

Pulk, Kätlin

Doctoral Thesis

Making Time While Being in Time: A Study of the Temporality of Organizational Processes

PhD Series, No. 43.2016

Provided in Cooperation with:

Copenhagen Business School (CBS)

Suggested Citation: Pulk, Kätlin (2016) : Making Time While Being in Time: A Study of the Temporality of Organizational Processes, PhD Series, No. 43.2016, ISBN 9788793483514, Copenhagen Business School (CBS), Frederiksberg,
<https://hdl.handle.net/10398/9380>

This Version is available at:

<https://hdl.handle.net/10419/208997>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc-nd/3.0/>

COPENHAGEN BUSINESS SCHOOL
SOLBJERG PLADS 3
DK-2000 FREDERIKSBERG
DANMARK

WWW.CBS.DK

ISSN 0906-6934

Print ISBN: 978-87-93483-50-7
Online ISBN: 978-87-93483-51-4

MAKING TIME WHILE BEING IN TIME

PhD Series 43-2016

Kätlin Pulk

MAKING TIME WHILE BEING IN TIME

A STUDY OF THE TEMPORALITY OF ORGANIZATIONAL PROCESSES

PhD School in Organisation and Management Studies

PhD Series 43.2016

CBS  COPENHAGEN BUSINESS SCHOOL
HANDELSHØJSKOLEN

Making Time While Being in Time

A study of the temporality of organizational processes

Kätlin Pulk

Supervisors:

Tor Hernes, Professor, Copenhagen Business School

Are Bransted, Associate Professor, University College of Southeast Norway

Doctoral School of Organisation and Management Studies

Department of Organisation

Copenhagen Business School

Word Count: 58.357

Kätlin Pulk
Making Time While Being in Time
A study of the temporality of organizational processes

1st edition 2016
PhD Series 43-2016

© Kätlin Pulk

ISSN 0906-6934

Print ISBN: 978-87-93483-50-7
Online ISBN: 978-87-93483-51-4

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 organizations.

All rights reserved.

No parts of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without permission in writing from the publisher.

Table of Contents

ACKNOWLEDGEMENTS	5
1. INTRODUCTION	7
1.1 Time as a tool for organizing	8
1.2 Aspects of time and temporality investigated in the current thesis.....	12
1.3 Empirical papers and their contribution.....	14
1.4 The structure of the thesis	18
2. APPROACHES TO TIME IN ORGANIZATIONAL STUDIES	20
2.1 A linear time.....	20
2.2 Social time.....	22
2.3 Attempts to merge clock time and social time in organizational studies.....	30
2.4 The plurality of time-reckoning systems	27
2.5 An event-based time	29
3. A PERIODIC VIEW OF TIME AND ITS LIMITATIONS	33
3.1 Limitations and criticisms of a periodic view of time	34
4. A PROCESSUAL VIEW OF TIME	39
4.1 Temporality - the interplay between past-present-future	40
4.2 Time in events and events in time.....	43
4.3 Temporality in the mindful performance of routines.....	46
4.4 Sensed (dis)continuity in the flow of time.....	51
5. METHODS	62
5.1 Methodological constraints of temporal research	62
5.2 Case study design and sampling.....	65
5.3 Data collection and sources	70
6. FIRST EMPIRICAL PAPER: The past and the future in the now: Improvisation and routines as temporal interplay and the making of an improvisational event.....	75
7. SECOND EMPIRICAL PAPER: Mindful application of routines – lost in the outsourcing?.....	112
8. THIRD EMPIRICAL PAPER: Risks and consequences of temporal discontinuity in the organizational change process	147

9. IMPLICATIONS AND QUESTIONS FOR FUTURE RESEARCH	186
9.1 Implications	186
9.2 Questions for future research	190
10. CONCLUSION	192
EPILOGE	197
SUMMARY	198
SAMMENFATNING	201
REFERENCES	205

ACKNOWLEDGEMENTS

This thesis finalizes my PhD journey at the Department of Organization. It would not have been possible to finish that journey alone without the contribution and help of so many people around me.

First, I am deeply grateful to Majken Schultz and Tuborgfoundation, and Peter Kjær on behalf of the IOA, who provided funding for my studies. I would like to thank Signe Vikkelsø and Lene Lillebro for their help in negotiating my contract with the Doctoral School of Organization and Management Studies. I would like to thank the department, which has been for me like an intellectual rehabilitation center, for allowing me to enjoy its academically vibrant and nourishing atmosphere whenever I had a chance to spend time at the IOA.

My special thanks at IOA go to Tina Brun, who always greeted me with a big warm hug and Joan Knudsen, who during my long working sessions while at IOA fed me with tasty sandwiches from the late night meetings whenever there were some leftovers. I would like to thank retired IOA professor Flemming Agersnap for providing shelter when I was at CBS without any funds available.

My greatest ever gratitude will go to my main supervisor Tor Hernes for accepting me as his student and for enduring the whole journey despite a couple of near cardiac conditions I caused with my ‘creative use of English.’ Thank you Tor, for your patience, guidance and cooperation. For one interested in issues around time and temporality, it would be hard to find a better and more knowledgeable supervisor than you! I have learned and developed so much at the academic level, and without your help, this project would not look as it looks today.

I am also grateful to Micheal Haagensen for smoothing out the unnecessary creativity in my use of English and Karsten Staecher for translating the Summary

into Danish. Also, I would like to thank Ida Danneskiold-Samsøe for checking and revising the special terms in the Danish Summary.

My gratitude goes to Jenny Helin and Robin Holt for their constructive feedback and useful recommendations during my WIP2 seminar. I would like to thank my second supervisor, Are Branstad, for his comments and encouragement during the last year.

I would like to thank my colleagues from Estonian Business School. My special thanks go to Arno Almann and Olav Aarna, who have supported my studies at CBS and who have waited patiently for my graduation. I am thankful to Maarja Murumägi, who has been my constant support and offered a shoulder to cry on if needed. Although, usually we managed with just a glass or two of Leffe Blonde (according to Maarja, usually two).

Last but not least, I am so happy about the continuous support offered by my partner Fred and our children Loreen and Manfred. I know that while developing admirable self-sufficiency and self-organizing skills, there have been many sacrifices you had to bear during my numerous longer and shorter visits to CBS. Thank you for providing me your moral support and tolerating my PhD journey (including the messy house). I love you guys!

Thanks to all and everyone who has somehow contributed to this project!

What a ride!

Kätlin

Tallinn, 15 June 2016

1. INTRODUCTION

“...we don’t know what is behind more than we know what is ahead...”

“...future that came and future which did not come...”

“The time is now — now is the time”

This thesis is based on three empirical papers focused on issues around time and temporality in organizational settings. Although there is a wide body of research covering time in organization and management research, there are few studies on temporality. When time is reflected in research then according to Lee and Liebenau (1999, p. 1035-1051), these studies represent “time-related research” and missing “research on time.” I am focusing on time itself, my research is “research on time.” My theoretical framework is influenced by Whitehead’s processual approach to reality and time as ontology. I will follow Whitehead’s view of time as embedded in events. I am also influenced by Heidegger’s and Schütz’s phenomenological approach to social reality. Additionally, I rely on the recent work of Hernes (2008, 2014, 2014b) who has integrated a processual-phenomenological approach more tightly with organization theory.

The above quotations show some expressions of the different aspects associated with time. The quotes, originating from various sources have each caught my attention at different moments in time. The first quote is my free translation of the Estonian poetess, Doris Kareva. The second quote is from the youth novel “Beautiful Chaos”, written by Kami Garcia and Margaret Stohl, and the last quote originates from a Yogi Tea label. A common feature of these quotes is that, although related to time, the time they are referring to is neither clock time nor socially constructed time. Instead, they are directing our attention to the alternative ways to think about the meaning and nature of time. Although each with a different focus,

all the above mentioned quotes refer to time as understood in process theory. That means that I do not limit my approach to time with an abstract, unitary concept of industrialized clock time. Instead, I focus on time and temporality and their role in organizations and, more specifically, in organizational becoming (Tsoukas and Chia, 2002).

“Good morning,” said the little prince.
“Good morning,” said the merchant.
The merchant was selling patent pills to quench thirst: you swallow one each week, and you no longer feel the need to drink.
“Why are you selling those?” asked the little prince.
“They’re a great time-saver,” said the merchant. “The experts have worked it out. You can save fifty-three minutes in every week.”
“And what do I do with these fifty-three minutes?”
“You do whatever you like...”
“For my part,” said the little prince to himself, “if I had fifty-three minutes to spare, I would take my time walking slowly toward the nearest fountain of water.”

Antoine de Saint-Exupéry “The Little Prince”

1.1 Time as a tool for organizing

Time has an important role as a tool for societies to organize and coordinate their activities (Adam, 1990, 2004; Clark, 1985; McGrath and Rotchford, 1983). For example, agricultural societies have been and to some extent, still are organized according to seasonal rhythms (Reinecke and Ansari, 2015). Industrial and contemporary post-industrial societies have chosen Newtonian clock time as the dominant form of time, which has become a deeply taken-for-granted aspect of social life (Adam 1990, 2004).

The above citation from de Saint-Exupéry's 'The Little Prince' illustrates how time tends to be understood in modern society. On a daily basis people budget their time, they plan, use, and allocate it. People use time as a resource or commodity by spending, saving, selling and even wasting it (Hall, 1983). The clock enables us to measure time precisely, and time is perceived as something that can be saved or used according to one's preferences. As a resource or commodity, quantified labor time has become an integral component of production (Adam 1990, 2004; Clark, 1985; Lee and Liebenau, 1999). As a result of monetization, time is viewed as a scarce resource (Adam, 2004) and speed has become an important competitive advantage (Hernes et al., 2013). Within organizations, time is estimated, measured and used as a tool for measurement, coordination, regulation, and control (Clark, 1985; Hassard, 2002; McGrath and Rotchford 1983; Purser and Petranker, 2005).

Serving as a tool for measurement requires time to have a quantifiable nature – in minutes, hours, days, weeks, months, and years. That means that the concept of time in modern society is linked to the clock and the calendar (Hernes, 2014; Wiebe, 2010) and is seen as linear (Chia, 1999). There is nothing wrong with clock time per se. Clock time is an important tool for regulating tempo, speed, acceleration, slow down and urgency in organizational routines (Ancona et al., 2001) and can help coordinate and synchronize different interrelated tasks within organizations. Still, one should not neglect all other aspects of time and focus only objectively on it as an external and absolute measure (Adam 1990, 2004; Clark, 1985.) The narrowing of our conceptualization of time to measurable clock time has for a long time been seen as a too limited approach (Clark, 1985; Hassard, 2002; Adam, 1990, 2004, etc.).

Measurable clock time refers to external time, time viewed as a background system external to human experience and events. The concept of clock time refers to a-temporal time based on Newtonian theoretical physics which views time as 'absolute, true and mathematical' flowing 'equally without relation to anything

external' (Newton quoted in Whitehead, 1929/1978, p. 70) Thus, clock time is seen as objective, continuous, linear, and quantifiable, existing independently of objects, actions and events (e.g. Clark, 1985; Lee and Liebenau, 1999; Orlikowski and Yates, 2002). Alternatively, time is also described as an internal feature for humans, things, and events (Mead 1932/2002). Internal or 'own time' (Hernes, 2014, p. 49) refers to unique, either personal or organizational, temporal structuring. That is "its own unique path of unfolding, supported by its own specific contingencies, the production of its unique past, and its own unique choices for future aspirations" (Hernes, 2014, p. 51). The opening quote from de Saint-Exupéry's 'The Little Prince' indicates that a clock time does not necessarily sync with a person's internal time and can be dissociated from human experience (Purser and Petranker, 2005; Wiebe, 2010). Romer (2010, p. 198 quoted in Bakken et al., 2013, p. 19) suggests that "it is almost as if the precision with which we can measure time is an indicator of our existential lostness." Bluedorn and Denhardt (1988, p. 300) claim that "time is a fundamentally social construct", and therefore, the concept of clock time is too simplistic to explain organizational life. This claim of Bluedorn and Denhardt is supported, for example, by McGrath and Rotchford (1983), Clark (1985), Das (1993), and Hassard (1989, 1996). All mentioned authors suggest that social analysis requires a theory which, despite the dominance of clock time, takes into account the various subjective times (note the plurality here). Those various subjective times tend to be more cyclical than linear (Hatch, 2002), and context specific (Clark, 1985; Hassard, 2002).

Adam (1990) insists that because time plays an important role both in people's lives and in their thinking, it is important to understand all of its aspects in their totality, as well their dynamic relations. With every choice comes a related consequence. By organizing their activities according to the clock time, modern societies chose their view of reality and an adequate behavior to cope with that reality. For example speed or acceleration, as a result of monetized time, leads to

the shortening of production or product life cycles and ‘forgetting’ (Czarniawska, 2013). Both shorter production or product life cycles, as well as ‘forgetting’, can have either positive or negative consequences. For example, ‘forgetting’ caused by time pressure may mean that fewer resources in the form of past experiences are available (Argote, 2013). At the same time, ‘forgetting’ can be positive if one is trying to get over a traumatic past experience (Czarniawska, 2013). Czarniawska (2013, p. 11) points out that increasing speed and acceleration in production has caused resistance in society in the form of the ‘Slow Movement’. This ‘Slow Movement’ approach appears to be quite similar to the reaction of *The Little Prince*; that is, to slow down and ‘feel’ the time saved.

Another outcome of speed is ‘intensification’ (Bakken et al., 2013) or ‘time-space compression’ (Hassard, 2002). ‘Intensification’ or ‘time-space compression’ may, through shortened time horizons up to the point where there is only the present without the future (Hassard, 2002), lead to unsustainable practices, as it gives the impression that both the coming events and environment have abundant, exploitable standing reserves (Bakken et al., 2013). Thus, it could be argued that the way in which time is conceptualized has a far reaching impact on how reality is seen and responded to by actors. Moreover, the question is not so much about ‘one or the other’; that is, clock time or social time – instead, it is important to understand the relationships between different, simultaneously active and mutually non-excluding aspects of time. Luhmann (1980 quoted in Adam, 1990) argues that the question of time is a fundamental if not a necessary precondition to social theory. Consequently, the different aspects of time and the role of time in organizational theories cannot be less important, because how the organizational reality is imagined and responded to by actors is rooted in our view of time. That is, the conceptualization of time influences how the reality is created and enacted.

1.2 Aspects of time and temporality investigated in the current thesis

In this section, I will discuss the research questions addressed in the three papers and then explain how they are subsumed under the general research focus.

The research question of the first paper is: *How is temporal interplay created between improvisation and routines?* In the paper, we investigate how revolutionized ship design was actualized in the project, which started with a conventional design and evolved to the production phase. The actors' desire to grasp the opportunity and change the design of the vessel already under construction, despite a non-negotiable project deadline, created the experience of compressed time for them. While in the literature improvisation and routines are seen as being separated in time by sequential relationship, the experienced compression of time did not leave room for sequential order. In the paper, we approach the relationship between improvisation and routines through the prism of immanence and show how they reciprocally constitute in the present; how the momentary stabilization of improvisation in routines is seeded simultaneously with improvisation.

The research question posed in the second paper is: *How does outsourcing influence the mindful application of routines?* Although this paper does not address temporality or time as the main research concerns, it relates to both through the analysis of empirical data. In the paper, I focus on the unintended change in meaning and application of outsourced accounting routines. While analyzing why relatively mundane and seemingly technical processes such as accounting for payables and receivables are not easily transferrable from one local organizational context to another, I show that the relocation of routines changes several temporal configurations. Continuity of routines as practices exists with their specific temporality; continuity of organizational background as an unfolding process exists

with its temporality; relationships exist between routines and the organizational background. Therefore, there are complex dynamic relations, which have an impact on the meanings attributed to the performance of organizational routines. If these dynamic relations are cut off or change, the meaning and performance of routines will change in an unpredicted way. The outsourced routines are performed in relation to a *different* view of the past and the future compared to the original routine. In addition, although not addressed in the paper, there is an aspect of forgetting. Discontinuity of the activities could lead to forgetting and the loss of competencies, which in turn could mean the organization is unable to handle its affairs.

In the third paper, I hypothesize that perceived discontinuity of time caused by strategic change hampers employee work-related commitment including their commitment to change. In the literature, the nature of organizational change is highlighted as one of the main aspects that affects employee attitudes towards commitment. Taking a temporal view indicates that employee change commitment is influenced more by perceived (dis)continuity than by the type of organizational change. Although it could be argued that with a certain type of change (i.e. downsizing), discontinuity is reinforced more than with another type of change, there is no rule of thumb to rely on. While downsizing may intensify a sensed discontinuity by disrupting employee expectations for the future, the excluded past may have an even more adverse influence on the sensed continuity.

The general research focus of my thesis relates to the temporality of organizational becoming. The main research question is ‘how, in the flow of time, is continuity sustained in organizations.’ Within this topic, I explore how the temporality of routines is related to organizational improvisation, organizational meaning structures or background knowledge and employee commitment. While exploring these relationships, I take into account the passing nature of the flow of time. I am building my argumentation on the assumption of actors enacting and

being shaped by the flow of time. In my work, I make a distinction between time and temporality. Therefore, they are not viewed as synonymous. I view time as a continuous flow while temporality is viewed as an active effort to maintain continuity by making connections across the past, present and future. I view an organizational being as challenged by the passing time – challenged by new emerging possibilities as well as by forgetting (Argote, 2013) and perishing (Helin et al., 2014). The actors are confronted with the need to make plausible connections across the past, present and future to maintain their sensed continuity in the passing time. In a sense, the temporal being is carved out from the flow of time (Hernes, 2014, p. ix). This can be described as ‘on-going temporality’ (Schultz and Hernes, 2013). The concept of on-going temporality highlights that temporality is not a passively perceived experience but an active effortful and purposeful creation of connections.

1.3 Empirical papers and their contribution

The thesis consists of three empirical studies aimed at answering the stated research question. The three studies are based on empirical data from different research settings – organizational improvisation in ship design and construction, backsourcing of accounting tasks and implementing strategic organizational change projects in contrasting settings (anticipated expansion and experienced contraction). A qualitative case study design is used in all three studies.

The first empirical paper titled – **The past and the future in the now: Improvisation and routines as temporal interplay and the making of an improvisational event** – is presented in Chapter 6. Based on the in-depth single case study analysis and relying mainly on 39 semi-structured interviews, this study focuses on the situated and temporal interplay between improvisation and routines in a ship design and construction company. In this paper, co-authored with my

supervisor, Professor Tor Hernes, we are investigating how the creation of the ‘new’, that is an actualization of the potential, is achieved through improvisation. The virtual idea of X-Bow (a revolutionized bow shape) was actualized through the improvisational response to situational circumstances. At the same time, it could be argued that this actualization of potential was based on both previous and current limited coping.

We claim that although improvisation and routines are seen as interdependent phenomena, they tend to be portrayed as different, not just in terms of their temporal nature, but also separated in time. In the paper we consider improvisation and routines as unfolding simultaneously in the flow of time by mutually constituting each other. Such a view provides an insight into the dynamic interplay between improvisation and routines, and shows how acts of improvisation depend on established routines, while enable novelty through their interplay with routines. In the case studied for this paper we found that actors were anticipating the changing routines while they were improvising new solutions, which enabled the improvised solutions to be eventually adapted as a new practice. The precarious nature of improvisation, we find, makes the interplay with routines all the more crucial. At the same time, routines require improvisation for their development and maintenance. Taking a perspective of temporal interplay enables a number of ideas for organizational becoming.

The second empirical study titled – **Mindful application of routines – lost in the outsourcing?** – is presented in Chapter 7. In this study I focus on the temporality of routines and organizational background knowledge. I investigate the relationship between the mindful performance of routines and organizational background knowledge guided by the assumption that both the relationship between the performance of routines and background knowledge as well as background knowledge itself, are inherently temporal. In the study, I analyze the impact that

outsourcing has had on organizational accounting routines. Based on a nine-month ethnographic study, I develop the concept of mindful application of routines and show the impact that outsourcing, revealed by back sourcing, tends to have on the mindful application of routines.

My study shows that when routines are treated as semi-automatic practices that can be decomposed into subtasks in time and relocated to different environments, there is a risk of losing the meaning of routines and the mindfulness in their application. The conduct of the routine is what makes it mindful or mindless through its sensitivity to operations, but as with any conduct, its meaning depends on its context. To outsource is to take the routine to another, decoupled temporal landscape. Therefore, it is important to take into account the temporality of the routines as actions informed by past experiences and future aspirations, the temporal nature of the relationship between routines and the social context in which they are performed, and the temporal nature of the contextualized or background knowledge. The outsourcing of a routine is a detachment from the temporality of the routine in its context. The empirical study supports the assumption that through the decreased sensitivity to operations and context outsourcing may decrease the mindfulness of performing routines through decreased. The decreased sensitivity to operations and context may in turn lead to important and, unfortunately, unfavorable consequences.

The concept of the mindful performance of routines extends the performative model of routines introduced by Feldman and Pentland (2003). The main contribution of Feldman and Pentland (2003) is in viewing and analyzing routines and actors as a single unit of analysis. Viewing the performance of routines as inseparable from the performer (Tsoukas and Chia, 2002) allows us to see the processual nature of the routines and explain the unanticipated change and adaptation of routines (Feldman and Pentland, 2003). In my argumentation, I take a slightly different approach and argue that because of the continuously unfolding

temporal relations we cannot separate the performer from the organizational settings without changing the meaning and possible outcome of routines.

The third study, titled – **Risks and consequences of temporal discontinuity in the organizational change process** – is presented in Chapter 8. In this study, a comparative case study analysis, based mainly on interview data, is used. Here I investigate the importance of sensed temporal continuity to employees' commitment to change in the context of strategic organizational change. The main theoretical contribution of this study is to show how perceived temporal continuity is important for the ways in which organizational members commit to the change process. Applying a temporal perspective to organizational change, I suggest the labels “the excluded past” and “the disassociated future” as forming part of perceived discontinuity. I argue that on the one hand, the excluded past will reduce organization members' available cognitive resources from which they can draw projections to the future and thus reduce the likelihood that they show action-driven commitment to the change. On the other hand, if the envisioned future is disassociated from past and present, it remains implausible to actors and may hence reduce their commitment to the course of change.

The two case studies presented in this paper support the notion, made by previous studies, that commitment to change is future-oriented action informed by past experiences. In addition, the case studies show that in organizational settings there are multiple commitments taking place simultaneously. These other commitments include organizational, and occupational commitments as on-going practices related to different identities employees in organizations are holding and trying to maintain. As strategic change interventions disrupt existing practices, it is unlikely that employees will exhibit affective commitment to change if these disruptions negatively affect their on-going commitments to organization or occupations.

As action is temporal, the excluded past seems to lead to a disassociated future. That is, the envisioned future is viewed as implausible, as there are no past experiences available to make sense of that envisioned future. Therefore, in the case of the excluded past, the change initiative will most likely be resisted. Alternatively, if the past is incorporated into the change project but the future anticipated from the change is seen as undesirable by the organizational members, there is little chance of achieving employee action-driven commitment for implementing that change. Although the future resulting from the change may be interpreted as plausible, employees may choose to disassociate themselves from that future if it does not look desirable. In the case of a disassociated future, employees do not necessarily resist the change, but their commitment could remain obligation-based, meaning that they are ready to fulfill merely their minimum obligations by complying to change demands. It could be argued that in addition to the need to link the change project logically to the past, it is necessary to link it logically also to envisioned future expectations.

Although the studies presented in the three papers investigate different aspects of time and temporality they all focus on how temporality of organizational processes create time and how the created time shapes the same organizational processes in the flow of time.

1.4 The structure of the thesis

The following chapter provides a general overview of the approaches to time in organizational studies moving from Taylorism and clock time to a plurality of social times and event-based time. Chapter 3 discusses periodic time and its limitations when applied in organizational studies. In Chapter 4, I discuss a processual view of time with its multiple aspects while connecting the different

aspects to the empirical papers. In Chapter 5, I describe my data collection process and sources used for data collection. The three empirical papers are presented in Chapters 6–8 respectively. Implications and suggestions for future research are outlined in Chapter 9. Finally, the conclusion in Chapter 10 draws the thesis together.

2. APPROACHES TO TIME IN ORGANIZATIONAL STUDIES

2.1 A linear time

A linear time refers to the concept of clock time, which is the most dominant and widespread conceptualization of time in modern organizations (Bluedorn and Denhardt, 1988; Clark, 1985; Crossan et al., 2005; Sorokin and Merton, 1937). Clock time, rooted in Newtonian physics, represents objective, linear, measurable time that exists independent of objects, actions and events (e.g. Lee and Liebenau, 1999; Orlikowski and Yates, 2002). Clock time is different from temporality because it views time as symmetrical and thus reversible (Bluedorn and Denhardt, 1988). Studies taking the clock time approach cover a wide spectrum of time management topics in organization and management research. For example, concepts like ‘just-in-time’, ‘time to market’, ‘lead time’, ‘response time’, ‘cycle time’ (Ciborra, 1999, p. 86), ‘time and motion’, ‘time allocation’, ‘time budget’, ‘time management’, ‘forecasting’, and ‘time series analysis’ (Lee and Liebenau, 1999, p. 1051) are well represented in management studies.

The interest in time within organizational and management studies was first expressed at the end of the 19th and beginning of 20th century, in Scientific Management, beginning with the work of Taylor. Choosing clock time as its departure point, Scientific Management, or ‘Taylorism’, emphasized time as a resource. Based on the measurable monetized aspect of time, Taylorism lead to time-management within the industry with the aim of allocating, measuring and spending time with scientific precision (Adam, 1990; Clark, 1985; Hassard, 2002). Even if not applied in its totality (Clark, 1985), Scientific Management is still a thriving concept within industry, with its approach to time as measurable and objective, an important tool for scheduling, ordering, planning and synchronizing different activities within an organization.

Clock time, viewed as a resource, is “measured by person-time units or man-hours” (Lee and Liebenau, 1999, p. 1043). As a measurable and quantified resource, clock time is directly linked to production planning and organizational efficiency and effectiveness calculations (Bluedorn and Denhardt, 1988; Ciborra, 1999). According to Ciborra (1999, p. 86), “In modern management, time is looked at as a fundamental business performance variable, even more important than money.” Viewed as a resource, it is assumed that clock time presupposes active management and planning (Crossan et al., 2005) and imposes the problem of allocation (Orlikowski and Yates, 2002).

The quantified time is a highly useful tool for scheduling the use of hotel rooms or meeting rooms. Without the help of calendars and clock time managing and organizing the use of such limited spaces as hotel and meeting rooms could be very challenging. In production, it is common sense that some tasks should be performed before the others. For example, in the ship construction, the cabling and piping cannot be done before the hull is welded. Usually, production runs in cycles and therefore the duration of the cycle is an important indicator for planning the production capacity. Similarly, the knowledge of the duration of different tasks allows planning working schedules, which is well covered topic in operations management literature. In the accounting, the financial reports cannot be completed (at least not accurately) before all the transactions belonging to the specific reporting period are posted.

The Academy of Management Review special issue 2001 is dedicated to the aspects of time such as speed, sequencing, pacing, and duration. In this special issue, time is treated either as an independent or dependent variable in and for organizational or team performance, change interventions and institutionalization (Goodman et al., 2001). This special issue is a valuable attempt to bring time to the forefront of organizational and management studies. The main shortcoming of the

mentioned special issue is its conceptualization of temporality as limited to speed, sequencing, pacing and duration (Hernes et al., 2013).

Although a linear time or clock time is still the most dominant and widespread conceptualization of time in modern organizations (Bluedorn and Denhardt, 1988; Clark, 1985; Crossan et al., 2005; Sorokin and Merton, 1937), and despite its importance in organizational life, it has several limitations. These limitations have caught the attention of many authors (e.g. Bluedorn and Denhardt, 1988; Clark, 1985; Das, 1993; Hassard, 2002; McGrath and Rotchford, 1983). For example, Hassard (2002, p. 585) claims that “working time is a much richer phenomenon than is portrayed in mainstream industrial sociology. Dominant perspectives such as functionalism and structuralism mostly fail to capture the complexity of industrial temporality.” The mentioned complexity of industrial temporality, which mainstream clock-time based perspectives fail to capture, includes a plurality of times emerging from relative, subjectively perceived and experienced time (Clark, 1985). A plurality of relative, subjective times which informs and gives meaning to one’s action contrasts with singular, objective and measurable clock-time (Bluedorn and Denhardt, 1988).

2.2 Social time

Sorokin and Merton claim that clock time, to which they refer as an ‘empty mathematical’ time (Sorokin and Merton, 1937, p. 623) that is flowing continuously and equally, cannot be carried over into the social world. In the social world, continuity, a feature of the Newtonian conception of time, is disrupted by socially significant events. Thus, instead of mathematical time, Sorokin and Merton (1937) stress that time is constructed in relation to events that are regarded socially significant. This social significance is determined locally, that is, “local time

systems are qualitative, impressed with distinctly localized meanings” (Sorokin and Merton, 1937, p. 628). As a result, there are multiple various time systems with different qualities influencing judgments of aptitude, opportunity, continuity, constancy, and similarity. Sorokin and Merton (1937) stress that how time is understood depends on the organization or group functions. The significance of time, both as duration and indication, becomes visible only in relation to social activities, in the everyday order of social life and occupational rhythms. According to Sorokin and Merton (1937, p. 619), objective clock or calendar time “becomes significant only when it is transformed into social time”. As such, clock time is an emergent social tool for organizing “otherwise chaotic, individually varying, activities” (Ibid., p. 628).

Clark’s (1985) approach to time, based on anthropology, is aligned with the claims made by Sorokin and Merton (1937). Clark criticizes that “organizational sociology [...] possessing a strong orientation towards the construction of analytical schemas and law-like statements which are “time free”.” (Clark, 1985, p. 35). Clark (1985) is critical of ‘time free’ analytical schemas, where time is separated from events. He is emphasizing relativity of time and plurality of times “each of which is appropriate to understanding specific phenomena” (Clark, 1985, p. 40). Clark is also critical of studies “in real time” or “over time”, “time lags”, “time horizon” or the “time span of discretion” and ‘Taylorism’ (Clark, 1985, pp. 38-39, pp. 49-50). Clark claims that:

“From the review of organization sociology it is clear that most research and theorizing has been focused on structure rather than structures; similarly there has been a preoccupation with time rather than times, and there has been a neglect of the *contingent periodicities* which provide a continuing, virtually daily, challenges to organizational members (Friedman, 1982). The temporal embeddedness of organizational action has been neglected by all perspectives even in the open-system approaches of Katz and Kahn (1966,1978). ” (Clark, 1985, p. 37 *Italic in origin*)

In ‘time-free’ studies, according to Clark’s explanation, theoretical assumptions of empirical regularities are based on cross-sectional research designs and assumed to hold irrespective of the time in which they were undertaken. ‘Over-time’ studies are usually based on a longitudinal research design and utilized in relation to change theories, either in relation to multi-stage theories of change or to various process-oriented theories of change. Studies on time-lags intend to uncover the ways in which the initial intervention emerges at a later time. Time horizons or time span studies are focused on differences in expectations to receive feedback. A common feature of these approaches to time is that they are all based on “the unitary framework of time associated with the calendar and the clock” (Clark, 1985, p. 39).

Still, Clark (1985) does not urge to abandon chronological time reckoning in organizational studies, because both event-based and chronological time-reckoning systems are used in modern organizations. Instead, Clark (1985) stresses the need for a wider use of the “in-times” perspective within organizational sociology, putting particular emphasis on event-based time-reckoning systems, because of their strategic importance. Clark (1985, p. 36) insists, that for sociological analysis time should be viewed as a social construction, “organizing device by which one set, or trajectory of events is used as point of reference for understanding, anticipation and attempting to control other set of events”. Clark emphasizes that “time is *in* events”, as does Hernes (2014) and “events are defined by organizational members” (Clark, 1985, p. 36 *italics in original*). Therefore, if time is in events and events are defined by organizational members, then there is a plurality of times. A plurality of time presupposes the plurality of time-reckoning systems. Time-reckoning systems have a strategic importance in organizations because the levels of profitability or perspectives for survival are directly dependent on the correct reading of the event and the subsequent decisions made in anticipation of the future (Clark, 1985). However, Clark (1985) similarly to Sorokin and Merton (1937) claims that events and their perceived (socially constructed) importance enable humans to recognize

time, to make time visible for humans. At the same time, Clark (1985) does not pay attention to the actively constructed temporal time through which some possibilities are actualized as events while other possibilities remain as non-events (Kahneman, 2011).

2.3 Attempts to merge clock time and social time in organizational studies

Taking into account the importance of clock time in organizing organizational life (Clark, 1985) and the notion that the meaning of clock time is socially constructed (Sorokin and Merton, 1937) there are attempts to merge the clock time and social time in organizational studies. For example Yakura (2002) and Orlikowski and Yates (2002) have attempted to merge the clock and social time in everyday life situations. Both papers use the term ‘pluritemporality’, introduced by Nowotny (1992 cited in Orlikowski and Yates, 2002; Yakura, 2002). In her study, Yakura (2002) shows how timelines, based on the concept of standardized, context-free clock time, are used by different organizational subgroups to coordinate and synchronize their actions. In her study Yakura (2002, pp. 956-959) defined timelines as boundary objects that enable different organizational actors to coordinate their work and to handle a plurality of social times existing concurrently. Yakura (2002, pp. 957-958) shows the importance of timelines (artifacts representing clock time) as tools to manage different and possibly divergent subjective understandings about objective time, different occupational rhythms or cycles, and the differing experience of urgency. It follows that, although timelines are based on the assumption of standardized time, their meaning is interpreted differently based on the specific sub group's approach to time.

In order to overcome the objective-subjective time dichotomy, Orlikowski and Yates (2002, p. 684) use the term “temporal structures”, understood as being simultaneously shaped by and shaping ongoing human behavior. In organizations, temporal structures are related to, for example, weekly meeting schedules, project deadlines, financial reporting, budgeting, etc. and influence the accepted code of conduct. Based on the work of Giddens, Orlikowski and Yates (2002) argue that the relationship between ongoing human action and temporal structures is reciprocal. That is, temporal structures as shaped by ongoing human action are not independent of human action but shaped by it. At the same time, temporal structures are not fully determined by human actions because they, in turn, influence them. Orlikowski and Yates (2002, p. 688) stress that “studying time in organizations requires studying time in use, that is, examining what organizational members actually do in practice, and how in such doing they shape the temporal structures that shape them.” While seeing the relationship between human action and temporal structures as reciprocal, the underlying assumption of Orlikowski and Yates (2002) is that only humans have an agent power and that time is ‘used’ by human actors.

Although temporal-structures were not the focus of my research, their importance for organizing everyday work activities was evident in all four case studies. In the first paper, the importance of keeping the deadline of the project and ability to hand over the ship by agreed due date was highlighted as an important sales argument and quality related to organizational identity. The internal control system to some of the accounting routines investigated in the second paper was scheduled with the 30 minutes accuracy. The backourcing project itself had predetermined due date. The strategic organizational change projects investigated in the third paper had their anticipated completion dates with different milestones. Indeed, in all mentioned cases the temporal-structures contained both objective and subjective time elements.

Still, because temporal-structures are at first hand created by human action, time is viewed as realized through people's repeated practices. Focusing on regular on-going practices or events neither timelines (Yakura, 2002) nor temporal structures (Orlikowski and Yates, 2002) can explain sudden, unexpected and unpredictable events. As such, an active role and an agent power of time are denied. For example, it is not possible to explain full-scale improvisation or shift in one's temporal orientation and change commitment by using timelines.

2.4 The plurality of time-reckoning systems

Clark (1985) argues that the way different possible trajectories of events are understood by actors depends on the actors' personal biographies, on inter-subjectively constructed systems known to the actors belonging to one relatively small group, and on wider socially constructed trajectories. The event trajectories belonging to the private domains of specific individuals are informed by these individuals' biographies, which are the foundations for silent 'because- motives' (Schütz, 1962/1982). 'Because-motive' refers to actor's subjective experiences and intentional acts guided by intrinsic aim(s). According to Schütz (1962/1982), in contrast to 'in-order-to' motives with extrinsic aim, an actor in his action is not aware of his 'because-of-motives', which are giving direction to his action. Additionally, the event trajectories belonging to the private domain of specific individuals are influenced by personal time frames. Personal time frames are influenced by an individual's orientation toward past, present, and future, and by their imagination of the future. Inter-subjective time frames are embedded in practices, group activities and achievements (Sorokin and Merton, 1937), and are influenced by temporal reference into collectively recognizable events with

relevance (Hernes, 2014). Public time frames, as produced and reproduced by all members of society, are available to the whole society.

Das (1993) points out that the concept of clock time, which ignores the human actor, falls short of providing an understanding of organizational phenomena in its complexity. Lee and Liebenau (1999) argue that studies based on the assumption of objective time presume that all organizational members adhere to linear time flow with constant pace, like a straight arrow, and behave according to that belief. That kind of uniformity of understandings is questioned by scholars supporting social time. Bluedorn and Denhardt (1988, p. 308) claim that “two of the fundamental differences among people are their overall temporal orientation and their differing abilities to project into and deal with the future.” The perceived possible event trajectories are far from being unitary or homogeneous, and thus, there is no unitary, homogeneous way to understand time. Reinecke and Ansari (2015), in their recent study of Fairtrade Labelling Organization International, present a conflict of two radically different temporal orientations. As they stress in their study, different temporal orientations are associated with different worldviews (Reinecke and Ansari, 2015).

Ancona et al. (2001, p. 519) refer to ‘temporal personality’ as an indicator of how an actor relates to time, his or her disposition, attitude and approach toward time. Temporal personality or temporal orientation impacts a person’s behavior unconsciously (Wiebe, 2010). The two case studies presented in the third paper show the differences in how different employee groups relate to the past, present and future and how their perceived different event trajectories impact their motivation to commit or reject organizational change. Based on Mead’s (1932/2002) conception of the internal conversation, which shapes a person’s reflections and attitude toward social context, Emirbayer and Mische (1998) suggest three dimensions to the agency. Namely, *iterational* — through an orientation to the

past; practical evaluative — through an orientation to the present; and projective — through an orientation to the future (Mutch et al., 2006). Emirbayer and Mische (1998) argue that the personal experience of time is strongly influenced by his/her social interaction, which means that a person's relation to time, or his/her internal time orientation, is, by nature, a dynamic ongoing process, rather than a static tie (Emirbayer, 1997). Thus, personal time orientation has a reciprocal relationship with a person's context and on-going interactions (Emirbayer and Mische, 1998; Lorino and Mourey, 2013). This means that time-reckoning systems in their plurality are not fixed and static, but evolving and changing in the flow of time as a result of the ongoing interaction, and possible shifts in personal internal time orientation. The shift in personal internal time orientation becomes visible in the Growing Company case presented in the third paper. Comparison of the recruitment interviews' notes to the interview data collected approximately one year later, indicates that the newly hired employees lost their drive and enthusiasm for implementing change due to constant conflicts with and passive resistance of the long tenured employees.

2.5 An event-based time

In organizational studies, the connection between time and events is addressed in three, conceptually different ways. The first approach is rooted in anthropology and views *time as reckoned in events* or events as signifiers of time (Clark, 1985; Sorokin and Merton, 1937). Events as signifiers of time means that social activities provide specific qualities to the periods of time they belong to (Sorokin and Merton, 1937, p.621). Sorokin and Merton highlight that “the social life of the group is reflected in time expressions. The names of days, months, seasons, and even years are fixed by the rhythm of social time” (Sorokin and Merton, 1937:619). For example, in the Estonian ‘old people’s calendar’, which

does not refer to elderly people, but to the ancient people, the names of the months were related to specific activities usually performed at that time. There is “künnikuu” referring to April when it was time to plow fields; “heinakuu” referring to July, when it was time to make hay; “lõikuskuu” referring to August, when it was time to collect the harvest, and so on. These periods indicate the approximate duration of one or another activity. The exact time to begin a specific activity depended on the weather conditions. Therefore, it was important to reckon the correct time for the specific event in the surrounding events, which leads to time-reckoning systems (Clark, 1985).

The event-based time-reckoning systems are not reserved ‘primitive people’ (Sorokin and Merton, 1937, p. 619) or societies. The importance of event-based time-reckoning systems as tools for organizing social life and understanding ongoing and anticipated events is highlighted, for example, by Adam (1990; 2004) and Clark (1985). The main assumption of viewing time as reckoned in events is that time becomes *visible* in social activities, and is observable in events defined by social actors (Adam, 1990; Clark, 1985). The meaning ascribed to the observed time in events allows social actors to construct event trajectories and construct expectations about what kinds of events will follow and when. For example, recognizing market trends or understanding economic cycles or changes in societies related to generational shifts. Therefore, it is important to read events or reckoning time in events correctly to adjust activities accordingly (Clark, 1985).

According to another view, time is seen as a signifier of an order of events (Barnett, 1949). Events are viewed as finished, discrete and arranged sequentially in time. For example, the Academy of Management Review 2001 special issue devoted to time and temporality (Ancona et al., 2001) implies a sequential view of events. Similarly, the Academy of Management Journal 2013 special issue devoted to processual research (Langley et al., 2013) portrays events as sequential, discrete,

finished (i.e. Jay, 2013; Gehman et al., 2013; van Oorschot, 2013) and focuses on the causal relationship between events over time.

A sequential time corresponds to McTaggart's B series time (Bakken et al., 2013) where "time appears through the isolation of events in series; one event can occur before, at the same time, or after another event" (Bakken et al., 2013, p.14). The perspective of a sequential or B series time affords "distinctions between causes (before) and effects (after), and the possibility of efficiency gains when isolated events, things, and activities are sequentially rearranged so that workflows can be coordinated and compacted along linear axes of time" (Ibid). As a sequential view of time allows drawing causal connections between events it has attracted a lot of attention, and it is widely used in management and organization studies. In Chapter 3 I discuss the sequential or periodic view of events and its limitations in more detail.

Beside the event-based time-reckoning and sequential events in time, there is a third view of event-based time. Namely, the view that time as events is enacted. This view of event-based time accounts for an active view of time and makes it agentic (Emirbayer and Mische, 1998; Hernes 2014). Based on that view, actors are not observing time in events and neither do they arrange events sequentially, but they are in events and in events they take part in the on-going construction of events, including the one they are in. Being in events means that actors are in the on-going present (Schultz and Hernes, 2013), where the past events and expected events are enacted simultaneously. In the first empirical paper of this thesis presented in Chapter 6, we highlight the notion of immanence. The immanence of the past and future in the present relates events temporally and gives to time its agency.

A special issue of the *Scandinavian Journal of Management*, edited by Hernes, Simpson and Söderlund (2013) is focused on the temporal connections between events. Topics covered in this special issue are, for example, the different

types of time, the continuity of the past, present and future, and the emergence of creativity in strategy making. The message forwarded by the articles published in this special issue is that the past and future are not distinct elements for the actors in time and events. Instead, the past and future constitute the present, which is intrinsically on-going. Therefore, the past and future belong to the present; they are not separated from the present.

Temporality in sensemaking is brought forward by Wiebe (2010) and Gephart et al. (2010). There has been some work devoted to the importance of temporal span and the ability to draw from the past in an attempt to create the future. For example, Schultz and Hernes (2013) have highlighted the on-going temporality about identity (re)creation, and Kaplan and Orlikowski (2013) about strategy creation. More recently, Hussenot and Missonier (*forthcoming*) have studied how time as events are enacted. Still, the active role of event-based time and temporality in organizational settings remains understudied. The perspective of event-based time is explained in more detail in sub-section 4.2.

3. A PERIODIC VIEW OF TIME AND ITS LIMITATIONS

A periodic view of time refers to episodes or events with identifiable starting and ending points. Identifiable starting and ending points enable us to create a chronology of events. For example, my grandmother, who lived between 1905-2000, used to talk about different eras. In her perception, there were more or less distinguished eras with very specific characters. Namely, she used to talk about the 'Tsarist era', the 'German era', the 'Estonian era', the 'Russian era' and the 'new era'. The 'Tsarist era' refers to the years up until 1917, when Estonia was under the control of the Russian Tsarist state. The 'German era' refers to the German occupation of Estonia, (1917-1918 and later 1941-1944). The 'Estonian era' refers to the first Estonian Republic 1918-1940, and the 'Russian era' refers to the Soviet Russian occupation between 1919-1920, 1940-1941 and 1944-1991. The 'new era' refers to the period after Estonia regained its independence in 1991. Indeed, if one reads historical records one can recognize that these times are different, having a very different impact on the lives of the people living during these eras.

A periodic view of time is also widely used in organizational studies to compare 'before' and 'after' conditions, or development of some specific condition over time. For example, the studies where the conditions or states of something are measured respectively at the time points t_1 , t_2 , t_3 and t_y (e.g. Allen et al., 1995; Van Oorschot et al., 20013). Results obtained at each time point are compared to each preceding result to determine the rate of change and possible effectiveness of change intervention. A periodic view of time is most often used to compare the specific state or condition between different periods of time while treating these periods as discrete.

More recently, a periodic approach is presented in the Academy of Management Journal 2013 special issue devoted to 'process studies of change in

organization and management’ (Langley et al., 2013, p. 1). This special issue, while being critical about ‘variance theorizing’ as timeless, focuses mainly on change ‘over time’, representing a periodic time approach (Langley et al., 2013, p. 4). A common feature of qualitative studies presented in this special issue is ‘temporal bracketing or decomposition’ (Langley et al., 2013, p. 7). For example, Van Oorschot and colleagues (2013) analyze the impact of slipping schedules in the boundary of fixed due dates of a project. Additionally, they focus on the relationship between number and categories of events (positive, negative and neutral) and the decision to terminate the project. In their article, Van Oorschot et al. (2013) address the concept of temporality as a scheduling problem and events as clearly categorizable (positive, negative and neutral) and discrete. Thus, a periodic view of time may be useful to investigate the occurrence and recurrence of breaks in the structural mechanisms.

