projects are substantially complex endeavors, which most often hold a range of preconditions or requirements as a central part of their outset. Several of these are decisions made prior to that the design process is launched. They are often factual, in the sense that they cover aspects like the size of the building site, the number of people that the building is supposed to accommodate, and similar types of information. But today, the establishment of a building project increasingly involves preconditions that may rather be characterized as vague organizational aspirations. These are aspirations that can inspire the development of the design process, and that can also be inspired by the design solution, as it emerges. The story about the entrance counter in the Town Hall project and the somewhat vague aspiration of *"signifying openness"* might be an example of such an input. Here, the notion of 'open' or 'closed' took on different interpretations, according to context and situation.

If we return to some of the general developments within the area of organizational design (cf. 2A), design is often perceived, not only as a design product, but more so as a process of designing. Here, there seems to be an important tension between the original project outlines and the ideas that emerge in the project. Organized end user participation represents an approach that seems

likely to support and also influence design as being an emerging process. These activities can potentially maintain a continuous discussion about the design solution and might thus be seen as an opportunity to establish arguments in the process of decision making. In this perspective, pre-mediated conditions might not be perceived as premises, but rather as results of a complex development process of exchanges between the involved parties. The organized participation induces a learning opportunity, not only for the staff but also for the manager.

Here, we might recall the approach to strategic change as exchanges of sensemaking and sensegiving efforts between management and staff (Gioia and Chittipeddi 1991). In this approach, ambiguity and uncertainty form a point of departure, with regards to the project's basic aspiration. Again, we may revisit the Town Hall project, in which a staff member returned from her leave of absence to find sketches of an entrance counter that, in her view, sent a 'closed' signal to clients and visitors. On this basis, she enacted the vague organizational aspirations of becoming a learning organization and/or signifying openness, by initiating a complex process of redesigning this particular architectural unit. The story illustrated that these processes are surrounded by ambiguity and uncertainty, and can hardly be said to be thoroughly pre-mediated. In this particular example of the emergence of a design (and decisions about this design), the ambiguous quality could be illustrated in the following way:

- The municipality wanted to signify openness.
- The staff in general wanted closed offices.
- The staff eventually learned to discuss and articulate the conditions that regarded the open office layout through the course of their engagement in the organized participation. Based on the input produced as a result of these activities, the staff got various needs and wishes included in the design of the open layout, although they still preferred the closed office structure.
- A staff member on leave returns to the scene. She sees the sketches of the entrance counter and points out that they signify concealment and should thus be reconsidered.
- The counter goes through various rounds of renegotiation and is eventually redesigned.
- The building is constructed and occupied.

- Shortly after, the entrance counter is considered too open. New plans are made for an adjustment of the entrance counter. And so the story continues.

These are highly complex processes, in which a decision is not merely a decision. In one perspective, design decisions are units that remain in motion for a very long time, possibly continuously. Weick has suggested two different ways to approach the concept of design: to perceive a design as a product or what he calls a "blueprint", or conversely as that of a process or a "recipe" (Weick 2001). The concept of a blueprint includes elements such as technical drawings, organizational diagrams or other, which describe what the design should represent in its final version. We have seen examples of such an approach above in this thesis, for example with reference to the traditional brief of requirement (cf. sections 6A). In this setup the design solution might thus be said to be 'pre-mediated'. We know a lot about what we get, in advance. The recipe, on the other hand, rather represents a potential guideline to the design process. The concept includes many of the pieces that can support the emergence of the design solution – but without controlling their actual format and the order in which they appear. The recipe might thus be said to provide a set of building blocks, but the way to assemble or interpret these, is left for the designer to develop. Here, the same decision can be perceived and understood differently if the recipe is perceived from a different perspective. This seemed to have happened in the story of the open/closed entrance counter, in which different players interpreted the recipe in ways that produced different meanings to it (too open, too closed, etc.).

If we once again recall the decision of the open office layout, this condition may in one perspective be perceived as a blueprint. But considering the ambiguity that the participation activities involve in practice, they might rather have represented a way of talking and thinking about the open office layout that made it possible for the staff to accept it. Here, focus is not on the shape of the layout, but rather on the process of making acceptance possible. The point is that the way the participation is organized seems to have a substantial effect on how the layout establishes as a design solution. In empirical projects like those explored in this study, in which organizational and architectural factors are attempted to be connected, there are necessarily many unknown factors at stake. Gioia and Chittipeddi (1999) suggest the concept of "ambiguity by design" as an approach to launch and drive the development process. In such approaches, the exchanges,

rather than the preconditions, represent the central design parameter. It is the tension between the pre-mediated decisions and the participative engagement that is central. Not so much for the content of these decisions, but more for the process of making them. It is on this tension span that organizational developments take place.