3.1 Limitations and criticisms of a periodic view of time

Seeing the past, present and future outside of each other enables us to construct causality between events or things. A prerequisite for causality is a temporal separation between events. Because “a causal relationship can only hold between events if they are separated temporally so that a light signal, or anything slower, can pass between them” (Adam, 1990, p. 57). Thus, when the focus is on the establishment of casual cause-effect links the past and present are seen as separate discrete events instead of temporally extending events. Snowden (2003, p. 25) stresses the ‘phenomenon of retrospective coherence’ or ‘retrospective illusion’ by arguing that: “the current state of affairs always makes logical sense, but only when we look backwards. The current pattern is logical but is only one of many patterns that could have formed, any one of which would be equally logical.” The message from Snowden (2003) is that causal links could be established so that the

past serves as an explanation to the present. Thus, it is possible to explain with hindsight the “existing” causal relationship (Kahneman, 2011). At the same time, alternative possibilities are overlooked as there may be no clear temporal separation between the events, but one event extends over or prehends to another without the clear temporal separation in the flow of time.

Assumed causality means that the world is seen as a predictable outcome of confirmed laws in action (Kahneman, 2011). The worldview led by assumed causality based on fixed laws tends to neglect possible alternatives, how things could have turned out instead of how they actually turned out. Predictability tends to overlook the fact that there are other possibilities that are open as a-causal developments enabled by temporal extension. Kahneman (2011, p. 200) claims that “the human mind does not deal well with non-events.” For the human mind, it is more convenient to ignore “the myriad of events that would have caused a different outcome” (Ibid.). Moreover, predictability is based on fixed laws and rules that assume that the *ceteris paribus* (everything else being equal) condition holds. In the complex, interdependent and intra-acting social world the *ceteris paribus* condition is fictional because we are not dealing with discrete but intertwined processes with reciprocal influences (Stake, 2006).

By ignoring complexity, interdependence and intra-actions, we end up with a simplified world-view (Stake, 2006). Whitehead (1925/1985, 1929/1978), referring to Newtonian’s physics inadequacy to explain for example a-causal temporal connections found in quantum physics, has warned about this kind of over simplification referring to the ‘fallacy of misplaced concreteness’ and ‘simple location’ (Whitehead, 1929/1978, p. 7, p. 137), which are ignoring “the degree of abstraction involved” (Whitehead, 1929/1978, p.7) and viewing entities as occupying a clearly definable point in space-time. The *ceteris paribus* assumption is based on an oversimplification of existing complexities (Stake, 2006), which may

lead to the unjustified feel of control over the world and which may thus lead to serious consequences. It is tempting to quote Tolstoy's novel (1869/1933), *War and Peace* quoted in MacKay and Chia, 2013, p. 208) here: "While Napoleon thought he was in control of events, the Russian general Kutuzov knew that neither of them were, and so made fewer mistakes." Thus, assuming to have control while not grasping the temporal complexity of the situation, and the time embedded in the events, tends to lead to misconceptions and even to fatal errors (Clark, 1985). For example, the fall of the film camera producer Kodak or cellphone manufacture Nokia, which have become a textbook cases. Both companies were the market leaders in their industries, but lost their grasp over the market and ceased to exist. Although both companies recognized the looming threats – digital technology and iPhone respectively, they interpreted these as the threats of competition not as the shifts of event-trajectories. They were too slow to react to the changing event trajectories, because they were unable to read the time in events correctly, and adjust their business models accordingly.

Langley et al. (2013) stress that the power of temporal bracketing is its capacity to identify the recurrence of specific theoretical mechanisms over time, and it serves as a tool to construct events and activities as progressive and "separated by identifiable discontinuities in the temporal flow" (Langley et al., 2013, p. 7). Although a periodic view sees the past stages in the change process as influencing the present stages and the present stages in turn as influencing the future stages, the past is treated as finished (Hussenot and Missonier, *forthcoming*). Thus, a periodic view of time discards the openness of the past, its active construction in the present, based on selectively chosen memory cues (Schultz and Hernes, 2013).

By using bracketing off, the event is not only cut off from the whole it belongs to, but its temporal connections to its past and future are cut off as well. According to Hernes (2014, pp. 37-38), "This suggests that the present experience may be

compared to previous experience as if they are distinct temporal units that can be held up against one another.” Events, viewed as discrete, are seen as temporarily related through the successive order, as logical outcomes of previous events, while still separate from those previous events. If viewed as separated, events are seen not constitutive of one another (Hernes, 2014; Hussenot and Missonier, *forthcoming*), as they would in a process view, to be discussed below. Respectively, if viewed as lacking constitutive power, events also lose their agency. Thus, periodic analyses tend to overlook the temporal complexity of events and the agency that events may have in recreating the meaning of past events and the influence they can exert on the trajectories of the future events.

Bracketing or cutting off the research target from its context, including temporal connectedness, is highly criticized by philosophers with processual orientation (e.g. Heidegger, 1927/1962; Polanyi, 1967; Schütz, 1967; Whitehead, 1929/1978). The bracketing off ignores the intertwined messiness of the world (Heidegger, 1927/1962; Holt and Sandberg, 2011) and focus on distinctions. These distinctions are something to which Whitehead (1925/1985, p. 61) refers to as ‘simple location’. As Chia (1999, p. 219) explains, “simple location emphasizes the inherent locatability of all experienced phenomena in space-time. For causal analysis to succeed, it must first be possible to locate and isolate both causal factors and their effects“. With ‘simple location’ Whitehead referred to separation or bracketing out, resulting in the view that objects or events occupying a unique location in the space-time; being here and now (Hernes, 2008, pp. 37-42). Heidegger (1927/1962, p. 474) points out that “now-time” is based on the view that each case has its own “now-time”. As a result “the ecstatical constitution of temporality” which is a foundation of datability and significance, is leveled off (Heidegger, 1927/1962, p. 474). That is, if events lose their agency, their power to influence other events in the present, past and future, then also time, when viewed as event-

based, loses its agency. In the framework of “now-time” where time is seen as a pure succession, it does not have significance (Heidegger, 1927/1962).

Furthermore, Clark (1985, p. 70) states that ‘over time’ analysis tends to present everyday life as “being significantly shaped by the historical past”, while the historical past is seen as passive and inert, relatively unitary, clear, coherent, and fixed. That type of analysis is lacking the “plurality of varied “chronological codes” (Clark, 1985, p. 69) which is the concern of historians when reconstructing a chronological account of events. Thus, periodic analysis, whether viewed as a chronological or before-after comparison, denotes the orderly succession of discrete events and acts in time (Schultz and Hernes, 2013). By assuming either a before and after or a sequential and serial view of organizational change the theorizing under a periodic view is still based on time as an external framework (Clark, 1985). Focusing on causal relationships between the clearly distinguishable stages of change a periodic view assumes a spatial and temporal separation of events.

4. A PROCESSUAL VIEW OF TIME

The ontological assumption of a process theory is that “the world exists as flows in which entities are in a state of becoming rather than as a final state of being” (Hernes, 2008, p. 128). The two words — ‘flows’ and ‘becoming’ — deserve extra attention. Similar to the theory of dissipative structures, a processual view, instead of focusing on fixed entities in closed systems, focuses on ongoing relations or processes (Hernes, 2014). These relational processes are described as flows in the open systems (Edwards and Jaros, 1994; Tsoukas and Chia, 2002). For example, Feldman (2000) has described routines as flows, Tsoukas and Chia (2002, pp. 572-578) are talking about ‘a flow of possibilities’ and ‘a flow of opportunity-driven choices’, Hernes (2008) refers to processes as flows, Weick (1995) refers to sensemaking as flow, Bakken et al. (2013) describe experiences as flows.

The concept of ‘becoming’ (Whitehead, 1929/1978) presupposes temporality made possible by being in the flow of time. That is, becoming is an extension or ‘prehension’ (Whitehead, 1929/1978, p. 18) in time. Becoming is emerging, a self-replicating process in the temporally tangled web-like world (Edwards and Jaros, 1994; Hernes 2008, 2014). In process theories becoming, temporality and passing time are seen as closely related terms. A common feature of such process thinkers as Whitehead, Mead and Heidegger is that they all see futures and pasts as unceasingly and mutually co-constituting (Hernes et al., 2013). It is important to recognize that such unceasing mutual co-constituting, which is the basis of temporality, is made possible by the passing time. That is, temporality is possible only in the flowing time as there cannot be temporality if time stays still. The passing character means that time is simultaneously emerging and perishing (Mead, 1932/2002; Whitehead, 1929/1978). The simultaneously emerging and perishing

nature of time enables becoming, which is made visible through events (Hernes, 2014).

4.1 Temporality - the interplay between past-present-future

In process theory, the emerging reality is characterized by unpredictability and openness (Helin et al., 2014) caused by the interconnections between the past, present, and future. We cannot be sure about the ultimate meaning of the past because both past and future exist as possibilities open to the imagination (Bakken et al., 2013) and recreation (Helin et al., 2014; Hernes, 2014). The past remains as hypothetical as the future (Mead 1932/2002). Mead (1932/2002) theorized that, although the past itself is out of our direct control and cannot be changed, its meaning is subject to redefinition. Although the past cannot be lived again as it was, its meaning is reinterpreted in the present (Hernes, 2014). In the passing time, the meaning of the past is changing based on the present circumstances and future anticipations. Reinterpretation of the past enables us to construct different histories (Bakken et al., 2013; Kahneman, 2011), whether personal, organizational or national. The (re)interpretation of the past requires the future (Helin et al., 2014). According to Hussler (quoted in Adam, 1990, p. 31), “even a concern with short-term memory has to include fundamentally the future dimension.” Thus, the meaning of the past is mediated through the future as it is seen in the present. There is no past without the future. Thus, the influence takes place from a future point to a point in time (Hernes, 2014b). In this sense, the future creates the past.

At the same time, the future is not determined but created through temporal connections chosen by actors. In the present, there are multiple possibilities and directions implied by the uncertain future (Griesbach and Grand, 2013). While there is no past without the future (Helin et al., 2014), the ability to see different future

possibilities, including more distant futures, depends on one's grasp of the past. Through action, in the passing of time, experiences accumulate, and the temporal span becomes longer (Hernes, 2014). That is, the temporal span into the future is rooted in the temporal span in the past. It is important to recognize that "span indicates that our temporal markers are not 'points', but stretches" (Bakken et al., 2013, p. 18). Although not necessarily symmetrical, the longer span into the past enables the greater extension to the future (Hernes, 2014; Kaplan and Orlikowski, 2013; Schultz and Hernes, 2013). Thus, the past serves as an important resource for looking forward (Hernes, 2014). Hernes (2014, p. 165) points out that the past, once considered as being unattractive may lose its unattractiveness with the passing of time. In a similar way, a future once fantasized as the most desirable or undesirable may be re-evaluated respectively in light of new events that have emerged and new experiences that have been acquired in the passing time (Kahneman, 2011).

Undetermined future means that our action in the present situation both creates and constraints our future potentialities (Chia, 1999; Hernes, 2014). Potentiality reflects the central thought of Whitehead's process theory (1929/1978) that the world is constantly emerging and at every single moment, there are multiple possibilities open. Potentiality refers to something not yet here in the physical or actual form, to something that is open as one of the multiple options to actualize (Helin et al., 2014). In the flow of time, multiple possible event trajectories are emerging, but naturally only selected event trajectories from the emerging trajectories are actualized (Kahneman, 2011). Alternative possibilities do not have equal probabilities to be actualized. Some past and present events make certain trajectories for future events more probable than others (Hernes, 2014).

Different alternative event trajectories may reflect a merely limited coping with the present or a creation of a new (Helin et al., 2014). Limited 'coping' refers to the realization of the possible, that is, to the realization of one possibility from

the multiple possibilities that are available, while the creation of a ‘new’ refers to the actualization of a potentiality. According to Helin et al. (2014, p. 9) “creation needs to be understood as the actualization of the virtual, rather than as realization of the possible”. Thus, the becoming could be more or less intense, more or less visible, and more or less dramatic. Still, being in the becoming, either through the realization of the possible or actualization of the virtual, could happen only through action, and action can take place only in the present. The action that is taking place in the present with the direction to the future is spontaneously responsive to the living surroundings at the current moment (Shotter 2010). Thus, the present plays a vital role in keeping up the on-going temporality and shaping the unfolding event trajectories.

The first empirical paper presented in Chapter 6 focuses on the situated and temporal interplay between improvisation and routines. In this paper, co-authored with my supervisor Professor Tor Hernes, we are investigating how the creation of a ‘new’, that is an actualization of the potential, is achieved through improvisation. Although we do not refer to actualization in our paper, this is one way to read the paper. The virtual idea of X-Bow (a revolutionized bow shape) was actualized through the improvisational response to the situational circumstances. At the same time, it could be argued that this actualization of potential was based on both previous and current limited coping. Thus, the realization of some possibilities may be more supportive of actualization events than others. In our paper, we see the realization of possibilities, or limited coping (routines), and actualization of potential, or creation of new (improvisation), as mutually constitutive and unfolding simultaneously in the flow of time. Such a view allows for a deepened understanding of how acts of improvisation enable novelty through their interplay with routines. In the study presented in Chapter 6, we found that actors were anticipating the changing routines while they were improvising new solutions, which eventually enabled the improvised solutions to be adapted as a new practice.

The precarious nature of improvisation, we find, makes the interplay with routines all the more crucial. At the same time, routines require improvisation for their development and maintenance. Taking a perspective of temporal interplay enables some ideas for organizational becoming.

Still, the on-going nature of temporality (Schultz and Hernes, 2013) is also highlighted in the second and third empirical paper. Viewing temporality as a “perception of the continuum of reality” (Hussenot and Missonier, *forthcoming*, p. 5) in the third paper I focus on the sensed discontinuity and analyze its influence on employees’ commitment to organizational change. In the second paper, I analyze the unanticipated change in the meaning and intention of routines, which could be ascribed to changed temporal context or configuration of events (discussed in more detail in the next subsection) in organizational meaning structures (Hernes, 2014), which in turn change the composition of available temporal resources in the present.

4.2 Time in events and events in time

It is important to recognize that an on-going temporality does not equal a succession of pasts, presents, and futures such as points along a line (Hernes, 2014). Instead, as we highlight in the first paper, the past and future events are immanent in the present, which means that the experienced past events, as well as anticipated future events, constitute the present event (Griesbach and Grand, 2013). That means that the past, present and future events are internally related, that every event is linked to its precedents, contemporaries, and antecedents (Hernes, 2014; Hussenot and Missonier, *forthcoming*). The immanence of the past and future in present events and the immanence of the present events in the past and future gives to time its agency (Hernes, 2014). Alternatively, it could be argued that as “any mention of an event includes a reference to time, and vice versa...” (Bakken et al., 2013, p. 18),

time as events is enacted and it is through the enactments agency is given to time. As Griesbach and Grand stress “in the enactment of situations, the situation is transcended, thereby influencing other situations beyond the current situation only” (Griesbach and Grand, 2013, p. 64). Therefore, events are emerging from other events (Cobb, 2007; Hernes, 2014); there is no spatial or temporal separation between events and “the structure of events defines temporality of organization” (Hussenot and Missonier, *forthcoming*, p. 8).

The interpretation of the past, similar to the anticipation of the future, are both mediated through the present or happening in the present (Hussenot and Missonier, *forthcoming*). Both Mead (1932/2002) and Schütz (1967) see human action as intimately tied to the present. They see the present as the locus of action or ontological reality. The present is real while past and future are imaginative (Bakken et al., 2013; Mead, 1932), and as such, extending beyond the real (Bakken et al., 2013). Following Mead and Whitehead, actors never escape the present; the past, as well as the future, are continually constructed using the materials of the present (Mead, in Schultz and Hernes, 2013). Past and future situations or events are mobilized to cope with current situations or events (Griesbach and Grand, 2013). Griesbach and Grand (2013, p. 65) argue that coping with current issues in the present moment shapes “how the current situation and previous and future situations relate to each other.” The present as a locus of creating temporal trajectories by connecting the past and future events is brought forward in the first empirical paper presented in Chapter 6 where the focus is on the temporal interplay between routines and organizational improvisation as it happens in the present. Additionally, the role of the past and future, mediated through the present is investigated in the third empirical paper presented in Chapter 8 about employee commitment to change.

It is important to recognize the plurality of connections each event has (Helin et al., 2014). Additionally, it is important to recognize that the nature of connections

is not spatial or mathematical but relational in time (Helin et al., 2014). As relations are temporal, then connectivity is temporal. Instead of a one-to-one succession in line, each event has multiple possible trajectories open, due to its multiple connections to different past events, which enables us to make present different choices informed by different pasts and by different future anticipations, and lead to different future events.

Hernes (2014, p. 95) describes events “as related in the form of a manifold”, where the manifold is characterized by having different forms and elements that are “woven together in a continuum that has no endpoints, but rather like planes that intersect and self-intersect.” To be connected to the manifold means that the specific event may be influenced by the events that took place, not in the immediate past or recent history, but a long time ago. Being influenced by the events from the distant past increases the unpredictability of current events, and adds an element of surprise and the emergence of the new.

Being in the flow of time and facing manifold indicates that every event has to struggle for its becoming, for its emergence and endurance (Shotter, 2006). According to Mead (1932/2002), emergence is the real source of time. Without the emergence of the novel, humans are not able to recognize time. Still, no matter if the specific event is influenced by the recent or more distant past, the influencing takes place in the present, as the present is the temporal locus of action. The actualization of the potential can happen only in the present. Some moments in the present could be more decisive than others. That is, the present could offer an instant moment that could radically change the trajectories of events and may have far-reaching consequences both for the better or worse, but the present falls into the past.

Possibilities in the flow of time are not fixed or permanent, but may vanish (Helin et al., 2014). Dreyfus (1975, p. 151) explains that this instant moment applies

“to any occasion in human life when one makes a decisive choice, a commitment which gives a definite form to one’s future and a retroactive meaning to one’s past.” That instant moment or ‘fleeting now’ (Kaplan and Orlikowski, 2013, p. 967) may not appear again. Therefore, it represents a unique moment, a potentially decisive ‘window of opportunity’ (Tyre and Orlikowski, 1994) when the entire past is reassessed, and a completely new focus for the future is set. It is important to recognize that those decisive moments appear as unpredicted possibilities for the actualization of potential in the flow of time leading to unplanned and unpredicted enactments or configurations of events.

The appearance and importance of that kind of decisive moment become evident in the study of the X-Bow, presented in Chapter 6. The visit of the CEO of the client company all of a sudden not only changed the design of the already under construction vessel, altering the course of action for production, but also acted as a trigger for the actualization of the specific potential and radically changed the future event trajectories for the entire Ulstein Group. The planned visit of the client company’s CEO marked an unpredicted and significant event for the company, not the visit itself per se, but because of the temporal connections that this visit created through its prehension to other past and future events. It could be argued that the client company’s CEO visit as an event was enacted to the realization of the X-Bow, and through the realization of the X-Bow also to the X-Stern (downward and outward sloping ship stern).

4.3 Temporality in the mindful performance of routines

The importance of temporality to the mindful performance of routines is investigated in my paper titled “Mindful application of routines – lost in the

outsourcing?”, presented in Chapter 7. The theoretical framework of this paper is inspired by the thoughts of Heidegger (1927/1962), Schütz (1962/1982) and Polanyi (1967). These works, written decades ago when the term ‘outsourcing’ was not even coined, can offer topical insight into issues related to routines, outsourcing, and organizational performance. Common to all three authors is a reluctance to separate an actor from the context of action. On the contrary, they all highlight the inseparable nature of the relationship between the subject and the world, which is the most fundamental principle of phenomenology (Holt and Sandberg, 2011).

It is important to recognize that according to phenomenology the world, as the context for action, does not refer only to the spatial, physical world. The world is referred mainly as existing temporal relations forming the everydayness for an actor who is ‘thrown’ into this temporal relational everydayness (Heidegger, 1927/1962). Thus, the phenomenological world becomes a world of the making of the actor, which shapes the actor in turn. As Holt and Sandberg (2011, p. 221) explain, “we live in an everyday world of instrumentality in which our intentional relationship with things, far from being individual and somehow private to us as mental beings, is governed by a common human, social arrangements.” That is, our being in the everyday world is intentional, relational and highly temporal.

First, the ‘intentional relationship with things’ indicates that the meaning of things, i.e. their significance to human actors, is being-ready-to-hand for doing something with (Heidegger, 1927/1962). According to Heidegger (1927/1962) ‘being-ready-to-hand’ requires experience-based bodily knowledge from the actor, that they know how to handle a thing and for what the specific thing is or could be used for. Experiences need to be repeated before they will be internalized into bodily knowledge (Polanyi, 1962). That is, to establish a relationship to things requires time. The claim that the properties of things are pre-set or ‘governed by a common human, social arrangements’ (Holt and Sandberg, 2011, p. 221) indicates that the

everyday world, into which humans are thrown is based on internalized knowledge and established (taken-for-granted) social arrangements. Both internalized knowledge and established social arrangements have an ongoing temporal nature. They are what they are in the specific temporal context. The relationship of things and common social arrangements is temporal; this relationship has the past, and it is evolving into the future, tying the meaning of things temporally to human arrangements that are also temporal, not permanent.

Second, to do something is a future-oriented action. Thus, humans' relation to things is mediated through future expectations and anticipations, to achieve or accomplish something in the future. Schütz (1962/1982) describes the motivation to achieve something as 'in-order-to' motivation and distinguishes it from the 'because-of' motivation that is internalized bodily and which remains mostly as an unconscious, background guide for directing one's action. Thus, on the one hand, what is anticipated or expected directs action. On the other hand, what is seen as possible to anticipate or expect is based on the past experiences accumulated in the background knowledge, which allows the drawing of analogies. Based on Heidegger (1927/1962) Holt and Sandberg (2011, p. 221) conclude that "we learn about things in relation to entire scenes of significance that rarely come into question" and "our primary relation with things in the everyday world is not that of detachment but absorbed coping." That is, our understanding of things is mediated through unconscious background knowledge or taken-for-granted assumptions by coping or acting. An absorbed coping as an action is embedded in the background knowledge.

According to Heidegger (1927/1962), skillful everyday coping presupposes awareness, but not necessarily cognitive, perceptual self-awareness or mindfulness as a social psychological concept referred to by Langer (Langer et al., 2012; Ie et al., 2012). Instead, Heidegger (1927/1962) highlights the need for openness in our

concern to accomplish the task at hand. This aspect is important because according to Polanyi (1967), our ‘subsidiary’ or background awareness, which relates us to our surroundings gives meaning to the object we are focally aware of. That is, when being focally aware while performing some routines, the meaning we attribute to our practices is subconsciously influenced by wider organizational interactions – by our subsidiary awareness (Polanyi, 1967; Tsoukas 2003, 2009), and by organizational meaning structures (Hernes, 2014). Organizational meaning structures (Hernes, 2014) mold background knowledge (Dreyfus, 1991), which is available to an actor at a subconscious level (Polanyi, 1962). Thus, the foundation for the mindful performance – the attentiveness to others and the sensitivity to the general context, is achieved through a subsidiary (Polanyi, 1967; Tsoukas 2003, 2009) or background (Dreyfus, 1991) awareness. Background knowledge is not static information but bodily experienced temporal knowledge. That is, it incorporates past experiences while anticipating future happenings that are organization specific. Through subsidiary or background awareness, the mindful performance of routines is sensitive to operations (Weick et al., 2008), sensitive to their relational configuration and contextual inter-dependences (Becker, 2004; Dreyfus, 1991).

While taking a phenomenological perspective, it could be argued that the meaning of routines as ‘things’ is rooted in their relation to ‘entire scenes of significance’ (Holt and Sandberg, 2011, p. 221) and we cannot separate the performance of routines as absorbed coping from the organizational context, including background knowledge. If the performance of routines is relocated from one organizational context to the other then most probably the performance of routines changes as a result of the altered temporal connections between an actor and performed routines, between an actor and organizational settings (including background knowledge), and between the performance of routines and organizational settings (including background knowledge). Thus, by changing the

organizational context for performing routines, as happens in the case of outsourcing, the way routines are performed will be changed; as a result of the changed temporal connections the application of routines cannot stay the same.

As mentioned before, background knowledge is not static but bodily experienced temporal knowledge. Being in the flow of time, on the one hand, enables us to add experiences and expand our background knowledge, which may also expand the range of available possibilities. At the same time, the perishing nature of time erases experiences and knowledge (Helin et al., 2014) available from the past as a material in the present. In its openness, the past is fragile and perishing and cannot be treated as unproblematic and taken for granted (Hernes, 2014). The connection to the past needs to be maintained; otherwise, the knowledge accumulated through past experiences tends to disappear due to forgetting (Argote, 2013). The availability of the distant past requires some maintained connections through some memory cues. Schultz and Hernes (2013) have suggested textual, material and oral memory forms as important links to the past for identity (re)creation. By highlighting the term ‘memory form’ Schultz and Hernes (2013, p. 4) are emphasizing that the form in which memory “is evoked shapes the meaning of an experience.”

Still, in addition to those three memory forms which help to keep up the connection to the past for future use, our bodily experiences and skills are maintained through mundane everyday practices, through performing routines. Routines, as mundane practices, are important means to recall the past, to draw on it and consult it for action. When performed in a repeated manner, organizational routines help to maintain procedural memory (Hernes, 2014; Orlikowski, 2002) and organizational meaning structures (Hernes, 2014).

The concept of the mindful performance of routines presented in Chapter 7 extends the performative model of routines introduced by Feldman and Pentland

(2003). The main contribution of Feldman and Pentland (2003) is their approach to viewing and analyzing routines and actors as a single unit of analysis. Viewing the performance of routines as inseparable from the performer (Tsoukas and Chia, 2002) allows us to see the processual nature of the routines in a different light and explain the unanticipated change and adaptation of routines (Feldman and Pentland, 2003).

In my paper, I argue that we cannot separate the performer from the organizational settings without changing the meaning and possible outcome of routines. Following the idea of Feldman and Pentland (2003) that routines and actors form a single unit of analysis, and seeing the actors as existentially embedded in their context, I show in my paper, that there is a number of temporal connections cut off with re-locating routines from one organizational context to another. As a result of these temporal cut-offs, the meaning and intention of routines will be changed despite a detailed specifications and tight control system.

4.4 Sensed (dis)continuity in the flow of time

The plurality of time-reckoning systems mentioned in sub-section 2.3 raises some important questions about their impact on organizational life. For example, questions how different social times influence internal organizational affairs, business activities, events and respectively, how do they influence employee commitment to these internal affairs, business activities and events. These are the central questions of my third empirical paper presented in Chapter 8.

As organizations are complex social systems, we can expect to see heterogeneous times also in organizations. At the micro level, individuals have their personal time perspective characterized by the temporal span (Bakken et al., 2013)

and internal time orientation (Emirbayer and Mische, 1998). The temporal span refers to the actors' grasp of the past – to the past resources available in the present situation (Schultz and Hernes, 2013). An internal time orientation refers to qualitatively different relations of the past, present and future and to the relative dominance of one over the others (Emirbayer and Mische, 1998). Jaques (1982/1990, p. 21) states that:

“No two men living *at* the same time live *in* the same time. Each one, living at the same moment, has his own personal time perspective, his own living linkage with past and future, the content of which, and the scale of which, are as different between one person and another as are their appearance, their fingerprints, their characters, their desires, their very being.”

Jaques argues further that although it may not be self-evident that “different people live in different time-scales, or in different *temporal domains*” it does have “profound and far-reaching consequences for everyone” (Ibid). Ancona et al. (2001, p. 519) refer to a temporal personality as “the manner in which an actor understands and acts with respect to the temporal continuum.” Similar to Jaques (1990), Ancona and colleagues point out that “like a fingerprint, a temporal personality is unique for each actor” (Ancona et al., 2001, p. 519). In his study, Wiebe (2010) shows how differences in temporal personalities of middle-level managers across organizations impact their attitudes toward planned top-down change. Wiebe (2010) claims that a person's internal time orientation unconsciously influences his or her attitudes and behavior.

Sociologists take a broader view and although they agree that how actors understand time has far-reaching consequences and depends on their personal histories and time orientation, they point out that the experienced personal time is influenced by the person's social interaction (Clark, 1985; Emirbayer and Mische, 1998; Gurvitch 1964/1990a, b). Therefore, it may be problematic to make a clear

distinction between personally experienced time and social time peculiar to a social group. Moreover, sociologists disagree with the fingerprint metaphor to the extent that it refers to the static, unchangeable nature of temporal personality (Emirbayer and Mische, 1998; Gurvitch, 1964/1990a, b). Instead, time orientation is viewed as a dynamic characteristic shaped by on-going everyday interactions (Emirbayer and Mische, 1998).

Therefore, for sociologists, the plurality of times, or to be more precise, the plurality of social times, is a social phenomenon (Gurvitch 1964/1990a). For example, Gurvitch is clear that it is not possible to separate social man from the total of social phenomena (and thus, from social time) when he states that:

“This ‘total man’ cannot be reduced to mental life, not even to the collective consciousness. He is a body as much as he is a participant of societies, of classes of groups, of We-ness: all representing total social phenomena. And by this reciprocal participation, the total social phenomena participates in man as much as man participates in the whole.” (Gurvitch, 1964/1990b, p. 68)

Following the quote above, it could be argued that if ‘the total social phenomena participates in man as much as man participates in the whole’ and social time is viewed as a part of the total social phenomena, then social time participates in man as much as man participates in social time. Still, it is important to recognize that there is no singular social time, but a plurality of social times. Therefore, people create social times as much as social times create people.

In his typology, referred to by Hassard (1996, p. 586) as “the most ambitious attempt to outline the qualitative nature of social time”, Gurvitch (1964/1990b) has proposed eight different types of social time. The eight types of social time – enduring, deceptive, erratic, cyclical, retarded, alternating, in advance of itself, and explosive, are described in Table 1. Gurvitch (1964/1990a, p. 40) claims that social times can be understood only dialectically, and with eight types of times he

highlights the differences in the structural and astructural elements, continuity and discontinuity, and contingency of social times (Gurvitch, 1964/1990b, p. 69).

As a matter of fact, all the characteristics of time, always in degrees, can...be understood only dialectically: the ‘discontinuous continuity’ and the ‘continuous discontinuity’, the duration is succession and the succession in duration, the past, the present and the future, sometimes projected in one another, sometimes dominant over one another, and finally sometimes reduced to one another, the ‘quantitative-qualitative’ and the ‘qualitative-quantitative’ (quantity itself presented in the form of degrees of extensity and intensity), the homogeneous heterogeneity, and the stable-change and the changing stability. (Gurvitch, 1964/1990a, p. 40)

Ancona et al. (2001, p. 519) cited above, refer to personal temporality as “the manner in which an actor understands and acts with respect to the temporal continuum.” Gurvitch, in his typology, emphasizes continuity through discontinuity, where the discontinuity is seen as sudden configurational changes of past, present and future. By challenging the idea of stable time-reckoning systems or stable social times (Clark, 1985; Hassard, 1996, 1990), Gurvitch emphasizes “creating temporal meanings rather than responding to temporal structures” (Hassard, 1996, p. 586). Gurvitch argues that social sub-groups hold diverse, simultaneously coexisting, conflicting and constantly competing times. This argument is supported, for example, by the recent empirical research conducted by Reinecke and Ansari (2015), who analyzed the collision between market and development temporalities and associated different temporalities with the different goals organizational sub-groups hold. The mixture of colliding times creates the total social phenomenon described as vibrant and effervescent:

“the pulsation of total social phenomenon is manifested in a perpetual coming and going. All these levels permeating each other and struggling with each other are animated by the varied pulsations of continuity and discontinuity. Moreover, their accentuations change with each type of total

social phenomenon, be it a We, a group, a class or a social society.”
(Gurvitch, 1964/1990b, p. 68)

Being part of the total social phenomenon, words like ‘pulsation’, ‘perpetual coming and going’, ‘permeating and struggling’, and ‘change’ indicate that social times are as vibrant and effervescent as the total social phenomenon described above. A closer look at the typology presented in Table 1 suggests that different types of social times are characterized by actions with different qualities (i.e. enduring, competing, fighting, being ahead of itself, being late, etc.). Assuming that action is future oriented (Schütz, 1967), the question is how the future looks for the different types of social time and how the anticipated future impacts the employee commitment to strategic organizational change. These are the aspects I am investigating in the third paper.

In my third article titled – **Risks and consequences of temporal discontinuity in organizational change** – presented in Chapter 8, I draw on the assumption that human beings act based on the temporal meaning they give to events and their own action. The temporal meaning of the action is constructed in an on-going temporality (Schultz and Hernes, 2013). Similar to the idea of dynamic social times proposed by Gurvitch (1964/1990a, b), the concept of on-going temporality assumes that the meaning of the past, present and future is not fixed, but created continuously. Therefore, the experience of time is created continuously, and through the continuously created experience of time, time is created continuously. Still, the encountered time may be sensed by actors as discontinuous.

Both contingency and continuity/discontinuity are stressed as important aspects that influence employee resistance and commitment to strategic change projects. In the third paper, my main interest is in the sensed continuity/discontinuity dimension. Although I do not apply Gurvitch’s typology as a theoretical framework

in my paper, I am investigating the sensed continuity/discontinuity and its relation to commitment. In my research, I investigate how actors make sense of the strategic organizational change and choose the level of their change commitment based on the perceived continuity. Additionally, interviews with the persons belonging to different organizational sub-groups show the heterogeneous social times in the play, collision, and alteration in the event of strategic change. The eight times typology helps to better understand the tensions revealed in the case organizations. The typology is helpful to follow the collisions of different times, the consequences of those collisions, and the transformation of a particular type of time to a different one.

In the both case companies investigated in the third paper, there are different organizational sub-groups characterized by different types of time. In both companies, the top management has the pushing forward 'in advanced of itself' type of time. This pushing forward future-oriented type of time collides with the 'enduring' past dominated time held by the employees with long tenure in the organization. In the Outsourcing Company, where the past was valued and incorporated into the change rhetoric, the experienced social time evolved from 'enduring' time to 'erratic' time. Therefore, there were uncertainties related to anticipated roles and some difficulties in maintaining temporal connections, but there was a readiness to cooperate, and there was no resistance or fight against the change. In the Growing Company, where the past was contrasted against the future, the experienced social time evolved to the 'alternating' type of time characterized by the 'endless and bitter struggle between the past and future'. In the Growing Company, there were visible tensions between the employees with long tenure and the newly hired employees including the new management. To some extent, the newly hired employees experienced 'retarded' time, as both they as well as their efforts to impose something were unwelcomed by the closed group of the long-term employees. The newly hired employees struggled for each advancement so much

that even when they achieved something, it felt delayed and inefficient. The time experienced as ‘retarded’ influenced their motivation for commitment. Therefore, it seems that understanding the prevailing type of social time could help managers to mitigate the possible negative impacts of change implementation by taking into consideration the underlying time orientations and the possible alteration of the prevailing social time in the case of a challenge.

In this third paper, my main focus is on the connection between perceived temporal (dis)continuity and commitment to organizational change. Applying a temporal perspective to organizational change, the paper shows how perceived temporal continuity is important for the ways that organizational members commit to the change process. The empirical material shows the adverse impact that perceived discontinuity has on employee commitment. Data indicates that sensed (dis)continuity could be fuelled both by the excluded past as well as by the disassociated future. The excluded past may influence employee commitment more adversely than specific change type (i.e. downsizing) and lead to change resistance. If the change rhetoric includes the past, the situation may be better in the sense that the past as a resource for making sense of the present and projecting into the future is seen as valid and valuable. The past, seen as valid and valuable, makes it possible to sense the continuity of affairs and achieves at least obligation-based commitment instead of resistance. Still, it seems that for affective commitment, employees need to be able to perceive continuity across all three dimensions of time; employees need to be able to perceive plausibly connected past, present, and future. If the future is perceived as disassociated, it remains implausible to actors and hence, reduces their commitment to the course of change.

The dialectical play between continuity/discontinuity is fascinating as it seems to have different layers. For example, according to the Gurvitch typology, social time in the case of the X-bow (paper 1) could be described as ‘explosive’ and

filled with rapid movements. The realization of the X-bow could be viewed as an act of collective creation characterized by ‘effervescent conduct intervening with social reality. The present, as well as the past, dissolved in the creation of the immediately transcended future, where discontinuity and contingency are maximized’ (see Table 1 below). Indeed, the interview data supports that description. That is how participants are describing the event. But as the case shows, beneath this ‘effervescent discontinuity’ different kinds of temporal connections were in the making – that this ‘effervescent discontinuity’ is more connected to the stable processes, to the trustable routines, than could be visible at first glance. The ‘immediately transcended future’ requires continuity or as we describe in the paper, a momentary stabilization; it requires an anchoring into the present on-going affairs. In the case of Ulstein, there are continuous and purposeful efforts to maintain the ability and readiness to improvise, to break out from one’s comfort zone and take a risk. Also, as the case shows, there is commitment across the organizational levels to secure the continuity of the improvisation through the materialization of the abstract idea and translate it into the strategy.

In the second paper (on mindful routines), the experienced time during the backsourcing project suits the description of ‘erratic’ time. Erratic time is characterized by an ‘irregular pulsation between the appearance and disappearance of rhythms; accentuated discontinuity, uncertainty and contingency; an enigmatic series of intervals and moments placed within duration; the present appears to prevail over the past and the future (with which it may have difficulties to relate), and a collision between regulated social roles and attitudes with repressed, aspired, fluctuating and unexpected social roles’ (see Table 1 below). Although it was not my research focus in the paper, this description forwards the atmosphere of the backsourcing project adequately. Deeper analysis of the data reveals that beneath the description of social time several discontinuities related to outsourced routines appeared, which hampered the ability of actors to relate to the past and future.

First, there is a discontinuity in the performance of outsourced routines caused by physical relocation. Second, as a result of physical relocation to the different context, there is a discontinuity of organizational background knowledge or meaning structures. Third, there is a discontinuity of the relationship between routines and its performer as the employees of the GlobalCompany were not moved to an outsourcing partner. Fourth, there is a discontinuity in relations between outsourced routines, and the routines kept in-house. On the one hand, the number of different discontinuities related to outsourced routines hints that the outsourced routines, their meaning, and intention will not continue to stay the same as before the outsourcing. On the other hand, a discontinuity of relationship between performed routines and organizational meaning structures means that knowledge and competences concerning the specific tasks may not continue in the passing time. Therefore, beneath the social times characterized by different temporal configurations and (dis)continuities, there are different temporal connections in the making, aimed at securing or fighting against a sensed (dis)continuity. It could be said that these temporal connections in the making are what constitutes organizational reality.

Table 1. Gurvitch's typology of social times

Type	Description	Continuity, contingency	Main characteristics	Relation to Past, Present and Future	Representative groupings	Representative social classes/ institutions
1) Enduring	Slowed down long duration	The most continuous of the social-times	The past is dominant despite its remoteness	The past is projected in the present and in the future	Kinship and locality groupings, clans	Peasant
2) Deceptive	Sudden and unexpected crises are hidden by the long and slowed down duration	Reinforcing discontinuity	Simultaneously slowed down and agitated	Rupture between the past and the present	Large cities	Political 'publics'
3) Erratic	Irregular pulsation between the appearance and disappearance of rhythms	Discontinuity becomes prominent, uncertainty and contingency are accentuated	An enigmatic series of intervals and moments placed within duration	The present appears to prevail over the past and the future (with which it may have difficulties to relate)	Collision between regulated social roles and attitudes with repressed, aspired, fluctuating and unexpected social roles	Sociability of the passive mass; global societies in transition
4) Cyclical	An apparent precipitation makes a withdrawal into itself A delayed, waiting for unfolding	Continuity is accentuated while contingency is weakened Delayed time, no equilibrium between continuity and discontinuity attained. Contingent elements are reinforced	'A dance on one spot' Awaited so long that it becomes inefficient	The past, present and future are mutually projected into one another The future actualized in the present	Mystic-ecstatic groupings Closed groupings to which admission is difficult	Churches, sects The nobles, the landed gentry, certain corporations whose members are selected, particularly the licensed professions such as academic faculties and the professions

Table 1. Gurvitch's typology of social times Continuous

Type	Description	Continuity, contingency	Main characteristics	Relation to Past, Present and Future	Representative groupings	Representative social classes/ institutions
6) Alternating	Alternating between delay and advance	Discontinuity is stronger than continuity. Contingency is not enhanced	Delay and advance with equal strength struggle endlessly. The victory of one over the other can end with a very bitter struggle, and the issue is always precarious.	The realization of past and future compete in the present	Economic groupings	Global societies at the inception of capitalism or when absolute monarchs ruled
7) In advanced of itself	Pushing forward	Discontinuity and contingency triumph over continuity and regularity	Collective effervescences, aspirations toward the ideal and the common values, collective acts of decision and innovation	The future becomes present	Active masses and communions in revolt	Proletarian class
8) Explosive	Fast movements	Discontinuity and contingency are maximized	Acts of collective creation. Effervescent conduct, which always intervenes with social reality.	The present, as well as the past, are dissolved in the creation of the immediately transcended future	Creative Communion	In centralized and pluralistic collectivism there is an attempt to make this time dominant

Adapted from: Gurvitch, G. (1964) Varieties of Social-time in John Hassard (Ed) 1990. *The Sociology of Time*, pp. 67-76 and Clack, (1985) A Review of the Theories of Time and Structure for Organizational Theory, p.44.

5. METHODS

The purpose of this chapter is to discuss the main methodological challenges and strategies of the research project. As each of the empirical papers have their dedicated methods sections, I will focus on common aspects without repeating what is written there. This chapter will address some of the main challenges of conducting social research within a processual and time-sensitive view. The discussion will thus develop from issues I have discussed in chapters above.

5.1 Methodological constraints of temporal research

The processual-phenomenological perspective poses some interesting methodological questions to the practice of social research (Hernes, 2008). First, the concept of becoming indicates that nothing is in the final fixed state but in the process of becoming. If something is in the process of becoming it is not possible to say anything final about it – something which cannot become different in the future (Hernes, 2008). Second, the notion of becoming assumes on-going activity, and not a self-sustaining state of affairs that stays the same if there is a lack of force to cause it to change (Hernes, 2008). Becoming as an on-going activity includes potentiality, but it is not possible to either measure or to predict and control it (Hernes, 2008). Third, phenomenology assumes the intertwined messiness of the world (Heidegger, 1927/1962) and argues against decontextualized research, which reduces the whole into particles while assuming that the analysis of the particles will reveal the nature of the whole (Schütz, 1967). The fourth constraint is related to time. If we assume that the reality is in the process of becoming then conducting research focused on a cross-sectional snapshot taken at a single point in time does

not capture the dynamics related to becoming. As indicated in sub-section 3.1, the comparison of points over time also does not serve as an appropriate approach because it is still comparing static points over time not allowing us to grasp the process of how actors make temporal connections or how time as events is enacted.

Although it is not possible to account for, measure or control the dynamic process of becoming, we can enhance our understanding (Hernes, 2008) about the process of becoming and to discover the underlying aspects (Corbin and Strauss, 2008) using the in-depth case study design. In-depth case studies can provide a rich picture of the real-life situations in organizations (Stake, 2006; Langley and Abdallah 2011). Organizations, as complex social systems in the becoming, are by their nature dynamic. Case studies, according to Fitzgerald and Dopson (2009, p.466) “lend themselves well to the relatively uncontrolled and dynamic conditions of organizations.” Moreover, the in-depth case study focusing on some specific situation or event grasps some duration in the flow of time. The duration, in contrast to points in time, makes it possible to investigate how events are enacted, how the past and future are used in the present and how the meaning of the present, past and future is created through on-going activity. In contrast to the aim of comparing states over time, an in-depth case study makes it possible to focus on the certain period, which could be defined as an on-going present (Schultz and Hernes, 2013). That is, instead of bracketing out points in time, a period is bracketed off. Therefore, the case study design with bracketed off duration makes it possible to investigate the activities as interrelated and interactive rather than determinative (Stake, 2006).

I have defined my cases as events (Hussenot and Missonier, *forthcoming*). The chosen events are viewed as important and significant by the stakeholders. My interest is in how actors make sense of those events, how they relate to these events temporally, and how they see those events as linked to previous and anticipated events. At the same time, in contrast to Langley et al. (2013), I do not consider that

the chosen events are closed and finished. My interest is not to define when exactly one event starts or ends. Instead, I am interested in the temporal unfolding of these events and how actors connect to those events temporally. In each case study, instead of using the before-after comparison of the situation or state of some phenomenon, I concentrate on the on-going situation and how actors connect to that based on their histories and their future aspirations.

For example, the case of X-bow presented in the first paper could serve as an illustration of the openness of an event. On the one hand, the launch of X-bow took place in 2005, and as such, it could be declared to be a finished event. On the other hand, according to the actors, it was perceived as a significant event that helped Ulstein regain its role as an international player in the ship design and construction industry. The X-bow was recurrently brought into the stories of the organization indicating that the X-bow was an event still in enactment, still unfolding into new possibilities, still utilized by organizational members for new enactments. Similarly, in the third paper, where I study temporality of commitment in the case of strategic change events, I leave those events open in their potential future enactments by focusing on their temporal connections as made visible by the research in the bracketed off duration. Therefore, my aim is not to determine the end of events (despite the projects' official ending dates), but how they are enacted and understood by the actors involved.

The qualitative in-depth case study design also takes into account the challenges related to a processual-phenomenological approach by emphasizing the importance of context (Woodside, 2010; Yin, 1994) and including the somehow "undervalued element of 'context'" (Fitzgerald and Dopson, 2009, p.468) in the analysis. The importance of context is brought forward in all three studies. In the second paper, concentrated on the routines in the back sourcing project, the context plays a central role. In this study I am investigating temporality in organizations

through the interplay between organizational routines and organizational context. The main focus of this study is on how and why routines are changing if relocated from one organizational context to the other. In a similar manner, the role of the context cannot be overlooked in the comparative analysis presented in the third paper. In fact, one of the reasons for choosing the cases for this comparative study was their contextual difference (Ragin and Amoroso, 2011) – the anticipated organizational growth versus reduces in headcount caused by outsourcing.

5.2 Case study design and sampling

The case study method is defined by Yin (1994, p.13) as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.” This definition provided by Yin applies to my research. Still, compared to Yin and Eisenhardt’s (1989) positions, which according to different authors (i.e. Bryman and Bell, 2011; Easterby-Smith et al., 2008; Piekkari et al., 2009) represent a more positivistic approach to case studies, my approach to the case study is interpretive (Easterby-Smith et al., 2008; Fitzgerald and Dopson, 2009).