STORY MATTERS: ESTABLISHING A POINT OF REFERENCE

As a vehicle to inform organizational design processes, organized end user participation in architectural design processes seems to enhance the organization's ability to handle change events. In projects that involve elements of organizational restructuring, and where new ways of working and collaborating are considered central, the spatial organization of work practice might represent an opportunity to approach such change events. Here, conversations about current and future work practice might give the participants a sense of ownership, with regards to the new. The participation activities can thus enhance comprehension, but it may also produce suggestions to inform the future structure. I have attempted to illustrate this through the empirical projects explored in the study, for example when architects and process designers attempted to work together in the Mikado House project. With the process designer as a new player in the building process, this collaboration represents unfamiliar design conditions. Here, many change events were involved and several of the factors that constituted the design process, were unknown. To be able to embrace the unknown, we often try to generate a sense of something known, something we can recognize, through which the unknown might easier to comprehend. With the participation activities as the central framework within which such change events were organized, the establishment of recognition must be considered unstable. Not only are there many voices involved in the actual processes, whose perceptions change or modify continuously. Also, these voices represent a lot of other people: colleagues, clients and visitors, all of which are future users of the building. However, the framework that the participation produces can potentially allow the establishment of a form of recognition among the participants. Through talking, sharing experiences, exchanging ideas, having

controversies and so forth, associations are made, stories are built, told and retold, and a sense of recognition might thus be constituted.

The manager and the architect can use the participation activities as a means to form stories that can support them in their attempts to solve their tasks as manager and architect. The participation activities hold an opportunity to interpret the ideas from the users, and to mould these into suggestions to, and decisions about, the forthcoming organizational and/or architectural design. If we again recall the events of the Town Hall project, I proposed that leadership might be seen as the ability to produce "a point of reference, against which a feeling of organization and direction can emerge" (Smircich and Morgan 1982: 258 in Weick 2003: 75). Here, "a feeling of organization and direction" seems to entail that there is a general sense of cohesion, with regards to the events at stake. This does not mean that everyone involved agrees on the directions taken and the decisions made – they usually don't. But it means that the stories (about the spatial layout of the interior design of the house, the properties of the reception area, the spatial intersections between departments, or other) have been retold in versions that hold a reference to the participation activities, and thereby become recognizable. In this setup, the notion of recognition might be said to be necessarily and beneficially unstable, with reference to organizational as well as to architectural design processes.

In the Mikado House project, the large staff group that was involved in the initial participation activity produced various versions of a helix as an input to the design of Arkitema's future domicile. Several other inputs were produced in the activities, but this particular metaphor was maintained as an inspiration to inform the emergence of the design solution, throughout the course of the first phase of the project. The helix established itself as a mutual point of reference that not only inspired a range of versions of the design for a building constitution, it also informed the interior layout of the building and inspired Arkitema's new organizational structure. Finally, it reached back to the project's point of departure, where the helix might be said to represent the firm's repeated strategic aspirations with regards to future practice. From *"knowledge sharing"* to *"cross disciplinarity"*, *"intersection"*, *"spiral"*, *"möbius strip"*, *"helix"*, *"marguerite route"*, *"underground route"*, *"meeting place"* and many more points of association, the helix's journey became a lever for the project's progression. Here, the reference does not require that two components in the chain of association

(from one version of the helix to the next), visually correspond. They naturally won't as they have gone through various exchanges along the way. Rather, it repeats a particular story by adding new pieces to it. The helix becomes 'the mutual third' that unites the organizational and the architectural by using this point of reference as a way to coordinate and communicate. The notion of the mutual third thus represents a 'connection'. The point is general in the sense that although the Mikado House project was unique in many ways, it also involved many aspects that are common in (organizational and architectural) development projects. The conflicts caused by attempts at cross disciplinary collaboration, the complexity caused by many perspectives, the need for a mutual point of reference to bring the development into progression – all of these are common features.

What happened in the Mikado House project, however, was that when the project's design conditions changed, the helix broke as a mutual point of reference. Despite that the actual helix of curved loops might in fact be visually apparent in the final design representation and also in the building that is currently emerging from the ground as I write this, the participants lost sight of the reference – and thereby also of the connection between the architectural design and the organizational input. If the story is not repeated and added to continuously, the reference is gone. Here, the role of the participation activities illustrates that the recognition of a design solution or "the feeling of organization and direction" does not as such reside within the design itself. Rather, it is formed by the perspective, from which we approach it. People in organizations don't recall or remember on a 1:1 scale, to use an architectural expression – they remember the story. The establishment of a point of reference might thus be perceived as a vehicle to support, not the development of each of these design processes, but the enhancement of a 'connection' between them.

THE LANGUAGE TRAP

As I have discussed in Chapter 4, the community of professional architects presently seems to go through significant challenges. The closer collaboration between architect and client organization and the interface that this seems to

involve represents an important challenge that includes a linguistic dimension. Architectural design practice is difficult for architects to explain, let alone for layman to comprehend. The closer link requires increased communication, and the architect profession does not have a tradition for communicating their design process to society at large. Rather it is surrounded by a certain concealment, which also contributes to uphold the community's professional recognition. With current societal tendencies, in which collaboration across professions and an increased involvement of users in product development is regarded as central, the ability to communicate becomes decisive to all parties. I will not expand further on this point here, but simply repeat a basic implication that these developments seems to hold. In this climate of extended collaboration across professional borders, it becomes crucial to be able to legitimize your choice by explaining its significance. If the architect's ability to verbalize her contribution is weak, her involvement in a project becomes difficult to explain and justify to clients. This linguistic challenge does not only make it more difficult for architects to explore new business opportunities. Also, it makes concrete collaborational endeavors difficult to handle. The linguistic secrecy and the nonattendance to verbalization established within the trade, is considered a central part of the profession's sense of identity. The ability to take on, explore and test new ways of working seems to be a central challenge for the architect profession in the coming years. While architectural theorists acknowledge that the challenge of verbalization exists, and offer certain explanations of its origin, not many proposals address how it can be attended to in future practice.