In their article, based on the review of case study-based articles, Piekkari, Welch and Paavilainen (2009) provide a thorough analysis of the approaches to case studies and the comparison between mainstream (positivistic or postpositivist) and alternative approaches to case study research. The main differences between the two approaches by Piekkari, Welch and Paavilainen (2009) are that the positivistic case study approach aims to build theory by generating generalizable propositions through extracting variables from their context (e.g. Yin, 1994, 2009; Eisenhardt, 1989). Often positivistic approaches use multiple case studies (Eisenhardt, 1989) with the aim of producing either theoretical or literal ‘replication’ (Yin, 2009), and

therefore, theoretical sampling is used for case selection. The variety of data collection methods is used to triangulate and improve the validity of the study.

Alternatively, in the constructive and interpretive approaches, the aim of the case studies is to produce rich and particularized explanations embedded in the situational context (Bryman and Bell, 2011). Therefore, in order to maintain a detailed and rich description of the context and avoid thinness related to a “surface” case study (Dyer and Wilkins 1991 cited in Piekkari et al., 2009, p. 572) either the within case study or small-N comparative (two case studies) design is used. The case selection is driven by the logic of identifying and selecting “information-rich cases related to the phenomenon of interest” (Palinkas et al., 2013, p. 1). Therefore, purposeful case selection is used (Patton, 1990). Purposeful sampling is viewed as “suitable for qualitative research which is informed a priori by an existing body of social theory on which research questions may be based” (Curtis et al., 2000, p. 1002). Although qualitative in-depth single case study research does not aim at theory testing or building, it is viewed as a useful tool “for advancing theoretical ideas” (Ragin and Amoroso, 2011). Therefore, qualitative in-depth case studies may enable analytical generalization to theory (Tsoukas, 2009; Woodside, 2010). Similarly to positivistic case studies, interpretive case studies also use multiple data collection methods. But the focus is on uncovering different meanings and possibly conflicting interpretations (Piekkari, Welsh and Paavilainen, 2009) instead of increasing the validity of the study by proving supporting evidence through replication.

According to Woodside (2010, p. 1) the aim of the case study research can be describing, understanding, predicting and controlling. My aim is threefold. I would like to describe the role of time and temporality in organizational settings, to contribute to the understanding of the role time and temporality have in organizational settings, and to some extent anticipate what could be the possible

consequences if time and temporality are left out of the analysis. It is important to highlight that I do not refer to anticipation as the predictability of a probabilistic assumption of a causal relationship under the *ceteris paribus* condition, but a more general highly possible consequence of the time and temporality in and for organizations. Based on the aims of my research I have chosen an interpretative case study approach as according to Fitzgerald and Dopsn (2009, p. 466) “interpretive methods are particularly indicated where the task is the description, interpretation, and explanation of a phenomenon rather than the estimation of its prevalence.” My aim with the interpretive case study approach is to identify and understand employees’ multiple experiences with different temporalities of organizational processes (i.e. improvisation, routines, strategic organizational change and commitment).

My research is based on four case studies arranged into three articles. The case studies conducted for this thesis could be defined as instrumental cases (Stake, 2006) meaning that they allow understanding broader issues related to time and temporality in organizations (Stake, 2006). My case analysis is explanatory by trying to answer how and why questions (Yin, 2009) and advancing organizational theories (Piekkari et al., 2009; Ragin and Amoroso, 2011) related to time and temporality. I have used purposeful case selection (Patton, 1990). Based on the typology provided by Patton (1990), the Ulstein case as unusual and specific could be defined as an ‘extreme’ case (Patton, 1990, p. 169). The Ulstein case is ‘extreme’ in the sense that against the odds the company was able to regain its position in the highly competitive ship design and construction industry as an internationally recognized player specialized in high complexity vessels for the offshore industry. Ulstein was established in 1917 as a ship repair workshop. By the nineties, Ulstein became a group with activities in the propeller and electrical equipment design, ship design and construction. At the end of the nineties, Rolls Royce bought the Ulstein businesses, except Ulstein’s ship construction part. Ship construction was

considered too expensive to carry out in Norway. The Ulstein family decided to buy back the naval construction yard and to build up the “new” Ulstein. However, following the buy-out, the company has only a dock, a handful of engineers and construction employees. Ulstein was left without a design department. Moreover, the buy-out agreement stipulated a five-year quarantine (1999–2004), which meant that Ulstein was not allowed to sell their designs to other yards. Therefore, starting with no designers under strict restrictions, Ulstein was able to restore its name in the offshore vessels design industry. Moreover, with the X-bow design Ulstein was able to revolutionize the hull shape and set new standards in the context of a very conservative shipbuilding industry.

The case study presented in the second paper could according to Patton’s typology be defined as an ‘opportunistic/intensity case’ (Patton, 1990, p. 171, p. 179). On the one hand, it is ‘opportunistic’ in the sense that through my employment in the particular organization I was offered an opportunity to join the team with the aim to bring once outsourced accounting tasks back in-house. Thus, I just grasped the opportunity to join the team. I was lucky enough to get permission to conduct an insider ethnographic study on this project and take “advantage of whatever unfolds as it unfolds” (Patton, 1990, p. 179). On the other hand, the backsourcing case could be defined as an ‘intensity’ case. Meaning that although it is not extreme it allowed me to collect rich and enlightening information on organizational routines and their temporal connections (Patton, 1990, p. 171).

Although case study and ethnographic study are referred to as separate methods (e.g. Easterby-Smith et al., 2008; Fitzgerald and Dopson, 2009), the line between the two methods is blurred (Bryman and Bell, 2011). For example, although Fitzgerald and Dopson (2009, p. 466) argue that both ethnographic and case studies “can provide in-depth and multifaceted data around a research question,” they point out a number of differences. The main differences are in the

role of the researcher, who in an ethnographic study should be immersed in and have an extensive knowledge of the research context. Furthermore, compared to a case study design, an ethnographic study could be more expensive and time-consuming. In addition, an ethnographic study could be perceived as intrusive by organizational members (Fitzgerald and Dopson, 2009, pp. 466-467). On the other hand, Bryman and Bell (2011) claim that the distinction between ethnographic and case study is not so obvious and categorize intensive ethnographic studies as a typical form of qualitative case study. Similarly, Piekkari, Welch and Paavilainen (2009, p. 584) have mentioned the ethnographic case study as one possible approach to case study design.

In the third paper, I use a comparative case study analysis with the aim to investigate how, if at all, the nature of strategic organizational change impacts the importance of perceived continuity. Based on Patton's (1990) typology, the case selection can be defined as 'maximum variation' sampling (Patton, 1990, p. 172). Selecting cases, which are at first glance very different (anticipated growth versus experienced contraction) makes it possible to identify commonalities and shared aspects (Patton, 1990; Ragin and Amoroso, 2011) of sensed (dis)continuity and commitment, which in turn may help to enhance the resulting understanding of the investigated phenomenon (Patton, 1990). As Fitzgerald and Dopson (2009, p. 474) explain, "the logic of this design is that purposeful sampling will aid the process of analysis by facilitating the researcher to focus on differences and that such differences will aid the detection of interrelationships between variables and factors in the context."

Both organizations analyzed in the third paper are in the middle of implementing strategic organizational change, which has a direct impact on current working procedures and routines. Still, the important difference between the Growing Company and the Outsourcing Company is the nature of the strategic

change. In the case of the Growing Company, a five-fold increase in turnover is expected, while in the Outsourcing Company a 50% decrease in headcount is expected. The different nature of the strategic change made it possible to investigate the relationship between change commitment and perceived continuity in two contrasting contexts – an organizational expansion or contraction – and identify common patterns in the relationship between perceived (dis)continuity and commitment to change.

5.3 Data collection and sources

For all four case studies, I have combined different methods for data collection (Fitzgerald and Dopson, 2009; Piekkari et al., 2009). Therefore, two studies are based mainly on interview data supported with some observation and company documents, while one of the studies is an ethnographic case study based on observing participation (Moeran, 2009), supported by company documents and informal conversations. An overview of the methods used in the different studies is presented in Table 2.

The mapping of the organizational context was the very first step in my data collection. For each case, I started the data collection by collecting more general information about the organization, recent developments in the industry, the organization's historical background, and current on-going projects. To obtain that kind of information, I used company websites, industry reports, professional journals, company documents, and publications as important sources.

The first empirical paper, co-authored with my supervisor Professor Tor Hernes, is based on the case of Ulstein Group. Although the data collection lasted over a four-year period from 2011 to 2014, my role in data collection was modest. I joined the international research team as a junior researcher just before the end of

the project. Still, I had a chance to visit the Ulstein Group, participate in two interviews with Ulstein designers at the beginning of 2014, and have a tour in the yard (dry dock) where hull welding takes place and on an almost completed ship in the dock. As I did not participate in the earlier data collection phases, familiarizing myself with the background information of Ulstein and X-bow included, in addition to the materials mentioned above, the interview data collected in the 1st phase of data collection 2011–2012. Although my involvement in data collection was limited, I did the major part of the data analysis including the first round of coding in Nivo. The writing of the paper, including the discussion, was done on an equal basis.

To build up the background understanding for the back sourcing of accounting tasks (the empirical case presented in the second study), I drew upon my previous working experience in the company and the accounting profession. Before joining the team, which was assigned to handle the back sourcing, I was employed by the same company as a senior accounting specialist in the Global Accounting Competence Center for six months. My previous position in the company gave me an overview of the accounting, reporting, and internal control systems of the company, including the split of roles between business, in-house accounting services, global teams, and outsourcing partner. Moreover, having nearly twenty years of experience in the accounting profession equipped me with a detailed understanding of the accounting in most of its aspects. My previous experience in accounting included full accounting services, reporting and budgeting in multinational companies, consolidation, implementing international financial reporting standards (IFRS), preparing consolidated annual reports for listed companies, financial and tax auditing and outsourcing related knowledge transfer of accounting routines. Therefore, the prerequisite to “have extensive knowledge of the research context and to employ adequate means to document observations” (Fitzgerald and Dopson, 2009, p. 466) was fulfilled. Through my involvement in

actual practice, I was simultaneously able, as a practitioner belonging to a specific professional community, and as a researcher, to investigate backsourced routines and to collect data about how intention and the understanding of certain routines were changed in the process of outsourcing (Yanow and Tsoukas, 2009).

The research project conducted in the Growing Company (presented in the third study) had the shortest duration. Although the material collection altogether lasted approximately five months (from January to May), the interview period was constrained within only two months (from April to May). In the case of the Growing Company, the notes from the recruitment interviews were important to supplement the material from the subsequent interviews (conducted a year later), which made it possible to analyze the shift in attitudes and change commitment among the newly hired employees. While the interview data revealed the differences in time orientations and multiplicity of times perceived by actors, the notes from the recruitment interviews indicated the shift of the temporal perspectives of the newly hired employees. General observations in the company while conducting the interviews helped to understand the emerged organizational sub-groups and the tensions between these sub-groups.

In the case of the Outsourcing Company, the research project lasted one and a half years. Data collection started with my participation in the announcement meeting in Vienna in May 2005, and ended with the completion of the knowledge transfer to the external outsourcing partner in September 2006. The announcement meeting in 2005 was a two-day meeting including a charter flight to Poland to visit the sites of the outsourcing partner. The project ended with a one-day workshop which was designed to wrap up the downsizing and knowledge transfer experience, discuss the problematic topics and enhance the understanding of the working methods after the completion of the knowledge transfer.

As Stake (2006) points out, a case “can be used as an arena to host or fulcrum to bring many functions and relationships together for study.” The case can be viewed as being dynamic and operating in real time (Stake, 2006). Excepting the X-bow case, all cases were on-going projects at the time of my research, which enabled me to study the unfolding situation or event in real time. In the ethnographic case study presented in the second paper, I was able to follow the back sourcing project from the start to the completion as an observing participant. For the case studies presented in the third paper, I had a chance to participate in the meetings and workshops related to the implementation of the strategic change. Being able to participate in meetings and workshops enabled me to sense the general atmosphere by paying attention to the tone, facial expressions and body gestures used by different participants. All this helped me build up an understanding of the situation and provided a relevant supporting material to analyze interview data.

In addition, the in-depth case studies allow selecting specific situation or event, which can provide the relevant information to enhance our understanding of the phenomena. Selecting specific event was a strategy we used for understanding the temporal interplay between routines and improvisation in the X-bow case. Although the improvisational design of X-bow was materialized in 2005, it still served as an important reference for Ulstein employees. Retrospective descriptions of the interplay between improvisation and routines related to the development of X-bow allowed Ulstein employees to make sense and explain the role of routines and improvisation in the on-going developments.

The general overview of the empirical data used for each study is presented in Table 2 below. The more detailed description of the relevant sources and methods is provided separately in the each empirical paper.

Table 2 Overview of the empirical data

	Chapter 6: 1st Empirical paper	Chapter 7: 2nd Empirical paper	Chapter 8: 3rd Empirical paper
Title of the paper	The past and the future in the now: Improvisation and routines as temporal interplay and the making of an improvisational event	Mindful application of routines – lost in the outsourcing?	Risks and consequences of temporal discontinuity in organizational change process
Main focus of the study	Temporal interplay between organizational improvisation and routines	Temporality of routines and organizational background knowledge and the interdependency between the two	Importance of perceived temporal continuity for organizational change commitment
Research type	Case study	Ethnographic case study	Comparative case study
Sampling logic	Extreme case	Opportunistic/intensity case	Maximum variation
Study period	2011–2014*	October 2011–June 2012	(January) March–April (June) 2011/ May 2005–September 2007
Main source of data	Unstructured and semi-structured interviews	Observing participation	Semi-structured interviews
Detailed overview of data	<p>In total 39 interviews (approximately 58 hours): 32 interviews with individuals 7 group interviews</p> <p>Participation at company's two-day management seminar</p> <p>Informal conversations</p> <p>Site visits including company museum and production site</p> <p>Company's internal publications including 90th anniversary book, internal newsletters, presentations</p>	<p>9 months leading to approximately 1800 hours of field work</p> <p>2 A4 format notebooks of handwritten field notes, approximately 40 A4 pages of e-mail correspondence, 25 pages of meeting memos</p> <p>Different process descriptions of varying length including three 'unofficial' A4 format instructions used by the external service provider</p> <p>12 knowledge transfer sessions with the external service provider teams lasting from 1 to 2 hours; 4 workshops with global teams</p> <p>Lync meetings with project managers</p> <p>Bi-monthly Lync meetings with local accountants</p> <p>Informal conversations with local accountants and business controllers</p>	<p><u>The Growing Company:</u> 12 semi-structured interviews with employees (6 long tenured employees and 6 employees with tenure 1–3 years) 3 conversations with top managers</p> <p>Company reports, newsletters, notes of requirement interviews</p> <p>General observations in the company while conducting interviews</p> <p><u>The Outsourcing Company:</u> 4 semi-structured interviews with top or middle-level managers; 9 semi-structured interviews with local accountants and controllers</p> <p>Company newsletters, presentations, memos</p> <p>Observing two 2-day meetings and three 1-day workshops</p>

* As mentioned in the text, the author of this thesis was not involved in the entire data collection process.

6. FIRST EMPIRICAL PAPER: The past and the future in the now: Improvisation and routines as temporal interplay and the making of an improvisational event

The first revision of this paper, co-authored with my main supervisor Professor Tor Hernes, is in the review process in Organizational Studies.

THE PAST AND THE FUTURE IN THE NOW: IMPROVISATION AND ROUTINES AS TEMPORAL INTERPLAY AND THE MAKING OF AN IMPROVISATIONAL EVENT

Abstract

Improvisation and routines tend to be portrayed as temporally different phenomena and ordered sequentially in time. Drawing upon the notion of temporal immanence in process philosophy, our contribution is to consider them mutually constitutive in the flow of time. In the case studied for this we show how day-to-day improvisation arose from familiar past routines and directed towards similarly familiar routines. More consequential acts of improvisation, leading to change, relied on more untested and uncertain routines. Common to both types of improvisation was that improvisation was directed at momentary stabilization through routines. At a more conceptual level, the idea of immanence enables us to show how routines are brought into the improvisational act to constitute it. This observation enables us to critically question some established ideas about improvisation and routines, such as assuming that improvisation is devoid of anticipation. On the contrary, we find that routine-based implementation, working both forward and backward in time, is an integral part of the improvisational act. It also enables us to question current thinking about temporal agency and 'contingencies of the moment'. Temporal agency, we argue, is more about the process by which past and future events are brought into the present moment than qualities of the present moment per se. We derive our data from a study of design and construction of ships.

Keywords: improvisation, routines, temporal interplay, time, process philosophy, immanence, Whitehead, event

“All great improvisational jazz musicians have one thing in common, which is that they are accompanied by very skilled musicians who never let themselves be distracted.”

Manager, Ulstein Design and Solutions

Introduction

In her analysis of improvisational jazz, Hatch (1999) shows how improvisation relies on the group adhering to some stable and recognizable pattern, called the groove. While improvisation happens at the spur of the moment, the groove reflects a cyclical, recognizable, pattern, which allows the musicians to maintain a feel of the structure of the tune. Importantly, for improvisation to take place, it needs to rely on a regularity in the piece of music being performed before, during and after, as improvisation departs from the groove, for then to return to the groove. This means that the soloist, while improvising, anticipates the return to the groove. However, the groove is not constant, and while the improvisation is taking place, the comping, while forming background to the soloist, adapts and accompanies the improvisation. Although the improvisational act and the groove will come together at a later point in time, anticipating the conjoining influences both the improvisation and the performance of the groove. That is, anticipating the conjoining connects improvisation and the performance of the groove temporally.

A number of works on improvisation take the example of jazz as a point of departure for discussing improvisation (e.g. Moorman and Miner 1998a,b; Hatch

1999; Weick 1998; Ciborra 1999; Zack 2000; Crossan et al. 2005; Winter 2003). When, for example, Winter (2003), describes jazz as *rising* from patterned and practiced performance, this is an accurate description of improvisation in jazz. However, the vast majority of works, although they are inspired by jazz, do not reflect the seamless relationship between the improvisational and regularized acts. On the contrary, they tend to work with the idea of what Weick calls a ‘split’ (Weick 1993), such as between design and implementation. On one side of the split there is design, associated with planning and predictability and on the other side of the split there is implementation, associated with improvising solutions. Weick warns that the assumption of a split is in itself rationalistic assumption, suggesting order and analyzability, which is inconsistent with the idea of improvisation,

‘What is common among all of these instances of lost precision is that they attempt to acknowledge the existence of improvisation, but do so without giving up the prior commitment to stability and order in the form of habit, repetition, automatic thinking, rational constraints, formalization, culture, and standardization. The result, when theorists graft mechanisms for improvisation onto concepts that basically are built to explain order, is a caricature of improvisation that ignores nuances highlighted in previous sections.’ (Weick 1998, p. 551)

In spite of Weick’s warning, the notion of split prevails in studies of organizational improvisation, the most important of which is an assumed split in time between improvising and realization (e.g. Moorman and Miner 1998a,b; Crossan et al. 2005). The main problem of assuming a split is that the actual experience of acting in time is denied in the analysis. Instead time is compartmentalized into periods that are both different and secluded from another.

Nor is there evidence that such a split actually occurs in improvisational jazz. What happens is that the soloist anticipates the coming together of the solo and the groove while he is soloing, which influences (we suppose) his soloing, while the

other members of the band, while accompanying the soloist, also anticipate the coming together of the soloing and the groove. Both soloist and band perform in their own time, so to speak, while being temporally connected through their anticipated conjoining. In so doing they anticipate the performance of each other by folding into the present that which may unfold in the near future. For example, Barrett (1998), writing from his own experience as a jazz player, suggests that,

‘Improvisers enter a flow of on-going invention, a combination of accents, cymbal crashes, changing harmonic patterns, that inter-weave throughout the structure of the song. They are engaged with continual streams of activity; interpreting others' playing, anticipating based on harmonic patterns and rhythmic conventions, while simultaneously attempting to shape their own creations and relate them to what they have heard.’ (p. 613) [...] They need to interpret others' playing, anticipate likely future directions, make instantaneous decisions in regard to harmonic and rhythmic progressions. But they also may see beyond the player's current vision, perhaps provoking the soloist in different direction, with accents and chord extensions.’ (p. 618)

We will argue theoretically and illustrate empirically that this is what happens in the interplay between organizational improvisation and routines. We will show that although a split may occur in terms of delay between the act of improvisation and its realization through routines, that realization is already made present – played out - during improvisation. We intend to show how acts of improvisation are connected to the routines, not as separate acts, but as mutually constitutive acts in the flow of time.

Paper outline

We start with a brief discussion of improvisation and routines in the context of change, in which we discuss the problem of assuming temporal split between

improvisation and routines. We then move on to the theory chapter to explain how process philosophy may help overcome the temporal split. Working from a conception of time from process philosophy we argue that instead of time being what separates improvisation and routines, it connects them through the idea of immanence. This, we argue, is useful for explaining the conditions under which acts of improvisation may or may not connect with routines. We then present a case study in which we investigate temporal interplay between two types of improvisation and routines. The first type is ornamented improvisation, which takes place among routines and in response to solving concrete problems. We show how ornamented improvisation went on repeatedly among routines and directed towards familiar routines with anticipated responses. Another type of improvisation, called full-scale improvisation, is presented with the case of the development of the X-bow at Ulstein. We show how the act of improvisation leading to the X-bow proved highly consequential, it also proved a highly fragile and contingent process. Its fragility lies in the fact that past and future events that are brought into the act of improvisation were untested and consequently uncertain. The last part of the paper contains four suggested implications from our analysis.

Routines, improvisation and the split problem

Routines (Feldman, 2000) are commonly seen as repetitive, recognizable patterns of interdependent actions, carried out by multiple actors (Feldman and Pentland, 2003). Routines are commonly seen as the basis for organizational sensemaking (Weick 1995), as repositories of knowledge (Levitt and March 1988), as sources of continuity and change (March and Simon 1958) and the very means by which products and services are created and maintained. In fact, Feldman and Pentland (2003) conclude that organizational routines are regarded as the primary means by which organizations accomplish much of what they do.

While being a different phenomenon from routines, improvisation may both enable the execution of routines and affect change in them. Following Berliner (in Weick 1998) we see improvisation as involving ‘reworking pre-composed material and designs in relation to unanticipated ideas conceived, shaped, and transformed under the special conditions of performance, thereby adding unique features to every creation’. Following Crossan et al. (2005) and Moorman and Miner (1998a) we choose to distinguish between two types of improvisation. The first type is what Crossan et al. (2005), drawing on Moorman and Miner (1998) call ‘ornamented improvisation’; improvisation in response to an event which is unexpected, but which does not entail a particularly high degree of uncertainty as to its consequences. Ornamented improvisation typically takes place when,

‘... environmental cues are clear, and firms need only structure their response quickly. In this scenario improvisation is characterized by a high level of spontaneity, a low level of creativity, and a strong influence of prior routines and experience. These improvisations represent extemporaneous deviations from present models—not original creations’ (Crossan et al. 2005, p. 133).

Ornamented improvisation takes place in the execution of routines. Faced with the need to provide continuity in a changing world actors are faced with the challenge of complying with routines while coming up with a solution to the problem at hand. Hence Ciborra (1999, p. 81) suggests that people continually learn and improvise while working. This is a view of improvisation that reflects an ongoing and incremental view of change, whereby the improvisation takes place amid routines and directed towards the routines (Feldman 2000).

Another type of improvisation is what Crossan et al. (2005) refer to as ‘full-scale improvisation’. Full-scale improvisation typically takes place outside routines (Miner et al. 2001) under high uncertainty where actors are under simultaneous

pressures to act, while they at the same time are unable to fully understand what goes on around them (Crossan et al. 2005). A similar idea is proposed by Moorman and Miner (1998a), drawing on Weick's (1996) term 'formulaic improvisation', from which new products or processes (routines) may result. Similarly, such improvisation is likely to take place outside routines, and its outcome may be more far reaching than ornamented improvisation.

There is reasonable agreement that full-scale improvisation, although it may lead to change in routines, also relies on routines in some form or other. Still, a challenge remains to explain how full-scale improvisation interacts with routines while eventually changing those same routines. This is where the notion of split comes in the way of providing adequate explanations. Two forms of split are implicitly or explicitly assumed between improvisation and routines.

First, improvisation and routines are considered basically different temporal phenomena. Contrary to routines, improvisation is seen as 'ex-temporaneous' (Ciborra, 1999, p. 77). By the word 'ex-temporaneous' Ciborra implies that improvisation occurs outside the flow of time, that is, in an unexpected or unplanned, sudden moment. Improvisation, as described by Ciborra (1999, p. 91), is the 'moment of vision' during which 'recollection and anticipation reach far beyond the immediate interval defined by retention and protention.' Whereas routines are seen as sequential, semi-automated practices, carried out in the repeated manner, improvisation is seen as having taken for granted 'in-the-present' qualities (Ciborra 1999; Crossan et al., 2005, p. 131). Such 'in-the-present' qualities include open-endedness and indeterminacy (Schütz 1967; Rindova and Kohta 2001; Orlikowski and Yates 2002; Tsoukas and Chia 2002; Hernes 2014a). Related to this is the notion of play, which Bakken et al. (2013), with reference to Heidegger describe as being without a 'why' (Warum), the 'why' being dissolved by the game.

A more integrative view of improvisation and routinized actions is presented by Berliner (1994), who warns about taking for granted in-the-present qualities of improvisation. Arguing from the experience of jazz, Berliner (1994, p. 492) suggests that it is inappropriate to define improvisation only as spontaneous and intuitive action. On the contrary, improvisation is directed at a possible future, which, rather than be another moment of improvisation, is more likely to be some routinized pattern of acts that absorbs and extends the act of improvisation. If we were to follow Berliner's line of thinking, improvisation is not (just) about a moment of vision, but about its realization into some form of routinized behavior.

Second, improvisation and routines are seen as operating in 'separate times'. A commonly accepted definition of improvisation focuses on the temporal order of conception and execution (Vendelø 2009; Cunha et al. 1999; Moorman and Miner 1998a). Moorman and Miner (1998, p. 698) defined improvisation as 'the degree to which the composition and execution of an action converge in time'. They argue specifically that continuous access to prior organizational memory facilitates instantaneous execution of composition resulting from improvisation. Although Moorman and Miner refer to Weick's important point about the split, they assume that composition and execution still operate in their own separate times. The same goes for the relationship between improvisation and routines, where writers tend to see routines as repositories of improvisational acts (Moorman and Miner 1998a; 2001; Kyriakopoulos 2011). The underlying assumption is that there is a time for improvisation and a time for routinizing the fruits of the innovation.

These two types of split are less clear in practice than they seem in theory. In fact, our study will demonstrate, not only that they are empirically misplaced, but also that assuming the split comes in the way of appreciating the actual dynamics that goes on between improvisation and routines. Still, overcoming the split depends

on the use of an appropriate theoretical background, which is what we suggest below.

Theorizing a way around the split: working from the idea of temporal immanence

The idea of temporal split is strongly contested by process philosophers (e.g. Whitehead 1929; Heidegger 1927; Schütz 1967). It corresponds, for example, to what Whitehead (1929, p. 137) referred to as ‘simple location’. To assume simple location of phenomena means to abstract them out of their “concretely real” context and deny them their intrinsically relational character. The problem becomes that [. . .] ‘any division, including some activities and excluding others, also severs the patterns of process which extend beyond all boundaries’ (Whitehead 1938: 140). This implies that a temporal split at one level serves to deny connections between moments in time that may exist at other levels.

Rather than assume split, a temporal view inspired by process philosophy assumes the principle of mutual *immanence* between moments in time (Whitehead 1933, p. 254). A number of organizational scholars have to a varying extent drawn upon the idea of immanence (e.g. Chia 1999; Cooper 2005; Weik 2011; Hernes 2014a; Hussenot and Missonier 2016). The idea of immanence is conveyed through two principles. The first principle is that each moment in time contains in itself other moments in time. This follows from a view of temporality derived from process philosophy, whereby everything is process; there can be nothing outside of process, hence all previous moments in time are necessarily carried on by all subsequent moments in time. The second point is a mere corollary of the first, but contains analytical implications, which is that that moments in time connect internally to one another. It means, for example, that while being in one moment of time one acts with anticipation of what will happen in later moment in time. Importantly, the

anticipation makes an incursion into the current act as it is brought into the present. Other moments in time may be brought into the current moment either experientially as in the case of previously lived moments in time or hypothetically, as in the case of possible future moments in time.

Another, and related, principle of temporal process philosophy is the primacy of the temporal present (Mead 1932; Emirbayer and Mische 1998; Hernes 2014a,b). Past and future exist, but as mere dimensions of the present (Deleuze 1994). Present, past and future are also different in terms of their degree of determinacy. Working from Whitehead's work on temporality, Hernes (2014a) suggests that the present is open and indeterminate event as to its outcome until closure. The situation is different when it comes to past and future events, which are closed in the sense that they are seen as having taken place. Even a future event is treated as hypothetically having taken place (Schütz 1967). This means that past and future events are seen as accomplished events, although they remain open for inquiry and redefinition as to their meaning and the ways in which they relate to one another. A past event, although it is over and done with, is brought into the present and it is while being brought into the present that it takes part in the making of the present. The same goes for an anticipated future event.

According to the principle of immanence, actors bring a past or future event into the present, and in so doing they actually establish the making of the present event as it draws to closure. In this view, even though the events may be chronologically distinct, they take part in each others' making on an on-going basis. This means that although the future act has not yet taken place, its workings are not just anticipated in the current act, but the anticipation of the future event also takes part in the making of the present act, as actors work with 'anticipatory sense' (Shotter 2006) of what is to come. This means that the current act is not just about

anticipating what is to come, but the anticipation of what is to come takes part in shaping what takes place in the current act.

Taking this thinking to the problem of improvisation and routines enables us to see acts of improvisation as taking place in a living, open present during which anticipation of the events of past and future routines are brought into the act of improvisation. Although routines consist of multiple events, it may be assumed that during acts of improvisation actors anticipate events that are key to the routine towards which the improvisation is directed. It is with this theoretical background in mind that we have collected and analyzed our data, guided by the following research question: how is temporal interplay created between improvisation and routines?

The Research Context

Ulstein Group is a world-class provider of ship design, shipbuilding and system solutions for ships. From its establishment as a fishing boat repair workshop in 1917, it began a phase of major growth and acquisitions in the early 1970s, to become one of the world's leading designers of offshore vessels and among the world's three largest designer of ship propellers and electrical systems in the mid 1990s. A major turning point occurred when Ulstein was taken over by the Vickers Corporation in 1998, for then to be sold to Rolls-Royce a few months later. Prior to the buy-out Ulstein consisted of propeller and electrical equipment design, ship design and construction. While taking over the entire ship design department, consisting of more than 40 naval architects, Rolls-Royce declined to take over Ulstein's ship construction part, concluding that ship construction would not be profitable given high labor costs in Norway. The company was imposed a 5-year quarantine selling their designs to others starting in 1999.

Following the buy-out, the company was bereft of its design department, as its entire staff had been moved to Rolls-Royce. Being left without their old design department, only half their engineering department and a yard, Ulstein had no choice but concentrate on breaking back into the market again with novel designs. In spite of the relatively high naval construction costs, Ulstein re-emerged after their 5-year quarantine as a designer of so-called high complexity vessels for the offshore industry, claiming a number of innovations, among them the notable X-bow design, a novel design with an inverted backward sloping bow, which was launched in 2005. The X-bow design and related innovations would again place them as a world-class offshore vessel designer.

Data collection and analysis

In our study we chose an in-depth qualitative case study approach to investigate the dynamics between improvisation and routines. A single in-depth case study with its “revelatory potential and richness of data” (Langley and Abdallah 2011, p. 205) seemed an appropriate choice. Assuming that time was a main variable in the study, we chose to pursue what Ancona et al (2001) refer to as temporal research. Temporal research, according to Ancona et al, may be grouped in three different categories. Their most relevant category for our project is what they call temporal personality, which they define as “the characteristic way in which an actor perceives, interprets, uses, allocates, or otherwise interacts with time (Sherman, 2001)” (Ancona et al. 2001, p. 519) that corresponds to the focus on actors’ subjective construction of time in our study. Such a view is relevant to our study, which deals primarily with actors' subjective experience of time and less with chronological time.

For the data collection, we utilized multiple approaches. The main focus was on interviews conducted over a four-year period from 2011 to 2014. One-to-one

interviews were supplemented with group interviews. In total, 39 unstructured or semi-structured interviews were carried out, amounting to a total duration of 58 hours approximately. Among these 39 interviews are 32 interviews with individuals and 7 group interviews. One interview was conducted by telephone. The group interviews included 3 interviews with 2 persons, 3 interviews with 3 persons and one interview with 4 persons. Group interviews proved particularly effective in constructing narratives around key events, such as during the development of the X-bow mentioned above, as they allowed for both individual and collective narratives to be analyzed (Sonenshein 2010). All the interviews were tape recorded and transcribed. Interviews lasted from 30 minutes to two and a half hours.

We deliberately sought variety in the interviewees' organizational positions and occupational background. Our interviewees came from production, design, engineering, international sales, and subsidiaries. The top management group included board members of Ulstein Group, head of the Ulstein International, COO, CFO and the HR Director. Also interviewed was the CEO of a client company, who was instrumental in the initial launch of the X-bow. Participants had also different tenure with the company ranging from 3 years to 34 years. Interview data was supplemented with site visits, participation at company's two days management seminar, informal conversations with employees, media reports and the company's internal publications. In order to analyze the performance of the company compared to the overall performance of the Norwegian shipbuilding industry secondary data in the form of the company's financial data and Norwegian ship construction industry was utilized.

The data was collected and analyzed in three different phases. Phase 1 of our research aimed at a broader understanding of how the company had achieved their long-term growth through continued practices of innovation.

Phase 1 sought to establish capabilities of the company that people saw as being historically important, without a priori consideration of category. The data for this phase was mostly interview based, with some observations added during field visits and meetings with company staff. The main focus of the interviews was on how novel solutions interacted with more standard programs, procedures and routines in the company. We sought answers to the extent of routinization of tasks and the dynamics between situations, tasks and routines. We quickly became alerted to the importance of time as a factor between improvisation and routines. First, they pursued actively a strategy of consistently delivering vessels on time, even though they were frequently obliged to make major changes during the construction process. Second, practices were temporally intertwined. At a general level, the design phase had to precede engineering and construction phases. At a more day-to-day level, the timing and ordering of activities influenced strongly how they worked. Interviewees frequently alluded to often having to improvise, while at the same time they could not know the outcome of the improvisation. Improvising one solution could come in the way of another solution. On the whole this sensitized us to the on-going nature of improvisation in the company, at virtually all levels.

An advantage of following this approach is that we became alerted to situations that were not necessarily seen as improvisation by the people at Ulstein. For example, their in-house brainstorming sessions were those events that people in the company associate with improvisation. However, those sessions, much like those identified by Sutton and Hargadon (1996) are not seen as interacting with future routines. As we probed further we discovered gradually the tangled relationship between improvisation and routines.

During phase 2 more specific interviews, including three group interviews were held to gain understanding about a specific period (from 1999 to 2014) during which the company re-developed their innovative potential as a means to gain new

competitive advantage following the Rolls-Royce buy-out. Additional information came from informal talks over coffee and lunch, as well as an in-house seminar at Ulstein, during which various design-, construction- and business related challenges and solutions were discussed. In this phase, the aim was to elicit a collective narrative of specific new product developments, which included a revolutionary ship bow conception (the X-bow), a hybrid energy propulsion system as well as a novel high-tech ship bridge design referred to as 'bridge vision'. Phase 2 interviews enabled us to get a deeper understanding of how novel ideas generally were absorbed and materialized through routines in the organization. We learned, for example, through various stories about the development of the X-bow concept, how volatile such moments actually may be. The interviews provided us with more insights into how routines may actually enable ideas or solutions conceived during improvisation to transcend the window of opportunity for improvisation. Phase 2 also alerted us to the importance of interaction between improvisation and routines that extended beyond the borders of the company, such as with partner companies. It was pointed out how Ulstein could not have all services and products in-house, and depended on timely delivery from other companies. Here acts of improvisation seemed to spread across the borders to partner organizations when a novel solution at Ulstein required novel solutions in the routines at partner companies.

Once we entered phase 3 of the data collection we had a fairly good overview of how acts of improvisation took place, what their temporal restrictions were (imposed by strict deadlines), the tanglement of improvisation and routines, and their temporal connections. In phase 3 we were ready for looking more closely into a selected process where improvisation and routines interacted in time. Although several novel ideas had been conceived and implemented, there was in particular one that was frequently held up as epitomizing their ability to improvise. What struck us was also that the situation that they referred to both reflected an act of

improvisation and the crucial role that construction routines played in the realization of the improvised solution.

In many interviews the development of the X-bow had been mentioned. There are at least two possible reasons for that. One reason was that it was primarily the development of the X-bow that was seen to have temporarily enabled Ulstein to re-emerge as an important actor in the market. One effect of this was that many people at Ulstein had developed an understanding of the process, which was methodically advantageous, as we could go back to previous interviews for more information about the process in addition to collecting more explicit data about it. Another reason for the X-bow being mentioned relatively often was that it was a catchy tale of fortuity and ability to grasp the opportunity in the moment. This meant that more interviewees could recall different pieces of the puzzle surrounding the X-bow process, hence we were able to obtain a fuller picture of the temporal interplay between improvisation and routines. In phase 3 group interviews were held in addition to individual interviews, where the group interviews aimed at extracting a fuller narrative about the X-bow process. In phase 3 findings were also presented and discussed at two seminars attended by Ulstein managers, as well as researchers from related research projects, where we specifically tested some of our findings related to improvisation and routines.

Ornamented improvisation and routines at Ulstein

Improvisation was reported as extensive and oriented towards routines. Solutions to on-going problems had to be improvised frequently, which meant that their implementation required adaption of on-going routines. Ornamental improvisation would go on while routines were being executed, because once the construction of a vessel was begun, hundreds of routines were being initiated. This means that improvisational acts, such as fitting a different type of machine into the

existing technological architecture of the vessel, would be done amid on-going implementation of routines.

Implementing co-called “change orders” without delay in vessel delivery was frequently mentioned as a major challenge. Changes during construction can sometimes be substantial, representing as much as 30% of the ship’s sales value, which means that they may be far reaching, and require extensive improvisation for their implementation. In temporal terms projects typically last 24 months, typically involving 4000 work-hours during the design stage, 40 000 work-hours during the engineering stage and 400 000 work-hours during the construction period.

It was frequently mentioned how changes would always be made during construction, sometimes so late in the construction phase that many components and routines were affected. Although substantial changes might be made in the event of change orders, they would normally know what to replace the current design with.

“We have been good at changing quickly, adapting to the needs of the customer, and I think that has been like that always. We are able to turn around, make changes, take on even a substantial change order one or two months before project completion.”

“Anyway, it’s quite, sort of, touch and go, but it’s very inspiring to work on such projects where there is a lot of uncertainty. There are sometimes big changes during the project. Back in 2007, we worked on a subsea boat, and then all of a sudden we got a request to construct an intervention vessel, a complete change order in the middle of constructing a vessel.”

Such changes are improvisational in the sense that they have to make do with the materials at hand to solve problems involving multiple components and connections. A modern vessel is crammed with technology, and making changes during construction is a very challenging operation, which sometimes demands that several of the parties involved are able to think holistically. In order to solve problems during construction representatives from different functions are brought

together to work out a solution for individual components against a background of multiple connected elements.

“There are many examples where we actually come up with completely new solutions, where we can think differently during construction and come up with a different solution that is much better, which shows how we can mobilize resources at a given moment in time, think differently and implement the solution. For example, there was a case of an unanticipated problem of a chimney where we decided, in order to fit the chimney, it could not be built in place, where we came up with a horizontal solution which meant that we could fit it into the construction in a different way and adapt to the other changes of the customer.”

It was striking how on the one hand routines were seen as consisting of tightly coupled acts while being seen as flexible and open on the other hand. Actually, most projects were started with the anticipation of 10-15 % slack, which would mean that the ability of routines being adapted to change was foreseen at the design stage.

“But, you know, there are always changes to be made, and we have to fix things as we go along. So we have to work with the yard all the way, always adapting and improvising to be able to deliver the right quality and on time. But the blessing for us designers is that we have this yard, so when we make mistakes, they are quite forgiving.”

“So we can do extreme things in a very short time frame with the yard because then we know that there will be faults. It will not be 95% perfect. It will be 85% perfect. So there is a calculated, kind of, risk and a challenge and we have been doing advanced things in extremely short periods of time.”

This means effectively that construction was undertaken with the assumption that routines would adapt to changes in the design as and when the needs arose, and that the assumption was based on experience. They had traditionally been able to solve problems through improvisation, which over the years had become increasingly more subjected to routines,

“You know, in the early days, a fishing boat could come in during the night, and we would have to go out and weld it and repair it. [...] You just had to go in there with the pilot or the captain and find things out together with them. Not only were there no plans or drawings, but they had also been rebuilt and modernized several times. [...] Then, of course, it was different; it was much more ad-hoc, which is very different from today’s situation, with more elaborate planning, schedules and systems for follow-up.”

In other words, they had developed over decades a built-in assumption that they could deal with unforeseen problems through improvisation. In response to increasing complexity of modern vessels the company had in recent years developed more stable routines to deal with problems. Rather than rely on individual workers to solve the problems as they arose, they would convene meetings on an ad hoc basis in response to problems and develop solutions in common.

“So, there’s endless possibility of consequences when you change something. Because it’s a question of really comprehending the consequences when you take your decisions because a wrong...not seeing the consequences is very dangerous. And we, sometimes, have to have some fixing going on later stages always, but at different say amounts or severity.”

“When we have a change order, acquisition, construction and engineering need to sit down together and see how we can work to incorporate those changes, and how it affects, not only this project but other projects.”

Although it could not be known exactly how routines would adapt to the problem, there was a high probability that sets of familiar routines would be invoked, which would eventually help them solve the problem at hand. This helps explain how Ulstein could work on the assumption that things would work out in spite of the common occurrence of change orders, which could sometimes impose considerable adaption.

Full-scale improvisation at Ulstein: The case of the X-bow

Whereas the general findings showed the ubiquity of ornamented improvisation and the reliance on routines during acts of improvisation, the specific case of the development of the X-bow shows how the convergence of several routines during an act of improvisation made for the development of a novel design, which ultimately had a major strategic impact on the company.

When we began our interviews in 2011, the X-bow was associated with the famous event and the ensuing trajectory of commercial success. The ensuing change occasioned by the X-bow improvisation came in the form of increased orders and the gradual embedding of the X-bow as an element in Ulstein's long-term strategy.

The X-bow, a novel design with an inverted backward sloping bow, was first conceived by a designer in 1997 while working for another naval design company. That company did not want to pursue the idea; he then brought it up during a brainstorming session at Ulstein in 2003, before it eventually was materialized in 2005 when a customer placed an order for a ship equipped with an X-bow. Such sessions (called "Ulsten beyond") are still being held in the company, during which they exercise what some referred to as "madness"; using various types of materials to model virtually anything that might be seen as out-of-the-box, aimed for possible future scenarios.

"...we struggle against the dark thoughts like "This won't work, it's already done, might be a good idea," and so on and this we will fight, we will make ours and we will play, and we will lose control."

Whereas those sessions were held on a regular basis, it was highly uncertain when a certain idea was adopted and put into action, if at all. Some ideas maybe "left to simmer", sometimes for several years until the propitious moment arrived

to have them materialised. Examples of solutions “left to simmer” to be mobilized at some later stage included nuclear powered vessels, a new solution for cleaning up oil spills, “bridge vision” (a high-tech conception of future ship bridge) and several other solutions. Improvising during those sessions was not addressed at on-going routines, but was done to provide imaginary solutions for future opportunities, should they arise.

In 2005 a client CEO came for a routine visit to Ulstein in connection with an on-going construction of a vessel for his company. During the meeting, the client CEO caught a glimpse of a mock drawing of a ship fitted with an X-bow,

“We spent many late nights, up on the fifth floor, where we had help from designers, who were actually not ship designers, to start work. The first picture was on the front of Christmas bulletin where the future ship design was drawn. Then it wasn’t an X-Bow, but it was a backward tilted bow. It seemed more like design fiction. That was Christmas 2001 or 2002.”

The drawing was one of several result from the brainstorming sessions that had been taking place during the previous months. The client CEO asked the Ulstein representatives about the ideas behind the concept. The Ulstein designers replied that it was something they ‘had been playing around with’ during their internal brainstorming sessions. They discussed the viability of the design, and towards the end of the meeting they discussed the possibilities of fitting an X-bow on the existing vessel under construction. It is important to highlight that at that moment of time X-bow existed only as an idea visualized by a drawing. Still, by the end of the meeting they had agreed with to explore the possibilities of fitting the vessel with an X-bow instead of the conventional bow that had been foreseen at the outset.

What is described here corresponds adequately to the definition of improvisation by Berliner (1994) referred to above. It highlights improvisation as a collective act, in which the client CEO played an important role. The Ulstein

designer had explained to us the idea of the X-bow (see fig 1) using the metaphor of a whale. Rather than try and lift itself up from the wave (the way a conventional bow is meant to do with a ship), a whale engages with the wave; it glides through it. This holistic way of seeing the ship's motion was an important part of improvising novel concepts during the brainstorming sessions. However, the metaphor of a whale is most unusual for a ship of this kind, and it was by no means obvious that it would appeal to the client CEO.

What happened, and which turned out to be highly significant was that the client CEO was a former sea captain, who had spent many hours on the bridge in high sea and who had felt bodily the shocks and vibrations from a bow design that made the ship surge upwards from its encounter with waves. He told us during an interview that he felt intuitively that the “whale-inspired” design was right. As it happens, his technical director accompanied him during the visit, who expressed support for the design from a technical viewpoint.

Replacing an existing conventional bow with an X-bow entailed significant risks. It was not certain that it was technically feasible. Ships for the offshore industry are made to withstand the extreme weather conditions in the North Sea, with storms and waves of 10-20 metres high. Other risks were institutional. The conventional, forward sloping bow represented centuries of standard practice. With the exception of some submarines and some private yachts, an X-bow had not been mounted on a ship before. In an industry where aesthetics plays a central role, it was actually considered ugly. For example, the X-bow was later bestowed the dubious honor of featuring on the website www.uglyships.com.

Still, as pointed out to us in an interview, the request from the client CEO was a window of opportunity that might not present itself again.

“If it weren’t for them, it would still not be a product. The only, the catalyst and the key was Bourbon Offshore. That was it. If they didn’t put money on the

table, nobody else would. So, that was the challenge. Well, you never know, you cannot say for certain that it wouldn't happen, but...So, timing is always of the essence."

The actors involved depended crucially on activating several sets of routines in order for the improvisation to materialize. A main reason for this was that time was literally running out. As mentioned above, the hull was already under construction with a conventional bow, and even if it was to be equipped with an X-bow, no major delay could be allowed. In other words, routines would have to adapt timely to the demands of an entirely new bow design, as delays would be too costly.

If this had been treated as ornamented improvisation, the meeting would probably have amounted to solving practical problems occurring in the construction processes, and a conventional bow would have remained on the vessel. The first part of our data analysis shows how multiple routines were in wait for routinely and creatively dealing with the practical problems at hand. However, putting an X-bow on the vessel involved other and novel routines, such as model testing.

First, model testing routines. They could not be sure that the bow was technically feasible,

"When they first tested up in Trondheim that was an incredible experience. But actually the scientists up in Trondheim, some of the top marine scientists, were also skeptical about it."

As the X-bow existed only in the format of 3D drawing, technical calculations had not yet been carried out, nor had a model of the X-bow been tested for hydrodynamic performance. They did not know if the model tests would bear out their ideas but took the next steps on the assumption that the calculations and tests would bear them out.

“Yes, there were some ideas about why it should be like that. We had a rationale for doing it, but nothing had been analyzed or calculated or tested. So we had to continue testing. Yes, it explained that we were on the right way. The fact is that it survived, and with style, and it did not lose any speed hitting the wave. When you’ve done comparative tests between X-Bows and conventional bows side-by-side, we can see that the X-Bow is superior. You know, down at the production level this was a revolution for us as well. It was like a flash when it first came, and then we thought, “Now the future will be secure.” About that we were right.”

They proceeded with calculations and model testing at the Naval Lab at the Technical University of Trondheim. Model testing was necessary for the new design to be certified, which is a requirement for obtaining insurance of the vessel. As it happens, the tests turned out very positive for the X-bow design, both in terms of stability and fuel consumption. Model testing is in itself a series of routines, consisting of model making, calculations, scaling, and systematic recording of performance.

“So what we did, tactically, was to test [the X-Bow] with an extreme wave. We were not obliged to do that for approval, but we tested with an extreme wave for extreme reasons [because of our competitors] who were laughing out loud. This is the parody of it all. The test was formidable. We have a video of it. Where other ships would go down this one survived it by a good margin.”

Second, new design and change order approval routines. Top management approval would be needed, both within Ulstein and within the client company. Top management approval is gained at meetings in the top management group. Such meetings are routines in their own right, being scheduled to take place at regular intervals and based on recurring agendas. After the meeting, the Ulstein designers quickly obtained approval from Ulstein management. Being able to mobilize them

instantly to get permission to construct the X-bow while changing an existing construction project was seen as crucial.

“Of course. I mean, we were not able to use two and a half million on a model test if Tore and Gunvor (senior members of the management team) were not involved, of course not.”

On his side, the client CEO needed seek approval from his superiors in Marseille, France, to place an order, contingent upon the outcome of calculations and testing. Getting approval from them was crucial, and he was eventually able to negotiate their support, although they showed considerable skepticism towards the project.

A third routine that was initiated, and which would have to be carried out differently from earlier, was the process of recalculating the ship with the parameters imposed by the X-bow. New calculations had to be done to take account of weight changes, and the layout of the hull would have to be reorganized. This had to happen quickly, as they were making substantial changes to a vessel that they had already begun constructing.

A fourth set of routines comprised the construction routines at the yard. Because the vessel at Ulstein was already under construction at the time of the meeting with the client CEO, improvisation depended on the designers' expectations that the yard would adapt their production procedures in time for the X-bow to be fitted on the ship that was already under construction.

“They [engineers, production people] just, they were very positive, I mean, very positive. Once [the X-bow] was presented, they immediately found alternatives on how to think structure, because you had to think differently about the internal structure of the boat. We are lucky that we have a very, very problem-solving oriented organization. Like, if you bring on a new solution, if they feel included, that is, they will almost bend over to find a solution.”

The initial calculations for the current ship with an X-bow took about two weeks, and everything, included testing and construction, took about 6 months, which means that with all the changes the overall construction time was not much longer than if they had proceeded with the already planned conventional bow. The ship, named Bourbon Orca (Orca being Latin for killer whale) was launched in April 2005, seven months after the meeting at Ulstein). Now, ten years later the Ulstein X-bow fleet counts several dozens of ships, and an “X-stern” is currently being launched.

Discussion: The making of a (full-scale) improvisational event

Viewing the data through the lens of immanence enables explanation of how future and past events are brought into the present. As pointed out above, the idea of immanence assumes that selected past and future events take part in constituting the present.

In the case of ornamented improvisation, the events that are brought into the improvisational event are typically familiar and appear relatively low risk to actors. This is why at Ulstein they can work with the expectation of ornamented improvisation taking care of solving problems in as much of 15% of the cases during construction. They could not do that if every act of improvisation was entirely unpredictable in its consequences. We found that actors’ knowledge of the response from the routines was based on how those routines have been experienced in the past, while at the same time they expect them to respond differently from how they have responded in the past. Past events are typically problem solving meetings with representatives from different functions to collectively solve acute problems when they arise. Events of ornamented improvisation are typically oriented towards more familiar and aimed at solving problems related to delivery.

The meeting with the client CEO could easily have resulted in ornamented improvisation with a conventional bow left in place, and the discussion directed towards problems of progress at the yard. Ornamented improvisation would have enabled continuity, with delivery on time, adding insights incrementally to enable other, similar vessels to be built, equipped with conventional bow. As it turned out, the meeting became an event of full-scale improvisation, which became highly consequential for the company. The collective improvisation carried out in the meeting between the client CEO and Ulstein designers enabled Ulstein to emerge again as a leader in its field, partly fueled by the X-bow invention. In the years following the launch of the first X-bow their order books doubled many times over, as several other novel solutions followed in the wake of the X-bow.

Despite its eventual impact, the X-bow improvisation process was highly volatile, being aimed at creating a novel product while involving different and more unpredictable routines than what would have been the case with ornamented improvisation. For example, two of the routines, the model testing and the approval by the CEO's superiors in France were more or less out of the hands of the people at Ulstein, which contrasts with the routines involved in ornamented improvisation. As to their own routines, they felt they could rely on them to adapt to the request at hand. While both ornamented and full-scale improvisation was directed towards routines, they differed greatly in the degree of uncertainty of past and future events that were brought into the present. In the X-bow development, past events included the various brainstorming sessions mentioned above, from which the idea of the X-bow emanated. The ideas conceived during those sessions were based on out-of-the-box thinking. It facilitated the bringing into the current event of past event during brainstorming sessions.

As mentioned, however, those events had produced hypothetical, non-proven non-tested concepts. The future events brought into the X-bow improvisational act

were correspondingly uncertain because they involved partly routines with responses of lower predictability than what was the case with ornamented improvisation. Seen through the lens of immanence this means that for the meeting to become consequential, they would have to anticipate responses from routines that were partly untried. It is also important to take into account the fact that all routines would have to respond adequately to the challenge at hand. Not just would they have to respond favorably, time was running out, as mentioned above, and timely response was equally important for the project to succeed.

In spite of building on uncertain events, those events were part of routines, which means that although the act of full-scale improvisation was constituted by uncertain events, those events are considered part of a quasi-stabilized routines. Thus, although full-scale improvisation harbors novelty, it also implies momentary stabilization of the ideas emanating from it through the execution of routine based acts. In fact, this momentary stabilization is partly played out in the improvisational act.

Implications

The analysis suggests four potential implications of our study. The first is that the imagery of improvisation taking place through the ingenious soloist, such as assumed by literature that relies on jazz for inspiration, becomes deeply flawed. On the contrary, the improvisation taking place during the meeting at Ulstein was inherently relational. Whereas the Ulstein designer was at the origin of the idea, he could not foresee, much less bring about the meeting that eventually took place. What eventually turned the meeting into an act of full-scale improvisation was partly the intuitive, experience based feeling by the client CEO that the X-bow was a viable design option when he sensed the importance of the whale-inspired imagery conceived by the Ulstein designers. According to him the initial support from his

technical director, who was present, was also important for the way that things turned out. Although we were not there, and memories of those who were there are somewhat blurred, the three interviews we have had with the Ulstein designer suggest that he was able to make the others partake in his ideas. We may reasonably assume that the mutual sharing of the whale metaphor was a strong driver. After all, the vessel was eventually given the name ‘Bourbon Orca’ (killer whale). Our point remains that improvisation cannot be traced to one actor, but is necessarily relational. Moreover, it is the relationality of the process that makes it into an improvisational event. Typically, when we inquired about the event, people were at pains to describe who had been there (apart from those who did participate, of course), although the story of what took place at the event was repeated several times in interviews.

Second, although specialized knowledge of improvisers in the way of products or concepts may be needed for full-scale improvisation to take place, their knowledge of the temporal unfolding of organizational routines seems just as important. This knowledge is manifest through the sense of urgency that was created in the process. The deadline for delivery of the vessel remained non-negotiable and they anticipated how other routines would have to be activated to stick to the deadline. Part of their anticipation was the assumption that routines would respond to their request. Here the findings are mixed. In Ulstein they were quite confident that the management team would respond favorably to fitting the vessel with an X-bow. It was much less certainty about the response of the top management team of the client company, however. Still, a mixture of hope and realism about the temporality of responses from the various routines seemed to prevail, which enabled them to go ahead. Returning to our example from improvisational jazz, we may say that their anticipation of a return to the ‘groove’ of the tune, considering their knowledge of the temporal unfolding of the routines, made their improvisational act possible.

This point also shows why it is important to overcome the split in the analysis. When Ciborra (1999), whose work is may be the most profound contribution to improvisation and routines, suggested that ‘While improvising, the agent is able to frame and recombine features of her situation, so that they become resources for intervention’ he missed the temporal dimension of improvisation and routines. Rather than see routines as a constraining structure to improvisation, they are seen as temporal resources, which, although they may be mobilised later, already take part in the improvisational act as it happens. The main point here is that whereas improvisation may be seen to deal with the unforeseen, it is far from blind. It is unforeseen in the sense that it is not predictable, and that is not planned. However, this does not make it blind. On the contrary, our study shows that both in the case of ornamented and full-scale improvisation, acts of improvisation are directed towards routines, which are essential for the accomplishment of the improvisation.

Third, although full-scale improvisation is commonly associated with change and uncertainty, it depends on momentary stabilization through routines for its accomplishment. The events on which full-scale improvisation is contingent, form part of routines, which means that are part of routinized sets of acts. This contrasts strongly with past studies of improvisation, which tend to pit improvisation against routines. For example, Cunha et al.’s (1999, p. 321) suggestion, that improvisation is more likely to occur when actors cannot rely on adequate routines, does not seem a realistic proposition. It also contrasts with Crossan et al.’s (2005, p. 134) point that full-scale improvisation as situations where individuals “wade into situations with fallible knowledge, secure in the belief that they can recombine that knowledge by shifting their fallibilities around”. Their suggestion is that full-scale improvisation does not involve planning, because such situations are typical crisis situations, where time is running out, implying that full-scale improvisers acting in their own time, tinkering and coming up with solutions or ideas that may or may not be adapted.

What our data suggest, though, is that the improvisational act did include planning, as agreement was made between those present about the next steps to be taken. Passing the model test, getting approval from superiors and getting approval from the production people, were future events that were part of routines on which the eventual success of the improvisation depended. Still, being routines means that they involve stabilization. This suggests that full-scale improvisation aims primarily at momentary stabilization of its intentions through routines. Fitting a new bow on a vessel that was different from what had been done traditionally meant that the improvisation relied on fairly stable routines, yet adaptable routines for its accomplishment. It was not yet associated with change, because it was primarily directed at momentary stabilization. It was after success was achieved and order books began to fill up, that the event became associated with change.

In constituting the improvisational act, actors rely on some form of reliable response from routines as the anticipated response from routines becomes a contingency for the improvisational act. The anticipated execution of the outcome of the improvisation through routines is conditioning the very act of improvisation. In this sense, the routines needed for the execution of improvisation are part of the improvisation. Therefore, improvisation is not ‘making of something out of nothing’ (Berliner 1994, p. 492 quoted in Weick, 1998, p. 544), but depends on the underlying routines or as Winter (2003) has pointed, emerges from patterned performances.

Fourth, our analysis brings a different light to the idea of the present in relation to past and future than what is commonly assumed in recent works on time and temporality in organizational life. We have pointed out above that the idea of split, which we have tried to overcome with the help of the idea of immanence, assumes that time is compartmentalized into periods that are both different and secluded from another. The idea of immanence bridges this divide and enables study

of how moments of time are brought into one another. Other researchers have also taken a step further from a split view, such as Emirbayer and Mische (1998), whose influential paper focuses on temporal agency exercised by actors through their 'practical-evaluative' ability to contextualize (iterationally generated) past habits and (imagined) future projects within the 'contingencies of the moment' (p. 962). The contingencies of the moment are, as we read Emirbayer and Mische, constituted by the actual situation that the actors find themselves in. The contingencies of the moment are phenomenologically different from the past, which is routine based, and the future, which is imagined.

Emirbayer and Mische manage to overcome the temporal split associated with sequential ordering of events. However, they leave another split in their equation, which is to distinguish the present event from past and future, by suggesting that the practical-evaluative aspect of the present is particular to the present. The notion of immanence, however, takes the present-past-future relationship in a somewhat different direction from what Emirbayer and Mische do, in the sense the contingencies are solely a feature of the present moment per se, but reside in the process of bringing in of past and future into the present. For sure, there were contingencies belonging to the present in the X-bow case, such as the composition of the actors at the meeting with the client CEO. Still, we would argue that the expression "contingencies of the moment" do not belong to the moment as such, but reflect the contingent bringing into the present of past and future events. For example, the outcome of executing the routine of model testing was a contingency that went into the very making of the improvisational moment in the form of an assumption of what might happen. Seen through the lens of immanence it is the contingent nature of past and future events brought into the present that makes up the contingencies of the present.

Conclusion

The view that improvisation and routines are temporally different phenomena and ordered sequentially in time appears to be both empirically untenable and to suffer from lack of theoretical scope. Working from the idea of immanence we have shown how routines, both past and future are brought into the act of improvisation. We have been able to explain how both ornamented and full-scale improvisation are not just directed towards routines, but routines actually constitute the improvisational act. Improvisers bring events from past and future routines into the improvisational act. In the case of ornamented improvisation, past and future events tend to be more familiar and based on learning. This is what enables ornamented improvisation to take place extensively in organizational life. Full-scale improvisation is also addressed at routines, but involves routines that are more uncertain and may refer to past and future acts involving untried and hence more uncertain solutions.

At an analytical level we have demonstrated the making of an event, which cannot be seen in isolation from past and future. Past and future events are brought into the present. If it turns out that the routines that the anticipated events respond favorably to the improvisation and subsequently lead to change, as was the case with the X-bow improvisation, the improvisational act gets to be seen as an event. In the words of Bakhtin (in Cunliffe et al. 2014) it acquires ‘eventness’. Its ‘eventness’, in other words, is constructed retrospectively. But its ‘eventness’ also serves future purposes. In other processes involving the possibility of full-scale improvisation, it may be brought into an improvisational act as a symbol of what they have done before. As a symbolic event it may make an ‘ingression’ (Whitehead 1929; Hernes 2014a) into other processes of improvisation. This is may also be how

jazz musicians are inspired by former famous events of jazz improvisation. How that is done, however, requires that the idea of split is circumvented.

References

- Ancona, D. G., Okhuysen, G. A. and Perlow, L. A. (2001) Taking time to integrate temporal research. *Academy of Management Review* 24(4):512-529.
- Bakken, T., Holt, R. and Zundel, M. (2013) Time and play in management practice: An investigation through the philosophies of McTaggart and Heidegger. *Scandinavian Journal of Management* 19(1):13-22.
- Barrett, F. J. (1998). Coda: Creativity and improvisation in jazz and organizations: Implications for organizational learning. *Organization Science* 9(5):605–622.
- Berliner, P. F. (1994). Thinking in jazz—the infinite art of improvisation. Chicago: The University of Chicago Press.
- Chia, R. (1999) A ‘Rhizomic’ model of organizational change and transformation: Perspective from a metaphysics of change. *British Journal of Management* 10:209-227.
- Ciborra, C. U. (1999) Notes on improvisation and time in organizations. *Accounting, Management & Information Technology* 9(2): 77–94.
- Crossan, M., Cunha, M. P. E., Vera, D. and Cunha, J. (2005) Time and organizational improvisation. *Academy of Management Review* 30(1):129-145.
- Cooper, R. (2005) Relationality. *Organization Studies* 26(11):1689-1710.
- Cunha, M. P. E, da Cunha, J. V. and Kamoche, K. (1999) ‘Organizational Improvisation: What, When, How and Why’, *International Journal of Management Reviews* 1(3): 299–341.
- Cunliffe, A., Helin, J. and Luhman, T. (2014) Michail Bakhtin. In J. Helin, T. Hernes, D. Hjort and R. Holt (Eds.) *The Oxford handbook of process philosophy and organization studies*. New York: Oxford University Press.
- Deleuze, G. (2004) *Difference and repetition*. London: Continuum.
- Emirbayer, M. and Mische, A. (1998) What is agency? *American Journal of Sociology* 103(4):962-1023.

- Feldman, M. S. (2000) Organizational routines as a source of continuous change. *Organization Science* 11: 611–629.
- Feldman, M. S. and Pentland, B. (2003) Reconceptualizing organizational routines as a source of flexibility and change. *Administrative Science Quarterly* 48: 94–118.
- Hatch, M. Jo (1999) Exploring the empty spaces of organizing: How improvisational jazz helps redescribe organizational structure. *Organization Studies* 20(1):75–100.
- Hernes, T. (2014a) *A process theory of organization*. Oxford: Oxford University Press.
- Hernes, T. (2014b) Alfred North Whitehead. In Helin, J., T. Hernes, D. Hjorth and R. Holt (Eds.) *Oxford handbook of process philosophy and organization studies*. (255–271). Oxford: Oxford University Press.
- Hussenot, A. and Missonier, S. (in press) Encompassing novelty and stability: an events based approach. *Organization Studies*.
- Kyriakopoulos, K. (2011) Improvisation in Product Innovation: The Contingent Role of Market Information Sources and Memory Types. *Organization Studies* 32(8) 1051–1078.
- Langley, A. and Abdallah, C. (2011) Templates and Turns in Qualitative Studies of Strategy and Management. In Donald D. Bergh and David J. Ketchen (Eds) *Building Methodological Bridges, Research Methodology in Strategy and Management*, Vol. 6, Bingley: Emerald, 201–235.
- Latour, B. (1999) *Pandora's Hope: Essays on the Reality of Science Studies*, Cambridge: Harvard University Press.
- Levitt, B. and March, J. G. (1988) Organizational learning. *Annual Review of Sociology* 14:319–340.
- March, J. G. and Simon, H. A. (1958) *Organizations*. New York: John Wiley.
- Mead, G. H. (1932) *The philosophy of the present*. Prometheus.
- Miner, A., Bassoff, P. and Moorman, C. (2001) Organizational improvisation and learning: A field study'. *Administrative Science Quarterly* 46: 304–337.
- Moorman, C. and Miner, A. S. (1998a) Organizational Improvisation and Organizational Memory. *Academy of Management Review* 23(4): 698–723.

- Moorman, C. and Miner, A. S. (1998b) The convergence of planning and execution: Improvisation in new product development. *Journal of Marketing* 62(3): 1–20.
- Orlikowski, W. J. and Yates, J. (2002) It's about time: Temporal structuring in organizations. *Organization Science* 13(6):684-700.
- Polanyi, M. (1967) Sense-giving and sense-reading. *Philosophy* XLII (162):301-325.
- Rindova, V. P. and Kotha, S. (2001) Continuous "morphing": competing through dynamic capabilities, form, and function. *Academy of Management Journal* 44(6):1263-1280.
- Schütz, A. (1967) *The phenomenology of the social world*. London: Heinemann Educational Books.
- Sherman, M. (2001). Time personalities: How organizations think about, use, and relate in time. Unpublished dissertation draft proposal, Fielding Institute. Sloan School of Management, MIT. Cambridge, MA.
- Shotter, J. (2006) Understanding process from within: An argument for 'witness'-thinking. *Organization Studies* 27(4):585-604.
- Sonenshein, S. (2010) We're changing—or are we? Untangling the role of progressive, regressive, and stability narratives during strategic change implementation. *Academy of Management Journal* 53(3):477-512.
- Sutton, R. I. and Hargadon, A. (1996) Brainstorming groups in context: Effectiveness in a product design firm. *Administrative Science Quarterly* 41:685-718.
- Tsoukas, H. and Chia, R. (2002) On organizational becoming: rethinking organizational change. *Organization Science* 13(5):567-582.
- Vendelø, M. T. (2009) Improvisation and Learning in Organizations - An Opportunity for Future Empirical Research. *Management Learning* 40(4): 449–456.
- Weick, K. E., (1993) Organizational redesign as improvisation. In: Huber, G.P., Glick, W.H. (Eds.), *Organizational Change and Redesign*. Oxford: University Press, Oxford, pp. 346–379.
- Weick, K. E. (1995) *Sensemaking in organizations*. Thousand Oaks, CA: SAGE.
- Weick, K. E. (1996). Drop your tools: An allegory for organizational studies. *Administrative Science Quarterly* 41(2):301-312.

- Weick, K. E. (1998) Improvisation as a Mindset for Organizational Analysis. *Organization Science* 9(5): 543–555.
- Weik, E. (2011) In Deep Waters: process theory between Scylla and Charybdis. *Organization* 18(5) 655–672.
- Whitehead, A. N. (1929) *Process and reality*. New York: The Free Press.
- Whitehead, A. N. (1933) *Adventures of ideas*. New York: The Free Press.
- Whitehead, A. N. (1938) *Modes of thought*. New York: The Free Press.
- Winter, S. G. (2003) Understanding dynamic capabilities. *Strategic Management Journal* 24: 991–995.
- Zack, M. H. (2000) Jazz Improvisation and Organizing: Once More from the top. *Organization Science* 11(2):227-234.

7. SECOND EMPIRICAL PAPER: Mindful application of routines – lost in the outsourcing?

The first draft of this paper was presented at the *Seventh International Symposium on Process Organization Studies*, 24-27 June 2015, in Kos, Greece. Later versions of the paper are accepted to the EGOS Colloquium 04-07 July 2016, in Napoli, Italy and to the Academy of Management annual conference 05-09 August 2016, in Anaheim, California. The latest draft of the paper is under revise and resubmit process in Scandinavian Journal of Management.

MINDFUL APPLICATION OF ROUTINES – LOST IN THE OUTSOURCING?

Abstract

There is limited empirical evidence to date that indicates how outsourcing impacts routines. My aim in this research project was to investigate how initial outsourcing and later backsourcing have influenced routines as practices. Cutting routines out from the organizational context cuts off the relationship between routines and the organizational context as well as temporal continuity of routines. Cutting off will ultimately lead to organizational forgetting and lost competences. Based on my nine months ethnographic study, I argue that the foundation for skillful performance lays in the mindful application of routines while mindfulness is based on temporal continuity of performing routines and on contextual background knowledge. Therefore, mindful application of routines cannot be detached from their background. Instead, the background and mindful performance of routines are in interplay with one another. Cutting one from the other means that they are disconnected temporally as well as spatially.

Keywords: outsourcing, routines, mindful application

Introduction

One of the recent trends in large multinational companies looking for economic efficiency is business process outsourcing (Handley, 2008, 2012; Jensen and Pedersen, 2012; Kakabadse and Kakabadse, 2005; Kotlarsky and Bognar, 2012). Business Process Outsourcing (BPO) refers to service outsourcing as a part of an organizational redesign that aims to increase the efficiency of corporate functions (Sako, 2010). BPO has become a common business practice (Jensen and Pedersen, 2012) despite the fact that it is a complex process that quite often fails to meet expectations (Landis et al., 2005). BPO can be defined as a strategic decision to move some of an organization's internal activities to an external service provider (Saxena and Bharadwaj, 2009). Still, instead of being a solution to improving organizational performance, outsourcing can often create unforeseen problems that may lead to a back sourcing decision.

Backsourcing is the activity of bringing once outsourced processes back in-house. Therefore, "backsourcing describes a process that can only follow after an outsourcing decision is made and implemented" (Kotlarsky and Bognar, 2012, p. 80). Instead of being an easy solution to problems created by initial outsourcing, however, backsourcing itself can be a challenging task because it is fraught with problems (Burkholder, 2006; Landis et al., 2005). Importantly, the challenges related to backsourcing are caused mainly by organizational forgetting (Handley, 2008; Kakabadse and Kakabadse, 2005) and lost internal knowledge and capabilities to perform the once outsourced routines (Handley, 2012).

Traditionally, economically oriented theories are used to analyze issues related to outsourcing (Busi and McIvor, 2008; McIvor, 2000). For example, the procurement-oriented view (Robinson et al., 2008) analyzes routines through the lens of transaction cost theory or strategic management theories. Alternatively,

strategic management theories with an emphasis on economic rationality are used, such as resource-based or organizational boundary theories (Kavcic and Tavcar, 2008; Caniëls and Roeleveld, 2009; Kakabadse and Kakabadse, 2000, 2005). While the economic cost-based view concentrates on minimizing production and transaction costs, the strategic competence-based view focuses on identifying and retaining core competencies (Freytag et al., 2012). A common feature of the mentioned approaches is that in the light of the outsourcing routines are treated as 'things' which make it possible to 'cut,' 'package,' 'price' and 'move' them from one location to another.

By treating routines as 'things' freely dividable and transferable, economically oriented theories tend to ignore two important aspects of routines, which are their internal relational configuration and contextual interdependences (Becker, 2004). These two aspects mean that routines are not carried out in isolation, but they are deeply entangled with other routines and organizational practices (Holt and Sandberg, 2011). Economically oriented theories also seem to ignore deliberately the endogenous change in routines highlighted by Feldman (2000) and as such, these theories do not address the knowledge and capability loss caused by outsourcing the routines.

Viewing routines as the foundation for organizational performance (Weick et al., 2008), I argue that how we define organizational routines does matter. The opportunity to have a 'from-within' or 'withness' (Shotter, 2006, p. 600) view of the backsourcing of once outsourced activities could provide some evidence for those arguments. Taking a processual-phenomenological perspective, I choose routines as flows (Feldman, 2000) as my starting point. Thus, I view routines as on-going, self-replicating, emergent accomplishments (Feldman, 2000) in the temporally tangled web-like world (Edwards and Jaros, 1994; Hernes, 2008, 2014). Focusing on the temporal interplay between the performance of routines and organizational settings, including background knowledge, allows me to take a

slightly different view compared to Feldman (2000) and Feldman and Pentland (2003) model of routines where the performer and the performance of routines are viewed as inseparable. Grounding my argumentation on a phenomenological approach, I claim that we cannot separate the performer and performing of routines from the organizational settings (Heidegger, 1927) without changing the meaning and possible outcome of performed routines (Polanyi, 1962; Shotter, 2006).

Paper outline

I start with a brief review in which I present different views of organizational routines following the conceptualization of ‘mindfulness’ and a comparison of characteristics of ‘mindful’, ‘live’ and ‘dead’ routines. The review identifies and discusses the crucial interplay between everyday routines performed by individuals, on the one hand, and the contextual background those routines are performed, on the other. The review is followed by a description of my case study and analysis of the impact that fragmentation and de-contextualization have on the mindfulness of routines. The paper concludes with a discussion of the implications of viewing the meaning of routines as dependent on organization-specific background knowledge, and skillful organizational coping as dependent on the mindful application of routines.

Theoretical background

From scripted rules to on-going activities

In organizational studies, routines were introduced by Cyert and March (1963) in their theory of organizational choice and search. Cyert and March (1963) described routines from the perspective of bounded rationality, as cognitive

regularities or patterns. In the literature routines are referred as rules (Becker, 2004), as standard operating procedures (Gavetti et al., 2007) repeatedly executed at the quasi-automated or subconscious level. Attention is considered a limited resource in organizational settings (Becker, 2004). Therefore, the main role of routines was seen as a means to enable better use of the limited capacity of attention. That is, performing routine activities semi-consciously allows full attention to be paid to non-routine actions (Becker, 2004).

Taking an evolutionary view of routines, Nelson and Winter (1982, 2002) see routines as repeated behavioral patterns with the main aim to secure behavioral continuity. “As a first approximation, therefore, firms may be expected to behave in the future according to the routines they have employed in the past” (Nelson and Winter, 1982, p. 134). Although both those approaches admit the possibility of change in routines, they rather choose to focus on the lack of change (Feldman, 2000). In both cases, change is seen as exogenous either as an “adaptation” (Cyert and March, 1963, p. 101) or as a “mutation” (Nelson and Winter, 1982, p. 18) caused by the external context. On the contrary, Feldman (2000), Feldman and Pentland (2003) and Pentland and Feldman (2005, 2008), emphasize that routines might be better viewed as a continuous source of change. For example, according to Feldman (2000, p. 613), routines could be viewed as “emergent accomplishments...often works in progress rather than finish products.”

Routines may produce both apparent stability as well as considerable change (Becker, 2004; Feldman and Pentland, 2003). Pentland and Feldman (2008) make the distinction between dead and live routines. According to this distinction, artifacts are dead routines, they are rigid, mindless and explicitly stored, lack agency and improvisation, and can be fully scripted in advance. Therefore, dead routines provide the strongest control by the designer, but they work only for fully automated transactions (Pentland and Feldman, 2008).

Aligned with a description of ‘live routines’, Salvato (2009) opposes the understanding of routines as ‘mindless’. He emphasizes that actors are not “simple automata executing preordained behavioral programs” but instead actors are seen “as mindful interpreters of organizational capabilities” (Salvato, 2009, p. 385). As organizational capabilities incorporate routines (Eisenhardt and Martin, 2000; Teece, 2012) then ‘mindful interpretation of organizational capabilities’ presupposes mindful application of routines.

Mindful application of routines

Mindfulness refers to actors’ attentiveness and flexible responsiveness to contextual cues (Argote, 2013). Levinthal and Rerup (2006, p. 504) take a step further and argue that “mindfulness requires two basic elements: attentiveness to one’s context and the capacity to respond to unanticipated cues or signals from one’s context.” The concept of mindfulness can be described as “a heightened state of involvement and wakefulness in the present moment” (Ramsey and Jones, 2015, p. 25) or as “a process of actively making new distinctions about objects in one’s awareness, a process that cultivates sensitivity to subtle variations in context and perspective about the observed subject, rather than relying on entrenched categorizations from the past” (Langer et al., 2012, p.1115). Thus, mindfulness is directly linked to the context where the action is taking place. Moreover, the ability to project the possible consequences of one’s action into the future is seen as an important characteristic of mindfulness (Hernes and Irgens, 2012). Thus, the conduct of the routine is what makes it mindful or mindless. But the meaning of any conduct depends on its situational context and therefore, the mindful conduct of routines is directly linked to the context where the action is taking place.

Although, for example, Salvato (2009) has referred to the mindful interpretation of organizational capabilities, and Weick and Roberts (1993) and

Weick et al. (2008) highlight thoughtful, heedful organizational interrelations, mindfulness has not been applied explicitly to routines. On the contrary, routines are referred to as “less-mindful” processes (Argote, 2006, p. 501; Levinthal and Rerup, 2006, p. 504). Indeed, Weick and Sutcliffe (2001, p. 88) have stated that “mindfulness takes effort and cost; mindlessness in the form of routine can be cost-efficient.” Viewing mindlessness as a source of cost-effectiveness is the underlying argument of economically oriented theories treating routines as semi-automated, scripted and standardized.

Nevertheless, if the mindful organizational practice is viewed as constituted by routines, and characterized by an awareness (Becker et al., 2005; Salvato, 2009), then we may question the idea of automatic or semi-automatic routines and think instead about routines as mindful, context specific action (Weick and Roberts, 1993). Being aware and attentive means that mindful action is characterized by temporality in contrast to semi-automatic or habitual action where “each performance is a replica of its predecessor” (Weick and Roberts, 1993, p. 362). That is, a mindful performance of routine is modified by its predecessor (Weick and Roberts, 1993). A performance of routine, as an action, is informed both by past experiences as well as the anticipated future. Thus, the performance of routines is temporally connected to its past and future performances. Even when carried out in a repeated manner, a mindful performance of routine, while being modified by its predecessor, is sensitive both to its potential consequences (Hernes and Irgens, 2012) and to different possibilities emerging from the situational context (Dreyfus, 1991; Langer et al., 2012; Weick and Roberts, 1993).

There are certain similarities between the concept of mindful application of routines and, say, the performative/ostensive routines model presented by Feldman and Pentland (2003), as, seeing a change in routines as endogenous. Still, there are also important differences. Namely, what Feldman and Pentland’s model tends to overlook is that those specific repetitious practices or routines are elements of the

organization as a whole. That is, they do pay attention to the micro-level relationships between actions that constitute recognizable patterns or routines, but they do not extend their attention to the wider relationships between routines and their contextual background in the organizational settings. Furthermore, although they admit that practices are carried out against a background, they define the background as a set of rules and expectations (Pentland and Feldman, 2008) that actors are consciously aware of.

Compared to the performative/ostensive model of routines from Pentland and Feldman (2005, 2008), the concept of mindful application of routines incorporates what Hernes (2014, pp. 105, 134) has called ‘practical articulations of organizational meaning structures.’ Hernes (2014, p. 105) defines the structure of organizational meaning as ‘spatio-temporal ordering’, which consists of conceptual, human or material elements forming interconnected wholes that may be taken as ‘the organization’. The practical articulation of organizational meaning structures (Hernes, 2014) refers to the bodily experience of repetitious actions or routines through which understanding is created (Hernes, 2014; Orlikovski, 2002). That is, routines is an articulation of the meaning, which is stored in the background practices (Dreyfus, 1991; Polanyi, 1962) not just a means to accomplish a certain task. Tsoukas (2009, p. 3) states that “practitioners necessarily rely on a subsidiary (tacit) awareness of the background for focally attending to the particular tasks they engage in. The background is known, albeit in the form of subsidiaries, and, as such, it cannot be separated from the focus and examined independently because its meaning would then be lost.” Table 1 presents a comparison between mindful, live (Feldman and Pentland performative/ostensive model) and scripted or dead routines.

Table 1. Comparison of mindful, live and scripted/dead routines

	Mindful routines	Live routines Feldman and Pentland performative/ostensive model	Scripted or dead routines
Form	- Process	- Generative system	- Written scripts - Written workflows maps - Software
Characteristics	- Re-iteration - Active knowing (tacit procedural knowledge) know-how - Flexible - Includes agency and improvisation - Contextual/situational - Reflective - Attentive to the whole	- Repetitious/re-iteration - Explicit procedural knowledge of how to do something - Relatively stable but incorporates variation - Include agency and improvisation - Contextual/situational - Reflective - Related to other routines	- Repetitious - Declarative explicit knowledge about facts, casual relations etc. - Very stable - Rigid - Lack of agency and improvisation - Unrelational/uncontextual - Resources for action - Unable to specify specific behavior - Unable to determine action
Source	- Based on organizational meaning structures; embedded in background knowledge	- Based on mutually constitutive performative patterns - Stored in organizational procedural memory	- Designed by managers
Unintended consequences	- Change in capabilities, knowledge and procedural memory - Change in available strategic options - Change in organizational meaning structures	- Change in patterning/performing patterns - Change in routines	- May inhibit innovation - May lead to missed opportunities - Works only in the case of the fully automated routines

Routines and outsourcing

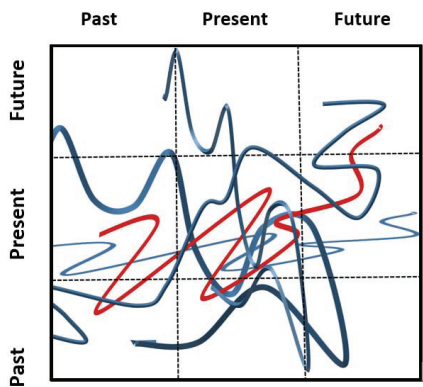
In the case of outsourcing, it is common for routines to be treated as black boxes (Pentland and Feldman, 2008) – separated in time and transferrable from one organization to another according to economic efficiency calculations. Compared to the views driven by theories with a strong economic foundation, the performative/ostensive model by Feldman and Pentland (2003) is more flexible. Their model admits that routines are not fixed and rigid, but include agency and improvisation, which may lead both to stability as well as to change. Still, interconnectedness between routines and the organizational context within which the routine is embedded is an aspect Feldman and Pentland (2003, p. 93) do not consider explicitly, since according to them routines are ‘repetitive, recognizable patterns of interdependent actions, carried out by multiple actors.’ According to that definition, it is legitimate to investigate recognizable patterns of action without delving into organizational meaning structures or without analyzing the relationships between recognizable patterns of actions and contextual background knowledge.

Viewing routines as a practical articulation of organizational meaning structures implies that by outsourcing part of the routines the organization, as the interconnected whole (Hernes, 2014), is decomposed into separate orderings. In the process, the surrounding, interconnections and background system of the routines are changed. In conjunction with the changed background knowledge, subsidiary awareness, which is the foundation for meaning (Polanyi, 1962; Tsoukas, 2003, 2009), is also changed. Moreover, as an action, the performance of routines is temporally connected to its past and future performances. For example, Griesbach and Grand (2013, p.65) argue that coping with current issues in the present moment is shaping “how the current situation and previous and future situations relate to each other. That is, the past and future situations are mobilized to cope with the

current performance of routines”. In the case of outsourcing, this temporality of routines will be changed due to de-coupling routines from the past experiences.

In the organizational context, there is no a single routine that is performed but multiple routines are performed concurrently in the flow of time. The action that is taking place in the present with the direction to future is a spontaneously responsive to the living surroundings at the current moment (Shotter, 2010). That is, routines are in interplay with other routines and actions. It is important to recognize that the world, as the context for action, does not refer only to the spatial, physical world. The world is referred as existing temporal relations forming the messy everydayness for an actor who is ‘thrown’ into this temporal relational everydayness (Heidegger, 1927). Figure 1 below visualizes the temporality of routines and the interplay of the performance of routines and organizational settings.

Figure 1. Temporal interplay of routines as flows



At the same time, it is important to recognize that both routines and background knowledge are temporal and related temporally to each other. Experiences need to be repeated before they will be internalized into bodily knowledge (Polanyi, 1962). That is, the background knowledge is not static information, but bodily experienced temporal knowledge related to its “own ‘parts’ at some earlier point in time” (Shotter, 2006, p.591). As the background knowledge is unconscious knowledge available through subsidiary awareness, then temporal interplay between the performance of routines and the background knowledge is also more sensed and felt than consciously analyzed (Shotter, 2006).

Based on that my main research question is ‘how does outsourcing influence the mindful application of routines?’

Methods

To answer my research question, I conducted a nine-month insider-ethnography study (Alvesson, 2009, 2003). In my study, I investigated the idea of the mindful application of routines with the aim to show the impact that outsourcing, revealed by back sourcing, tends to have on them. An insider-ethnography can be claimed to be a suitable approach for studying practices, as it allows the required immersion and “being there” (Moeran, 2009; Nicolini, 2009). My role as a researcher may be best described as observant participation (Moeran, 2009), which compared to participant observation is more active and has natural access to the backstage reality (Alvesson, 2009; Moeran, 2009).

As typical of an observant participant, I used my position to get access to the research site (Alvesson, 2009). While doing my research, I was employed as senior professional in the team appointed to backsource accounting activities from an external service provider. My dual role was overt, as from the very beginning of the

backsourcing project I informed both colleagues as well as superiors that I would like to follow this project as a researcher. I worked with memos and field notes. I made notes regularly either at the end of the work-day or when it was possible just after relevant events/observations/conversations.

My involvement in the backsourcing project that lasted nine months led to approximately 1800 hours of field work as an observant participant and an extensive amount of notes. My field notes consist of two A4 format notebooks of handwritten notes accompanied by approximately 40 A4 pages of e-mail correspondence, 25 pages of meeting memos, different process descriptions of varying length, and three ‘unofficial’ A4 format instructions used by the external service provider to guide their tasks instead of official lengthy process descriptions.

The nine-month period included six month-end closings (closing all accounts for monthly reporting), two quarterly closings and one annual closing for the 14 companies involved in the backsourcing project. We had 12 knowledge transfer sessions with the external service provider teams. Each of those sessions lasted from an hour to two hours. In addition, we had four learning sessions with different global teams concerning invoice scanning, the intercompany reconciliation process, and internal controls. We had weekly Lync-meetings (Lync was the internal communication software in use) with the backsourcing project manager and controller, and regular (at least bi-monthly) official Lync-meetings with members of CAS (country accounting services) teams from the involved companies. In addition to formal project meetings, we had frequent informal conversations and discussions with local business controllers and CAS members with whom we shared the office building.

The research context

The ModernGroup (a pseudonym) is a global company active in the paper, biomaterials, wood products and packaging industry. The ModernGroup employs around 29,000 people worldwide, its business is divided into six different divisions, and it is a publicly traded company listed on two Nordic stock markets. Each of the six divisions has relative independence in its strategic decisions, as each one is responsible for achieving its financial targets.

Due to the pressure to “show” numbers and enhance profit margins, one of the divisions called Rebel (a pseudonym) decided that the contracted costs of outsourced business services were far too high and that it should be possible to provide the same services in-house at a lower cost. In ModernGroup, it was decided that instead of fully bringing accounting back into each company in the group, a shared service team would be set up in Estonia, which would serve all those companies. A pilot project was established to return or backsource the accounting services from 14 smaller entities belonging to the Rebel division. Those 14 smaller entities included three companies from the Czech Republic, two from Austria, two from Estonia, two from Latvia, two from Lithuania and three newly acquired companies from Finland. The permission was granted on the condition that the shared service team would follow established global routines or a global process model (GPM), including all the internal controls, and internal and external reporting deadlines, without any deflection. Nevertheless, the general attitude in the group toward this project remained highly skeptical. It was predicted that after the short-term rebellious attempt to show some independence and handle things in their way, all the companies in the Rebel division will return to the global process model as the more efficient and reliable solution.

The backourcing team

The backourcing team (BT) started with three full-time employees, who had all previously been involved in different global teams. Therefore, the initial team had diverse experience in ModernGroup, which provided an advantage in the sense that all members were familiar with the group's fairly complex structure and fairly complex accounting/reporting set-up. Additionally, experience with SAP (enterprise resource planning system) was a significant input to the team's knowledge and capabilities to handle backourcing.

Data analysis

In my data analysis, I will investigate the idea of the mindful performance of routines by analyzing once outsourced accounting routines and assessing their mindfulness against the accounting professionals' collective understanding in ModernGroup. That is, in order to identify the mindful application of routines, I will focus on the lost mindfulness in once outsourced accounting routines that has been made visible by the backourcing process.

In my data presentation, I will focus only on the accounts payable (AP) process. I will present four examples to illustrate how increased task fragmentation and disconnectedness from the general business background caused by outsourcing have in some cases resulted, from an accounting point of view, in lost mindfulness in the application of routines.

Lost mindfulness due to fragmentation

As the group management required that all the backsourced routines should be carried out identically to the global process model (GPM), BT investigated

carefully exact performance of each of activities that were transferred back. The requirement to follow the GPM in all and every aspect created a challenge because in many instances decontextualized abstractions of existing routines had created puzzling requirements and costly duplications.

Example 1. A zero balance versus one-to-one match. An intra-company receivables/payables clearing process can serve as an illustration of established routines perceived as unnecessary from the accounting perspective. The reason these routines were perceived as unnecessary from the accounting perspective is that intra-company receivables/payables are invoices issued by different subunits in the same company to relocate some of the expenses or revenues. As intra-company invoices are used to relocate revenues/expenses internally (inside one company e.g. between two different plants belonging to the same company), these invoices are not subject to monetary payments and for the financial reporting should be cleared from the receivables/payables ledger against each other. A special account number was used for intra-company invoices that should have zero balance and no open (not cleared) items at the end of the each month. In that instance, mindful application of routines would require checking that the debit and credit postings to the account match, that is, the overall balance of the account equals zero. A subsidiary awareness of accounting would inform an actor that a company cannot have a liability toward or receivable from itself. The background knowledge also contains information about the fact that intra-company accounts are cleared by each and every month end. Therefore, if there are debit and credit postings on the account and the final balance of the account equals zero, then debit and credit postings can without further investigation be cleared against one another. As a result, there should be no open items, that is, un-cleared transactions on the account. If the account does not equal zero, then based on the background knowledge it should be concluded that one business unit has issued an invoice that is not yet approved by

the counterparty. Only when that is the case, and the account balance does not equal to zero, is it necessary to inform CAS.

During the knowledge transfer session, a team member of the external service provider subsidiary in Asia very enthusiastically explained how to perform the intra-company receivables/payables clearing. He showed via shared screen how to create special macros (automatic equations) in Excel to search for matching pairs of receivables/payables that could be cleared against each other. After finishing his somewhat enthusiastic explanation, there was a deep silence. With a little nervousness, he asked: *“Are you with me? Can you still follow?”* and after a continuous silence from BT side, he started all over again. While gathering themselves after initial consternation, BT quickly interrupted him by saying: *“No, no, we can follow you completely. We can understand what you are doing. No, we do not have a problem with that. But we cannot understand why you are doing what you are doing.”*

The startled reaction of BT was caused by a discrepancy between the understanding of the application of routines based on the background knowledge and the description offered by the external service provider team member. From an accounting point of view, there was no need to copy data from SAP to Excel, create macros, etc. All that mattered was that the balance of that account (debit/credit) equaled zero; that is, receivables and payables posted to that account were equal and cleared off against one another at each month end. A balance that does not equal zero indicates that either there is an error somewhere in the accounting system or, as mentioned before, there is an unprocessed invoice in the accounting system. From the accounting perspective, focusing on the search for the exact match of each receivable/payables in the intra-company account with Excel macros was irrelevant. There was no need to find an exact match for every transaction by comparing sophisticated technical details behind each transaction. Instead, from the accounting

perspective, it was important to focus only on the cases where there were postings without counterparties.