THE CLIENT AS A MOVING TARGET

The extended focus on participation in architectural design processes seem to propose that the design of such spatial frameworks is supposed to emerge in a collective process. In this setup, the client organization is increasingly considered a *"co-designer"*, as it was characterized in official documents of the Town Hall project. To professional architects, it involves that several of the points I have indicated above in this chapter would affect their practice. First, the notion of the client as a 'compound body of users' radically changes the architect's traditional

perception of a client. Here, the users are not compound in the sense that they are imagined future users of the building, which would be a typical situation in architectural design work. Rather, they are active, invited into the participation activities, within which they talk about their work practice as they imagine it to be organized in the forthcoming building.

Second, the 'compound body' is active in the sense that its representatives learn and change in the course of their engagement. Their conversations about space change their perception of the things they talk about. These displacements are complex in the sense that the participants themselves often do not see them; they have what we might call a "bad memory surface" (Weick 1979: 208). Through their exchanges in the participation activities, they tell and retell stories, and in this process of storytelling, the stories wander in various directions. If we look back on the story about the entrance counter in the Town Hall project, the participants' attitude towards this particular object went through several changes along the way. From a substantially 'open' version in the original architectural design proposal that was considered 'too open', to the more restricted variant that was perceived as too separated from the clients and thus 'too closed'. After the latter version was redesigned and materialized in the new building, the entrance counter went through further reconsiderations, due to functionality and security issues. Some of these continuous developments are familiar to professional architects, who are generally used to a design process, where things emerge accordingly. But if 'an organizational input' produced by a 'compound body of users' are regarded a design parameter – what does it then mean if the input continuously changes? These can involve smaller or bigger displacements, based on exchanges and continuous discussions and stories that emerge and travel on an organizational (client) level. The shifts may appear small or invisible, but the consequences can be substantial if they involve changes in the organization's sense of identity. To be able to respond to this motility poses a challenge to the contemporary architect. The capacity to handle the moving target thus becomes a 'connection' between the two design processes.

In the somewhat untraditional design collaboration between the architect and the client as 'a compound body of users', the architect represents substantial expertise – as a professional designer. On the other hand, users are also tentative experts, in their capacity of having knowledge of their practice. It is thus an uneven

relationship that questions the balance between knowledge and influence in the design process. As I have illustrated and discussed on several occasions above, the organized end user participation produces a substantial amount of input. A lot of this input can be characterized as having an informational quality. It describes spatial aspects of the daily work; financial preconditions; details about the building site, and more. But quite an amount of the input also regards contextual aspects like atmosphere, proximity preferences, perceptions of 'open' as opposed to 'closed', and so forth. These are preferences that are based on context and that might change accordingly.

To architects, it might be relevant to divide the content of 'the organizational input' between 'pieces of information' and 'pieces of inspiration'. The 'informational pieces' are reasonably stable units that can add onto the basic material that informs the project, as an integrated part of the traditional brief of requirements. The 'inspirational pieces', on the other hand, are active units that modify and travel as the project and the design solution emerges. Because of their format and constitution, they cannot be transferred in 1:1 versions. They should be translated, with reference to the stories they hold, but based on architectural expressions developed by professional architects. To the architect, such a responsibility involves certain challenges. First, this kind of translation process involves the ability to balance the tension between being hypersensitive and arrogant as a designer. As mentioned above, much of the input produced in the participation activities will necessarily be contextual and repetitive. The translation of the inspirational pieces should thus not be made too literal. Rather, the (architectural) designer needs to go behind these inputs and translate them into new versions.

Where secrecy is involved, arrogance is often close at hand. The chore of translating a 'piece of inspiration' might thus be said to be potentially demanding, as it refers to people's contextual perception, which may change, but also potentially stimulating, as it might induce conceptual ideas and shapes that can contribute to the ongoing design process by being based on different references. The story of the helix in the Mikado House project can serve as an example. The spiral shape of the curved loops that was established as an input produced in the initial participation activities was used by the architects and process designers as inspiration. It wasn't an easy task to get it established as a general point of

reference to inform the design process as it involved a lot more than just the physical curves. It was muddled through and further developed in a considerably demanding design process. But it inspired the architects in an unfamiliar design situation, and it continued to develop as a point of reference. Here, we might recall the conceptual idea of approaching the design process as a blueprint or a recipe. Whereas 'informational pieces' might be having a certain blueprint quality to them, the 'inspirational pieces' might rather be seen as indications that need translation in order to take shape and thereby adopt meaning. These are building blocks that can be assembled in different ways according to the context in which they appear. The 'pieces of inspiration' might thus be said to represent a potential 'connection' between the two design processes.