However, to make sure that we had understood all the possible aspects of the routine described above we approached CAS and asked what they were doing with those Excel reports that were sent for their approval. Both the Estonian and Lithuanian CAS said that in the first instance, they did not have any idea why these reports were sent to them. According to the Lithuanian CAS, *“you know, they just keeping sending those reports, and I don’t even understand what these are or why they are doing that. Every single month, I receive an e-mail, and I am asked to send the approval back. I just reply that “Yes, I approve” and that’s it. If I forget to do that fast enough, they will send a reminder that “please be so kind...” you, know.”* To the question, whether they expected that BT would continue with the same routine when taking over accounting services from the external service provider, the answer from Estonian CAS was: *“no, please stop sending those reports! There is no point at all, there is no control function, there is nothing to control in clearing. The only thing that matters is the zero balance; that’s it.”*

The shift in focus from zero balance to find exact matches has changed the meaning and execution of the routines. It could be argued that the shift in focus was caused by the disconnection between the routines and the background knowledge. By responding to the demand to secure the clearing of intra-company accounts the external service provider has accumulated its own experiences that informed its application of routines. Being ‘external’ the team members of the external service provider did not have access to the background knowledge of ModernGroup. Instead, they had created their own background knowledge informed by their profound Excel skills and voluminous experiences to perform a limited range of isolated routines. Creating sophisticated macros in Excel and using those as tools for searching exact matches is a manifestation of focal awareness – being

consciously aware and cognitively involved with performing a certain task without relating to its background. Although the team member of the external service provider was apparently proud of the macros they had created in Excel, CAS members did not understand neither the technically sophisticated Excel reports nor the aim of those reports. On the contrary, from the CAS viewpoint, regular reports with quite complicated technical information just added to their workload. The example serves as an illustration of lost mindfulness in the performance of routine caused by the disconnectedness from the background knowledge when these routines are outsourced. By “shortening” the routine it was possible to reduce both the time spent carrying out the routine and the burden to the CAS inbox. It is worth noting that during the backsourcing project most of the tasks described above were eliminated and only the part that was relevant from the perspective of accounting and internal control was maintained.

Example 2. From double check to quadruple check. The accounts payable internal control process illustrates how detachment from the actual routines may have created time-consuming, and therefore, also costly routines.

Because there had been incidents of double payments, extensive internal control was applied in the case of outgoing payments. In fact, double-checking was performed to 100% of the outgoing payments. In practice, that meant that two external service provider teams responsible for accounts payable were always involved. Asian team prepared the payments and then the Polish team checked all the prepared payments one by one by comparing prepared payments to suppliers' invoices. The double checked, prepared payments were then sent for approval as outgoing payments.

While taking over the accounts payable process, it was discovered that the unquestioned requirement to double check all payments led to a triple check for approximately 80% of the cases. In reality, it was necessary to double check only

approximately 20% of the outgoing payments to fulfill the ‘four eyes’ control principle (at least two people are involved to avoid mistakes). Due to the nature of the business, up to 80% of the vendor invoices were intercompany invoices. Intercompany invoices are invoices between companies belonging to ModernGroup. All these internal payables/receivables were checked twice a month and reconciled at the end of each month. From those 80% intercompany invoices, in turn, 15–20% were uploaded to SAP through integrated production/sales program in automated batches. Before those transactions were posted to SAP relevant accounts for postings were added by local sales people in factories and checked by local business controllers. Therefore, in the case of those invoices, quadruple checks were performed. It turned out that different external service provider teams handled different sub-tasks each with a different internal control set up and they never analyzed the entire accounts payable process in detail.

Being attentive toward the composition of the accounts payable and applied internal control system would be allowed to establish mindful application of routines and avoid mass checking of accounts payable. Being attentive toward the whole implies having a subsidiary understanding about the structure of accounts payable (external versus internal payables). That is, connections between the total amount of accounts payable and intercompany accounts payable, and different internal controls applied to intercompany accounts. Therefore, a prerequisite for mindful performance of routines was an understanding of the integrated multilevel set-up of accounting and internal control system in ModernGroup. Isolated subtasks created a fragmented picture that provided little support to recognize that different payables were treated differently and covered by parallel internal controls.

In the initial takeover phase, the person responsible for accounts payables in BT, in that case for all routines related to accounts payable handling, complained that:

“I feel like I’m schizophrenic or suffer some multiple personality syndromes – in principle I am demanded to check the same stuff like four times by different process descriptions. That is, I need to check my own work over and over again.”

Her reaction reflected a situation where she was required to check and to reconcile intercompany invoices twice a month and still check all the outgoing payments, including intercompany invoices handled twice a month when preparing payment orders. Therefore, the requirement to check 100% of the outgoing payments did not take into consideration the controls performed on intercompany invoices, nor the percentage of the intercompany invoices from the total amount of accounts payable. In fact, to execute full control over outgoing payments it would have been enough that only 20% of the total payables, that is, only external payables was double checked. Finally, this specific case ended on the table of ModernGroup’s internal auditors, who officially approved the exception from the GPM.

These two examples described above suggest that by “cutting” integrated processes into fragmented subtasks carried out by different teams in different physical locations, the picture of the whole process with its interconnections and interrelatedness may be lost. Cutting or bracketing the performance of the sub-routines out from the whole accounting process created isolated subtasks. The performance of routines lost its mindfulness and responsiveness to the whole as a result of fragmentation and disconnection from background knowledge.

Lost mindfulness due to de-contextualization

Example 3. Following rules may lead to a court of justice. The third example is about a case of contractual commissions for suppliers that almost ended in a court of justice and led to the loss of an important supplier.

Some of the companies in ModernGroup operate in the wood processing and timber sector. To secure a constant flow of raw material contracts with the main suppliers stipulated commission payments to suppliers based on the amount and price level of the supplied timber. According to terms fixed in the contracts, periodical commission calculations and payments were made. The fact that commission invoices are important exceptions to general (accounting) rules of accounts payable is important background knowledge that practitioners in accounting are subsidiary aware. The general accounting rules covering accounts payable are, first, vendor accounts in the accounts payable sub-ledger should be with credit balances, which in accounting terms represent liabilities (accounts payable). Second, all the invoices issued by the company go through the accounts receivable sub-ledger, that is, in accounting terms, these are assets. Third, the vendor account is debited because of the credit note, which is a cancelation of the original invoice. Following the general logic, an invoice issued by the company should be receivable, and therefore, if posted to vendor accounts, it should be deducted from the amounts due not added to the (existing) liability. Still, commission invoices issued by the company are an important exception to the general rule as they are posted as payables to vendor accounts. In the case of commission invoices a company issues an invoice that increases its liabilities towards its supplier.

Following the contract terms, commission invoices were issued and posted correctly to the accounts payable sub-ledger as an increase in the company's liabilities. At the same time, the external service provider's Global AP (accounts payable) team was checking the accounts payable sub-ledgers. The Global AP team recognized abnormal postings in the accounts payable sub-ledger. Following the guidelines, they checked if the abnormal postings were incorrectly posted credit notes from the vendor. The Global AP team reported the abnormal book entries to the AP internal auditor and on permission from the AP internal auditor they deleted

those entries from the accounts payable sub-ledger. As the entries were deleted from the book, they did not appear as liabilities and no payment orders were prepared for those sums. Due to the highly fragmented tasks the unfulfilled liabilities remain unnoticed until the supplier, who had not received its commission payment threatened to sue because of a violation of the contract (unpaid commissions).

The third example illustrates the unintended outcomes of the less mindful application of routines in terms of a lost supplier, the disrupted inflow of raw materials and the threat of being sued caused by the missing knowledge of the situational and contextual background. It is important to note that the third example shows that the external service provider team showed focal awareness by recognizing the abnormal postings in the supplier ledger. The team checked if the recognized abnormality was caused by errors in posting supplier credit notes. Therefore, the team members were focally aware of the situation, and they checked the situation according to and against the rules and guidelines. At the same time, the team was not aware of the business case (contractual commission payables to suppliers) and of accounting exception (the specific posting logic for commission invoices that diverge from the general rule). That knowledge was not part of the background knowledge accessible for them through subsidiary awareness. The case also serves as an example of how following the general rules without a situational awareness may lead to suboptimal or even harmful consequences. Therefore, without the shared background knowledge, official rules and guidelines are insufficient for securing the intended outcome.

Example 4. Coping with currencies. Different currencies in use by group companies also created errors. As most of the larger companies in the group (e.g. Finland and Germany) belong to the eurozone, then the Euro was seen as dominant currency. Euro dominance was especially visible when the external service provider's Asian team instead of the Polish team was involved. For example, there

was a case when the intercompany loan to the Swedish company was posted in Euros instead of Swedish Crowns. That is, the amount was correct, but the currency was wrong leading to approximately 9.5 times greater liability and mismatches in intercompany accounts reconciliation.

In that case, the quality of the outsourced accounts payable process suffered due to missing background knowledge about the wider business environment including the currency in use and company characteristics. For example, having a more intimate knowledge of the company which took the intercompany loan, that is, about its general size and its overall balance sheet volume, would have set off the alarm before posting 95 million Swedish Crowns to the company's liabilities instead of the modest 10 million.

The fourth example illustrates how not being aware of the situational, contextual background led to unintended outcomes; that is, the balance sheet of the borrowing company was distorted while a substantial mismatch in the internal reconciliation was created. Although the previous example was one of the most "outstanding" cases, the wrong currency in accounts payable postings was one of the main reasons for errors leading to delayed postings and late payments. Postings with the incorrect codes and accounts were blocked by the system. Although the system prevented the completely incorrect postings, blocking/correcting/posting took time. Often so much time that the due dates of the invoices expired and penalties for late payments were demanded by the vendors.

As a business controller responsible for Estonian and Swedish companies revealed:

"According to my experience, the "record" for getting an invoice posted took six rounds. Can you imagine, six times the posting proposal was pending back and forth! Six times the posting proposal was sent and each time there was something wrong – company code, supplier account, profit center, currency, cost center or code for value added tax. What's funny, or rather sad or annoying, is that they [the

external service provider team] just keep sending in the defective posting proposal without giving a second thought. In principle, we have standardized practices, but in reality, there is so much variation in the process that we are far from standardized practices. They [the external service provider teams] just don't have sufficient knowledge about our business."

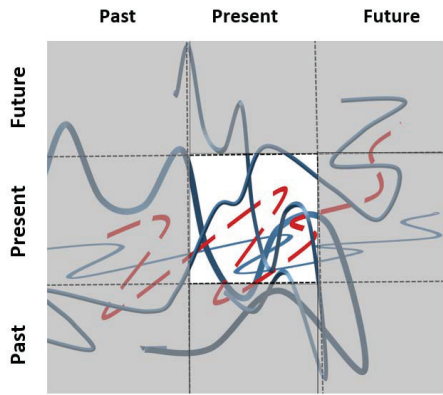
Somehow eye-catching from the above quotation is the claim that there was a lot of variation despite the standardized processes due to missing background knowledge. As outsiders, the external service provider team did not have access to the background knowledge of ModernGroup. The background knowledge available for external service provider team members were embedded in different temporal and spatial relations. Relying on focal awareness alone made the routines slower and due to intentional cognitive efforts, more prone to mistakes. Mistakes in postings caused delays in vendor invoice postings and payments. Because of the constant delays in payments, the Finnish companies were listed in the "public list of bad companies" as unreliable business partners. Marked as unreliable business partners, they were facing higher purchasing prices and prepayment requisites. Dealings with leasing companies were especially sensitive to constant delays in payments and were expressed both in increased company specific interest rates as well as leading to substantially decreased possibilities for applying for external financial leverage. Therefore, lost mindfulness in performing routines had real and costly consequences measurable in monetary terms.

Discussion

As the empirical examples indicate the meaning and performance of the outsourced routines tends to change because of the detachment from their previous performance and the organizational settings. By detaching performance of routines from its "own 'parts' at some earlier point in time" (Shotter 2006, p.591) cuts off

routines’ internal temporality, its extension in time. At the same time, the mindful performance of routines is dependent on its interplay with background knowledge which is in the temporal flow, embedded in the temporality of the organization. Being cut off from ‘organizational meaning structures’ (Hernes, 2014: 105); that is, not paying attention to the whole, but concentrating on distinct routines instead, restricts mindfulness in outsourced routines. Cutting one from the other means that routines and background are disconnected temporally as well as spatially. In the case, the analyzes of routines for outsourcing are based on the present performance of routines the history of interconnections and interplays are not the main focus of analysis as are not the possible future developments. That means that only a fragmental snapshot of routines is analyzed. The present performance of routines is represented in Figure 2 by the white, center area. This center area is relatively little compared to the hypothetical whole represented in the figure by a gray area. One can recognize the difference by comparing the white area on Figure 2 to the white area on Figure 1 presented on page 10.

Figure 2. Temporally bracketed off routines



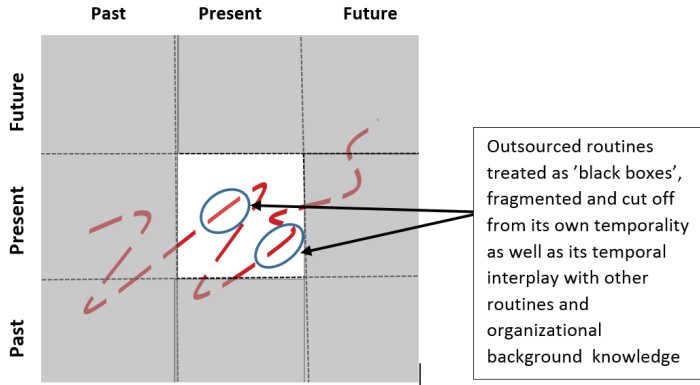
Based on the comparison of Figure 1 and Figure 2 it can be argued that the assumption based on a mechanistic approach to routines and seeing routines as ‘things’ which meaning and execution will remain intact irrespective of the organizational settings, does not hold. This claim, supported by the empirical material, could be expressed by the Equation 1 below. In the Equation 1 R_1 stands for routines initially performed by the outsourcing company, S stands for shared organizational context including the background knowledge, P for profound professional knowledge, and R_2 stands for outsourced routines performed by the external service provider, G for written guidelines and R for rules.

$$\text{Equation 1. } R_1 = S + P \neq R_2 = G + R$$

As the case of commission invoices indicates, rules are insufficient as a guide for the mindful performance of routines, as rules operate on the ‘*ceteris paribus*’ (everything else being equal) assumption. According to Dreyfus (1991, p. 75), “*ceteris paribus* conditions never capture, but rather presuppose, our shared background practices. These practices are an aspect of our everyday transparent ways of coping.” Rules, without deeper contextual and temporal understanding, are lifeless artifacts, and therefore, could easily lead to suboptimal outcomes and dysfunctional practices (Eisenhardt et al., 2010; Eisenhardt and Martin, 2000).

Figure 3 below illustrates that by moving two fragments or subtasks of one routine to the external partner the performance of routines is cut off from the background that gives the meaning to it as well as from its own temporality. Thus, outsourcing does not separate routines only in space, but also in time. Even if recognizable patterns remain seemingly the same, the meaning of the routines will be different. Unintended change in the meaning of the routines is due to the different background knowledge, which is in the temporal flow rooted in the temporality of the organization.

Figure 3. Temporally and spatially bracketed off routines



Moreover, viewing organizational routines as maintaining procedural memory (Hernes, 2014; Orlikowski, 2002) means that with outsourcing the organization will voluntarily give away a part of its procedural memory (Argote, 2013; Orlikowski, 2002). That is, the outsourcing company is not able to maintain its knowledge of its routines without performing them. This practice-based knowledge maintained by routines tends to disappear from the organizational meaning structures because the temporal connections are cut off. At the same time, the performance of routines loses its sensitivity toward the whole; it loses its mindfulness. Thus, the mindfulness of routines as sensitivity toward the whole tends to diminish if the performance of routines is cut off from its context. There are costs related to the lost mindfulness. Based on the current study there were, first, direct expenses caused by unnecessarily elongated and fragmented routines, additional workload and the unproductive use of time. Second, there were additional costs in the form of the recognizable undesirable outcomes of the less mindful conduct of routines. For example, penal fines, possible loss of important suppliers, higher interest rates due to lowered credibility index, just to name a few.

Implications

Following the backourcing process made it possible to see the importance of the theoretical conceptualization of routines in organizational settings. By restricting our analysis of organizational routines with economically oriented theories, and treating organizational routines as ‘black boxes’ (Pentland and Feldman, 2005:800) may lead us to “the fallacy of misplaced concreteness” (Whitehead, 1929/1978:7). This means that we may overlook “the degree of abstraction involved” (Whitehead, 1929/1978:7) and ignore important aspects of actualities and their relational reality. The on-going temporal nature, internal relational configuration and the contextual interdependences routines have are important aspects of routines that economically oriented theories tend to ignore. Cutting off routines from their background means that the meaning of routines is changed, and the temporality of routines is cut off. The contextual interdependence between routines and the organization as a whole is an aspect also overlooked by Feldman and Pentland (2003, 2008) in their performative/ostensive model of routines, which concentrates on routines as recognizable patterns. Viewing routines as ‘practical articulations of organizational meaning structures’ (Hernes, 2014:105,134) indicates that there is a large part of routines that is unrecognizable, but hidden in the background knowledge and social context. At the same time, if routines are ceased to be performed, as in the case of outsourcing, related organizational meaning structures will disappear as well, leading to forgetting.

Acknowledging the difference between the mindful and mindless application of routines and its dependence on background knowledge available through the subsidiary awareness calls for caution in the case of outsourcing. Guidelines and scripts are insufficient for maintaining the ability to perform and sustaining control over routines. From the control perspective, the outsourced routines will be shaped

by new context and they will create new temporal patterns, which will alter their meaning. Scripted rules are neither able to restrict nor grasp this transformation. From the perspective of performance, relying on scripted rules and guidelines requires that actors exercise focal awareness. Unfortunately, focal and subsidiary awareness as mutually exclusive (Tsoukas, 2009). Exercising focal awareness inhibits a deeper understanding as the deeper understanding is based on subsidiary awareness, which is drawn from background knowledge (Dreyfus, 1991). It is important to recognize that all three, that is, routines, background knowledge and the relationship between the two are temporal, meaning all three are changing the flow of time.

Conclusion

My study shows that when routines are treated as semi-automatic practices that can be decomposed into subtasks and relocated to different environments, there is a risk of losing the meaning of routines and the mindfulness in their application. The conduct of the routine is what makes it mindful or mindless. But the meaning of any conduct depends on its context. To outsource is to take the routine to another, de-coupled temporal landscape. Thus, it is important to take into account the temporality of the routines as actions informed by past experiences and future aspirations; the temporal nature of the relationship between routines and the social context in which they are performed; and the temporal nature of the contextualized or background knowledge. The latter means that the background knowledge is in the temporal flow; it is within the temporality of the organization. Thus, outsourcing of a routine is a detachment of the temporality. The empirical study supports the assumption that outsourcing tends to decrease the mindfulness of performing routines, and therefore, their sensitivity to operations that may lead to important and, unfortunately, unfavorable consequences.

Acknowledgement

I am grateful to TUBORGFOUNDATION who has supported this research as a part of the project titled 'Changing in Time.'

References

- Alvesson, M. (2009) At-home ethnography: Struggling with closeness and closure. In Ybema, S., Yanow, D., Wels, H. and Kamsteeg, F. (Eds) *Organizational Ethnography: Studying the Complexities of Everyday Life*. CA: Sage, 156-174.
- Alvesson, M. (2003) Beyond neo-positivism, romanticism and localism. A reflective approach to the research interview. *Academy of Management Review*, Vol. 28, No. 1, 13-33.
- Argote, L. (2013) *Organizational Learning: Creating, Retaining and Transferring Knowledge*. New York: Springer Science Business Media.
- Argote, L. (2006) Introduction to Mindfulness. *Organization Science*, Vol. 17, No. 4, 501.
- Becker, M. C. (2004) Organizational routines: a review of the literature. *Industrial and Corporate Change*, Vol. 13, No. 4, 643-677.
- Becker, M. C., Lazaric, N., Nelson, R. R. and Winter, S. G. (2005) Applying Organizational Routines in Understanding Organizational Change. *Industrial and Corporate Change*, Vol. 14, No. 5, 775-791.
- Burkholder, N.C. (2006) *Outsourcing: The definitive view, applications, and implications*. New Jersey: John Wiley & Sons Inc.
- Busi, M., McIvor, R. (2008) Setting the outsourcing research agenda: the top-10 most urgent outsourcing areas. *Strategic Outsourcing: An International Journal*, 1 (3), 185-197.
- Canie"ls, M. C. J., and Roeleveld, A. (2009) Power and Dependence Perspective in Outsourcing Decisions. *European Management Journal*, Vo. 27, No. 6, 402-417.
- Cyert, R. M., and March, J. G. [1963/1992] *A behavioural theory of the firm*. 2nd ed. Oxford: Blackwell Publishers.
- Dreyfus, H. L. (1991) *Being-in-the-World: A Commentary on Heidegger's Being and Time, Division I*. USA: The MIT Press.

- Edwards, L. B. and Jaros, G. G. (1994) Process-Based System Thinking – Challenging the Boundaries of Structure. *Journal of Social and Evolutionary Systems*. Vol. 17, No. 3, 339-353
- Eisenhardt, K. M., Furr, N. R. and Bingham, C. B. (2010) Microfoundations of Performance: Balancing Efficiency and Flexibility in Dynamic Environments. *Organization Science*, Vol. 21, No. 6, 1263-1273.
- Eisenhardt, K. M. and Martin, J. M. (2000) Dynamic Capabilities: What Are They? *Strategic Management Journal*, Vol. 21, 1105-1121.
- Feldman, M. S. (2000) Organizational Routines as a Source of Continuous Change. *Organization Science*, Vol. 11, No. 6, 611-629.
- Feldman, M. S. and Pentland, B. (2003) Reconceptualizing Organizational Routines as a Source of Flexibility and Change. *Administrative Science Quarterly* 48: 94-118.
- Freytag, P. V, Clarke, A. H. and Evald, M. R. (2012) Reconsidering Outsourcing Solutions. *European Management Journal*, Vol. 30, 99-110.
- Gavetti, G., Levinthal, D. and Ocasio, W. (2007) Neo-Carnegie: The Carnegie School's Past, Present, and Reconstructing for the Future. *Organization Science*, Vol. 18, No. 3, 523-536.
- Greisbach, D. and Grand, S. (2013) Managing as transcending: An ethnography. *Scandinavian Journal of Management*. Vol. 29, 63-77.
- Handley, S. M. (2008) *The Evaluation, Analysis, and Management of the Business Outsourcing Process*. Unpublished Doctoral Dissertation. The Ohio State University, Columbus, OH. Available https://etd.ohiolink.edu/ap:0:0:APPLICATION_PROCESS=DOWNLOAD_ETD_SUB_DOC_ACCNUM:::F1501_ID:osu1217602296.attachment (19.02.2015)
- Handley, S. M. (2012) The perilous effects of capability loss on outsourcing management and performance. *Journal of Operations Management*, Vol. 30, 152-165.
- Heidegger, M. (1927/1962) *Being and time*. Oxford: Blackwell Publishers.
- Hernes, T. (2014) *A Process Theory of Organization* New York: Oxford University Press

- Hernes, T. (2008) *Understanding Organization as Process: Theory for a Tangled World*. London: Routledge.
- Hernes, T., and Irgens, E. J. (2012) Keeping things mindfully on track: Organizational learning under continuity. *Management Learning*, Vol. 44, No. 3, 253-266.
- Holt, R. and Sandberg, J. (2011) Phenomenology and Organization Theory. *Philosophy and Organization Theory*. Vol. 32, 215-249.
- Jensen, P. and Pedersen, T. (2012) Offshoring and International Competitiveness: antecedents of offshoring advanced tasks. *Academy of Marketing*, Vol. 40, 313-328.
- Kakabadse, A., Kakabadse, N. (2005) Outsourcing: current and future trends. *Thunderbird International Business Review*, Vol. 47, No. 2, 183–204.
- Kakabadse, N., and Kakabadse, A. (2000). Critical review – Outsourcing: A paradigm shift. *Journal of Management Development*, Vol. 19, No. 8, 670–728.
- Kavcic, K., and Tavcar, M. I. (2008). Planning successful partnership in the process of outsourcing. *Kybernetes*, Vol. 37, No.2, 241–249.
- Kotlarsky, J., and Bognar, L. (2012) Understanding the Process of Backsourcing: Two Cases of Process and Product Backsourcing in Europe. *Journal of Information Technology Teaching Cases*, Vol. 2, 79-86.
- Landis, K. M., Mishra, S. and Porrello, K. (2005) *Calling Change in the Outsourcing Market: The Realities of the World's Largest Organizations*. Deloitte Consulting.
- Langer, E. J., Cohen, M. and Djikic, M. (2012) Mindfulness as a Psychological Attraction: The Effect on Children. *Journal of Applied Social Psychology*. Vol. 42, No. 5, 1114-1122.
- Levinthal, D. and Rerup, C. (2006) Crossing an Apparent Chasm: Bridging Mindful and Less-Mindful Perspectives on Organizational Learning. *Organization Science*, Vol. 17, No. 4, 502-513.
- McIvor, R. (2000). A practical framework for understanding the outsourcing process. *Supply Chain Management: An International Journal*, 5 (1), 22-36.

- Moeran, B. (2009) From participant observation to observant participant. In Ybema, S., Yanow, D., Wels, H. and Kamsteeg, F. (Eds) *Organizational Ethnography: Studying the Complexities of Everyday Life*. CA: Sage, 139-155.
- Nelson, R. R. and Winter, S. G. (2002) Evolutionary Theorizing in Economics. *Journal of Economic Perspectives*, Vol. 16, No. 2, 23-46.
- Nelson, R. R. and Winter, S. G. (1982) *An evolutionary theory of economic change*. Cambridge, MA: Harvard University Press.
- Nicolini, D. (2009) Zooming in and zooming out: A package of method and theory to study work practices. In Ybema, S., Yanow, D., Wels, H. and Kamsteeg, F. (Eds) *Organizational Ethnography: Studying the Complexities of Everyday Life*. CA: Sage, 120-138.
- Orlikowski, W. (2002) Knowing in Practice: Enacting a Collective Capability in Distributed Organizing. *Organization Science*, Vol. 13, No.3, 249-273.
- Pentland, B. and Feldman, M. S. (2008) Reconceptualizing organizational routines as a source of flexibility and change. *Administrative Science Quarterly* 48: 94-118.
- Pentland, B., and Feldman, M. S. (2005) Organizational Routines as a Unit of Analysis. *Industrial and Corporate Change*, Vol. 14, No. 5, 793-815.
- Polanyi, M. (1962) *Personal Knowledge*. Chicago Ill: University of Chicago Press.
- Ramsey, A. T., and Jones, E. E. (2015) Minding the interpersonal gap: Mindfulness-based interventions in the prevention of ostracism. *Consciousness and Cognition*, Vol. 31, 24-34.
- Robinson, P., Lowes, P., Loughran, C., Moller, P., Shields, G., Klein, E. (2008) Why settle for less? Outsourcing report. Deloitte Consulting Report.
- Sako, M. (2010) Technology Strategy and Management Outsourcing versus Shared Services. *Communications of the ACM*, Vol. 53, No. 7, 27-29.
- Salvato, C. (2009) Capabilities Unveiled: The Role of Ordinary Activities in the Evolution of Product Development Processes. *Organization Science*, Vol. 20, No. 2, 384-409.

- Saxena, K. B. C. and Bharadwaj, S. S. (2009) Managing Business Processes Through Outsourcing: A strategic partnership perspective. *Business Process Management*, Vol. 15, No. 5, 687-715.
- Shotter, J. (2010) Adoption a Process Orientation...in Practice: Chiasmic Relations, Language, and Embodiment in a Living World. In: T. Hernes and S. Maitlis (Eds) *Process, Sensemaking, & Organizing*, New York: Oxford University Press. 70-101.
- Shotter, J. (2006) Understanding Process from within: An Argument for 'Witness'-Thinking. *Organization Studies*, Vol. 27, No. 4, 585-604.
- Teece, D. J. (2012) Dynamic Capabilities: Routines versus Entrepreneurial Action. *Journal of Management Studies*, Vol. 49, No. 8, 1395-1401.
- Tsoukas, H. (2009) A Dialogical Approach to the Creation of New Knowledge in Organizations. *Organization Science*, Vol. 20, No. 6, 941-957.
- Tsoukas, H. (2003) Do We Really Understand Tacit Knowledge? In M. Easterby-Smith and M. Lyles (Eds.) *The Blackwell Handbook of Organizational Learning and Knowledge Management*. Oxford: Blackwell, 410-427.
- Weick, K. E., Sutcliffe, K. M. and Obstfeld, D. (2008) Organizing for High Reliability: Processes of Collective Mindfulness. In A. Boin (Ed) *Crisis Management Volume III*. London: SAGE, 31-66.
- Weick, K. E. and Sutcliffe, K. M. (2001) *Managing the Unexpected*. Jossey-Bass, San-Francisco, CA.
- Weick, K. E. and Roberts, K. H. (1993) Collective Mind in Organizations: Heedful Interrelating on Flight Decks. *Administrative Science Quarterly*, Vol. 38, 357-381.
- Whitehead, A. N. (1929/1978) *Process and reality*. New York: The Free Press.

8. THIRD EMPIRICAL PAPER: Risks and consequences of temporal discontinuity in the organizational change process

An early version of this paper was presented at the *Fifth International Symposium on Process Organization Studies*, 24-27 June 2013, in Chania, Greece. The latest version of this paper is accepted to the *Eight International Symposium on Process Organization Studies*, 16-18 June 2016, in Corfu, Greece.

RISKS AND CONSEQUENCES OF TEMPORAL DISCONTINUITY IN ORGANISATIONAL CHANGE PROCESSES

Abstract

The main contribution of this paper is to show the connection between perceived temporal (dis)continuity and commitment to organizational change. Applying a temporal perspective to organizational change, the paper shows how perceived temporal continuity is important for the ways in which organizational members commit to the change process. Based on my study, I label the excluded past and the disassociated future as a causes for perceived discontinuity. I argue that on one hand, the excluded past will reduce available cognitive resources to draw projections to the future and thus limit potentiality for commitment as an action; and on the other hand, if the envisioned future is disassociated from past and present it remains implausible to actors and hence, reduces their commitment to the course of change.

Keywords: change, commitment, temporality, temporal (dis)continuity

Introduction

Downsizing, restructuring and outsourcing are some of the keywords for current planned change projects. All these organizational change types can be considered as traumatic events for employees (Fedor, et al., 2006; Hallock, Strain and Webber, 2012; Kiefer, 2005; Worral, Parkers and Cooper, 2004) as they create disruptions. In the case of the before mentioned strategic changes, there are clear disruptions for those employees who lose their jobs, daily income, and self or group identity as a result (Hargrove, Cooper and Quick, 2012; Tziner, Fein and Oren, 2012). Additionally, these kinds of strategic changes may cause disruptions in careers, working teams, working processes, practices, routines, etc. Disruptions, as caused by disconfirmed expectations (Weick, 1995), are associated with ambiguity and emotional arousal (Weber and Glynn, 2006; Weick, 1995), which tend to create resistance (Bartunek, Rousseua, Rudolph and DePalma, 2006; Saunders, Altinay and Riordan, 2009; Vaara and Monin, 2010), while greater than usual commitment is required for implementing strategic changes that have a demanding nature.

Jaros (2010) claims that when compared to commitment directed at the organization or teams, which are viewed as relatively static entities, commitment to change is viewed as a more dynamic process. Jaros points out that “commitment to change is an ‘action commitment’” (Jaros, 2010, p. 80). Similarly, Weick refers to ‘action-driven commitment’ (Weick, 1995, p. 157), which “implies a binding set of acts that constitute behavioral commitment, where decisive commitment occurs when acts are experienced as explicit (there is clear evidence that the act has occurred), public (important people saw the act occur), and irrevocable (the act cannot be undone)” (Hernes et al., 2015, p. 125).

There are several different views on change commitment (Jaros, 2010). For example, Fedor et al. (2006) describe a commitment to change as “a behavioral intention to work toward the success of the change rather than reflecting a favorable

disposition toward it” (p. 3). They emphasize that as “commitment to change captures the notion of a positive, proactive intent,” and it does not equal with “the lack of resistance to change or the absence of negative attitudes” (Ibid, 2006, p. 4).

Armenakis and his colleagues (Armenakis et al., 2007, 1993; Armenakis and Harris, 2009) have defined employees’ willingness to support organizational change as one of the important factors indicating employees’ change readiness. In their model, they have included both factors describing change implementation process (fairness of the process, management support, achievability of the goals) as well as perceived positive outcome of change (personal and organizational valence).

Meyer et al. (2007) define commitment to change as “a mind-set that binds an individual to a course of action deemed necessary for successful implementation of a change initiative” (p. 186). They have highlighted three distinctive dimensions of commitment, namely — affective or feelings-based (employees want), normative or obligation-based (employees feel obliged), and continuance or cost-based dimensions (it is cost-effective to comply). Although the highest commitment to change is associated with affective commitment and the lowest one with continuance commitment, all three dimensions represent a commitment to change (in varying degrees).

These different change commitment models share an assumption that change commitment indicates certain ‘attachment to and involvement in the change initiative’ (Jaros, 2010, p. 81). The commitment to change is manifested through supportive action. Additionally, there is a shared assumption that to achieve employees’ attachment and involvement, the perceived positive outcome of change is important.

Although commitment to change is approached as a distinct form of commitment, it is hard to separate commitment to change completely from other types of employment commitment, like organizational, group and occupational commitment (Jaros, 2010; Muhuveloo and Rose, 2005; Reichers, 1985; Salancik,

1977a). Different studies have indicated significant, but contradictory, relationships between different commitments (Blau, 2001; 2003; Jaros, 2010). For example, Rashid and Zhao (2010) studied the relationship between organizational, career and change commitment. The findings of their study indicate that while organizational commitment had a direct positive relationship to change commitment, career commitment did not have a direct impact to change commitment. Instead, career commitment affected change commitment indirectly through greater responsiveness to effective change communication. Moreover, compared to direct impact from organizational commitment, this mediated impact was more significant (Rashid and Zhao, 2010). Reichers (1985) theorizes that in the case of organizational change the strong organizational commitment may lead to increased employee turnover. Lau and Woodman (1995) found organizational commitment has a strong negative impact to change commitment, while both Herold et al. (2008) and Ford et al. (2003) found a positive relationship between organizational and change commitment. In the context of dynamic workplaces, Blau (2001, 2003) has theorized that employees shift from organizational to occupational commitments.

In this paper, following the common aspects different change commitment models have, I build my argument on the notion that change commitment is an action. I view change commitment as an action that takes place in a wider organizational context (not limited to change only), and as such, is influenced by and also influences employees' other work related commitments (Reichers, 1985). Additionally, I build on the assumption that to achieve employees' commitment to change they need to see the change as plausible and achievable (Weick, 1995), and its outcome as favorable. What is plausible and achievable is assessed in the present based on accumulated past experiences. If the envisioned future is not linked to past and present, it is seen as implausible, and an implausible future vision fails to enable employee commitment. What is seen as 'favorable' depends on what employees are committed to (Salancik, 1977b).

Reichers (1985) warns that “to the extent that organizations pursue the conflicting goals of multiple constituencies, individuals who are committed to these constituencies may suffer from conflicts over the direction that their energies and loyalties should take” (p. 473). In cases where employees have a high commitment to the organization, working team or one’s occupation, strategic change may be perceived as threatening and create resistance. Thus, it could be hypothesized that when the strategic change disrupts employees’ other work related commitments (e.g., organizational and occupational commitments) as on-going actions, it creates perceived temporal discontinuity and resistance to change.

By taking a temporal view, I see action as temporal being informed by past experiences and future expectations. Temporality means that the present moment is assessed in light of the experiences gained from past events and anticipated future events, where the meaning both of the anticipated future events, as well as the experienced past events, are recreated (Hernes et al., 2013; Schultz and Hernes, 2013) on an on-going basis. According to Hernes (2014), temporality “refers to the carving out of temporal existence (present, past, and future) from the passing of time” (p. ix). The idea, that actors are not just responding to temporal structures, but are creating temporal meanings through their social interaction, is supported by Gurvitch (1964/1990). Different temporal meaning is created through qualitatively different temporal reconfiguration of past, present and future, and through the shifted dominance of one over the others (Dawson, 2014; Emirbayer and Mische, 1998; Gurvitch, 1964/1990) as sensed in the present. Thus, this ‘on-going temporality’ (Schultz and Hernes, 2013) refers to actors’ active efforts to make connections across past, present and future within the flow of time.

If the commitment is action, then commitment is also temporal. On the one hand, actors strive to create continuity in their actions by bridging the past, present and future, while organizations impose strategic change. They try to maintain their

commitment(s). On the other hand, strategic organizational change projects, like downsizing, restructuring and outsourcing, tend to create temporal disruptions or sensed discontinuities where the relations between past, present and future are cut off. Because the action, including commitment, is temporal, then it is hard to attract employees' commitment to change, so long as there is perceived temporal discontinuity caused by the disconfirmed expectations. Following that, I hypothesize that to change commitment maintained continuity of different work-related commitments is more important than the type of change.

In this paper, I define sensed discontinuity as a perceived missing relationship across one or more tenses — the past, present, and future.

Paper outline

I will start with the description of commitment as an action. I will continue with the definition of temporality and give an overview of an on-going temporality perspective. Then, to understand the importance of temporal (dis)continuity to change commitment, I turn to recent writings in the field of cognitive and social psychology in an attempt to find explanations applicable to organizational change processes. In studying the role of continuity and time, I develop the notions of the “excluded past” and the “disassociated future.” I will analyze temporal (dis)continuity and its impact on employees' change commitment based on the empirical data collected by 28 interviews from two case companies going through the strategic change implementation process. The paper concludes with a discussion of the implications of sensed continuity or discontinuity on employees' commitment to organizational change processes.

Commitment as an action

Salancik (1997a) defines commitment as “a state of being in which an individual becomes bound by his actions and through these actions to beliefs that sustain the activities and his own involvement.” (p. 62). Moreover, commitment sustains an action in the face of difficulties (Salancik, 1977a, 1977b). Thus, in contrast to Jaros (2010, p. 80), who sees change commitment as ‘action commitment’, Salancik (1977a) points out that any commitment is manifested through action. Action, while taking place in the present, has a future orientation. That is, through anticipated consequences action carries into the future. It is directed by expectations and anticipations formed on the basis of past experiences. The implications of action are the expectations about what should follow on from the action (Salancik, 1977b, p. 7). In that sense, expectations and anticipations “serve as constant guides to future actions” (Salancik, 1977a, p. 64) and commitments.

People within organizations can be committed to a range of different things — to what they are doing, to different projects, to one another, to pursuing new goals, or to maintaining the status quo (Salancik, 1977b, p. 3). Thus, one needs to take into account the fact that organizational change takes place in a wider organizational context and, therefore, commitment to change is simultaneously influenced by and has influences on employees other work related commitments (Blau, 2001, 2003; Fedor et al., 2006; Reichers, 1985; Salancik, 1977b). For example, organizational commitment is associated with employees’ loyalty and organizational identity (Moufahim et al., 2015) while occupational commitment can be defined as a “psychological link between an individual and his/her occupation that is based on an affective reaction to that occupation” (Lee et al., 2000, p. 800). Building on that, Blau (2003) argues that a person with “higher occupational commitment strongly identifies with and has positive feelings about their occupation” (p. 469). Moreover, Hitlin and Elder (2007) stress that in everyday life

“much of this taken-for-granted exists at the level of social commitments.” (p. 181). Hernes et al. (2015, p. 126, p. 127) have distinguished between ‘social commitment’ and ‘interpretive commitment’. ‘Interpretive commitment’ denotes “commitment to an underlying idea of the change process” (Hernes et al., 2015, p. 127), while ‘social commitment’ refers to commitment to the group, which is reinforced by group identity created by interactions (Hernes et al., 2015, p. 126). As actors in organizations may belong to a number of different groups they can hold and be committed to a number of different identities (Reichers, 1985).

If people in organizations can be committed to a wide range of identities, it will be hard for management to promote an outcome of change that is uniformly perceived as positive (Reichers, 1985; Sonenshein, 2010). In fact, the change may be perceived as threatening to one’s expectations (Weick, 1995) about the organizational or occupational identity (Reichers, 1985). At the same time, leaving the change message ambiguous does not mitigate the risk of change implementation failure (Sonenshein, 2010), because people have a tendency to be committed to their expectations, and to their actions (Fedor et al., 2006; Salancik, 1977a). This means that people will rather continue to do what they are doing, in a way they are used to, than change what they are doing or their method of doing it.

A temporal view of organizational change

Hernes et al. (2013) have stated that temporality, in the broader sense, is “the ways in which the passing of time shapes the very being of things” (p. 2). Such a view presupposes an assumption that actors experience time on an on-going basis (Schultz and Hernes, 2013). With such a view, both the meaning of the future, as well as the past, is open (Helin et al., 2014; Hernes, 2014; Schultz and Hernes, 2013). In other words, the present moment is assessed in light of past experiences

and future promises, while at the same time the meaning of both the anticipated future, as well as the experienced past, are recreated (Hernes et al., 2013; Schultz and Hernes, 2013). That is, rather than seeing the past and future as distinct temporal elements, they are viewed as belonging to the present as dimensions of the present experience (Deleuze, 2004 in Hernes, 2014).

The experience of being, as an action, is oriented to the future. The beliefs about possible futures motivate current action (Hitlin and Elder, 2007; Weick, 1995). At the same time, the ability to see different future possibilities, including more distant futures, depends on one's grasp of the past. Through action, in the passing of time, experiences are accumulated, and the temporal span becomes longer (Hernes, 2014), enabling more far-reaching future projections. That is, the temporal span into the future is rooted in the temporal span into the past. It is important to recognize that "span indicates that our temporal markers are not 'points', but stretches" (Bakken et al., 2013, p. 18). Although not necessarily symmetrical, the longer span into the past enables a greater extension into the future (Hernes, 2014; Kaplan and Orlikowski, 2013; Schultz and Hernes, 2013). Thus, the past serves as an important resource to look forward (Hernes, 2014), while the future expectations and anticipations give meaning to the present and past.

At the same time, longer involvement in an action commits the actor to that action and by that constraint flexibility (Salancik, 1977b). The longer people have contributed to an action, the lesser they are ready to change it, because an action creates a commitment to the trajectories that are seen as plausible. As the action takes place in the present, Griesbach and Grand (2013) argue that coping with current issues in the present moment shapes "how the current situation and previous and future situations relate to each other" (p. 65). That is, temporality or connections from the present to the past and future, and between the past, present and future, are shaped in the present. Their statement indicates that the way temporal connections

are established is important. Moreover, their statement hints that it is important that the past, present and future are related to one another.

There are relatively few studies (e.g. Griesbach and Grand, 2013; Hernes et al., 2015; Kaplan and Orlikowski, 2013; Schultz and Hernes, 2013; Sonenshein, 2010; Sutton 1987) that have taken a temporal view on organizational change (Dawson, 2014; Hernes, 2014). Common to those studies is the finding that it is important for organizational members that temporal connections across the past, present and future should be maintained. Only when the temporal connections across the past, present and future are maintained could organizational members assess the change efforts as coherent, plausible and acceptable. For example, the study conducted by Kaplan and Orlikowski (2013) focused on the strategy creation process in an organization facing very high uncertainty about its future. What is interesting about their study is the fact that although there were multiple options available for the future, the company had significant struggles in resolving tensions related to the establishment of a new strategic direction. Kaplan and Orlikowski found that “a new view of the future could not take hold unless it is woven into a coherent, plausible, and acceptable strategic account that articulates *how such a future could emerge from a particular understanding of the past and a specific assessment of present concerns*” (Kaplan and Orlikowski, 2013, p. 967 *Author’s Italics*). Kaplan and Orlikowski (2013) demonstrate how the maintained temporality enabled organizational actors to construct an organizational future in a plausible manner. Without creating a plausible strategic account it was impossible to secure employees’ commitment to the strategic change. The plausibility of a strategic account, in turn, demanded that the temporal connections between past, present and future were established and maintained.

In their study, Schultz and Hernes (2013) show how LEGO Group successfully redefined their strategy by changing the configuration of the elements

from the past that they had previously focused on. Although a new strategic future was defined, it was still based on the experienced past. The elements selected from the past for a new strategy were not highlighted in the previous strategy, but these were elements from the collective past of the organisation, accessible to the actors in LEGO Group. The importance of the accumulated collective past experiences as a foundation for collective future aspirations is also stressed in the study conducted by Hernes et al. (2015).

Although, downsizing and restructuring are seen as the most traumatic change types (e.g., Allen et al., 2007; Allen et al., 2001; Kiefer, 2005), Salancik (1977a) has stated that inescapable situations may have an appeal that transient situations rarely do. For example, in his study, Sutton (1987) investigated so-called “organizational death” (p. 542) cases, when referring to plant or department closings. Sutton focused on the cases where the dismantling of an organization was carried out by people who were members of that very organization. In principle, an organizational death refers to the change type that has neither personal nor organizational valence (Armenakis et al., 2007) yet results in strong negative emotions in employees (e.g., Armenakis et al. 2007). As a consequence, it could be hard to obtain employees’ commitment to the dying organization.

However, Sutton (1987) found that when an organization’s death was announced in advance then, contrary to leaders’ predictions and despite the strong negative emotions, like anger and sadness displayed by the employees, at all levels employees increased their efforts for the dying organization. He stresses the importance of the advance announcement that organizational death will occur as a turning point that enabled the members of the organization to no longer interpret their organization as a continuous entity, but as a temporal one (Sutton, 1987). While the organization itself was seen as discontinuous, the temporal continuity was maintained. The future, or to be more precise — the perspective of no future, was clearly connected to the organizational present; it was not hard for employees to see

that the end was coming and subsequently relate to that fact. Thus, one can conclude that for the members of the organization, it is easier to deal with the change, which, despite the possible negative end results is presented in a temporally consistent manner.