THE DIACHRONIC VS. THE SYNCHRONIC DESIGN LOGIC

Above, I have pointed out that the architect profession might gain from a forthcoming discussion about the profession's verbalizing capacity. In addition, I would propose a discussion that explores the competencies that are needed to support the ability to navigate these kinds of design processes.

If organized end user participation generates 'connections' between the organizational and the architectural design processes, these might require new ways of working and types of collaboration: intersections that are not thoroughly established between these two design fields. It potentially involves an extended collaboration between architects and process designers. But although there might be process designers involved in this new design approach, attempting to support the link by organizing the participation activities, the link also requires a closer relationship between the architects and the end users themselves. This increased proximity calls for an advanced ability to handle such collaboration.

Today, professional architects are not trained to respond to or manage the client as a 'compound body of users', who are active and continuously changing in smaller or larger shifts. To be able to navigate this contact, the architect profession

needs to consider new competencies, presently not implemented in the field. And as we know from decades and centuries of establishing new technologies, soft and hard alike, it takes time, effort and patience to introduce, adopt and institutionalize new ways of working. In order to consolidate, new competencies need identification and testing, which has not yet been thoroughly addressed in the field. Here, extended testing and trialing is necessary, in order for these new competencies to establish and the potentiality of the 'connections' between the two design fields to reveal. Several of the points I have indicated above might in this respect to seem trivial. We know that attempts at collaboration between groups of different professional background are difficult endeavors, in which, the involved parties try to find new ways to organize the collaboration. Many studies have addressed this challenge, also within the area of design. Where this study differs, is through the idea of bringing this particular group of players and phenomena together (architects, process designers and end users) and exploring the interface and interaction between them.

Based on the dynamics, dilemmas and tensions that were revealed in the production of this empirical material, I will suggest two design logics that seem to represent ways of working: opportunities and dilemmas hidden in this type of design collaboration. I call these the diachronic and the synchronic design logics, respectively. 'The diachronic design logic' might be said to reflect central parts of the building project as we know it. With this point of departure, the events involved in the design process take place in a sequential structure, and each of the players has a defined responsibility. Here, the processes of end user participation are experienced as unfamiliar by the architect as well as by the client. But although the input might seem different, the handling and facilitation of these activities are largely taken care of – by the process designer. The division of labor is clear: architects and process designers primarily work in separate processes. The process designer is responsible for the planning and execution of the participation activities, and also for the translation of the outcome produced.

What does this structural logic mean for the ambition of producing 'connections' between the two design fields? Among other things, it means that the collaboration might work without larger adjustments. It secures the integration of a new type of input to the design process that corresponds with societal tendencies. Also, it involves a translation challenge for the architect in her attempts to bring

the unfamiliar 'organizational input' into architectural form. But the architect is still at a safe distance from the client as a 'compound body of users'. The situation is comfortable. Despite the substantial differences it causes to the general project structure, the architect can hold on to her well-known design approach, while experimenting with the unknown. Architects involved in the Town Hall project thus characterized the design conditions as being *"different"* and *"rough"*, but also as inducing *"freedom"*.

The client, on the other hand, seems to be able to run highly complex organizational design projects like the Town Hall project, which was based on the framework of the parallel architectural design process. We might say that the diachronic logic responds to current tendencies that are approaching within and also between the fields. In an organizational perspective, the organized participation seems to involve new approaches to organizational development. From an architectural viewpoint, however, it does not seem to establish new ways of working and collaborating that in radical ways differentiates from tradition. Here, architects may work with a new type of material (which in itself represents displacements). But they do not interact closely, neither with the end user representative in the organized participation, nor with the process designers in the translation of the produced material.

'The synchronic design logic' appears to represent an incitement to the diachronic structure. In the synchronic logic, the integration of the end user as co-designer in a design process that is continuous and emerging seems central. The development of the Mikado House project might be said to have been built upon aspirations reflected in a synchronic logic, with the term *"synchronic"* also actively used by some of the players involved. Here, the idea of producing the brief of requirements while at the same time generating a design solution represented a synchronic feature, as did the attempts at translation of the outcome ('the organizational input') in collaboration between architects and process designers. In this collaboration, the process designers argued that the production of a broad material based on the participation activities would enhance the opportunity to produce new architectural design concepts. This notion of input volume: material that can potentially be used in different ways can also be said to represent the synchronic design logic.

Several of the challenges involved in the synchronic structure will need further investigation. First, the input from the end users holds a format that is unfamiliar for professional architects to handle. Here, the substantial differences in language and method between architects and process designers represent a central challenge. In Arkitema, the cross disciplinary aspects that characterized the collaborational experiment between the two groups did not find a point of intersection, from which this way of working could mature and establish in the firm. From subsequent informal conversations I have had with Arkitema architects, I know that some of the experiments the Mikado House project represented did plant certain seeds that were later applied on a small scale by individual architects around the firm. But as an integrated part of the architectural design practice, the experience from the project did not form a new template, from which further implementation of the method could be established. My point here is plain: these experiments need testing and trialing, in order to be thoroughly scrutinized. In this perspective, the Mikado House project can be seen as a brave attempt that involved a considerable amount of experiments. But the complications that the project represented may also have left those, who were skeptical more discrediting, and those, who were interested more in doubt.

It is also necessary to note that we do not know much about how these new design ideas and concepts – produced as a result of a closer collaboration between architects and process designers on the basis of 'an organizational input' – might work. If they represent some kind of newness or innovation, this change also needs substantial rounds of testing and trialing. New is not necessarily good, with reference to for example functionality. But again, functionality does not occur in a day. It takes time to evaluate the quality and prospect of a new spatial feature or layout in a work environment. Experimenting with new ways of working and collaborating based on a synchronic design logic that involves a closer relationship between architect and process designer and thus potentially between the architect and the client, might produce new architectural solutions. But there is always the risk that the client will not like the solution, and that the client sees and hears something different from what the architect (thought she had) brought forth. There is substantial uncertainty and ambiguity in these processes, from both ends: the organizational and the architectural alike. In an organizational perspective, spatial and functional preferences are, to a large extent, based on individual taste and contextual perception. They change and wander according to fashion and

continuous displacements. Also, the architect's approach to the design process is often highly individual. Here, some features can occasionally be traced back to an educational institution, generation, firm, contemporary fashion or other – but it seems basically hard to generalize architectural ways of working. Collaborational experiments of synchronic, concurrent and continuous design processes seem to require a sensibility in the exchange that architects do not seem to comprise as yet. They often hold this sensibility with regards to materials, lighting, lines, passages, spatial cohesion and many other things. But the type of input and collaborations indicated here, go beyond their basic competencies.

Based on some of the features that seem to represent these two design logics, it seems that the issue of proximity needs extended inquiry. If organized end user participation holds the ability to produce 'connections' that address the development of organizational and architectural design, we need to look specifically into the transition or intersection between the players. Here, a closer collaboration might, in fact, also indicate the need for a stronger separation. By engaging more closely with the participation activities and the initial translation of the produced material, the architect might also gain a broader span of design opportunities. In such a process of translation/design, the architectural tools, and also the architect's highly individualized ways of doing things, still form the point of departure. But by engaging closer with the end users and the production of 'the organizational input', the architect may establish new sources, from which architectural concepts can emerge. This calls for another separation – that between the architect and the conceptual idea. For the architect to be able to get into a closer collaboration with the user, such proximity might also indicate that a critical distance to the project is necessary. The establishment of such a distance might be hard for architects, as for many other professionals, who work with realizations of conceptual ideas. As it has been pointed out on several occasions above, translation does not mean transference, but rather represents a meeting or an intersection. An increased capacity to handle such an intersection could potentially represent a resource for the contemporary architect. But it still requires extended articulation capabilities. It seems a central challenge for the architect to increase the verbal effort as a means to strengthen the opportunity for their expertise to come into play.

A TRIANGLE OF CHANGE EVENTS THAT MAY AFFECT BOTH DESIGN PROCESSES

I consider this thesis to form a provisional outline, in which the potential link between organizational and architectural design processes has been discussed, illustrated and explored. Looking back on some of the discussions from the previous chapters, I will close this effort by repeating three aspects that I see, not only as significant, but also as potentially intertwined, as in a triangle. The first aspect is the challenges that the brief of requirements in architectural design processes currently seem to be subjected to. The second, which also regards the brief, is the duality between the input as having an informational and/or an inspirational character. Finally, the third aspect is the two design logics, provisionally outlined above as synchronic and/or diachronic approaches to the design process.

Concerning the first aspect of this triangle, and as has been described on several occasions in the thesis, the brief of requirements is a document that has traditionally played an important role in architectural designing (cf. diagram 1). It has served as a central point of departure to launch and guide the architectural design process, and also as a link between the client and the architect. As I have illustrated and discussed in the previous chapters, the brief currently seems to be going through substantial changes. In the Town Hall project, the brief was considered as *"different"* in the sense that it was written after the organized participation activities were launched. Not only did the brief as such consist of unfamiliar elements that were based on the outcome of the participation activities ('the organizational input'), produced by the substantial group of end user representatives (the 'compound body of users'). Also, these elements played a central part in the assessment of the design proposals that were produced by the architects in the course of the architectural competition. Here, 'the organizational input' seemed to be used as assessment criterion.

In the Mikado House project, the brief of requirements also played an important role in the project outline, but in a substantially different way to a traditional project. In this process, the traditional brief was tentatively dissolved in an attempt at integrating the organizational design process into the process of designing

architecture. The concept had substantial consequences, including the difficulties in collaboration between architects and process designers, which represented a central part of the project's general novelty. Also, the description of the brief as being absent didn't really reflect the project's actual conditions as they, in fact, appeared. The Mikado House project held a considerable amount of information that, in a traditional project, would have been characterized as a part of the brief. Here, we should recall the point that story matters. The way that features and conditions are presented in organizational life has substantial consequences to how they are perceived. These two empirical stories, in which the brief of requirements was given a new role that directly integrated organizational factors, represent a shift with reference to conventional architectural design processes.