Perceived temporal (dis)continuity

Temporal continuity seems to have an important impact on employees' sensemaking and decision-making processes (Gurvitch, 1964/1990), and thus to their commitment to change. Strategic changes may have an important effect on one's self-perceptions by requiring "to replace one sense of the world with another" (Weick, 1995, p. 14). The request 'to replace one's sense of the world with another' is existentially different and more demanding than the request 'to be committed to the replacement process', while the latter cannot be viewed separately from the former. Strategic changes, which disconfirm expectations, tend to create interruptions. According to Weick (1995), interruption causes emotional arousal and questions like "Is it still possible to take things for granted?" and "What next?" (p. 14). Thus, there are questions about the validity of the past experiences accumulated through action, as well as the future expectations directing action. As long as the temporal connection between past experiences and future expectations is missing a commitment in the form of action cannot take place.

In alignment with the logic behind an on-going temporality perspective, writers in cognitive and social psychology, such as Abram et al. (2014), state that the present being is perceived as "a continuity of the past and as a prelude to the future" (p. 76). In that sense, our ability to remember past experiences and to imagine and plan future ones is essential in our daily lives. Perceived temporal continuity is closely related to a person's sense of self-identity (Abram et al., 2014) and perceived self-continuity (Hershfield, 2011). Holman and Silver (1998) have

defined temporal continuity as “the overall span of cognitive involvement across the past, present and future life domains” (p. 1146). Similarly to the point made by Schultz and Hernes (2013), Holman and Silver (1998) highlight that the overall span may be either extended or narrowed, meaning it could range from distant past to distant future, or from immediate past to immediate future. A richer reservoir of past experiences (extended span) enables greater flexibility in constructing hypothetical future scenarios (Abram et al., 2014).

Temporal discontinuity is the outcome of changes in mental content caused by shifted attention (Holman and Silver, 1998; Weick, 1995) brought about by a specific stimulus situation (Pöppel, 1997). Holman and Silver (1998) associate temporal discontinuity with traumatic events. They argue that the intensity of the emotional reaction to a traumatic event can have a disintegrating effect on the entire psychological system and challenge the most fundamental beliefs one holds about oneself and one’s world. One may feel fragmentation in the continuity between past and present as a result of a traumatic event, and may sense the future as shortened or collapsed altogether (Holman and Silver, 1998). People may get ‘stuck in the past’, in the sense that in the passing of time “traumatic events objectively become part of the past, but subjectively, they may remain an active, salient, and present psychological experience” (Holman and Silver, 1998, p. 1152).

Studies conducted by Sani and colleagues (2007, 2008) confirm that, in addition to perceived personal continuity, one’s wellbeing is affected by perceived collective continuity. Their findings are aligned with the earlier research on group mergers, conducted by van Knippenberg et al. (2002), which revealed that if members of a group perceive some continuity between the pre-merger and post-merger group they are more willing to support the merger. In cases where the post-merger group looks too different from the pre-merger group, group members may not identify with it because they have a sense that the post-merger group is no longer

‘their’ group. The study results of Sani et al. (2007, 2008) and van Knippenberg et al. (2002) are aligned with the findings of Hernes et al. (2015), that perceived continuity at the group level enhances employees’ commitment to change.

The findings of Sani et al. (2007, 2008) and van Knippenberg et al. (2002) confirm the claims made by Weick (1995) and Gurvitch (1964/1990) that organizational change may cause sensed discontinuity. Organizational change can cut off continuity on personal, group and organizational level, and this may hamper employees’ commitment to change (Hiltin and Elder, 2007; Langley et al., 2012; Moufahim et al., 2015). On the one hand, as a stable sense of identity is drawn, in part, from past experiences and future dreams and expectations, temporal disintegration may be associated with difficulties assimilating the event into a stable sense of self (Hiltin and Elder, 2007). On the other hand, a threat to identity, either to one’s personal identity or group/organization’s identity, is referred to as one of the root reasons for resistance to change (Hitlin and Elder, 2007; Moufahim et al., 2015; Reichers, 1985; van Knippenberg et al., 2002; Ybema, 2004).

Thus, to avoid resistance to change and achieve employee commitment to it, managers need to pay attention to anticipated change outcomes and how temporal connections across the past-present-future are presented in their change communication. Self and Schraeder (2009) argue that often what is referred to as employee resistance to change is the failure of the management to successfully create and manage a commitment to change. Indeed, Ybema (2004; 2010) has found that temporal discontinuity may also result from management communication *about* the change. Ybema (2004, 2010) has highlighted the importance of the ways in which temporal resources (the past, present and future) are utilized by management in the discourse on change. He argues that management’s inherently future-oriented discourse or ‘postalgia’ may outline the present against the future, which means that in a similar way to nostalgia, there is no continuous connection over the past-present-future (Ybema, 2004, 2010).

Thus, if management communicates an organizational future which is not logically related to its present and past, but instead expresses dislike or even despise toward the present and past of the organization, it risks cultivating temporal discontinuities. Temporal discontinuities, in turn, create resistance rather than support towards change. Salancik (1977b) has warned that attacking someone's present positions in the hope to persuade him in the superiority of an alternative position tend to work in the opposite direction. That is, the person "committed to certain beliefs or actions tend to resist changing them in the face of attack" (Salancik, 1977b, p. 36). Instead, when faced with the attack on one's position, the person tends to become even more bound to it, while rejecting alternative options (Salancik, 1977b).

Methodology

In this paper, I use qualitative comparative case study analysis with the aim of investigating how, if at all, the nature of strategic organizational change impacts the importance of perceived (dis)continuity. I am using purposeful sampling, which according to Patton's (1990) typology could be defined as 'maximum variation' sampling (Patton, 1990, p. 172). 'Maximum variation' sampling allows identification of commonalities and shared aspects (Patton, 1990; Ragin and Amoroso, 2011) of sensed (dis)continuity and commitment. Identification of commonalities in the cases, which at first glance are very different (anticipated growth versus experienced contraction), may help to enhance understanding of the investigated phenomenon (Patton, 1990; Ragin and Amoroso, 2011), which in this paper is the relation of sensed temporal (dis)continuity and commitment to organizational change.

To take contextual differences into consideration (Gray, Stensaker and Jansen, 2012), commitment to change and temporal relations across the past, present and future are analyzed in two companies implementing top-down strategic change. In both companies, the central aim of the change is to radically transform the existing production processes, procedures, and routines. In both companies, the main group of change targets has a long tenure with the company which indicates high organizational commitment (Salancik, 1977b). Still, the reason behind the change is different. The first company, called the Growing Company, is expecting a fivefold increase in sales due to the innovative product they have developed, thanks to changing environmental legislation, which made this product mandatory for ships to control their waste water. In the Growing Company, twelve interviews with employees were conducted from March to April 2011, when the company was in the middle of rearranging its production processes. Six employees with a long tenure, as well as six quite freshly recruited employees (employees with a tenure of up to one year) were interviewed. Interviews were conducted during normal working hours at the working site. Conversations with three top management members also took place during the same period.

The second company, called the Outsourcing Company, is experiencing downsizing due to business processes outsourcing (BPO). Surviving accountants and controllers from different geographic locations within the Outsourcing Company were interviewed during the multiple day regional meeting in September 2006. The initial knowledge transfer to the external service provider was completed, but new working processes were not still in place. Interviews were scheduled before and after meeting days. Short informal interviews with four high-level executives were conducted during the initial BPO announcement meeting in Vienna, in May 2005. The data set from the Outsourcing Company contains four interviews with top or mid-level managers and nine interviews with local accountants or controllers.

The data gathered from the interviews is the main source of empirical data. In both case companies, the data collection was carried out in real-time, when the organizational change projects were being implemented. To avoid the dominance of the management's voice (Grey et al., 2012), both data sets comprise interviews with managers and employees directly involved in on-going change projects, either as change agents or change targets. The collected data set contains 28 semi-structured interviews, from which 21 interviews are with employees and seven interviews are with top management members. The open-ended semi-structured interviews lasted from 45 minutes to 90 minutes. All respondents participated in the research voluntarily. Each respondent was interviewed individually. During the interviews, interviewees were asked about their thoughts and opinions of the change project and about their future expectations related to change the outcome. In order to properly gather the respondents' stories, interview questions were loosely structured and open-ended, offering the opportunity to express feelings and thoughts about change related experiences. Special attention was paid to the way managers in both companies described the current situation within the organization and how they made connections across the past, present and anticipated future. Content analysis was utilized to find patterns in the transcribed responses.

Interview data was complemented with information from company web pages and internal newsletters. In the Growing Company, the author had access to the notes of recruitment interviews. Additionally, in the Outsourcing Company, the author was allowed to participate in two two-day meetings and three one-day workshops. The overview of the data collected is presented in Table 1.

Table 1. Overview of the empirical data

	Study period	Number of interviews	Profiles of interviews	Observations/ participation	Company documents
The Growing Company	6 months, from January to June 2011	12 semi-structured interviews; 3 (semi-structured) conversations with top management members	3 top managers; 6 employees with long tenures; 6 newly hired employees (1-3 years)	General observations in the company while conducting the interviews	Company reports and memos, participant descriptions of two-day change workshop held for production personnel, internal newsletters, webpage information, press releases, recruitment interviews notes
The Outsourcing Company	17 months, from May 2005 to September 2006	4 semi-structured interviews with top or mid-level managers; 9 semi-structured interviews with local accountants and controllers	2 top managers; 2 mid-level managers; 9 local accountants and controllers	Two 2-day meetings (including a charter flight to the external service provider office during the first announcement meeting in Vienna); three 1-day workshops for local controllers	Company internal newsletters, presentations, meeting memos, general project information announced via e-mails

Research Site 1 – The Growing Company

The Growing Company was established in the mid-eighties and has business operations in 2 continents: Europe and Asia. The company offers a wide range of fuel oil supply systems, auxiliary units for power stations and marine industries, which are designed and manufactured to fit in seamlessly with the customer's system. Additionally, the Growing Company offers solutions which include planning, required technical equipment and alteration work. The most typical customers for the company are shipyards.

During 2006-2008, The Growing Company succeeded in developing environmentally friendly, innovative ballast water treatment (BWT) system for all ballast water conditions, which combined automatic filtration and UV light disinfection. The company expected to grasp market share in the new opening market, as international legislation requires that all ships should have the BWT system in use within ten years. The Growing Company's strategy was based on an assumption that about 60 companies worldwide have a solution for this challenge and predicts that they have a very good possibility to gain at least a few per cent of market share, which would mean a growth of tens of millions in turnover in the near future. To meet requirements set by the anticipated fivefold growth, the opportunity company was making internal changes and started to transform its production processes. In 2008, the company invested in new production processes and prepared to create a new modulated product line for BWT. The aim was to increase organizational efficiency by establishing modulated production processes and formalizing the tacit knowledge of production employees who had a long tenure. To support the change in the production processes the company hired some new employees who were expected to act as change agents and lead the implementation

of the production processes. Additionally, a new chief executive officer was appointed at the beginning of 2010, who acted as a change leader.

Research Site 2 – The Outsourcing Company

The Outsourcing Company is a privately held, multinational company with a global presence in the field of component production. The company has a geographically dispersed structure. In Europe, there were more than 130 legal entities (either sale or production companies). Following the global trend, management decided to implement an outsourcing project for large-scale routine finance and accounting tasks to an external service provider.

The outsourcing set a new objective for finance and accounting – to cut annual costs by 50%. The cut in operational costs was planned to be achieved through a decrease in headcount from 220 to 110–120 full-time employees. For a finance and accounting organization, the outsourcing was a transformational change, affecting the processes, structure, roles and values of the organization. Before these changes, finance and accounting had been an especially stable business operation and very close to either the local sales or local production organization/department.

Following the transfers, the role and responsibilities of the retained employees changed dramatically, as well as the routines and structure of the organization. Finance and accounting were no longer a separate function within the company, becoming an internal service provider. BPO was the real challenge not only for finance and accounting employees, but also for sales and production organizations. Before, BPO sales/production and finance departments were accustomed to sitting side-by-side, with intense daily communication between functions. After, the BPO local sales and production organization should approach

accounting clerks based in Poland. That kind of process restructuring required changes in the ways sales and productions organizations arranged their daily working routines.

Data analysis

The Growing Company

In the Growing Company, where the new CEO is appointed by headquarters as a change champion, the management discourse contrast the present and the past against the future. In his interview, the CEO is frequently highlighting and describing in detail the shortcomings in the existing systems/procedures. The CEO overtly despises the present situation within the organization and does not in any way praise the past of the Growing Company, of which he has not been a part. By contrasting the anticipated future with the present and giving no credits to the past, his message has a ‘postalgic’ (Ybema, 2004, 2010) nature.

The operations of the company are based on the situation of the 1980’s. It is unbelievable that such old fashion methods are used in some parts of the organization. It is essential to get organizational processes running systematically and with a high level of consistency. (Manager: CEO, 1 year)

The higher level managers with three years experience with the company, appointed in 2008 when the change planning started, saw the attempts of new CEO to restructure existing processes as positive and necessary both for the company’s sustainability and risk management.

The new top management and the new processes in the company are an absolutely positive thing. The company has been ineffective for years until now. Although the company was like a family before, I do not believe that the company would have stayed in business much longer. (Manager: Financial Director, Asian Markets, 3 years)

We have to change because currently there is a lot of tacit knowledge in the company. We need to have modulated processes in the company, and we need a standardized way to perform the tasks, and we also need our employees to accept and follow those standardized working methods. This is the only way we can hope to be competitive in the new market. (Manager: Technical Director, 3 years)

Although these managers are expressing the future orientation and supporting the change, they do not deprecate the past of the company. The quote from the Financial Director that ‘although the company was like family before’, is referring to the fact that there are close relationships in the company. ‘Being like a family’ is not assessed as bad or harmful, but as insufficient for dealing with the changing market situation. In the same way, the Technical Director appreciates the tacit knowledge that the production employees have cultivated over the years but, similar to the Financial Director, does not see this as sufficient for dealing with the challenges of the future. Thus, both these managers, while agreeing with change, do see the value of the past. The quote ‘being like a family’ indicates the presence of strong organizational identity.

Based on the interviews, it could be said that production workers with a long tenure have reservations about the on-going changes. In their interviews, they express skepticism toward the change outcome quite explicitly. They seem to not connect with the future perspectives envisioned by the new management. For them,

the envisioned future is not logically connected to either their past experiences or the present situation. Their expressions indicate concerns about the outcome of the change and their future role in the company.

We have a bit of a skeptical attitude towards the change because it is unclear what that will mean to us. I think that the general view of my colleagues is that there is something fishy about this change. [...] I must say that I am not sure if this plan is ever going to work. The company has spent a huge amount of money for something new, and they do not even fix the old problems that we have in the production hall. (Worker: Production worker, 14 years)

Some time ago management stated that the job descriptions might and most apparently will change. We [production workers] cannot be sure about the change. It is not clear what kind of job I should do in the future. Hopefully, there will be something. (Worker: Production development, 4 years)

In addition to the unclear future and certain orientation to the past, 'we' is used consistently in the interviews. The use of 'we' refers to the strong group or social commitment created through the years. The production workers with a long tenure were bound together by the 'family-like' culture and by the new innovative BWT system they had developed together. As expressed by the Innovation Manager, who'd spent 10 years with the company: "They were involved in developing this product that is expected to be worth millions. They believe in it." While believing in BWT, the long-term workers do not believe in the future the company is trying to achieve through the change forced on them. They see the outcome of the change as unfavorable to them.

In our team [production] some of the guys have been laid off since there is not enough work. In 2008, there was a job for everyone, and we did the job as always before, and we got good results. Now there is not enough work for us while the company is recruiting new people in the other departments. (Manager: BWT Innovation Manager, 10 years)

This negative or passive attitude toward change among long-term employees is seen as a serious threat to success perspectives by HR, as well as by other new recruits who are supposed to act as the engines of change.

It is obvious that there are people who do not believe in change and do not want that change. They have their own thoughts about it, and I know that these people are spreading resistance to change by talking negatively and nagging about everything. (Manager: Technical Director, 3 years)

The greatest challenge for us is that we cannot be sure if the majority of our employees are going to follow the employees who are driving the change forward, or are they going to join the people who are lacking motivation. (Manager: HR, 1 year)

Based on the summaries of recruitment interviews it could be claimed that when new employees were recruited they were excited and enthusiastic about the challenges and opportunities that the company faced. Thus, initially they had a strong focus on the future, and they were ready to commit to the change as change agents. The newly hired employees had a high interpretive commitment to change, which gradually started to fade away.

Well, I am not sure if the change is going to be that successful [as planned] since there are a lot of conflicts with old workers immediately after something [working method] is improved in our department. For example, I have worked overtime almost every day, and nothing seems to be enough here. (Worker: BWT engineer, 1 year)

The source of the resistance among the long-term workers is that they are used to performing their task in a certain way and now, when we need to reorganize the department activities, they cannot follow the routines they are used to. They have to learn the new procedures, but they do not want to do that. (Worker: BWT expert and consultant, 1 year)

Newcomers' initial drive and enthusiasm was cooled down and replaced by a focus on dealing with current issues, as soon as they had to face everyday problems and obstacles — mainly in the form of passive resistance from long-term employees. These quotes reflect that initial enthusiasm turned into hesitation and insecurity. To them, the future has become foggy, while the present, with all its sharp edges, has become the utmost reality. In a way, the newcomers have become hopeless, having lost their (interpretive) commitment to change.

The Outsourcing Company

In the Outsourcing Company both management, as well as employees, had long tenures, ranging from 7-25 years. The management change discourse did not contrast the past and present with the future. One of the messages was the pioneering nature of the BPO project in a European context — to be the first European multinational to accomplish the outsourcing of routine finance and accounting (FA) tasks to an external service provider. So far, companies which have implemented

similar outsourcing projects were all Anglo-American enterprises with English as their service language, while in the Outsourcing Company, services in different European languages were required from the external service provider.

This is not something that is typically part of a basic education, and it is certainly a new way of thinking for us. (President of GBS, 25 years)

The main message of the managerial rhetoric is quality improvements in the provided services and an increase in the consistency and speed of financial reporting, as well as the alignment of global processes with the expected positive effect on bottom-line results.

We will offer scale services with the aim of reducing the fragmentation by consolidating and aligning various procedures. We are working to improve the efficiency of the global structure and counter-act existing fragmentation. (Global HR Director, 7 years)

This has resulted...in an alignment of processes that will allow us to take costs out of the value chain and to ensure a higher Earnings Before Interest and Taxes (EBIT) and Return on Net Assets (RONA). (GBS Regional Vice President, 15 years)

Although the BPO was presented as an innovative solution, its justification was linked to the previously implemented standardized SAP (enterprise resource planning software). The anticipated outcome of the change was seen as generally beneficial for the company and the next logical step after company-wide SAP implementation. Thus, the future, despite all of its innovation, represents a logical attempt for continuous improvement.

In a way, BPO enables us to get real benefit out of our new SAP platform. I mean, through labor arbitrage we can make some savings, at least on the bigger sites. Not sure there will be any real savings in small units which are anyway served only by one or two FA employees. (GBS Regional Manager 1, 23 years)

To succeed, we must be proactive and adapt our way of doing business to correspond to the changes caused by the political environment, our competitors and technological advances. For sure the change processes can be hard, but also rewarding — we can strengthen our development. (Global HR Director, 7 years)

Still, several interviewees, even from higher ranks, had some reservations, and do not describe future perspectives with enthusiasm. There appeared to be a hesitation, suggesting that perhaps the step taken was a little too big.

All that has happened too quickly, there are far too many things to take care of. For example, we have this newly implemented SAP with all the unsolved problems and are still missing follow-up training; I had to lay off two of my long-term colleagues, and that was really very hard for me; and then I'm supposed to convince our sales people that, despite the lacking services and support in FA related matters and the quite a significant bill from our external service provider, all this outsourcing stuff is in their ultimate interest... ... (Local controller 2)

I can see the benefits of the BPO; sure there are some pros. But personally, I don't know how this BPO project will suit with our company culture. BPO is

a big step and a very strong message to the entire company. (GBS Regional Manager 2)

The leap into the future created some serious doubts about the valence of the change outcome. In the interviews concerns about one's professional identity, a group identity, as well as organizational identity, were articulated. Additionally, the change outcome to internal customers, that is, to sales and production, was seen as unfavorable.

Outsourcing will change the roles of the retained employees. Not everybody will necessarily like the new roles and may prefer to leave. Maybe it is not business critical when support staff leave. My opinion is that local sales people are negatively affected by that, and definitely, they deserve more respect. (Local Controller 3, 11 years)

I have a financial and accounting background, and I really do like finance and accounting, but now I am supposed to give finance away and be responsible for the general administration of back-office functions. I am not so sure that administering all those other functions is something I am good at, or interested in. (Local Controller 4, 8 years)

I think that the FA top management should have communicated this change to the sales organization. BPO was their decision, and thus, I think it is not fair that I need to explain and justify that change to my colleagues. I'm not even sure about that myself. To me, this whole outsourcing project came as a big surprise, and I can't understand why our colleagues were laid off and their jobs given to external people. (Local Controller 5, 10 years)

While all local controllers stayed in the company throughout the whole knowledge transfer phase, those who expressed their dissatisfaction about their personal career perspectives changing working relationships with internal customers, or the new image of the company, chose to leave voluntarily, immediately following the knowledge transfer phase. They did not stay until full implementation of the change, but just until they had accomplished their part in it.

This is not anymore the same organization I am used to working for. I don't like what the outsourcing has done to the organization. I feel like not to answer anything to anybody about that organization anymore. (GBS Regional Manager 3, 14 years)

I'm not sure what to expect in the longer term. Also, I don't feel confident to explain the desired outcome of that change to our sales people. All I can say for sure is that I will be the only person in our local FA department. (Local Controller 5, 9 years)

Thus, it could be argued that while the outsourcing project was not directly resisted by employees and they did not work against the change; they showed just an obligation-based commitment to change and left as soon their primary obligations were fulfilled.

Discussion

The data analysis shows that when management uses 'nostalgic' change rhetoric and openly diminishes the past achievements of the organization they tend to create excluded past. Excluded past does not support employees' commitment to

change because commitment, as an action, requires perceived continuity. While it may seem tempting to contrast the past against the future to justify strategic change and create some urgency, it is important to recognize that if the past is perceived as excluded by employees, there will be no foundation for them to grasp the future. Without elements from the organizational past that can support the envisioned future, the time horizon of employees tends to be compressed into the present.

Production employees' high organizational commitment (indicated by their long tenures), supplemented with their high social commitment (indicated by interview data), made them entrenched in their position. The excluded past created resistance to change because they perceived change as threatening to their group and their role within the organization. As the case of the Growing Company shows, an anticipated fivefold growth was not sufficient for production workers to see the future as favorable and desirable. At the same time, the newly hired employees' interpretive commitment to change decreased as a result of the experienced failure to make an impact on long-term production employees. Their expectations became disconfirmed in the process, leaving them with a disassociated future. In a way, they became hopeless and their time horizons shortened.

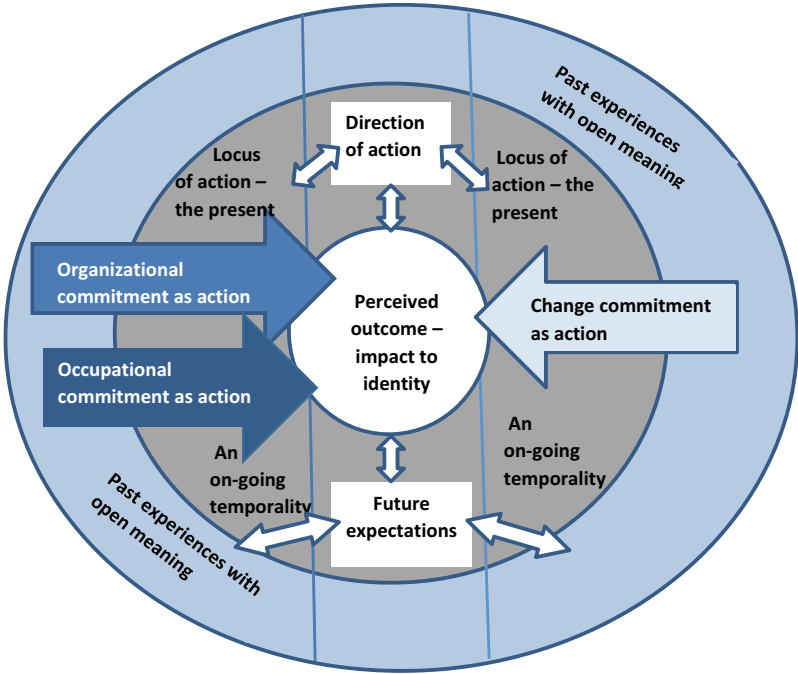
Contrary to the arguments that strategic change, which incorporates downsizing, tend to create the biggest resistance, the data from the Outsourcing Company does not support that. Although the commitment to the change remains mostly obligation-based, the change, including downsizing, was accepted. Contrary to the Growing Company there was no resistance to change. Based on the interviews it could be argued that the positive use of the past in the management's change communication had a more important impact on employees change commitment than the type of change. In the Outsourcing Company, the change communication was built on the past of the organization. That is, the BPO was viewed as the next logical step, after implementing standardized SAP. Both the past and present were seen in a positive light as a platform to move forward, even to the

more challenging and innovative future. Still, the obligation-based nature of the commitment to change seems to be caused by the somehow disassociated future. In many cases, the envisioned future seems not to include a possible and desirable range of future identities. Similar to the production employees in the Growing Company, all the employees in the Outsourcing Company had long tenures which, according to Salancik (1977b), is one indicator of high organizational commitment. Additionally, the interview data revealed that the working relationships between controllers and the local production or sales force were close. While management maintained temporal connections for the change, they did not pay attention to the outcome that the BPO had on the organization and one's occupational perspectives. Thus, the envisioned future was not linked to their organizational, group or personal identities and, because of that, it was seen as disassociated. As a result, of the disassociated future, employees did not have a commitment to it, they did not direct their efforts and purposeful action toward an implausible future. Instead, there was a perceived identity conflict, which leads to a conflict of commitments (Reichers, 1985).

The two case studies presented in this paper support the notion, made in previous studies, that commitment to change is future-oriented action, informed by past experiences. Additionally, the case studies show that in organizational settings there are multiple commitments to multiple identities, and that organizational change may challenge these existing commitments (Reichers, 1985). These other commitments include organizational, and occupational commitments as on-going actions, which are related to different identities that employees in organizations are holding and trying to maintain. As shown in Figure 1, different commitments as actions are directed to the future, informed by the anticipated outcomes of the actions. It is important to recognize that these anticipated outcomes are related to perceived continuity of one's identity or identities. Although the action is directed to the future, it is taking place in the present. Thus, the locus of an action is the

present, where the meaning of the past and future are synthesized in an on-going manner. That is, the past and future are continuously used to maintain one's perceived temporal continuity in the flow of time. In the case strategic change, intervention disrupts the existing practices and employees' on-going commitments, it challenges the perceived temporal continuity. In that case, it is unlikely that employees will exhibit affective change commitment. Moreover, viewing different commitments as actions, it seems unreasonable to expect that employees will counteract themselves.

Figure 1. Commitments as actions



This study has several implications for management. First, it is important to recognize that commitment is not a mental state but an action, and thus, commitment is temporal. This means that commitment is based on past (binding) actions and is driven by future expectations and aspirations. Second, in order to create a commitment to something it is important to ensure that this ‘something’ is somehow linked to some, maybe previously unrecognized, elements from the past. In cases where the past is excluded there is no chance of envisioning a plausible future. Third, the analysis suggests that managers need to pay closer attention to temporal dynamics of commitments as actions. It seems to be important for managers to understand different commitments in play, their temporalities, and possible collisions. Obtaining a complete view of the different commitments organizational actors are holding would help managers to design a change message, which incorporates elements from the collective past as building blocks for the future. The affective commitment to change seems to be achievable only when it is linked to other work-related commitments and identities that actors hold. Thus, the connections to the past, present and future should be established with care, as the affective change commitment presupposes that the past is included and the future is associated. The associated future means that it is connected to some elements of the existing identities that actors are committed to. In cases where a change rhetoric is contrasting, or threatening existing commitments in their temporal unfolding, either through exclusion or disassociation, it may easily lead to either active or passive resistance. Fourth, an interpretive commitment without leverage of other work-related commitments lacks the executive power required for altering the trajectories of the existing commitments when implementing organizational change.

Conclusion

As action is temporal, then the excluded past seems to lead automatically to the disassociated future. That is, the envisioned future is viewed as implausible — there are no past experiences available to make sense of that envisioned future and to connect the perceived possible future identities to that future, or the trajectory of action seems unachievable. As there are parallel commitments, as actions, directed by past experiences and future expectations, it is unlikely to achieve employees' commitment to something, which is not linked to their past experiences. Instead, the excluded past tends to lead to a disassociated future, which then tends to lead to resistance.

Alternatively, if the past is incorporated into the change project but its possible consequences to the temporality of the other work-related commitments are not taken into consideration, it may lead to a disassociated future. If that is the case, employees do not necessarily resist the change, but their commitment is only obligation-based. That is, after fulfilling their minimum obligations they may choose to leave voluntarily to overcome the conflict of commitments. It could be concluded that, in addition to the need to link the change project logically to the past, it is also necessary to link it logically to the envisioned future expectations, as well as to the different commitments — with different temporalities — that organizational actors may have.

References

Abram, M., Picard, L., Navarro, B. and Piolino, P. (2014) Mechanisms of remembering the past and imagining the future – New data from autobiographical memory tasks in a lifespan approach. *Consciousness and Cognition*, Vol. 29, 76–89.

- Allen, J., Jimmieson, N. L., Bordia, P., Irmer, B. E. (2007) Uncertainty during Organizational Change: Managing Perceptions through Communication. *Journal of Change Management*, Vol. 7, No. 2, 187-210.
- Allen, T. D., Freeman, D. M., Russell, J. E. A., Reizenstein, R. C., Rentz, J. O. (2001), Survivor reactions to organizational downsizing: Does time ease the pain? *Journal of Occupational and Organizational Psychology*, Vol. 74, 145-164.
- Armenakis, A., and Harris, S. (2009) Reflections: our journey in organizational change research and practice. *Journal of Change Management*, Vol. 9, No. 2, 127–142.
- Armenakis, A. A., Bernerth, J. B., Pitts, J. P., Walker, H. J. (2007), Organizational Change Recipients' Beliefs Scale: Development of an Assessment Instrument. *The Journal of Applied Behavioral Science*. Vol. 43, No. 4, 481-505.
- Armenakis, A., Harris, S., and Mossholder, K. W. (1993) Creating Readiness for Organizational Change. *Human Relations*. Vol 46, 681-703.
- Bakken, Tore, Robin Holt, and Mike Zundel (2013) Time and play in management practice: An investigation through the philosophies of McTaggart and Heidegger. *Scandinavian Journal of Management*. Vol. 19, No. 1, 13-22.
- Blau, G. (2003) Testing for a four-dimensional structure of occupational commitment. *Journal of Occupational and Organizational Psychology*, Vol. 76, 469-488.
- Blau, G. (2001) On assessing the construct validity of two multidimensional constructs: Occupational commitment and occupational entrenchment. *Human Resource Management Review*, Vol. 11, 279-298.
- Fedor, D. B., Caldwell, S., Herold, D. M. (2006) The effects of organizational changes on employee commitment: a multilevel investigation. *Personnel Psychology*. Vol. 59, No. 1, 1-29.
- Ford, J., Wessbein, D. and Plamandon, K. (2003) Distinguishing organizational from strategy commitment: linking officers' commitment to community policing to job behaviors and satisfaction. *Justice Quarterly*, Vol. 20, No. 1, 159–183.
- Dawson, P. (2014) Reflections: On Time, Temporality and Change in Organizations. *Journal of Change Management*, Vol. 14, No. 3, 285-308.

- Gray, B., Stensaker, I. G. and Jansen, K. J. (2012) Qualitative Challenges for Complexifying Organizational Change Research: Context, Voice, and Time. *The Journal of Applied Behavioral Science*. Vol. 48, No. 2, 121–134.
- Griesbach, D. and Grand, S. (2013) Managing as transcending: An ethnography. *Scandinavian Journal of Management*. Vol. 29, 63-77.
- Gurvitch, G. (1964) Varieties of Social-time. In Hassard, J. (Ed) (1990) *The sociology of time*. Basingstoke: Macmillan, 67-76.
- Hallock, K. F., Strain, M. R., and Webber, D. (2012) Job loss and effects on firms and workers. In Cooper, C. L., Pandey, A., and Quick, J. C. (Eds) *Dowsizing: Is Less Still More?* New York: Cambridge University Press, 3-50.
- Hargrove, M. B., Cooper, C. L., and Quick, J. C. (2012). The stress outcomes of downsizing. In Cooper, C. L., Pandey, A., and Quick, J. C. (Eds) *Dowsizing: Is Less Still More?* New York: Cambridge University Press, 293-325.
- Helin, J., Hernes, T., Hjorth, D., and Holt, R. (2014) Process is How Process Does. In J. Helin, T. Hernes, D. Hjort and R. Holt (Eds.) *The Oxford handbook of process philosophy and organization studies*. Oxford: Oxford University Press, 1-16.
- Herold, D., Fedor, D., Caldwell, S. and Liu, Y. (2008) The effects of transformational leadership and change leadership on employees' commitment to change: a multi-level study, *Journal of Applied Psychology*, Vol. 93, No. 2, 346–357.
- Hernes, T. (2014) *A Process Theory of Organization* New York: Oxford University Press
- Hernes, T., Simpson, B. and Söderlund, J. (2013) Managing and temporality. *Scandinavian Journal of Management*. Vol. 29, 1-6.
- Hernes, T., Hendrup, E., and Schäffner, B. (2015) Sensing the Momentum: A Process View of Change in a Multinational Corporation. *Journal of Change Management*, Vol. 15, No. 2, 114-141.
- Hershfield, H. E. (2011) Future self-continuity: how conceptions of the future self transform intertemporal choice. *Annals of the New York Academy of Science*, 30-43.
- Hitlin, S., and Elder, G. H. Jr. (2007) Time, Self; and the Curiously Abstract Concept of Agency. *Sociological Theory*, Vol. 25, No. 2, 170-191.

- Holman, E. A., and Silver, R. C. (1998) Getting "Stuck" in the Past: Temporal Orientation and Coping With Trauma. *Journal of Personality and Social Psychology*, Vol. 74, No. 5, 1146-1163.
- Jaros, S. (2010) Commitment to Organizational Change: A Critical Review. *Journal of Change Management*, Vol. 10, No. 1, 79-108.
- Kaplan, S. and Orlikowski, W. (2013) Temporal Work in Strategy Making. *Organization Science*. Vol. 24, No. 4, 965-995.
- Kiefer, T. (2005) Feeling bad: antecedents and consequences of negative emotions in ongoing change. *Journal of Organizational Behavior*. Vol. 26, 875-897.
- Knippenberg, D., Knippenberg, B., Monden, L. and de Lima, F. (2002) Organizational identification after a merger: A social identity perspective. *British Journal of Social Psychology*, Vol. 41, 233-252.
- Langley, A., Golden-Biddle, K., Reay, T., Denis, J., Lamothe, L. and Gervais, J. (2012) Identity Struggles in Merging Organizations Renegotiating the Sameness-Difference Dialectic. *The Journal of Applied Behavioral Science*, Vol. 48, 135-167.
- Lau, C., and Woodman, R. (1995) Understanding organizational change: a schematic Perspective. *Academy of Management Journal*, Vol. 38, No. 2, 537-554.
- Lee, K., Carswell, J., and Allen, N. (2000). A meta-analytic review of occupational commitment: Relations with person and work-related variables. *Journal of Applied Psychology*, Vol. 85, 799-811.
- Meyer, J., Srinivas, E., Lai, J. and Topolnytsky, L. (2007) Employee commitment and support for an organizational change: a test of the three-component model in two cultures. *Journal of Occupational and Organizational Psychology*, Vol. 80, No. 1, 185-211.
- Moufahim, M., Reedy, P. and Humphreys, M. (2015) The Vlaams Belang: The Rhetoric of Organizational Identity. *Organization Studies*, Vol. 36, No. 1, 91-111.
- Patton, M. (1990) *Qualitative evaluation and research methods*. Beverly Hills, CA: Sage.
- Pöppel, E. (1997) A hierarchical model of temporal perception. *Trends in Cognitive Sciences*, Vol. 1, No. 2, 56-61.

- Ragin, C. C. and Amoroso, L. M. (2011) *Constructing Social Research: The Unity and Diversity of Method 2nd Ed.* USA: Sage.
- Rashid, H., and Zhao, L. 2010. The Significance of Career Commitment in Generating Commitment to Organizational Change Among Information Technology Personnel. *Academy of Information and Management Sciences Journal*. Vol. 13, No. 1, 111-131.
- Reichers, A. E. (1985) A Review and Reconceptualization of Organizational Commitment. *The Academy of Management Review*. Vol. 10, No. 3, 465-476.
- Salancik, G.R. (1977a) Commitment is Too Easy! *Organizational Dynamics*, 62-80.
- Salancik, G.R. (1977b) Commitment and the Control of Organizational Behavior and Belief. In Staw, B. M. and Salancik, G. R. (Eds) *New directions in organizational behavior*, Oxford: England, 1-43.
- Sani, F., Bowe, M., and Herrera, M. (2008) Perceived collective continuity and social well-being: exploring the connections. *European Journal of Social Psychology*, Vol. 38, No. 2, 365-374.
- Sani, F., Bowe, M., Herrera, M., Manna, C., Cossa, T., Miao, X. and Zhou, Y. (2007) Perceived collective continuity: Seeing groups as entities that move through time. *European Journal of Social Psychology*, Vol. 37, 1118–1134.
- Saunders, M. N., Altinay, L. and Riordan, K. (2009). The management of post-merger cultural integration: implications from the hotel industry. *The Service Industries Journal*, Vol. 29, No. 10, 1359-1375.
- Schultz, M. and Hernes, T. (2013) A temporal perspective on organizational identity. *Organization Science*, Vol. 24, No.1, 1-21.
- Self, D. R. and Schraeder, M. 2009. Enhancing the success of organizational change: Matching readiness strategies with sources of resistance. *Leadership & Organization Development Journal*, Vol. 30, No. 2, 167-182
- Sonenshein, S. (2010) We're changing—or are we? Untangling the role of progressive, regressive, and stability narratives during strategic change implementation. *Academy of Management Journal* 53(3):477-512.
- Sutton, R. I. (1987) The Process of Organizational Death: Disbanding and Reconnecting. *Administrative Science Quarterly*, Vol. 32, 542-569.

- Tziner, A., Fein, E. C., and Oren, L. (2012) Human motivation and performance outcomes in the context of downsizing. In Cooper, C. L., Pandey, A., and Quick, J. C. (Eds) *Dowsizing: Is Less Still More?* New York: Cambridge University Press, 103-133.
- Vaara, E., and Monin, P. (2010) A Recursive Perspective on Discursive Legitimation and Organizational Action in Mergers and Acquisitions. *Organization Science*, Vol. 21, No. 1, 3-22.
- Walker, H. J., Armenakis, A. A., Bernerth, J. B. 2007. Factors influencing organizational change efforts: An integrative investigation of change content, context, process and individual differences. *Journal of Organizational Change Management*. Vol. 20, No. 6, 761-773.
- Weber, K., Glynn, M. A. (2006) Making Sense with Institutions: Context, Thought and Action in Karl Weick's Theory. *Organization Studies*, Vol. 27, No. 11, 1639-1660
- Weick, K. E. (1995) *Sensemaking in Organizations*. SAGE, California.
- Worral, L., Parkes, C., Cooper, C. L. (2004) The impact of organizational change on the perceptions of UK managers. *European Journal of Work and Organizational Psychology*, Vol. 13, No. 2, 139-163.
- Ybema, S. (2010) Talk of change: Temporal contrasts and collective identities. *Organization Studies*, Vol. 31, 481-503.
- Ybema, S. (2004) Managerial nostalgia: Projecting a golden future. *Journal of Managerial Psychology*, Vol. 19, 825-841.

9. IMPLICATIONS AND QUESTIONS FOR FUTURE RESEARCH

9.1 Implications

The data analysis of the three studies, which in combination form the empirical part of the current thesis, revealed some interesting features of time and temporality that have several practical implications. As each of the three studies has its dedicated discussion section, I will not repeat what is written there. Instead, I highlight some of the commonalities concerning time and temporality despite the different data sets and research questions posed in the papers.

First, all three studies indicate that there are multiple temporalities tangled in their interactions. These multiple temporalities are not strictly restricted to social actors and their different temporal spans, time orientation and sensing of time, although these aspects are all important in creating temporal dynamics. Multiple temporalities, mediated through social actors, also apply to different forms of action and being, for example, improvisation, routines, commitments, and organizational background knowledge. The variety of coexisting temporalities in their different manifestations support the flow-like worldview (Chia, 1999; Hernes, 2014), as anything that is flowing presupposes temporality.

Second, these different temporalities of actions and being are not isolated from one another but are tangled in the on-going interactions through which they both create and constitute one another (Hernes, 2014) as well as collide and conflict with each other (Gurvitch, 1964/1990). As the findings of the first paper show, while the temporalities of routines and improvisation could be different, they are far from isolated. Instead, through a reciprocal constitution, they create each other. Therefore, although activities may have different temporalities, it does not mean that they are unrelated in time. On the contrary, the principles of immanence

(Grienbach and Grand, 2013; Whitehead, 1929/1978) and on-going temporality (Schultz and Hernes, 2013) indicate that they are connected in time and by time. The same applies to the intention and application of routines, and the organization's contextual background investigated in the second paper, and commitments as actions in the third paper.

As the analysis of the second study shows, the intention and meaning of routines, the application of routines and the organizational context to perform routines are connected; they are all temporal, and their temporalities mutually shape and form each other. Therefore, if routines are decoupled or disengaged from the organizational context, the temporality of the whole – the meaning and intention of routines, the application of routines, organizational background knowledge and the relations between these will be affected accordingly. Moreover, as relations between sub-elements will be affected, the temporalities of sub-elements are subject to change. The analysis of the second paper demonstrates that when routines are cut off from their temporal-contextual background even relatively mundane and seemingly technical routines, such as accounting for payables and receivables, may become troublesome. Therefore, routines that have developed in a particular context tend to fail to work when relocated in another context, because the context, the understanding of the context, as well as the relationship between the context and routines are temporal. The latter means, that both the context and understanding of context are shaped by the routines in time; by the experience and knowledge accumulated over time while performing routines. At the same time the context and understanding of the context shape routines. In the case of outsourcing, it is important to recognize that through performance, outsourced routines, as acts, will create new temporal connections in their new organizational context with that new context. The meaning and performance of outsourced routines change because they are performed in relation to a different context, including a different view of the past and the future.

The analysis of the third study shows that change implementation may fail to achieve expectations due to a lack of commitment if not aligned temporally with existing commitments. The temporal alignment with existing commitments means that to create a new commitment requires linking it to existing identities by finding common ground from the past and binding it to the existing expectations.

Third, time viewed as active and dynamic, binding different phenomena and events temporally to each other paints a radically different picture of social reality when compared to the social reality characterized by a linear or sequential view of time. An active view of time enables us to understand the ways organizational actors actively construct their time, which in turn shapes their strategies and commitments. Moreover, how actors construct their time affects the creation, retention, and deployment of tangible and intangible resources in an organization. This became evident both in the first and second study. In the first paper, the visit by the CEO of the client company, who happens to be a former sea captain and who by chance was accompanied by the technical director of the client company, could serve as an example. On the one hand, there is no foundation to claim that the materialization of the X-bow was an effect of the visit of the CEO of the client company. Still, retrospectively this specific visit was assessed as a trigger event for X-bow and related to strategic success for Ulstein. According to the participants in the X-bow story, the X-bow may not have happened without this specific event. Moreover, following the successful launch of the X-bow, Ulstein introduced also X-stern. In the case of X-stern, there is no direct link to the previous visit of the CEO of the client company at all. Still, without being connected directly by a cause-effect relationship, these three events are connected temporally by the active and dynamic time in events, which has shaped the on-going unfolding of events. These events, the visit of the client company CEO, and the materialization of X-bow and X-stern, are connected through the enactment of events. At the same time, the analysis of the second paper shows that meaning and intention are subjects that can change when

their temporalities are affected. Therefore, both tangible resources (new products and the related cash flow) and intangible resources (skills, competencies, and knowledge) are directly influenced by the actors creating their time.

Fourth, a temporally tangled social reality, where time is viewed as active and dynamic results in a completely different meaning for the notion of ‘time management’. The notion of time management, built on linear and external time, has traditionally meant ordering, synchronizing, scheduling, and so on. It is important to know how long something takes, how often something needs to be performed, in which order different tasks should be performed, and so on, in order to accomplish these tasks. Without attempting to decrease the value of that kind of knowledge, an active and dynamic view of time adds different dimensions, worthy of attention. An active and dynamic view of time substantially increases the complexity of the social reality. Therefore, as shown by the X-bow case, the focus is not on ordering, synchronizing, or scheduling, although all these time management aspects were prevalent in the production cycle. Instead, the case emphasizes the importance of ‘seeing’ possibilities in the current moment as ambiguous and vague as these may be, to find elements from the past that support seizing the opportunity, helping to create plausible future scenarios and combining these in the present to support the actualization of the opportunities by actively creating one’s time.

Fifth, seeing time and actors as mutually creating and shaping one another, highlights the utmost importance of understanding time and temporality. Talking about ‘time management’ as demanding that managers understand the dynamics of time, that management is sensitive towards different temporalities in play, to their reciprocal influences, and the possible alterations in sensed social times (Gurvitch, 1964/1990). At the managerial level, it is also important to understand how to construct future strategies that are supported by elements from the past and linked

to anticipated identities. This requires a sensitivity towards the organizational past, skills to find and bring forward those elements from history, which have a potential to serve as building blocks for an envisioned future. As shown by the case studies presented in the third paper, this can be a delicate task because there is no single, unitary past and neither is there a homogenous understanding of the future. Instead, there could be collisions, conflicts, and contrasts between different temporalities, which need to be mitigated, handled, and managed.

Sixth, heterogeneous temporalities indicate that there are significant differences in temporalities due to different past and future time horizons and varied ways to connect past and future in the present. Due to heterogeneous temporalities finding a common temporal nominator is a serious challenge for managers. Moreover, multiple different temporalities, which form an organization through their continuous interactions, are not fixed and static, but on-going. Therefore, different actors construct their temporalities on on-going bases while affecting and being affected by other actors' on-going time construction, which creates the vibrant and effervescent total social phenomenon (Gurvitch, 1964/1990:68). As the analysis of the third paper indicates, to reduce the risk of possible conflicts between different temporalities (i.e. commitments), it is important for managers to understand and take into account different temporalities that different organizational processes and actions have.

9.2 Questions for future research

As the dynamic and active view of time presents a new perspective, there are plenty of possibilities for future research both in organizational studies as well as in wider social research. The empirical studies presented in the current thesis have revealed to some extent surprising and unexpected underlying temporal connections

and interrelatedness, and emphasize the importance of recognizing and understanding the temporal interplays, which form and shape organizational reality and its continuity. There are multiple questions, which surface as a result of the studies presented in this thesis. For example, how to enhance the sensitivity of managers towards heterogeneous temporalities and the consequences of their possible clashes, alterations, shifts, and so on. How to train managers to see time in events, to see different possible event trajectories before reaching the “point of no return” where causal predictions will take over? Although this may sound slightly negative, how to manipulate the existing event trajectories in a more favorable direction? These questions have utmost importance, not only in the organizational context but also in the wider social context. Therefore, the question is how people could create their time in the more conscious way? What is the best way to ‘deposit’ or ‘store’ past experiences to keep these available for creating different futures? How to handle and manage different temporalities at the societal level; how to create a shared future despite different pasts?

10. CONCLUSION

In order to answer the main research question of my thesis – ‘*How, in the flow of time, is continuity sustained in organizations?*’ – I conducted two in-depth case studies and one comparative case-study analysis of the data collected from four different organizations. Under this main research question, two research questions were subsumed in the first and second paper, and two hypotheses in the third paper. The research questions posed in the first and second paper were respectively ‘*How is temporal interplay created between improvisation and routines?*’ and ‘*How does outsourcing influence the mindful application of routines?*’ In the third study, I hypothesized, first, that when the strategic change disrupts employees’ other work-related commitments (e.g. organizational and occupational commitments) as on-going actions, it creates a perceived temporal discontinuity and resistance to change. Second, I hypothesized that to achieve change commitment, the maintained continuity of different work-related commitments is more important than the change type.

Based on the analysis of the data from the Ulstein Group the answer to the research question – ‘*How is temporal interplay created between improvisation and routines?*’ – posed in the first paper (Chapter 6), is that the interplay between different temporalities is created through immanence. The notion of immanence challenges the idea of sequentially ordered events in time where the past, present, and future are viewed as separated and discrete. Instead, according to the notion of immanence, the past, present and future constitute each other in every single moment in the on-going temporality. As our analysis showed, on the one hand, actors, while improvising, were expecting that routines can support the actualization of improvisation and give it continuity in the form of a materialized product. We refer to that actualization of improvisation as a ‘momentary stabilization’, which

refers to the process of anchoring the fluid and floating the idea as a concrete form. This anchoring could happen only through established routines. On the other hand, it was expected by actors that routines and processes provide a foundation for the possible improvisation whenever it could happen. We found that actions, which at first glance may appear as distinct are linked in time and by time. While different events may have different temporalities and may look distinct, they are connected temporally through enactment.

To achieve a sensed continuity, the ability to balance two different actions with two different temporalities is required from actors. The sensed continuity required balancing stability and change, both of which are tools for maintaining temporality. The act of balancing stability and change could be viewed as an on-going accomplishment of becoming. Sensed continuity and becoming go hand in hand – there cannot be one without the other. Balancing stability and change refers to the connections that are maintained and created in an on-going manner across the past, present, and future using elements from the past and future and recombining these in the present.

The main research question of the second study (Chapter 7) was: *'How does outsourcing influence the mindful application of routines?'* Analysis based on the ethnographic study showed that, similar to somehow unexpected and unanticipated connection between improvisation and routines found in the first paper, there are multiple interrelated temporalities of different nature at work simultaneously. There is the temporality of actors, actions, organizational background knowledge, and different routines and processes, all in continuous interplay. Viewing the social context as a temporal whole, where multiple temporalities mutually shape and form each other explains the unanticipated change in meaning and intention among the mundane routines if relocated from one temporal context to another. Outsourcing, as the relocation of some routines, decreases the sensitivity of routines towards the

context they have been extracted from and towards remaining routines. Therefore, outsourcing tends to have a negative effect on the mindful performance of routines because it cuts off temporal connections between outsourced routines, organizational background knowledge, and the routines that have remained in the organization. Moreover, due to the interdependencies of the elements in the whole, and the whole extracting some routines from the contextual-temporal whole, will affect not only the extracted routines, but also the organizational background knowledge and the procedural memory.

In the third study presented in Chapter 8, I used a comparative case study analysis with the aim of investigating how, if at all, the nature of strategic organizational change impacts the perceived continuity. I hypothesized that first, when strategic change disrupts employees' other work-related commitments (e.g. organizational and occupational commitments) as on-going actions, it creates a perceived temporal discontinuity and a resistance to change. Second, in order to achieve employee commitment to change, maintaining the continuity of different work-related commitments is more important than change type. To investigate these hypotheses I used purposeful sampling following the logic of 'maximum variation' (Patton, 1990:172). Selecting at first glance very different cases (anticipated growth versus experienced contraction) allowed me to identify commonalities and shared aspects (Patton, 1990; Ragin and Amoroso, 2011) of sensed (dis)continuity and commitment, and investigate the role of the change type, which was questioned in my second hypothesis.

My analysis showed that indeed, the existing commitments as actions are temporal and directly related to employee group organizational or occupational identities. Therefore, to achieve employee commitment to change, the change rhetoric needs to take account of the existing identities and commitments. Management, in their change rhetoric, should pay close attention to the existing

commitment. Thinking about the existing commitment as it flows with a certain force and direction helps us see strength in volatility and understand the importance of connecting the change commitment to this existing commitment. It is very hard if not impossible to create another flow with an opposite direction. Building on the existing commitment requires that a change commitment as an action is bound to some shared elements from the past. Without a connection to the past, commitment as an action is not able to sprout. As revealed by my analysis, the phenomenon of the excluded past may lead to either active or passive change resistance. As an action is future oriented, change commitment also needs to be linked to anticipated future identities. When the past is included but the future remains disassociated, employee commitment to change tends to remain obligation-based.

The outcomes of my three empirical studies makes it possible for me to answer to my main research question – *‘How, in the flow of time, is continuity sustained in organizations?’* My study shows that to sustain continuity in organizations, as well as organizational continuity, requires that different temporalities, which form the organized social context, should be recognized and managed tactfully. Moreover, my study suggests that temporal connections in the interplay are varied and tangled, and include different temporalities of different actions and processes, organizational meaning structures or background knowledge, and human actors. It could be concluded that first, through the concept of immanence, actions of very different temporal nature are connected and constitute each other and by that maintain continuity. Second, that actors and their actions create a temporal context that they operate, while the temporal context they are creating creates and constrains actors and their actions, and changing one may affect either the actual or sensed continuity of others. Third, that commitment to change requires a sensed continuity, while the sensed continuity presupposes the included past and associated future.

To conclude my thesis, I argue that that the role of time and temporality in organizational settings is much wider than reflected in past and current research. In fact, the role of time and temporality in organizational settings is so prevalent that, in a sense, it explains why time and temporality in mainstream organization and management studies has been overlooked for so long. Paying the attention time and temporality deserve could change our understanding about organizations and organizing.

EPILOGUE

When I was in the junior high school, around 1984–1986, my teacher of History demanded that every new notebook should start with the quote “The one who does not remember the past, lives without a future.” The same teacher was also teaching Military, which included dismantling and assembling Kalashnikov automatic guns, and this was a mandatory subject in school programs in the Soviet Era (Chapter 3). The aim of Military was to prepare the Soviet youth to respond adequately to the possible attacks of the ideologically corrupted West. Because of the dual role of this teacher, the quote had a kind of propagandistic flavor referencing to Soviet victory in the Second World War and the following ‘prosperous and happy life of all Soviet people.’

Now, three decades later, as a result of my struggles with completing my PhD, focused on time and temporality, the meaning of this quote has become much more significant and deep. In the light of my PhD thesis, which emphasizes the importance of temporal links across the past, present and future, and the sensed continuity, the past indeed serves as a critical temporal resource to make projections to the future. Still, the previous quote stresses the one directional relationship between the past and future, and overlooks the role of the future as the foundation for the meaning of the past. As a result of my PhD journey, I would like to paraphrase the previous quote and say that, “the one who does not remember the past lives without a future, but without a future there is no past to remember.”

SUMMARY

This thesis consists of three empirical papers that focus on time and temporality in organizational settings. Theoretical framework of this research is formed by a processual-phenomenological perspective. Throughout the studies there is a distinction between time and temporality - time is viewed as active and dynamic, embedded in events, while temporality is viewed as an on-going purposeful effort to create one's time and keep up one's sensed continuity in time. Additionally, a phenomenological approach to social reality, which stresses the mutual interrelatedness of social action and its embeddedness in a social context, is applied. The main research question of the thesis is: How, in the flow of time, is continuity sustained in organizations? The research questions posed in each of the papers address the main research question from different angles.

The first paper "The past and the future in the now: Improvisation and routines as temporal interplay and the making of an improvisational event" is co-authored with my supervisor Professor Tor Hernes. In this paper, the main research interest is expressed through the following question: How is temporal interplay created between improvisation and routines? The study, using a single in-depth case study design and relying mainly on 39 semi-structured interviews, focuses on the situated and temporal interplay of improvisation and routines. The analysis of the study shows that through immanence and momentary stabilization, improvisation and routines are not separate, but constitute and maintain each other. The main contribution of the paper is to show that the continuity of improvisation and routines are mutually dependent, and there is not a temporal split between the two.

The second paper "Mindful application of routines – lost in the outsourcing?" uses similarly to the first paper a single in-depth case study design. The main

research question for the second study is: How does outsourcing influence the mindful application of routines? In this study, a nine-month ethnographic study, where the author held a dual role acting simultaneously as a professional assigned to the back sourcing team and as a researcher, is used to collect data. The aim is to investigate the concept of the mindful application of routines. The paper concentrates first on the relationship of the mindful application of routines and organizational background knowledge, and second, on the temporality of routines and organizational background knowledge. The argumentation and analysis of the paper are established on the premises that the application of routines and the background knowledge, and the relationship between the two, are temporal. The analysis of data reveals that as outsourcing causes temporal and contextual cut offs, and decreases the mindfulness of routines. Because of the interdependencies of the social context, knowledge, understanding, and the meaning and intention of actions, the outsourcing of some routines is likely to influence other proximate aspects related to outsourced routines.

The third paper entitled “Risks and consequences of temporal discontinuity in the organizational change process” focuses on the importance of sensed continuity for employee commitment to change in the context of strategic organizational change. This paper is directed by two hypotheses. First, it is hypothesized that strategic change may create sensed temporal discontinuity by disrupting employees’ organizational and occupational commitment, which in turn leads to resistance. Second, it is hypothesized that the influence of the maintained continuity of different work-related commitments to change is more important than change type. A comparative case study analysis is used to support the hypotheses. To examine the role of the change type, two apparently very different cases, i.e. a strategic change led by an anticipated growth perspective versus a strategic change including downsizing, are compared. The main data source is 28 semi-structured interviews. Interview data shows that when the change effort led to the ‘excluded

past' or 'disassociated future', employees sensed discontinuity, which in turn hampered their action-driven commitment to change.

Viewing social actors and their actions as immersed in the flow of time presupposes that for sustaining continuity in organizations the connections across the past, present and future are maintained in a tactful manner. It is important to emphasize that the process of linking the past and future in the present is an on-going process. Sustaining actual and sensed continuity requires skillful management of different temporalities to avoid unnecessary conflicts between competing temporal perspectives. The skillful management of different temporalities demands that, first, these different temporalities are recognized, and second, that their interdependencies are understood.

Based on these three papers it could be suggested that *in the flow of time, continuity is sustained in organizations* through the continuous interaction of different temporalities. The different temporalities of human actors, actions, identities and meaning structures form together the organized social context, which in turn shapes the possible trajectories of the different temporalities. Through the notion of immanence and on-going temporality, different phenomena are related in time and by time. Being related in time and by time creates a sensed continuity, which contributes to innovation and development, sensitivity towards one's context, and commitment. Therefore, it is important to maintain temporal links to the past as well as to the future and to keep the past and future available in the present.

Paying attention to time and temporality in their different manifestations is bound to alter our comprehension of organizations and organizing. Apparently, the role of time and temporality in organizational settings is much more important than often thought, offering new interesting and rewarding avenues for research.

SAMMENFATNING

Denne afhandling består af tre empiriske artikler som fokuserer på tid og temporalitet i organisationer. Det teoretiske fundament baserer sig på et procesorienteret og fænomenologisk perspektiv. I alle studierne skelnes der mellem tid og temporalitet. Tid forstås som en aktiv og dynamisk faktor, der integreres i forskellige begivenheder, mens temporalitet eller samtidighed ses som en vedvarende og bevidst bestræbelse på at skabe aktørers tid og fastholde aktørers oplevede tidssammenhæng. Videre anlægges en fænomenologisk tilgang til den sociale virkelighed, en tilgang som understreger gensidigheden mellem sociale handlinger og deres forankring i sociale kontekster. Afhandlingens vigtigste forskningsspørgsmål er: Hvordan opretholdes kontinuitet i organisationer over tid? De tre studier angriber dette spørgsmål fra forskellige vinkler.

Den første artikel "The past and the future in the now: Improvisation and routines as temporal interplay and the making of an improvisational act" [Fortiden og fremtiden i nuet: improvisation og rutiner som tidsmæssigt samspil og tilblivelsen af en improvisatorisk hændelse] er skrevet i samarbejde med min vejleder professor Tor Hernes. Hovedspørgsmålet i denne artikel er: Hvordan skabes det temporale samspil mellem improvisation og rutiner? Et dybdegående casestudie og 39 semistrukturerede interviews fokuserer på det situerede og tidsmæssige samspil mellem improvisation og rutiner. Analysen viser, at improvisation og rutine under immanens og øjeblikkering stabilisering ikke er adskilt, men bevarer og konstituerer hinanden. Studiets vigtigste resultat er, at improvisation og rutiner indeholder en fælles kontinuitet, de er indbyrdes afhængige, og der er ikke nogen tidsmæssig opdeling mellem de to.

Det andet studie har titlen “Mindful application of routines – lost in the outsourcing?” [Opmærksom anvendelse af rutiner – tabt i outsourcing?]. Det empiriske materiale baserer sig som i det første studie på et enkelt dybdegående casestudie. Det vigtigste forskningsspørgsmål er: Hvordan påvirker outsourcing udførelsen af opmærksom rutineanvendelse i organisationer?. Data blev indsamlet under et ni-måneders etnografisk studium, hvor forfatteren havde en dobbeltrolle som henholdsvis specialist i et backsourcing team og forsker. Formålet er at undersøge idéen om opmærksom anvendelse af rutiner. Studiet fokuserer dels på forholdet mellem bevidst anvendelse af rutiner og organisatorisk baggrundsviden og dels på rutiners temporalitet og organisatorisk baggrundsviden. Analysen bygger på, at anvendelsen af rutiner og baggrundsviden, og forholdet mellem dem, er tidsmæssigt betingede. Analysen viser, at outsourcing forårsager tidsmæssige og kontekstuelle afbrydelser, og det reducerer opmærksomheden ved rutiner. Samspillet mellem den sociale kontekst, viden, erfaring og handlingens betydningsindhold betyder at outsourcing af rutiner sandsynligvis påvirker andre aspekter ved outsourcete rutiner.

Den tredje artikel har titlen “Risks and consequences of temporal discontinuity in the organizational change process” [Risici og konsekvenser af tidsmæssig diskontinuitet i den organisatoriske forandringsproces]. Studiet fokuserer på betydningen af den fornemmede kontinuitet for medarbejdernes forandringsparathed i forbindelse med strategiske organisatoriske forandringer. Der er to hypoteser. Den første hypotese er, at de forstyrrelser i medarbejders organisatoriske og arbejdsmæssige engagement, som forårsages af strategiske forandringer, afføder en fornemmet tidsmæssig diskontinuitet, hvilket igen fører til modstand. Den anden hypotese er, at forandringsparatheden i højere grad er betinget af at fastholde kontinuitet i arbejdssammenhængen, end af hvilken type forandring der er tale om. Et sammenlignende casestudie bruges til at undersøge disse hypoteser. For at undersøge betydningen af typen af forandring undersøges to

tilsyneladende meget forskellige situationer; en strategisk forandring under et forventet vækstperspektiv sammenlignes med en strategisk forandring præget af nedskæringer. Den vigtigste datakilde er 28 semistrukturerede interviews. Interviewene viser, at når forandringsprocessen førte til "udelukket fortid" eller "udelukket fremtid" fornemmer medarbejdere diskontinuitet, som igen reducerer deres forandringsparathed.

Når sociale aktører og deres handlinger ses i et tidsperspektiv, bliver det klart, at forbindelsen mellem fortid, nutid og fremtid må fastholdes på en taktfuld måde for at opretholde kontinuiteten i organisationer. Det er vigtigt at understrege, at processen med at forbinde fortid og fremtid er en løbende proces. At opretholde den faktiske og fornemmede kontinuitet kræver dygtig ledelse af de forskellige temporaliteter for at undgå unødvendige konflikter mellem konkurrerende temporale perspektiver. Dygtig ledelse af forskellige temporaliteter kræver dels at de forskellige temporaliteter erkendes og dels at deres indbyrdes sammenhæng forstås.

De tre studier i denne afhandling peger alle på, at kontinuitet i organisationer opretholdes gennem løbende samspil af forskellige temporaliteter. De forskellige temporaliteter formet af personer, handlinger, identiteter og betydningsstrukturer danner til sammen den organisatoriske sociale kontekst, som igen former forskellige temporale forløb. Forskellige fænomener er relateret i tid og gennem tid via immanens og løbende temporalitet. At være relateret i tid og af tid skaber en fornemmet kontinuitet, som bidrager til innovation og udvikling, og opmærksomhed over for ens kontekst og forandringsparathed. Derfor er det vigtigt at bevare temporale forbindelser til fortiden og til fremtiden og dermed holde fortiden og fremtiden tilgængelige i nutiden.

Ved at være opmærksom på tid og temporalitet og disse fænomeners forskellige manifestationer ændres forståelsen af organisationer og organisering.

Tid og temporalitet i organisatoriske rammer er langt vigtigere end det sædvanligvis antages, og dette perspektiv giver nye og givende muligheder for forskning.

REFERENCES

- Adam, B. (2004) *Time*. Great Britain: Polity.
- Adam, B. (1990) *Time and Social Theory*. Great Britain: Polity Press.
- Allen, T. D., Freeman, D. M., Reizenstein, R. C., Rentz, J. O. (1995) Just Another Transition? Examining Survivors' Attitudes Over Time. *Academy of Management Journal*. 78-82.
- Ancona, D. G., Okhuysen, G. A. and Perlow, L. A. (2001) Taking Time to Integrate Temporal Research. *Academy of Management Review*. Vol. 26, No. 4, 512-529.
- Argote, L. (2013) *Organizational Learning: Creating, Retaining and Transferring Knowledge*. New York: Springer Science Business Media.
- Bakken, T., Holt, R., and Zundel, M. (2013) Time and play in management practice: An investigation through the philosophies of McTaggart and Heidegger. *Scandinavian Journal of Management*. Vol. 29, 13-22.
- Barnett, L. (1949) *The Universe and Dr. Einstein*. London: Victor Gollancz.
- Becker, M. C. (2004) Organizational routines: a review of the literature. *Industrial and Corporate Change*, Vol. 13, No. 4, 643-677.
- Bluedorn, A. C. and Denhardt, R. B. (1988) Time and Organizations. *Journal of Management*. Vol. 14, No. 2, 299-320.
- Bryman, A. and Bell, E. (2011) *Business Research Methods 3ed*. Oxford: Oxford University Press.
- Chia, R. (2002) Essai: Time, Duration and Simultaneity: Rethinking Process and Change in Organizational Analysis. *Organization Studies*. Vol. 23, No. 6, 863-868.
- Chia, R. (1999) A 'Rhizomic' Model of Organizational Change and Transformation: Perspective from a Metaphysics of Change. *British Journal of Management*, Vol. 10, 209-227.
- Ciborra, C. U. (1999) Notes on improvisation and time in organizations. *Accounting, Management and Information Technologies*. Vol. 9, 77-94.
- Clark, P. (1985) A review of theories of time and structure for organizational sociology. In S. B. Bacharach and S. M. Mitchel (Eds.) *Research in the sociology of organizations*, 35-79.

- Cobb, J. B. (2007). Person-in-community: Whiteheadian insights into community and institution. *Organization Studies*. Vol. 28, 567–588.
- Corbin, J. and Strauss, A. (2008) *Basics of qualitative research 3ed*. London: Sage.
- Crossan, M., Cunha, M. P., Vera, D. and Cuhna, J. (2005) Time and Organizational Improvisation. *Academy of Management Review*. Vol. 30, No. 1, 129-145.
- Curtis, S., Gesler, W., Smith, G. and Washburn, S. (2000) Approaches to sampling and case selection in qualitative research: examples in the geography of health. *Social Science & Medicine*. Vol. 50, 1001-1014.
- Czarniawska, B. (2013) Is speed good? *Scandinavian Journal of Management*. Vol. 29, 7-12.
- Das, T. K. (1993) Time in Management and Organization Studies. *Time and Society*, Vol. 2, 267-274.
- Dreyfus, H. L. (1975) Human Temporality. In J.T. Fraser and N. Lawrence (Eds), *The Study of Time II*. New York: Springer Verlag, 150-162.
- Dreyfus, H. L. (1991) *Being-in-the-World: A Commentary on Heidegger's Being and Time, Division I*. USA: The MIT Press.
- Easterby-Smith, M., Thorpe, R. and Jackson, P. R. (2008) *Management Research 3rd Ed*. London, UK: Sage.
- Edwards, L. B. and Jaros, G. G. (1994) Process-Based System Thinking – Challenging the Boundaries of Structure. *Journal of Social and Evolutionary Systems*. Vol. 17, No. 3, 339-353.
- Eisenhardt, K. (1989) Building theories from case research. *Academy of Management Journal*. Vol. 14, No. 4, 532-550.
- Emirbayer, M. (1997) Manifesto for a Relational Sociology. *American Journal of Sociology*, Vol. 103, No. 2, 281-317.
- Emirbayer, M., and Mische, A. (1998) What is agency? *American Journal of Sociology*, Vol. 103, No. 4, 962-1023.
- Feldman, M. S. (2000) Organizational Routines as a Source of Continuous Change. *Organization Science*, Vol. 11, No. 6, 611-629.
- Feldman, M. S. and Pentland, B. (2003) Reconceptualizing Organizational Routines as a Source of Flexibility and Change. *Administrative Science Quarterly* 48: 94-118.

- Fitzgerald, L. and Dopson, S. (2009) Comparative Case Study Designs: Their Utility and Development in Organizational Research. In Buchanan, D. A. and Bryman, A. (Eds) *The SAGE Handbook of Organizational Research Methods*. Great Britain: Sage, 465-483.
- Gehman, J., Trevino, L. K. and Garud, R. (2013) Values Work: A Process Study of the Emergence and Performance of Organizational Values Practices. *Academy of Management Journal*. Vol. 56, No.1, 84-112.
- Gephart, R. P., Topal, C. and Zhang, Z. (2010) Future-oriented Sensemaking: Temporalities and Institutional Legitimation. In: T. Hernes and S. Maitlis (Eds) *Process, Sensemaking, & Organizing*, New York: Oxford University Press. 275-311.
- Goodman, P. S., Lawrence, B. S., Ancona, D. G. and Tushman, M. L. (2001) Introduction. *The Academy of Management Review*, Vol. 26, No. 4, 507-511.
- Griesbach, D. and Grand, S. (2013) Managing as transcending: An ethnography. *Scandinavian Journal of Management*. Vol. 29, 63-77.
- Gurvitch, G. (1964/1990a) The Problem of Time. In Hassard, J. (Ed) (1990) *The sociology of time*. Basingstoke: Macmillan, 35-44.
- Gurvitch, G. (1964/1990b) Varieties of Social-time. In Hassard, J. (Ed) (1990) *The sociology of time*. Basingstoke: Macmillan, 67-76.
- Hall, E. (1983) *The Dance of Life*. New York: Anchor Books/ Doubleday.
- Hassard, J. (2002) Essai: Organizational Time: Modern, Symbolic and Postmodern Reflections. *Organization Studies*. Vol. 23, No. 6, 885-892.
- Hassard, J. (1996) Images of time in work and organizations. In S. R. Clegg, C. Hardy, and W. R. Nord (Eds) *Handbook of Organization Studies*. Thousand Oaks, CA: Sage, 581-598.
- Hassard, J. (1990) Introduction: The Sociological Study of Time. In Hassard, J. (Ed) *The Sociology of Time*. Basingstoke: Macmillan, 1-18.
- Hassard, J. (1989) Toward a Qualitative Paradigm for Working Time. *International Social Science Journal*. Vol. 119, 93-104.
- Hatch, M. (2002) Essai: Doing Time in Organization Theory. *Organization Studies*. Vol. 23, No. 6, 869-875.
- Heidegger, M. (1927/1962) *Being and time*. Oxford: Blackwell Publishers.

- Helin, J., Hernes, T., Hjorth, D. and Holt, R. (2014) Process is How Process Does. In J. Helin, T. Hernes, D. Hjort and R. Holt (Eds.) *The Oxford handbook of process philosophy and organization studies*. Oxford: Oxford University Press, 1-16.
- Hernes, T. (2014) *A Process Theory of Organization*. Oxford: Oxford University Press.
- Hernes, T. (2014b) Alfred North Whitehead. In J. Helin, T. Hernes, D. Hjort and R. Holt (Eds.) *The Oxford handbook of process philosophy and organization studies*. Oxford: Oxford University Press, 225-271.
- Hernes, T. (2008) *Understanding Organization as Process: Theory for a Tangled World*. London: Routledge.
- Hernes, T., Simpson, B. and Söderlund, J. (2013) Managing and Temporality. *Scandinavian Journal of Management*. Vol. 29, 1-6.
- Holt, R. and Sandberg, J. (2011) Phenomenology and Organization Theory. *Philosophy and Organization Theory*. Vol. 32, 215-249.
- Hussenot, A. and Missonier, S. (forthcoming) Encompassing Stability and Novelty in Organization Studies: An Eventsbased Approach. *Organization Studies*.
- Ie, A., Haller, C.S., Langer, E.J. and Courvoisier, D.S. (2012) Mindful multitasking: The relationship between mindful flexibility and media multitasking. *Computers in Human Behavior*, Vol. 28, No. 4, 1526-1532.
- Jay, J. (2013) Navigating Paradox as a Mechanism of Change and Innovation in Hybrid Organizations. *Academy of Management Journal*. Vol. 56, No.1, 137-159.
- Jaques, E. (1982/1990) The Enigma of Time. In Hassard, J. (Ed) (1990) *The Sociology of Time*. Basingstoke: Macmillan, 21-34.
- Kahneman, D. (2011) *Thinking, Fast and Slow*. New York: Farrar, Straus and Giroux.
- Kaplan, S. and Orlikowski, W. (2013) Temporal Work in Strategy Making. *Organization Science*. Vol. 24, No. 4, 965-995.
- Langer, E. J., Cohen, M. and Djikic, M. (2012) Mindfulness as a Psychological Attraction: The Effect on Children. *Journal of Applied Social Psychology*. Vol. 42, No. 5, 1114-1122..
- Langley, A., Smallman, C., Tsoukas, H. and Van de Ven, A. H. (2013) Process Studies of Change in Organization and Management: Unveiling Temporality, Activity, and Flow. *Academy of Management Journal*. Vol. 56, No. 1, 1-13.

- Langley, A. and Abdallah, C. (2011) Templates and Turns in Qualitative Studies of Strategy and Management. In Donald D. Bergh and David J. Ketchen (Eds) *Building Methodological Bridges, Research Methodology in Strategy and Management*, Vol. 6, Bingley: Emerald, 201-235.
- Lee, H. and Liebenau, J. (1999) Time in Organizational Studies: Towards a New Research Direction. *Organization Studies*. Vol. 20, No. 6, 1035-1058.
- Lorino, P. and Mourey, D. (2013) The experience of time in the inter-organizing inquiry: A present thickened by dialog and situations. *Scandinavian Journal of Management*. Vol. 29, 48-62.
- MacKay, R. B. and Chia, R. (2013) Choice, Chance, and Unintended Consequences in Strategic Change: A Process Understanding of the Rise and Fall of NorthCo Automotive. *Academy of Management Journal*. Vol. 56, No. 1, 208-230.
- Mead, G. H. (1932/2002) *The philosophy of the present*. Prometheus.
- McGrath, J. E. and Rotchford, N. L. (1983) Time and behavior in organizations. *Research in Organizational Behavior*. Vol. 5, 57-101.
- Moeran, B. (2009) From participant observation to observant participant. In Ybema, S., Yanow, D., Wels, H. and Kamsteeg, F. (Eds) *Organizational Ethnography: Studying the Complexities of Everyday Life*. CA: Sage, 139-155.
- Mutch, A., Delbridge, K. and Ventresca, M. (2006) Situating Organizational Action: The Relational Sociology of Organizations. *Organization*. Vol. 13, No. 5, 607-625.
- Orlikowski, W. J. and Yates, J. (2002) It's About Time: Temporal Structuring in Organizations. *Organization Science*, Vol. 13, No. 6, 684-700.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N. and Hoagwood, K. (2013) Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research*. Available at www.researchgate.net/publication/258315317 (28.04.2016)
- Patton, M. (1990) *Qualitative evaluation and research methods*. Beverly Hills, CA: Sage.
- Piekkari, R., Welch, C. and Paavilainen, E. (2009) The Case Study as Disciplinary Convention: Evidence From International Business Journals. *Organizational Research Methods*. Vol. 12, No. 3, 567-589.
- Polanyi, M. (1967) *The Tacit Dimension*. London: Routledge & K. Paul.

- Polanyi, M. (1962) *Personal Knowledge*. Chicago Ill: University of Chicago Press.
- Purser, R. E. and Petranker, J. (2005) Unfreezing the Future: Exploring the Dynamic of Time in Organizational Change. *The Journal of Applied Behavioral Science*. Vol. 41, No. 2, 182-203.
- Ragin, C. C. and Amoroso, L. M. (2011) *Constructing Social Research: The Unity and Diversity of Method 2nd Ed*. USA: Sage.
- Reichers, A. E. (1985) A Review and Reconceptualization of Organizational Commitment. *The Academy of Management Review*. Vol. 10, No. 3, 465-476.
- Reinecke, J. and Ansari, S. (2015) When Times Collide: Temporal Brokerage at the Intersection of Markets and Developments. *Academy of Management Journal*. Vol. 58, No. 2, 618-648.
- Schultz, M. and Hernes, T. (2013) A temporal perspective on organizational identity. *Organization Science* 24(1):1-21.
- Schütz, A. (1967) *The phenomenology of the social world*. London: Heinemann Educational Books.
- Schütz, A. (1962/1982) *Collected Papers I: The problem of Social Reality*. Natason, M. (Ed). Martinus Nijhoff Publishers, The Hague, The Netherlands.
- Shotter, J. (2010) Adoption a Process Orientation...in Practice: Chiasmic Relations, Language, and Embodiment in a Living World. In: T. Hernes and S. Maitlis (Eds) *Process, Sensemaking, & Organizing*, New York: Oxford University Press. 70-101.
- Shotter, J. (2006) Understanding Process from within: An Argument for 'Witness'-Thinking. *Organization Studies*, Vol. 27, No. 4, 585-604.
- Snowden, D. (2003) Complex Acts of Knowing: Paradox and Descriptive Self-Awareness. *Bulletin of the American Society for Information Science and Technology*. April/May, 23-28.
- Sorokin, P. A. and Merton, R. K. (1937) Social Time: A Methodological and Functional Analysis. *American Journal of Sociology*. Vol. 42, No. 5, 615-629.
- Stake, R. E. (2006) *Multiple Case Study Analysis*. New York: The Guilford Press.
- Tsoukas, H. (2009) A Dialogical Approach to the Creation of New Knowledge in Organizations. *Organization Science*. Vol. 20, No. 6, 941-957.

- Tsoukas, H. (2009) Craving for Generality and Small-N Studies: A Wittgensteinian Approach towards the Epistemology of the Particular in Organization and Management Studies. In Buchanan, D. A. and Bryman, A. (Eds) *The SAGE Handbook of Organizational Research Methods*. Great Britain: Sage, 285-301.
- Tsoukas, H. (2003) Do We Really Understand Tacit Knowledge? In M. Easterby-Smith and M. Lyles (Eds.) *The Blackwell Handbook of Organizational Learning and Knowledge Management*. Oxford: Blackwell, 410-427.
- Tsoukas, H. and Chia, R. (2002) On Organizational Becoming: Rethinking Organizational Change. *Organization Science*. Vol.13, No.5, 567-582.
- Tyre, Marcie J. and Wanda J. Orlikowski (1994) Windows of opportunity: temporal patterns of technological adaptation in organizations. *Organization Science* 5(1):98-118.
- Van Oorschot, K. E., Akkermans, H., Sengupta, K. and Van Wassenhove, L. N. (2013) Anatomy of a Decision Trap in Complex New Product Development Projects. *Academy of Management Journal*. Vol. 56, No. 1, 285-307.
- Weick, K. E. (1995) *Sensemaking in Organizations*. SAGE, California.
- Weick, K. E., Sutcliffe, K. M. and Obstfeld, D. (2008) Organizing for High Reliability: Processes of Collective Mindfulness. In A. Boin (Ed) *Crisis Management Volume III*. London: SAGE, 31-66.
- Whitehead, A. N. (1929/1978) *Process and reality*. New York: The Free Press.
- Whitehead, A. N. (1925/1985) *Science and the Modern World*. London: Free Association Books.
- Wiebe, E. (2010) Temporal Sensemaking: Managers' Use of Time to Orchestrate organizational Change, in: T. Hernes and S. Maitlis (Eds) *Process, Sensemaking, & Organizing*, New York: Oxford University Press. 213-241.
- Woodside, A. G. (2010) *Case Study Research: Theory, Methods, Practice*. Bingley, UK: Emerald Group Publishing.
- Yakura, E. K. (2002) Charting Time: Timelines as Temporal Boundary Objects. *Academy of Management Journal*. Vol. 45, No. 5, 956-970.
- Yanow, D. and Tsoukas, H. (2009) What is Reflection-In-Action? A Phenomenological Account. *Journal of Management Studies*. Vol. 46, No.8, 1339-1364.
- Yin, R. K. (1994) *Case study research: design and methods*. Thousand Oaks: Sage.

Yin, R. K. (2009) *Case study research: design and methods*. Applied Social Research Methods Series. Volume 5. Thousand Oaks: Sage.

TITLER I PH.D.SERIEN:

– *a Field Study of the Rise and Fall of a Bottom-Up Process*

2004

1. Martin Grieger
Internet-based Electronic Marketplaces and Supply Chain Management
2. Thomas Basbøll
*LIKENESS
A Philosophical Investigation*
3. Morten Knudsen
*Beslutningens vaklen
En systemteoretisk analyse af moderniseringen af et amtskommunalt sundhedsvæsen 1980-2000*
4. Lars Bo Jeppesen
*Organizing Consumer Innovation
A product development strategy that is based on online communities and allows some firms to benefit from a distributed process of innovation by consumers*
5. Barbara Dragsted
*SEGMENTATION IN TRANSLATION AND TRANSLATION MEMORY SYSTEMS
An empirical investigation of cognitive segmentation and effects of integrating a TM system into the translation process*
6. Jeanet Hardis
*Sociale partnerskaber
Et socialkonstruktivistisk casestudie af partnerskabsaktørers virkelighedsopfattelse mellem identitet og legitimitet*
7. Henriette Hallberg Thygesen
System Dynamics in Action
8. Carsten Mejer Plath
Strategisk Økonomistyring
9. Annemette Kjærgaard
Knowledge Management as Internal Corporate Venturing
10. Knut Arne Hovdal
*De professionelle i endring
Norsk ph.d., ej til salg gennem Samfundslitteratur*
11. Søren Jeppesen
*Environmental Practices and Greening Strategies in Small Manufacturing Enterprises in South Africa
– A Critical Realist Approach*
12. Lars Frode Frederiksen
*Industriel forskningsledelse
– på sporet af mønstre og samarbejde i danske forskningsintensive virksomheder*
13. Martin Jes Iversen
*The Governance of GN Great Nordic
– in an age of strategic and structural transitions 1939-1988*
14. Lars Pynt Andersen
*The Rhetorical Strategies of Danish TV Advertising
A study of the first fifteen years with special emphasis on genre and irony*
15. Jakob Rasmussen
Business Perspectives on E-learning
16. Sof Thrane
*The Social and Economic Dynamics of Networks
– a Weberian Analysis of Three Formalised Horizontal Networks*
17. Lene Nielsen
Engaging Personas and Narrative Scenarios – a study on how a user-centered approach influenced the perception of the design process in the e-business group at AstraZeneca
18. S.J Valstad
*Organisationsidentitet
Norsk ph.d., ej til salg gennem Samfundslitteratur*

19. Thomas Lyse Hansen
Six Essays on Pricing and Weather risk in Energy Markets
 20. Sabine Madsen
Emerging Methods – An Interpretive Study of ISD Methods in Practice
 21. Evis Sinani
The Impact of Foreign Direct Investment on Efficiency, Productivity Growth and Trade: An Empirical Investigation
 22. Bent Meier Sørensen
Making Events Work Or, How to Multiply Your Crisis
 23. Pernille Schnoor
Brand Ethos
Om troværdige brand- og virksomhedsidentiteter i et retorisk og diskursteoretisk perspektiv
 24. Sidsel Fabech
Von welchem Österreich ist hier die Rede?
Diskursive forhandlinger og magtkampe mellem rivaliserende nationale identitetskonstruktioner i østrigske pressediskurser
 25. Klavs Odgaard Christensen
Sprogpolitik og identitetsdannelse i flersprogede forbundsstater
Et komparativt studie af Schweiz og Canada
 26. Dana B. Minbaeva
Human Resource Practices and Knowledge Transfer in Multinational Corporations
 27. Holger Højlund
Markedets politiske fornuft
Et studie af velfærdens organisering i perioden 1990-2003
 28. Christine Mølgaard Frandsen
A.s erfaring
Om mellemværendets praktik i en transformation af mennesket og subjektiviteten
 29. Sine Nørholm Just
The Constitution of Meaning – A Meaningful Constitution? Legitimacy, identity, and public opinion in the debate on the future of Europe
- 2005**
1. Claus J. Varnes
Managing product innovation through rules – The role of formal and structured methods in product development
 2. Helle Hedegaard Hein
Mellem konflikt og konsensus – Dialogudvikling på hospitalsklinikker
 3. Axel Rosenø
Customer Value Driven Product Innovation – A Study of Market Learning in New Product Development
 4. Søren Buhl Pedersen
Making space
An outline of place branding
 5. Camilla Funck Ellehave
Differences that Matter
An analysis of practices of gender and organizing in contemporary work-places
 6. Rigmor Madeleine Lond
Styring af kommunale forvaltninger
 7. Mette Aagaard Andreassen
Supply Chain versus Supply Chain Benchmarking as a Means to Managing Supply Chains
 8. Caroline Aggestam-Pontoppidan
From an idea to a standard
The UN and the global governance of accountants' competence
 9. Norsk ph.d.
 10. Vivienne Heng Ker-ni
An Experimental Field Study on the

- Effectiveness of Grocer Media Advertising*
Measuring Ad Recall and Recognition, Purchase Intentions and Short-Term Sales
11. Allan Mortensen
Essays on the Pricing of Corporate Bonds and Credit Derivatives
12. Remo Stefano Chiari
Figure che fanno conoscere
Itinerario sull'idea del valore cognitivo e espressivo della metafora e di altri tropi da Aristotele e da Vico fino al cognitivismo contemporaneo
13. Anders McIlquham-Schmidt
Strategic Planning and Corporate Performance
An integrative research review and a meta-analysis of the strategic planning and corporate performance literature from 1956 to 2003
14. Jens Geersbro
The TDF – PMI Case
Making Sense of the Dynamics of Business Relationships and Networks
15. Mette Andersen
Corporate Social Responsibility in Global Supply Chains
Understanding the uniqueness of firm behaviour
16. Eva Boxenbaum
Institutional Genesis: Micro – Dynamic Foundations of Institutional Change
17. Peter Lund-Thomsen
Capacity Development, Environmental Justice NGOs, and Governance: The Case of South Africa
18. Signe Jarlov
Konstruktioner af offentlig ledelse
19. Lars Stæhr Jensen
Vocabulary Knowledge and Listening Comprehension in English as a Foreign Language
- An empirical study employing data elicited from Danish EFL learners*
20. Christian Nielsen
Essays on Business Reporting
Production and consumption of strategic information in the market for information
21. Marianne Thejls Fischer
Egos and Ethics of Management Consultants
22. Annie Bekke Kjær
Performance management i Process-innovation
– belyst i et social-konstruktivistisk perspektiv
23. Suzanne Dee Pedersen
GENTAGELSENS METAMORFOSE
Om organisering af den kreative gørem i den kunstneriske arbejdspraksis
24. Benedikte Dorte Rosenbrink
Revenue Management
Økonomiske, konkurrencemæssige & organisatoriske konsekvenser
25. Thomas Riise Johansen
Written Accounts and Verbal Accounts
The Danish Case of Accounting and Accountability to Employees
26. Ann Fogelgren-Pedersen
The Mobile Internet: Pioneering Users' Adoption Decisions
27. Birgitte Rasmussen
Ledelse i fællesskab – de tillidsvalgte fornyende rolle
28. Gitte Thit Nielsen
Remerger
– skabende ledelseskrafter i fusion og opkøb
29. Carmine Gioia
A MICROECONOMETRIC ANALYSIS OF MERGERS AND ACQUISITIONS

30. Ole Hinz
Den effektive forandringsleder: pilot, pædagog eller politiker?
Et studie i arbejdslederens meningstilskrivninger i forbindelse med vellykket gennemførelse af ledelsesinitierede forandringsprojekter
31. Kjell-Åge Gotvassli
Et praksisbasert perspektiv på dynamiske læringsnettverk i toppidretten
Norsk ph.d., ej til salg gennem Samfundslitteratur
32. Henriette Langstrup Nielsen
Linking Healthcare
An inquiry into the changing performances of web-based technology for asthma monitoring
33. Karin Tweddell Levinsen
Virtuel Uddannelsespraksis
Master i IKT og Læring – et casestudie i hvordan proaktiv proceshåndtering kan forbedre praksis i virtuelle læringsmiljøer
34. Anika Liversage
Finding a Path
Labour Market Life Stories of Immigrant Professionals
35. Kasper Elmquist Jørgensen
Studier i samspillet mellem stat og erhvervsliv i Danmark under 1. verdenskrig
36. Finn Janning
A DIFFERENT STORY
Seduction, Conquest and Discovery
37. Patricia Ann Plackett
Strategic Management of the Radical Innovation Process
Leveraging Social Capital for Market Uncertainty Management
2. Niels Rom-Poulsen
Essays in Computational Finance
3. Tina Brandt Husman
Organisational Capabilities, Competitive Advantage & Project-Based Organisations
The Case of Advertising and Creative Good Production
4. Mette Rosenkrands Johansen
Practice at the top
– how top managers mobilise and use non-financial performance measures
5. Eva Parum
Corporate governance som strategisk kommunikations- og ledelsesværktøj
6. Susan Aagaard Petersen
Culture's Influence on Performance Management: The Case of a Danish Company in China
7. Thomas Nicolai Pedersen
The Discursive Constitution of Organizational Governance – Between unity and differentiation
The Case of the governance of environmental risks by World Bank environmental staff
8. Cynthia Selin
Volatile Visions: Transactons in Anticipatory Knowledge
9. Jesper Banghøj
Financial Accounting Information and Compensation in Danish Companies
10. Mikkel Lucas Overby
Strategic Alliances in Emerging High-Tech Markets: What's the Difference and does it Matter?
11. Tine Aage
External Information Acquisition of Industrial Districts and the Impact of Different Knowledge Creation Dimensions

2006

1. Christian Vintergaard
Early Phases of Corporate Venturing

- A case study of the Fashion and Design Branch of the Industrial District of Montebelluna, NE Italy*
12. Mikkel Flyverbom
Making the Global Information Society Governable
On the Governmentality of Multi-Stakeholder Networks
 13. Anette Grønning
Personen bag
Tilstedevær i e-mail som interaktionsform mellem kunde og medarbejder i dansk forsikringskontekst
 14. Jørn Helder
One Company – One Language?
The NN-case
 15. Lars Bjerregaard Mikkelsen
Differing perceptions of customer value
Development and application of a tool for mapping perceptions of customer value at both ends of customer-supplier dyads in industrial markets
 16. Lise Granerud
Exploring Learning
Technological learning within small manufacturers in South Africa
 17. Esben Rahbek Pedersen
Between Hopes and Realities: Reflections on the Promises and Practices of Corporate Social Responsibility (CSR)
 18. Ramona Samson
The Cultural Integration Model and European Transformation.
The Case of Romania
- 2007**
1. Jakob Vestergaard
Discipline in The Global Economy
Panopticism and the Post-Washington Consensus
 2. Heidi Lund Hansen
Spaces for learning and working
A qualitative study of change of work, management, vehicles of power and social practices in open offices
 3. Sudhanshu Rai
Exploring the internal dynamics of software development teams during user analysis
A tension enabled Institutionalization Model; "Where process becomes the objective"
 4. Norsk ph.d.
Ej til salg gennem Samfundslitteratur
 5. Serden Ozcan
EXPLORING HETEROGENEITY IN ORGANIZATIONAL ACTIONS AND OUTCOMES
A Behavioural Perspective
 6. Kim Sundtoft Hald
Inter-organizational Performance Measurement and Management in Action
– An Ethnography on the Construction of Management, Identity and Relationships
 7. Tobias Lindeberg
Evaluative Technologies
Quality and the Multiplicity of Performance
 8. Merete Wedell-Wedellsborg
Den globale soldat
Identitetsdannelse og identitetsledelse i multinationale militære organisationer
 9. Lars Frederiksen
Open Innovation Business Models
Innovation in firm-hosted online user communities and inter-firm project ventures in the music industry
– A collection of essays
 10. Jonas Gabrielsen
Retorisk toposlære – fra statisk 'sted' til persuasiv aktivitet