Turning to the second aspect of the triangle, and to the brief as consisting of 'pieces of information' as well as 'pieces of inspiration', we might say that these types of input represent the brief in its conventional as well as in its novel form. Here, the 'informational pieces' characterize the traditional brief as a point of departure to launch and guide the design process, while the 'inspirational pieces' also represent aspects that might emerge, based on the intersections that take place. The 'inspirational pieces' might be said to correspond with the idea of integrating the client organization closer into the architectural design process – to produce 'an organizational input'. This idea was, in different ways, explored and tested in both case organizations.

In this perspective, we should also recall the notion of talk and conversation as a constitutional factor in organized end user participation, and also in efforts of collaboration and communication across disciplines and fields. When we use talk as opportunities to create links, we exchange perspectives and add on to each others' stories and thereby build new stories. This is what happens when end users are invited to talk about spatial matters, in conversations that are set in an unusual framework. Such a different conversational perspective may lead to new ways to communication or new ways of working. As pointed out above, we don't know if these new ways will work, but they might be relevant to explore. This is what happens when architects and process designers meet in a mutual effort to set forth a design process that is based on an input, to which the architects are generally unaccustomed. Here, the new type of input requires (and inspires to) new ways of talking about – and undertaking – the design process.

As for the third and final aspect of the triangle, these inspirational pieces were, in the Town Hall project, brought into the design process as a new feature of the traditional brief of requirements. In the Mikado House project, the traditional brief was removed in order to give way to new approaches to the process of designing architecture. The Town Hall project represented a project structure that maintained a number of the conventional rules and regulations that are known in architectural design processes, in which the traditional brief of requirements plays a central role. This might be characterized as a diachronic design logic, in which a sequential structure steers the emergence of a design solution. In the Mikado House project, on the other hand, the brief of requirements and the architectural design solutions were supposed to emerge in a concurrent process. Here, the project structure was characterized as synchronic rather than sequential, and a number of new features were introduced to constitute the design process. This structure and several of the features it represented radically diverged from the traditional architectural design process. But as it was illustrated in Chapter 6, the Mikado House project comprised severe challenges that often left the players involved in the process confused.

CLOSING COMMENTS

Based upon some of the findings in the study, it seems conceivable that the two design processes can evolve concurrently and that various 'connections' are generated by an increased level of proximity. But the increased proximity and the proposed 'connections' illustrated and discussed in the thesis also imply significant challenges to both design fields. Here, the 'connections' necessarily exist in a tension between being perceived as resources and/or as restrictions. As I have provisionally described in the paragraphs above, the two processes might provide mutual resources, in which the one represents development opportunities for the other. On the other hand, we might also say that these processes mutually undermine and disrupt each another. Here, issues like divergence in methodology have been discussed to describe how the two design processes are not an easy match. In order for the link to become thoroughly explored, further experiments

within the practice fields and empirical research to interrogate these opportunities, seem necessary. If end user participation holds the potential of creating resources, disruptions and destruction in processes of organizational and architectural design, more effort should be put into understanding the conditions and factors that determine if the effect is one or the other, i.e. functional or dysfunctional: What determines if the architects will receive the end user inputs as demands or as inspirations? And also: What determines if the end users will recognize their footprint on the architectural design, even if they cannot find their specific demands and solutions?

In an organizational perspective, organized participation in architectural design processes might contribute as a vehicle to enhance the development of organizational design. Not necessarily for its architectural design qualities, but more so for its quality of representing a material subject matter, through which stories can establish and develop. In this way space and spatial matters might be perceived as a narrative resource that can support the organization's ability to contain and navigate their own practice. In an architectural perspective, 'the organizational input' produced by the client as a 'compound body of users' in processes of organized participation can contribute as an opportunity to regain a closer relationship with the client. The input might be perceived as 'informational' and 'inspirational', respectively, in which the latter might provide certain resources to contemporary architectural practice.

To unfold this potential, however, it requires that new competencies are established, in order to accommodate these new methodological and collaborational attempts. The 'connections' that the organized participation activities seem to establish might thus represent opportunities for both design processes and both designs. Not as blueprints for designs but rather as recipes and situated opportunities for navigation. The extent to which organized end user participation can contribute to form new architecture and new organizations remains to be seen in future projects. The input it produces is complex and 'personal', in the sense that it is often based on cognitive and emotional criteria. When people talk, they get carried away. They associate and often start talking about a lot of other things. The client as a 'compound body of users' does not represent a reliable designer in the traditional sense. Their input must thus be treated as inspiration, not as requirements on a 1:1 scale.

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DANSK RESUMÉ

Afhandlingen undersøger konstruktionen af gensidige koblinger mellem to design processer som traditionelt anskues som adskilte og sekventielt organiserede: den organisatoriske og den arkitektoniske design proces. Studiets baggrund er de senere års stigende interesse for rum og arkitektur som strategisk redskab i moderne ledelsespraksis, en interesse som også har etableret sig indenfor organisationsteoretisk forskning. Eksisterende forskning på dette område har dog i mindre grad taget udgangspunkt i empiriske studier. Det er dette forskningsmæssige vakuum jeg med afhandlingen ønsker at bidrage til at udfylde.

Med henblik på at undersøge konstruktionen af gensidige koblinger mellem den arkitektoniske og den organisatoriske design proces er organiseret brugerinddragelse udpeget som studiets primære genstandsfelt. Empirisk tager jeg udgangspunkt i to danske kontorbyggerier, hvor den arkitektoniske design proces har involveret høj grad af brugerinddragelse. I disse processer har bygningens slutbrugere været engageret i planlagte forløb, der omfangs- og indholdsmæssigt går udover den traditionelle kontakt mellem fx klient og arkitekt. Brugernes inddragelse indebar deltagelse i bl.a. workshops, interviews og dialogmøder. Disse aktiviteter var forberedt og faciliteret af såkaldte *”proces designere”*, en tilsyneladende ny spiller i den arkitektoniske design proces og i byggeriet. Gennem kontinuerlig brugerinddragelse i den arkitektoniske design proces søgte man i begge projekter at skabe en tættere kobling til den parallelle organisatoriske design proces. De to byggeprojekter er Hillerød Kommunes nye rådhus og arkitektfirmaet Arkitemas nye domicil i Ørestad.

I studiet har jeg forsøgt at afdække, hvilke resultater den organiserede brugerinddragelsen kan medføre for hhv. det organisatoriske og det arkitektoniske design. Afhandlingen illustrerer og diskuterer, hvordan de to meget forskelligartede design processer forsøges koblet, og hvorfor det er svært at lave sådanne koblinger. I de to empiriske studier identificerer jeg en række ’koblingspunkter’ (’connections’) mellem de to design processer, koblingspunkter

som repræsenterer steder, hvor centrale implikationer kan opstå. Teoretisk tager afhandlingen udgangspunkt i en del af litteraturen om sensemaking i organisationer, og desuden i aktør-netværks teori. På baggrund af de to projekters høje grad af utraditionelle samarbejdsrelationer, hvor deltagernes forskelligartede sprog og metodiske tilgange har repræsenteret en signifikant udfordring, har sensemaking litteraturen bidraget til bestræbelserne på at forklare og diskutere det empiriske materiale. Idet projekterne samtidig indeholder høj grad af materialitet: skitser, tegninger, dokumenter, mv. har aktør-netværk teori bidraget med en række teoretiske begreber som har gjort det muligt at analysere og diskutere materialet.

I forhold til den organisatoriske design proces viser analyserne blandt andet, at brugerinddragelsens fokus på rum og arbejdets rumlig organisering kan give anledning til at italesætte, diskutere og dermed udfordre deltagernes opfattelse af komplekse organisatoriske forhold. I disse processer kan fundamentale uenigheder om organisatoriske forhold delvist stabilisere medarbejdernes holdninger, gennem den kontinuerlige samtale om arbejdets rumlige struktur som brugerinddragelsen tilbyder. Her ser samtalerne om rum ud til at give anledning til en udvidelse af medarbejdernes generelle forståelse af kompleksiteten i moderne arbejdsorganisering. Brugerinddragelse i arkitektoniske design processer kan derfor delvist siges at give klientorganisationen mulighed for at skabe en organisation der er i stand til at rumme sin egen kompleksitet.

I forhold til den arkitektoniske design proces illustrerer afhandlingen det pres, som arkitektprofessionen ser ud til at opleve i disse år. I dag involveres et stadig stigende antal bidragsydere i det, der traditionelt set har konstitueret arkitektens opgave med udviklingen af et design. Her er klientorganisationen og slutbrugerne nogle af de spillere, som ser ud til at blive mere centrale. Den øgede involvering af slutbrugeren som bidragsyder i design processen indikerer en generel ændring i forholdet mellem klient og arkitekt. Denne ændring stiller nye krav til arkitektens evne til at kommunikere deres bidrag og beskrive den arbejdsmetode hvorigennem designet kan etablere sig. Dette forhold repræsenterer en distinkt kommunikationsmæssig og sproglig udfordring for arkitekten i de kommende år.

På baggrund af de to empiriske studier initierer afhandlingen to forskellige ’design logikker’ som kan beskrive og understøtte denne type design processer: den diakrone og den synkrone design logik. Den diakrone design logik

repræsenterer en struktur, hvor processens delelementer følger hinanden i et sekventielt organiseret forløb. Her er arbejdsdelingen mellem arkitekt og procesdesigner præcist afgrænset, og produktionen og oversættelsen af brugernes input er skarpt adskilt fra arkitektens arbejde med udviklingen af designet. Med den synkrone design logik introduceres idéen om et tættere samarbejde mellem klientorganisation, arkitekt og procesdesigner. For at den synkrone design logik skal kunne fungere, foreslår afhandlingen at inputtet fra brugeren forvaltes som inspiration ('pieces of inspiration') snarere end som krav til det arkitektoniske design. Der indikeres således en distinktion mellem klientens input som 'informationer' ('pieces of information'), som vi kender dem fra klassiske byggeprogrammer, og input som 'inspirationer' ('pieces of inspiration'), som skabes parallelt med udviklingen af det arkitektoniske design.