11. Christian Moldt-Jørgensen
Fra meningsløs til meningsfuld evaluering.
Anvendelsen af studentertilfredsheds-målinger på de korte og mellemlange videregående uddannelser set fra et psykodynamisk systemperspektiv
12. Ping Gao
Extending the application of actor-network theory
Cases of innovation in the telecommunications industry
13. Peter Mejlby
Frihed og fængsel, en del af den samme drøm?
Et phronetisk baseret casestudie af frigørelsens og kontrollens sam-eksistens i værdibaseret ledelse!
14. Kristina Birch
Statistical Modelling in Marketing
15. Signe Poulsen
Sense and sensibility:
The language of emotional appeals in insurance marketing
16. Anders Bjerre Trolle
Essays on derivatives pricing and dynamic asset allocation
17. Peter Feldhütter
Empirical Studies of Bond and Credit Markets
18. Jens Henrik Eggert Christensen
Default and Recovery Risk Modeling and Estimation
19. Maria Theresa Larsen
Academic Enterprise: A New Mission for Universities or a Contradiction in Terms?
Four papers on the long-term implications of increasing industry involvement and commercialization in academia
20. Morten Wellendorf
Postimplementering af teknologi i den offentlige forvaltning
Analyser af en organisations kontinuerlige arbejde med informations-teknologi
21. Ekaterina Mhaanna
Concept Relations for Terminological Process Analysis
22. Stefan Ring Thorbjørnsen
Forsvaret i forandring
Et studie i officerers kapabiliteter under påvirkning af omverdenens forandringspres mod øget styring og læring
23. Christa Breum Amhøj
Det selvskabte medlemskab om managementsstaten, dens styringsteknologier og indbyggere
24. Karoline Bromose
Between Technological Turbulence and Operational Stability
– An empirical case study of corporate venturing in TDC
25. Susanne Justesen
Navigating the Paradoxes of Diversity in Innovation Practice
– A Longitudinal study of six very different innovation processes – in practice
26. Luise Noring Henler
Conceptualising successful supply chain partnerships
– Viewing supply chain partnerships from an organisational culture perspective
27. Mark Mau
Kampen om telefonen
Det danske telefonvæsen under den tyske besættelse 1940-45
28. Jakob Halskov
The semiautomatic expansion of existing terminological ontologies using knowledge patterns discovered

- on the WWW – an implementation and evaluation*
29. Gergana Koleva
European Policy Instruments Beyond Networks and Structure: The Innovative Medicines Initiative
 30. Christian Geisler Asmussen
Global Strategy and International Diversity: A Double-Edged Sword?
 31. Christina Holm-Petersen
*Stolthed og fordom
Kultur- og identitetsarbejde ved skabelsen af en ny sengeafdeling gennem fusion*
 32. Hans Peter Olsen
*Hybrid Governance of Standardized States
Causes and Contours of the Global Regulation of Government Auditing*
 33. Lars Bøge Sørensen
Risk Management in the Supply Chain
 34. Peter Aagaard
*Det unikkes dynamikker
De institutionelle mulighedsbetingelser bag den individuelle udforskning i professionelt og frivilligt arbejde*
 35. Yun Mi Antorini
*Brand Community Innovation
An Intrinsic Case Study of the Adult Fans of LEGO Community*
 36. Joachim Lynggaard Boll
*Labor Related Corporate Social Performance in Denmark
Organizational and Institutional Perspectives*
 3. Marius Brostrøm Kousgaard
*Tid til kvalitetsmåling?
– Studier af indrulleringsprocesser i forbindelse med introduktionen af kliniske kvalitetsdatabaser i speciallægepraksissektoren*
 4. Irene Skovgaard Smith
*Management Consulting in Action
Value creation and ambiguity in client-consultant relations*
 5. Anders Rom
*Management accounting and integrated information systems
How to exploit the potential for management accounting of information technology*
 6. Marina Candi
Aesthetic Design as an Element of Service Innovation in New Technology-based Firms
 7. Morten Schnack
*Teknologi og tværfaglighed
– en analyse af diskussionen omkring indførelse af EPJ på en hospitalsafdeling*
 8. Helene Balslev Clausen
Juntos pero no revueltos – un estudio sobre emigrantes norteamericanos en un pueblo mexicano
 9. Lise Justesen
*Kunsten at skrive revisionsrapporter.
En beretning om forvaltningsrevisionsens beretninger*
 10. Michael E. Hansen
The politics of corporate responsibility: CSR and the governance of child labor and core labor rights in the 1990s

2008

1. Frederik Christian Vinten
Essays on Private Equity
2. Jesper Clement
Visual Influence of Packaging Design on In-Store Buying Decisions
11. Anne Roepstorff
Holdning for handling – en etnologisk undersøgelse af Virksomheders Sociale Ansvar/CSR

12. Claus Bajlum
Essays on Credit Risk and Credit Derivatives
 13. Anders Bojesen
The Performative Power of Competence – An Inquiry into Subjectivity and Social Technologies at Work
 14. Satu Reijonen
*Green and Fragile
A Study on Markets and the Natural Environment*
 15. Ilduara Busta
*Corporate Governance in Banking
A European Study*
 16. Kristian Anders Hvass
*A Boolean Analysis Predicting Industry Change: Innovation, Imitation & Business Models
The Winning Hybrid: A case study of isomorphism in the airline industry*
 17. Trine Paludan
*De uvidende og de udviklingsparate
Identitet som mulighed og restriktion
blandt fabriksarbejdere på det aftayloriserede fabriksgulv*
 18. Kristian Jakobsen
Foreign market entry in transition economies: Entry timing and mode choice
 19. Jakob Elming
Syntactic reordering in statistical machine translation
 20. Lars Brømsøe Termansen
*Regional Computable General Equilibrium Models for Denmark
Three papers laying the foundation for regional CGE models with agglomeration characteristics*
 21. Mia Reinholdt
The Motivational Foundations of Knowledge Sharing
 22. Frederikke Krogh-Meibom
*The Co-Evolution of Institutions and Technology
– A Neo-Institutional Understanding of Change Processes within the Business Press – the Case Study of Financial Times*
 23. Peter D. Ørberg Jensen
OFFSHORING OF ADVANCED AND HIGH-VALUE TECHNICAL SERVICES: ANTECEDENTS, PROCESS DYNAMICS AND FIRMLEVEL IMPACTS
 24. Pham Thi Song Hanh
Functional Upgrading, Relational Capability and Export Performance of Vietnamese Wood Furniture Producers
 25. Mads Vangkilde
*Why wait?
An Exploration of first-mover advantages among Danish e-grocers through a resource perspective*
 26. Hubert Buch-Hansen
*Rethinking the History of European Level Merger Control
A Critical Political Economy Perspective*
- 2009**
1. Vivian Lindhardsen
From Independent Ratings to Communal Ratings: A Study of CWA Raters' Decision-Making Behaviours
 2. Guðrið Weihe
Public-Private Partnerships: Meaning and Practice
 3. Chris Nøkkentved
*Enabling Supply Networks with Collaborative Information Infrastructures
An Empirical Investigation of Business Model Innovation in Supplier Relationship Management*
 4. Sara Louise Muhr
Wound, Interrupted – On the Vulnerability of Diversity Management

5. Christine Sestoft
*Forbrugeradfærd i et Stats- og Livs-
formsteoretisk perspektiv*
6. Michael Pedersen
*Tune in, Breakdown, and Reboot: On
the production of the stress-fit self-
managing employee*
7. Salla Lutz
*Position and Reposition in Networks
– Exemplified by the Transformation of
the Danish Pine Furniture Manu-
facturers*
8. Jens Forssbæck
*Essays on market discipline in
commercial and central banking*
9. Tine Murphy
*Sense from Silence – A Basis for Orga-
nised Action
How do Sensemaking Processes with
Minimal Sharing Relate to the Repro-
duction of Organised Action?*
10. Sara Malou Strandvad
*Inspirations for a new sociology of art:
A sociomaterial study of development
processes in the Danish film industry*
11. Nicolaas Mouton
*On the evolution of social scientific
metaphors:
A cognitive-historical enquiry into the
divergent trajectories of the idea that
collective entities – states and societies,
cities and corporations – are biological
organisms.*
12. Lars Andreas Knutsen
*Mobile Data Services:
Shaping of user engagements*
13. Nikolaos Theodoros Korfiatis
*Information Exchange and Behavior
A Multi-method Inquiry on Online
Communities*
14. Jens Albæk
*Forestillinger om kvalitet og tværfaglig-
hed på sygehuse
– skabelse af forestillinger i læge- og
plejegrupperne angående relevans af
nye idéer om kvalitetsudvikling gen-
nem tolkningsprocesser*
15. Maja Lotz
*The Business of Co-Creation – and the
Co-Creation of Business*
16. Gitte P. Jakobsen
*Narrative Construction of Leader Iden-
tity in a Leader Development Program
Context*
17. Dorte Hermansen
*“Living the brand” som en brandorien-
teret dialogisk praksis:
Om udvikling af medarbejdernes
brandorienterede dømmekraft*
18. Aseem Kinra
*Supply Chain (logistics) Environmental
Complexity*
19. Michael Nørager
*How to manage SMEs through the
transformation from non innovative to
innovative?*
20. Kristin Wallevik
*Corporate Governance in Family Firms
The Norwegian Maritime Sector*
21. Bo Hansen Hansen
*Beyond the Process
Enriching Software Process Improve-
ment with Knowledge Management*
22. Annemette Skot-Hansen
*Franske adjektivisk afledte adverbier,
der tager præpositionssyntagmer ind-
ledt med præpositionen à som argu-
menter
En valensgrammatisk undersøgelse*
23. Line Gry Knudsen
*Collaborative R&D Capabilities
In Search of Micro-Foundations*

- | | | | |
|-----|--|----|--|
| 24. | Christian Scheuer
<i>Employers meet employees
Essays on sorting and globalization</i> | | <i>End User Participation between Processes of Organizational and Architectural Design</i> |
| 25. | Rasmus Johnsen
<i>The Great Health of Melancholy
A Study of the Pathologies of Performativity</i> | 7. | Rex Degnegaard
<i>Strategic Change Management
Change Management Challenges in the Danish Police Reform</i> |
| 26. | Ha Thi Van Pham
<i>Internationalization, Competitiveness Enhancement and Export Performance of Emerging Market Firms: Evidence from Vietnam</i> | 8. | Ulrik Schultz Brix
<i>Værdi i rekruttering – den sikre beslutning
En pragmatisk analyse af perception og synliggørelse af værdi i rekrutterings- og udvælgelsesarbejdet</i> |
| 27. | Henriette Balieu
<i>Kontrolbegrebets betydning for kausalalternationen i spansk
En kognitiv-typologisk analyse</i> | 9. | Jan Ole Similå
<i>Kontraktsledelse
Relasjonen mellom virksomhetsledelse og kontraktshåndtering, belyst via fire norske virksomheter</i> |
- 2010**
- | | | | |
|----|---|-----|--|
| 1. | Yen Tran
<i>Organizing Innovation in Turbulent Fashion Market
Four papers on how fashion firms create and appropriate innovation value</i> | 10. | Susanne Boch Waldorff
<i>Emerging Organizations: In between local translation, institutional logics and discourse</i> |
| 2. | Anders Raastrup Kristensen
<i>Metaphysical Labour
Flexibility, Performance and Commitment in Work-Life Management</i> | 11. | Brian Kane
<i>Performance Talk
Next Generation Management of Organizational Performance</i> |
| 3. | Margrét Sigrún Sigurdardóttir
<i>Dependently independent
Co-existence of institutional logics in the recorded music industry</i> | 12. | Lars Ohnemus
<i>Brand Thrust: Strategic Branding and Shareholder Value
An Empirical Reconciliation of two Critical Concepts</i> |
| 4. | Ásta Dis Óladóttir
<i>Internationalization from a small domestic base:
An empirical analysis of Economics and Management</i> | 13. | Jesper Schlamovitz
<i>Håndtering af usikkerhed i film- og byggeprojekter</i> |
| 5. | Christine Secher
<i>E-deltagelse i praksis – politikernes og forvaltningens medkonstruktion og konsekvenserne heraf</i> | 14. | Tommy Moesby-Jensen
<i>Det faktiske livs forbindelse
Følsomt informeret, ny-aristotelisk
ἦθος-tænkning hos Martin Heidegger</i> |
| 6. | Marianne Stang Våland
<i>What we talk about when we talk about space:</i> | 15. | Christian Fich
<i>Two Nations Divided by Common Values
French National Habitus and the Rejection of American Power</i> |

16. Peter Beyer
Processer, sammenhængskraft og fleksibilitet
Et empirisk casestudie af omstillingsforløb i fire virksomheder
17. Adam Buchhorn
Markets of Good Intentions
Constructing and Organizing Biogas Markets Amid Fragility and Controversy
18. Cecilie K. Moesby-Jensen
Social læring og fælles praksis
Et mixed method studie, der belyser læringskonsekvenser af et lederkursus for et praksisfællesskab af offentlige mellemledere
19. Heidi Boye
Fødevarer og sundhed i sen-modernismen
– En indsigt i hyggefænomenet og de relaterede fødevarerpraksisser
20. Kristine Munkgård Pedersen
Flygtige forbindelser og midlertidige mobiliseringer
Om kulturel produktion på Roskilde Festival
21. Oliver Jacob Weber
Causes of Intercompany Harmony in Business Markets – An Empirical Investigation from a Dyad Perspective
22. Susanne Ekman
Authority and Autonomy
Paradoxes of Modern Knowledge Work
23. Anette Frey Larsen
Kvalitetsledelse på danske hospitaler
– Ledelsernes indflydelse på introduktion og vedligeholdelse af kvalitetsstrategier i det danske sundhedsvæsen
24. Toyoko Sato
Performativity and Discourse: Japanese Advertisements on the Aesthetic Education of Desire
25. Kenneth Brinch Jensen
Identifying the Last Planner System
Lean management in the construction industry
26. Javier Busquets
Orchestrating Network Behavior for Innovation
27. Luke Patey
The Power of Resistance: India's National Oil Company and International Activism in Sudan
28. Mette Vedel
Value Creation in Triadic Business Relationships. Interaction, Interconnection and Position
29. Kristian Tørning
Knowledge Management Systems in Practice – A Work Place Study
30. Qingxin Shi
An Empirical Study of Thinking Aloud
Usability Testing from a Cultural Perspective
31. Tanja Juul Christiansen
Corporate blogging: Medarbejderes kommunikative handlekraft
32. Malgorzata Ciesielska
Hybrid Organisations.
A study of the Open Source – business setting
33. Jens Dick-Nielsen
Three Essays on Corporate Bond Market Liquidity
34. Sabrina Speiermann
Modstandens Politik
Kampagnestyling i Velfærdsstaten.
En diskussion af trafikcampagners styringspotentiale
35. Julie Uldam
Fickle Commitment. Fostering political engagement in 'the flighty world of online activism'

36. Annegrete Juul Nielsen
Traveling technologies and transformations in health care
37. Athur Mühlen-Schulte
Organising Development Power and Organisational Reform in the United Nations Development Programme
38. Louise Rygaard Jonas
Branding på butiksgulvet Et case-studie af kultur- og identitets-arbejdet i Kvickly
8. Ole Helby Petersen
Public-Private Partnerships: Policy and Regulation – With Comparative and Multi-level Case Studies from Denmark and Ireland
9. Morten Krogh Petersen
'Good' Outcomes. Handling Multiplicity in Government Communication
10. Kristian Tangsgaard Hvelplund
Allocation of cognitive resources in translation - an eye-tracking and key-logging study

2011

1. Stefan Fraenkel
Key Success Factors for Sales Force Readiness during New Product Launch A Study of Product Launches in the Swedish Pharmaceutical Industry
2. Christian Plesner Rossing
International Transfer Pricing in Theory and Practice
3. Tobias Dam Hede
Samtalekunst og ledelsesdisciplin – en analyse af coachingsdiskursens genealogi og governmentality
4. Kim Pettersson
Essays on Audit Quality, Auditor Choice, and Equity Valuation
5. Henrik Merkelsen
The expert-lay controversy in risk research and management. Effects of institutional distances. Studies of risk definitions, perceptions, management and communication
6. Simon S. Torp
Employee Stock Ownership: Effect on Strategic Management and Performance
7. Mie Harder
Internal Antecedents of Management Innovation
11. Moshe Yonatany
The Internationalization Process of Digital Service Providers
12. Anne Vestergaard
Distance and Suffering Humanitarian Discourse in the age of Mediatization
13. Thorsten Mikkelsen
Personlighedens indflydelse på forretningsrelationer
14. Jane Thostrup Jagd
Hvorfor fortsætter fusionsbølgen ud-over "the tipping point"? – en empirisk analyse af information og kognitioner om fusioner
15. Gregory Gimpel
Value-driven Adoption and Consumption of Technology: Understanding Technology Decision Making
16. Thomas Stengade Sønderskov
Den nye mulighed Social innovation i en forretningsmæssig kontekst
17. Jeppe Christoffersen
Donor supported strategic alliances in developing countries
18. Vibeke Vad Baunsgaard
Dominant Ideological Modes of Rationality: Cross functional

- integration in the process of product innovation*
19. Throstur Olaf Sigurjonsson
Governance Failure and Iceland's Financial Collapse
 20. Allan Sall Tang Andersen
Essays on the modeling of risks in interest-rate and inflation markets
 21. Heidi Tscherning
Mobile Devices in Social Contexts
 22. Birgitte Gorm Hansen
*Adapting in the Knowledge Economy
Lateral Strategies for Scientists and Those Who Study Them*
 23. Kristina Vaarst Andersen
*Optimal Levels of Embeddedness
The Contingent Value of Networked Collaboration*
 24. Justine Grønbæk Pors
*Noisy Management
A History of Danish School Governing from 1970-2010*
 25. Stefan Linder
*Micro-foundations of Strategic Entrepreneurship
Essays on Autonomous Strategic Action*
 26. Xin Li
*Toward an Integrative Framework of National Competitiveness
An application to China*
 27. Rune Thorbjørn Clausen
*Værdifuld arkitektur
Et eksplorativt studie af bygningers rolle i virksomheders værdiskabelse*
 28. Monica Viken
Markedsundersøkelser som bevis i varemerke- og markedsføringsrett
 29. Christian Wymann
*Tattooing
The Economic and Artistic Constitution of a Social Phenomenon*
 30. Sanne Frandsen
*Productive Incoherence
A Case Study of Branding and Identity Struggles in a Low-Prestige Organization*
 31. Mads Stenbo Nielsen
Essays on Correlation Modelling
 32. Ivan Häuser
*Følelse og sprog
Etablering af en ekspressiv kategori, eksemplificeret på russisk*
 33. Sebastian Schwenen
Security of Supply in Electricity Markets
- 2012**
1. Peter Holm Andreasen
*The Dynamics of Procurement Management
- A Complexity Approach*
 2. Martin Haulrich
Data-Driven Bitext Dependency Parsing and Alignment
 3. Line Kirkegaard
*Konsulent i den anden nat
En undersøgelse af det intense arbejdsliv*
 4. Tonny Stenheim
Decision usefulness of goodwill under IFRS
 5. Morten Lind Larsen
*Produktivitet, vækst og velfærd
Industrirådet og efterkrigstidens Danmark 1945 - 1958*
 6. Petter Berg
Cartel Damages and Cost Asymmetries
 7. Lynn Kahle
*Experiential Discourse in Marketing
A methodical inquiry into practice and theory*
 8. Anne Roelsgaard Obling
*Management of Emotions
in Accelerated Medical Relationships*

9. Thomas Frandsen
Managing Modularity of Service Processes Architecture
10. Carina Christine Skovmøller
*CSR som noget særligt
Et casestudie om styring og menings-
skabelse i relation til CSR ud fra en
intern optik*
11. Michael Tell
*Fradragsbeskæring af selskabers
finansieringsudgifter
En skatteretlig analyse af SEL §§ 11,
11B og 11C*
12. Morten Holm
*Customer Profitability Measurement
Models
Their Merits and Sophistication
across Contexts*
13. Katja Joo Dyppel
*Beskatning af derivater
En analyse af dansk skatteret*
14. Esben Anton Schultz
*Essays in Labor Economics
Evidence from Danish Micro Data*
15. Carina Risvig Hansen
*"Contracts not covered, or not fully
covered, by the Public Sector Directive"*
16. Anja Svejgaard Pors
*Iværksættelse af kommunikation
- patientfigurer i hospitalets strategiske
kommunikation*
17. Frans Bévert
*Making sense of management with
logics
An ethnographic study of accountants
who become managers*
18. René Kallestrup
*The Dynamics of Bank and Sovereign
Credit Risk*
19. Brett Crawford
*Revisiting the Phenomenon of Interests
in Organizational Institutionalism
The Case of U.S. Chambers of
Commerce*
20. Mario Daniele Amore
Essays on Empirical Corporate Finance
21. Arne Stjernholm Madsen
*The evolution of innovation strategy
Studied in the context of medical
device activities at the pharmaceutical
company Novo Nordisk A/S in the
period 1980-2008*
22. Jacob Holm Hansen
*Is Social Integration Necessary for
Corporate Branding?
A study of corporate branding
strategies at Novo Nordisk*
23. Stuart Webber
*Corporate Profit Shifting and the
Multinational Enterprise*
24. Helene Ratner
*Promises of Reflexivity
Managing and Researching
Inclusive Schools*
25. Therese Strand
*The Owners and the Power: Insights
from Annual General Meetings*
26. Robert Gavin Strand
*In Praise of Corporate Social
Responsibility Bureaucracy*
27. Nina Sormunen
*Auditor's going-concern reporting
Reporting decision and content of the
report*
28. John Bang Mathiasen
*Learning within a product development
working practice:
- an understanding anchored
in pragmatism*
29. Philip Holst Riis
*Understanding Role-Oriented Enterprise
Systems: From Vendors to Customers*
30. Marie Lisa Dacanay
*Social Enterprises and the Poor
Enhancing Social Entrepreneurship and
Stakeholder Theory*

31. Fumiko Kano Glückstad
Bridging Remote Cultures: Cross-lingual concept mapping based on the information receiver's prior-knowledge
 32. Henrik Barslund Fosse
Empirical Essays in International Trade
 33. Peter Alexander Albrecht
*Foundational hybridity and its reproduction
Security sector reform in Sierra Leone*
 34. Maja Rosenstock
*CSR - hvor svært kan det være?
Kulturanalytisk casestudie om udfordringer og dilemmaer med at forankre Coops CSR-strategi*
 35. Jeanette Rasmussen
*Tweens, medier og forbrug
Et studie af 10-12 årige danske børns brug af internettet, opfattelse og forståelse af markedsføring og forbrug*
 36. Ib Tunby Gulbrandsen
*'This page is not intended for a US Audience'
A five-act spectacle on online communication, collaboration & organization.*
 37. Kasper Aalling Teilmann
Interactive Approaches to Rural Development
 38. Mette Mogensen
*The Organization(s) of Well-being and Productivity
(Re)assembling work in the Danish Post*
 39. Søren Friis Møller
*From Disinterestedness to Engagement
Towards Relational Leadership In the Cultural Sector*
 40. Nico Peter Berhausen
Management Control, Innovation and Strategic Objectives – Interactions and Convergence in Product Development Networks
 41. Balder Onarheim
*Creativity under Constraints
Creativity as Balancing 'Constrainedness'*
 42. Haoyong Zhou
Essays on Family Firms
 43. Elisabeth Naima Mikkelsen
*Making sense of organisational conflict
An empirical study of enacted sense-making in everyday conflict at work*
- 2013**
1. Jacob Lyngsie
Entrepreneurship in an Organizational Context
 2. Signe Groth-Brodersen
*Fra ledelse til selvet
En socialpsykologisk analyse af forholdet imellem selvedelse, ledelse og stress i det moderne arbejdsliv*
 3. Nis Høyrup Christensen
Shaping Markets: A Neoinstitutional Analysis of the Emerging Organizational Field of Renewable Energy in China
 4. Christian Edelvold Berg
*As a matter of size
THE IMPORTANCE OF CRITICAL MASS AND THE CONSEQUENCES OF SCARCITY FOR TELEVISION MARKETS*
 5. Christine D. Isakson
*Coworker Influence and Labor Mobility
Essays on Turnover, Entrepreneurship and Location Choice in the Danish Maritime Industry*
 6. Niels Joseph Jerne Lennon
*Accounting Qualities in Practice
Rhizomatic stories of representational faithfulness, decision making and control*
 7. Shannon O'Donnell
*Making Ensemble Possible
How special groups organize for collaborative creativity in conditions of spatial variability and distance*

8. Robert W. D. Veitch
Access Decisions in a Partly-Digital World
Comparing Digital Piracy and Legal Modes for Film and Music
9. Marie Mathiesen
Making Strategy Work
An Organizational Ethnography
10. Arisa Shollo
The role of business intelligence in organizational decision-making
11. Mia Kaspersen
The construction of social and environmental reporting
12. Marcus Møller Larsen
The organizational design of offshoring
13. Mette Ohm Rørdam
EU Law on Food Naming
The prohibition against misleading names in an internal market context
14. Hans Peter Rasmussen
GIV EN GED!
Kan giver-idealiteter forklare støtte til velgørenhed og understøtte relationsopbygning?
15. Ruben Schachtenhaufen
Fonetisk reduktion i dansk
16. Peter Koerver Schmidt
Dansk CFC-beskatning
I et internationalt og komparativt perspektiv
17. Morten Froholdt
Strategi i den offentlige sektor
En kortlægning af styringsmæssig kontekst, strategisk tilgang, samt anvendte redskaber og teknologier for udvalgte danske statslige styrelser
18. Annette Camilla Sjørup
Cognitive effort in metaphor translation
An eye-tracking and key-logging study
19. Tamara Stucchi
The Internationalization of Emerging Market Firms: A Context-Specific Study
20. Thomas Lopdrup-Hjorth
"Let's Go Outside": The Value of Co-Creation
21. Ana Alačovska
Genre and Autonomy in Cultural Production
The case of travel guidebook production
22. Marius Gudmand-Høyer
Stemningssindssygdommenes historie i det 19. århundrede
Omtydningen af melankolien og manien som bipolære stemningslidelser i dansk sammenhæng under hensyn til dannelsen af det moderne følelseslivs relative autonomi.
En problematiserings- og erfarings-analytisk undersøgelse
23. Lichen Alex Yu
Fabricating an S&OP Process
Circulating References and Matters of Concern
24. Esben Alfort
The Expression of a Need
Understanding search
25. Trine Pallesen
Assembling Markets for Wind Power
An Inquiry into the Making of Market Devices
26. Anders Koed Madsen
Web-Visions
Repurposing digital traces to organize social attention
27. Lærke Højgaard Christiansen
BREWING ORGANIZATIONAL RESPONSES TO INSTITUTIONAL LOGICS
28. Tommy Kjær Lassen
EGENTLIG SELVLEDELSE
En ledelsesfilosofisk afhandling om selvledelsens paradoksale dynamik og eksistentielle engagement

29. Morten Rossing
Local Adaption and Meaning Creation in Performance Appraisal
 30. Søren Obed Madsen
*Lederen som oversætter
Et oversættelsesteoretisk perspektiv på strategisk arbejde*
 31. Thomas Høgenhaven
*Open Government Communities
Does Design Affect Participation?*
 32. Kirstine Zinck Pedersen
*Failsafe Organizing?
A Pragmatic Stance on Patient Safety*
 33. Anne Petersen
*Hverdagslogikker i psykiatrisk arbejde
En institutionsetnografisk undersøgelse af hverdagen i psykiatriske organisationer*
 34. Didde Maria Humle
Fortællinger om arbejde
 35. Mark Holst-Mikkelsen
*Strategieksekvering i praksis
– barrierer og muligheder!*
 36. Malek Maalouf
*Sustaining lean
Strategies for dealing with organizational paradoxes*
 37. Nicolaj Tofte Brenneche
*Systemic Innovation In The Making
The Social Productivity of Cartographic Crisis and Transitions in the Case of SEEIT*
 38. Morten Gylling
*The Structure of Discourse
A Corpus-Based Cross-Linguistic Study*
 39. Binzhang YANG
*Urban Green Spaces for Quality Life
- Case Study: the landscape architecture for people in Copenhagen*
 40. Michael Friis Pedersen
*Finance and Organization:
The Implications for Whole Farm Risk Management*
 41. Even Fallan
Issues on supply and demand for environmental accounting information
 42. Ather Nawaz
*Website user experience
A cross-cultural study of the relation between users' cognitive style, context of use, and information architecture of local websites*
 43. Karin Beukel
The Determinants for Creating Valuable Inventions
 44. Arjan Markus
*External Knowledge Sourcing and Firm Innovation
Essays on the Micro-Foundations of Firms' Search for Innovation*
- 2014**
1. Solon Moreira
Four Essays on Technology Licensing and Firm Innovation
 2. Karin Strzeletz Ivertsen
*Partnership Drift in Innovation Processes
A study of the Think City electric car development*
 3. Kathrine Hoffmann Pii
Responsibility Flows in Patient-centred Prevention
 4. Jane Bjørn Vedel
*Managing Strategic Research
An empirical analysis of science-industry collaboration in a pharmaceutical company*
 5. Martin Gylling
*Processuel strategi i organisationer
Monografi om dobbeltheden i tænkning af strategi, dels som vidensfelt i organisationsteori, dels som kunstnerisk tilgang til at skabe i erhvervsmæssig innovation*

6. Linne Marie Lauesen
*Corporate Social Responsibility in the Water Sector:
How Material Practices and their Symbolic and Physical Meanings Form a Colonising Logic*
7. Maggie Qiuzhu Mei
*LEARNING TO INNOVATE:
The role of ambidexterity, standard, and decision process*
8. Inger Hædt-Rasmussen
*Developing Identity for Lawyers
Towards Sustainable Lawyering*
9. Sebastian Fux
Essays on Return Predictability and Term Structure Modelling
10. Thorbjørn N. M. Lund-Poulsen
Essays on Value Based Management
11. Oana Brindusa Albu
*Transparency in Organizing:
A Performative Approach*
12. Lena Olaison
Entrepreneurship at the limits
13. Hanne Sørum
*DRESSED FOR WEB SUCCESS?
An Empirical Study of Website Quality in the Public Sector*
14. Lasse Folke Henriksen
*Knowing networks
How experts shape transnational governance*
15. Maria Halbinger
*Entrepreneurial Individuals
Empirical Investigations into Entrepreneurial Activities of Hackers and Makers*
16. Robert Spliid
Kapitalfondenes metoder og kompetencer
17. Christiane Stelling
*Public-private partnerships & the need, development and management of trusting
A processual and embedded exploration*
18. Marta Gasparin
Management of design as a translation process
19. Kåre Moberg
*Assessing the Impact of Entrepreneurship Education
From ABC to PhD*
20. Alexander Cole
*Distant neighbors
Collective learning beyond the cluster*
21. Martin Møller Boje Rasmussen
*Is Competitiveness a Question of Being Alike?
How the United Kingdom, Germany and Denmark Came to Compete through their Knowledge Regimes from 1993 to 2007*
22. Anders Ravn Sørensen
*Studies in central bank legitimacy, currency and national identity
Four cases from Danish monetary history*
23. Nina Bellak
*Can Language be Managed in International Business?
Insights into Language Choice from a Case Study of Danish and Austrian Multinational Corporations (MNCs)*
24. Rikke Kristine Nielsen
*Global Mindset as Managerial Meta-competence and Organizational Capability: Boundary-crossing Leadership Cooperation in the MNC
The Case of 'Group Mindset' in Solar A/S.*
25. Rasmus Koss Hartmann
*User Innovation inside government
Towards a critically performative foundation for inquiry*

26. Kristian Gylling Olesen
Flertydig og emergerende ledelse i folkeskolen
Et aktør-netværksteoretisk ledelsesstudie af politiske evalueringsreformers betydning for ledelse i den danske folkeskole
 27. Troels Riis Larsen
Kampen om Danmarks omdømme 1945-2010
Omdømmearbejde og omdømmepolitik
 28. Klaus Majgaard
Jagten på autenticitet i offentlig styring
 29. Ming Hua Li
Institutional Transition and Organizational Diversity: Differentiated internationalization strategies of emerging market state-owned enterprises
 30. Sofie Blinkenberg Federspiel
IT, organisation og digitalisering: Institutionelt arbejde i den kommunale digitaliseringsproces
 31. Elvi Weinreich
Hvilke offentlige ledere er der brug for når velfærdstænkningen flytter sig – er Diplomuddannelsens lederprofil svaret?
 32. Ellen Mølgaard Korsager
Self-conception and image of context in the growth of the firm – A Penrosian History of Fiberline Composites
 33. Else Skjold
The Daily Selection
 34. Marie Louise Conradsen
The Cancer Centre That Never Was The Organisation of Danish Cancer Research 1949-1992
 35. Virgilio Failla
Three Essays on the Dynamics of Entrepreneurs in the Labor Market
 36. Nicky Nedergaard
Brand-Based Innovation Relational Perspectives on Brand Logics and Design Innovation Strategies and Implementation
 37. Mads Gjedsted Nielsen
Essays in Real Estate Finance
 38. Kristin Martina Brandl
Process Perspectives on Service Offshoring
 39. Mia Rosa Koss Hartmann
In the gray zone With police in making space for creativity
 40. Karen Ingerslev
Healthcare Innovation under The Microscope Framing Boundaries of Wicked Problems
 41. Tim Neerup Thomsen
Risk Management in large Danish public capital investment programmes
- 2015**
1. Jakob Ion Wille
Film som design Design af levende billeder i film og tv-serier
 2. Christiane Mossin
Interzones of Law and Metaphysics Hierarchies, Logics and Foundations of Social Order seen through the Prism of EU Social Rights
 3. Thomas Tøth
TRUSTWORTHINESS: ENABLING GLOBAL COLLABORATION An Ethnographic Study of Trust, Distance, Control, Culture and Boundary Spanning within Offshore Outsourcing of IT Services
 4. Steven Højlund
Evaluation Use in Evaluation Systems – The Case of the European Commission

5. Julia Kirch Kirkegaard
AMBIGUOUS WINDS OF CHANGE – OR FIGHTING AGAINST WINDMILLS IN CHINESE WIND POWER
A CONSTRUCTIVIST INQUIRY INTO CHINA'S PRAGMATICS OF GREEN MARKETISATION
MAPPING CONTROVERSIES OVER A POTENTIAL TURN TO QUALITY IN CHINESE WIND POWER
6. Michelle Carol Antero
A Multi-case Analysis of the Development of Enterprise Resource Planning Systems (ERP) Business Practices

Morten Friis-Olivarius
The Associative Nature of Creativity
7. Mathew Abraham
New Cooperativism: A study of emerging producer organisations in India
8. Stine Hedegaard
Sustainability-Focused Identity: Identity work performed to manage, negotiate and resolve barriers and tensions that arise in the process of constructing or ganizational identity in a sustainability context
9. Cecilie Glerup
Organizing Science in Society – the conduct and justification of resposible research
10. Allan Salling Pedersen
Implementering af ITIL® IT-governance - når best practice konflikter med kulturen
Løsning af implementerings-problemer gennem anvendelse af kendte CSF i et aktionsforskningsforløb.
11. Nihat Misir
A Real Options Approach to Determining Power Prices
12. Mamdouh Medhat
MEASURING AND PRICING THE RISK OF CORPORATE FAILURES
13. Rina Hansen
Toward a Digital Strategy for Omnichannel Retailing
14. Eva Pallesen
In the rhythm of welfare creation
A relational processual investigation moving beyond the conceptual horizon of welfare management
15. Gouya Harirchi
In Search of Opportunities: Three Essays on Global Linkages for Innovation
16. Lotte Holck
Embedded Diversity: A critical ethnographic study of the structural tensions of organizing diversity
17. Jose Daniel Balarezo
Learning through Scenario Planning
18. Louise Pram Nielsen
Knowledge dissemination based on terminological ontologies. Using eye tracking to further user interface design.
19. Sofie Dam
PUBLIC-PRIVATE PARTNERSHIPS FOR INNOVATION AND SUSTAINABILITY TRANSFORMATION
An embedded, comparative case study of municipal waste management in England and Denmark
20. Ulrik Hartmyer Christiansen
Follwoing the Content of Reported Risk Across the Organization
21. Guro Refsum Sanden
Language strategies in multinational corporations. A cross-sector study of financial service companies and manufacturing companies.
22. Linn Gevoll
Designing performance management for operational level
- A closer look on the role of design choices in framing coordination and motivation

23. Frederik Larsen
*Objects and Social Actions
– on Second-hand Valuation Practices*
24. Thorhildur Hansdottir Jetzek
*The Sustainable Value of Open
Government Data
Uncovering the Generative Mechanisms
of Open Data through a Mixed
Methods Approach*
25. Gustav Toppenberg
*Innovation-based M&A
– Technological-Integration
Challenges – The Case of
Digital-Technology Companies*
26. Mie Plotnikof
*Challenges of Collaborative
Governance
An Organizational Discourse Study
of Public Managers' Struggles
with Collaboration across the
Daycare Area*
27. Christian Garmann Johnsen
*Who Are the Post-Bureaucrats?
A Philosophical Examination of the
Creative Manager, the Authentic Leader
and the Entrepreneur*
28. Jacob Brogaard-Kay
*Constituting Performance Management
A field study of a pharmaceutical
company*
29. Rasmus Ploug Jenle
*Engineering Markets for Control:
Integrating Wind Power into the Danish
Electricity System*
30. Morten Lindholst
*Complex Business Negotiation:
Understanding Preparation and
Planning*
31. Morten Grynings
*TRUST AND TRANSPARENCY FROM AN
ALIGNMENT PERSPECTIVE*
32. Peter Andreas Norn
*Byregimer og styringsevne: Politisk
lederskab af store byudviklingsprojekter*
33. Milan Miric
*Essays on Competition, Innovation and
Firm Strategy in Digital Markets*
34. Sanne K. Hjordrup
*The Value of Talent Management
Rethinking practice, problems and
possibilities*
35. Johanna Sax
*Strategic Risk Management
– Analyzing Antecedents and
Contingencies for Value Creation*
36. Pernille Rydén
Strategic Cognition of Social Media
37. Mimmi Sjöklint
*The Measurable Me
- The Influence of Self-tracking on the
User Experience*
38. Juan Ignacio Staricco
*Towards a Fair Global Economic
Regime? A critical assessment of Fair
Trade through the examination of the
Argentinean wine industry*
39. Marie Henriette Madsen
*Emerging and temporary connections
in Quality work*
40. Yangfeng CAO
*Toward a Process Framework of
Business Model Innovation in the
Global Context
Entrepreneurship-Enabled Dynamic
Capability of Medium-Sized
Multinational Enterprises*
41. Carsten Scheibye
*Enactment of the Organizational Cost
Structure in Value Chain Configuration
A Contribution to Strategic Cost
Management*

2016

1. Signe Sofie Dyrby
Enterprise Social Media at Work
2. Dorte Boesby Dahl
The making of the public parking attendant
Dirt, aesthetics and inclusion in public service work
3. Verena Girschik
Realizing Corporate Responsibility
Positioning and Framing in Nascent Institutional Change
4. Anders Ørding Olsen
IN SEARCH OF SOLUTIONS
Inertia, Knowledge Sources and Diversity in Collaborative Problem-solving
5. Pernille Steen Pedersen
Udkast til et nyt copingbegreb
En kvalifikation af ledelsesmuligheder for at forebygge sygefravær ved psykiske problemer.
6. Kerli Kant Hvass
Weaving a Path from Waste to Value:
Exploring fashion industry business models and the circular economy
7. Kasper Lindskow
Exploring Digital News Publishing Business Models – a production network approach
8. Mikkel Mouritz Marfelt
The chameleon workforce:
Assembling and negotiating the content of a workforce
9. Marianne Bertelsen
Aesthetic encounters
Rethinking autonomy, space & time in today's world of art
10. Louise Hauberg Wilhelmsen
EU PERSPECTIVES ON INTERNATIONAL COMMERCIAL ARBITRATION
11. Abid Hussain
On the Design, Development and Use of the Social Data Analytics Tool (SODATO): Design Propositions, Patterns, and Principles for Big Social Data Analytics
12. Mark Bruun
Essays on Earnings Predictability
13. Tor Bøe-Lillegraven
BUSINESS PARADOXES, BLACK BOXES, AND BIG DATA: BEYOND ORGANIZATIONAL AMBIDEXTERITY
14. Hadis Khonsary-Atighi
ECONOMIC DETERMINANTS OF DOMESTIC INVESTMENT IN AN OIL-BASED ECONOMY: THE CASE OF IRAN (1965-2010)
15. Maj Lervad Grasten
Rule of Law or Rule by Lawyers?
On the Politics of Translation in Global Governance
16. Lene Granzau Juel-Jacobsen
SUPERMARKEDETS MODUS OPERANDI – en hverdagssociologisk undersøgelse af forholdet mellem rum og handlen og understøtte relationsopbygning?
17. Christine Thalsgård Henriques
In search of entrepreneurial learning – Towards a relational perspective on incubating practices?
18. Patrick Bennett
Essays in Education, Crime, and Job Displacement
19. Søren Korsgaard
Payments and Central Bank Policy
20. Marie Kruse Skibsted
Empirical Essays in Economics of Education and Labor
21. Elizabeth Benedict Christensen
The Constantly Contingent Sense of Belonging of the 1.5 Generation Undocumented Youth
An Everyday Perspective

22. Lasse J. Jessen
Essays on Discounting Behavior and Gambling Behavior
23. Kalle Johannes Rose
*Når stifterviljen dør...
Et retsøkonomisk bidrag til 200 års
juridisk konflikt om ejendomsretten*
24. Andreas Søeborg Kirkedal
*Danish Stød and Automatic Speech
Recognition*
25. Ida Lunde Jørgensen
*Institutions and Legitimations in
Finance for the Arts*
26. Olga Rykov Ibsen
*An empirical cross-linguistic study of
directives: A semiotic approach to the
sentence forms chosen by British,
Danish and Russian speakers in native
and ELF contexts*
27. Desi Volker
Understanding Interest Rate Volatility
28. Angeli Elizabeth Weller
*Practice at the Boundaries of Business
Ethics & Corporate Social Responsibility*
29. Ida Danneskiold-Samsøe
*Levende læring i kunstneriske
organisationer
En undersøgelse af læringsprocesser
mellem projekt og organisation på
Aarhus Teater*
30. Leif Christensen
*Quality of information – The role of
internal controls and materiality*
31. Olga Zarzecka
Tie Content in Professional Networks
32. Henrik Mahncke
*De store gaver
- Filantropiens gensidighedsrelationer i
teori og praksis*
33. Carsten Lund Pedersen
*Using the Collective Wisdom of
Frontline Employees in Strategic Issue
Management*
34. Yun Liu
Essays on Market Design
35. Denitsa Hazarbasanova Blagoeva
The Internationalisation of Service Firms
36. Manya Jaura Lind
*Capability development in an off-
shoring context: How, why and by
whom*
37. Luis R. Boscán F.
*Essays on the Design of Contracts and
Markets for Power System Flexibility*
38. Andreas Philipp Distel
*Capabilities for Strategic Adaptation:
Micro-Foundations, Organizational
Conditions, and Performance
Implications*
39. Lavinia Bleoca
*The Usefulness of Innovation and
Intellectual Capital in Business
Performance: The Financial Effects of
Knowledge Management vs. Disclosure*
40. Henrik Jensen
*Economic Organization and Imperfect
Managerial Knowledge: A Study of the
Role of Managerial Meta-Knowledge
in the Management of Distributed
Knowledge*
41. Stine Mosekjær
*The Understanding of English Emotion
Words by Chinese and Japanese
Speakers of English as a Lingua Franca
An Empirical Study*
42. Hallur Tor Sigurdarson
*The Ministry of Desire - Anxiety and
entrepreneurship in a bureaucracy*
43. Kätlin Pulk
*Making Time While Being in Time
A study of the temporality of
organizational processes*

TITLER I ATV PH.D.-SERIEN

1992

1. Niels Kornum
Servicesamkørsel – organisation, økonomi og planlægningsmetode

1995

2. Verner Worm
*Nordiske virksomheder i Kina
Kulturspecifikke interaktionsrelationer
ved nordiske virksomhedsetableringer i Kina*

1999

3. Mogens Bjerre
*Key Account Management of Complex
Strategic Relationships
An Empirical Study of the Fast Moving
Consumer Goods Industry*

2000

4. Lotte Darsø
*Innovation in the Making
Interaction Research with heterogeneous
Groups of Knowledge Workers
creating new Knowledge and new
Leads*

2001

5. Peter Hobolt Jensen
*Managing Strategic Design Identities
The case of the Lego Developer
Network*

2002

6. Peter Lohmann
*The Deleuzian Other of Organizational
Change – Moving Perspectives of the
Human*
7. Anne Marie Jess Hansen
*To lead from a distance: The dynamic
interplay between strategy and
strategizing – A case study of the
strategic management process*

2003

8. Lotte Henriksen
*Videndeling
– om organisatoriske og ledelsesmæssige
udfordringer ved videndeling i
praksis*
9. Niels Christian Nickelsen
*Arrangements of Knowing: Coordinating
Procedures Tools and Bodies in
Industrial Production – a case study of
the collective making of new products*

2005

10. Carsten Ørts Hansen
*Konstruktion af ledelsesteknologier og
effektivitet*

TITLER I DBA PH.D.-SERIEN

2007

1. Peter Kastrup-Misir
*Endeavoring to Understand Market
Orientation – and the concomitant
co-mutation of the researched, the
researcher, the research itself and the
truth*

2009

1. Torkild Leo Thellefsen
*Fundamental Signs and Significance
effects
A Semeiotic outline of Fundamental
Signs, Significance-effects, Knowledge
Profiling and their use in Knowledge
Organization and Branding*
2. Daniel Ronzani
*When Bits Learn to Walk Don't Make
Them Trip. Technological Innovation
and the Role of Regulation by Law
in Information Systems Research: the
Case of Radio Frequency Identification
(RFID)*

2010

1. Alexander Carnera
*Magten over livet og livet som magt
Studier i den biopolitiske ambivalens*