Afhandlingen foreslår at idéen om den parallelle design proces, hvor udviklingen af organisatorisk og arkitektonisk design finder sted sideløbende via organiseret brugerinddragelse, og hvor de to design processer herigennem har mulighed for at påvirke hinanden, bør undersøges yderligere gennem empirisk forskning. Kun igennem praktiske projekter kan vi lære, hvordan de *mulige* koblinger omsættes i *faktiske* koblinger. Her erstattes dele af det traditionelle byggeprogram af ofte usammenhængende og meget komplekse input fra brugerne. I de to parallelle design processer skabes disse input dynamisk, og på den måde etableres en mulighed for at anvende dem i begge designs. Det er dog ingenlunde givet, at sådanne input faktisk finder anvendelse. Det er betingelserne herfor, der kræver empiriske studier – og yderligere studier end det her afsluttede.

ENGLISH SUMMARY

In the thesis, I explore the construction of mutual links between two design processes that have traditionally been considered separated and sequentially organized: the organizational and the architectural design processes. The general background for the study is the increasing interest in space and architecture as a potential strategic vehicle that has established within contemporary management during recent years. Scholars within organization studies seem to share this interest. However, only few research contributions are based on empirical studies. My aspiration with the thesis is to contribute to fill this gap.

In order to explore the construction of such mutual links between the organizational and the architectural design processes, organized end user participation has been the study's primary research object. My empirical point of departure has been the establishment of two contemporary office buildings, in which the architectural design process has involved a high level of end user participation. Here, end user representatives were involved in a number of planned activities that in different ways extended the traditional contact between client and architect. The activities involved workshops, interviews and dialogue meetings, prepared and facilitated by so-called *"process designers"*, a player that seems new to the area of architectural design and to the building sector in general. Through continuous end user participation during the architectural design process, both projects aimed to establish a closer connection to the concurrent organizational design process. The two projects were Danish municipality Hillerød's new town hall and Danish architecture firm, Arkitema's new office domicile in Ørestad, Copenhagen.

In the study, I have attempted to disclose some of the results that organized participation can induce, with regards to the development of organizational and architectural design. The thesis illustrates various efforts to link these substantially different design processes, and discusses why the establishment of such links is difficult. I identify a number of 'connections' between the two design processes,

‘connections’ through which central implications seem to emerge. Two theoretical traditions have particularly inspired me in this work: sensemaking in organizations and actor-network theory. Based on the high level of untraditional collaborations that took place in the empirical projects, the participants’ differences in language and methodological approaches have represented a significant challenge. Here, the sensemaking literature has been helpful, in order to explain and discuss the data. As both projects also involved a high level of material objects: sketches, drawings, documents, and more, actor-network theory has contributed with a number of theoretical concepts that has helped me analyses and discuss the produced empirical material.

With regards to the organizational design process, findings show that the particular focus on the spatial organization of work processes can offer an opportunity to discuss, delineate and thereby challenge the participants’ understanding of complex organizational conditions. In these continuous conversations about the work’s spatial organization, fundamental disagreements with regards to the work structure somehow appeared to stabilize among the participants. Here, conversations about space seem to expand the participants’ general ability to comprehend some of the complexity that work in a modern organization involves. Organized end user participation in architectural design processes can thus be said to offer the client an opportunity to establish an organization, able to contain its own complexity.

As for the architectural design process, the thesis illustrates the pressure that that the architect profession currently seems to be confronted with. Today, an increasing number of players are involved in the process that has traditionally represented the architect’s responsibility in the establishment of a (building) design. Here, the client organization and the end user representatives are but a few of the players, who seem to obtain a more central position. The increased involvement of the end user as a contributor to the design development indicates a general change in the relationship between client and architect. This change implies a distinct communicational and linguistic challenge for the architect in the forthcoming years.

Based on the two empirical studies, the thesis suggests two different ‘design logics’ in order to describe and support design projects that involve a high level of

organized end user participation: the diachronic and the synchronic design logics. The diachronic design logic represents an arrangement, in which the different parts of the design process are organized in a sequential structure. Here, the division of labor between architect and process designer is distinctly defined, and the production and translation of the end user input takes place separate from the architect's creative design process. The synchronic design logic, on the other hand, introduces the notion of closer contact between client organization, architect and process designer. In order for the latter logic to work, however, it is suggested that the end user input is managed as 'inspirations' rather than as regular requirements to guide the development of the architectural design. In projects that involve organized end user participation, the thesis proposes a general distinction between client requirements as 'pieces of information' and 'pieces of inspiration'. The 'pieces of information' represent the type of input we know from the classical brief of requirement, while the 'pieces of inspiration' rather represent an input that is produced by the end users, parallel to the emergence of the architectural design.

The thesis indicates that the notion of a parallel design process, in which the emergence of the organizational and the architectural design take place in a parallel process that involves organized end user participation, needs further exploration through empirical research. Only practical projects can disclose how *potential* 'connections' can turn into *actual* 'connections'. Here, a part of the traditional brief of requirements is replaced by input from the end users that is often incoherent and complex. In these parallel processes, the input is produced through dynamic and concurrent activities that make it possible to use them in both designs. However, it cannot be taken for granted that these input come into use. It is the conditions for such usage that need to be studied empirically.

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