

Lennon, Niels Joseph Jerne

**Doctoral Thesis**

## Accounting Qualities in Practice: Rhizomatic stories of representational faithfulness, decision making and control

PhD Series, No. 6.2013

**Provided in Cooperation with:**

Copenhagen Business School (CBS)

*Suggested Citation:* Lennon, Niels Joseph Jerne (2013) : Accounting Qualities in Practice: Rhizomatic stories of representational faithfulness, decision making and control, PhD Series, No. 6.2013, ISBN 9788792977250, Copenhagen Business School (CBS), Frederiksberg, <https://hdl.handle.net/10398/8640>

This Version is available at:

<https://hdl.handle.net/10419/208843>

**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**  
**HANDELSHØJSKOLEN**  
SOLBJERG PLADS 3  
DK-2000 FREDERIKSBERG  
DANMARK

[www.cbs.dk](http://www.cbs.dk)

ISSN 0906-6934

Print ISBN: 978-87-92977-24-3

Online ISBN: 978-87-92977-25-0

**Accounting Qualities in Practice**

PhD Series 6-2013



**Copenhagen  
Business School**  
HANDELSHØJSKOLEN

# Accounting Qualities in Practice

Rhizomatic stories of representational  
faithfulness, decision making and control

**Niels Joseph Jerne Lennon**

LIMAC PhD School  
Department of Operations Management

PhD Series 6-2013

# **Accounting Qualities in Practice**

## **Rhizomatic stories of representational faithfulness, decision making and control**

Niels Joseph Lennon

Department of Operations Management

Copenhagen Business School

Supervisors:

Professor Jan Mouritsen

Associate professor Ivar Friis

PhD School LIMAC

PhD programme in Technologies of Managing

Niels Joseph Jerne Lennon

*Accounting Qualities in Practice*

*Rhizomatic stories of representational faithfulness, decision making and control*

1st edition 2013

PhD Series 6.2013

© The Author

ISSN 0906-6934

Print ISBN: 978-87-92977-24-3

Online ISBN: 978-87-92977-25-0

LIMAC PhD School is a cross disciplinary PhD School connected to research communities within the areas of Languages, Law, Informatics, Operations Management, Accounting, Communication and Cultural Studies.

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.

## Acknowledgements

Writing this ph.d. thesis has been a comprehensive piece of work in terms of hours and strain. The three years started to count down in April 2009. Already early in the process many people around me recommended me to "start instantly". The problem for me that even though I started by following my research proposal, things moved and other more interesting aspects of the research project turned up. If it wasn't for the much appreciated support from friends, family and colleagues, I am not sure this thesis would have been finished in time. Especially not in the form it has today.

I will give my thanks to the people at the different loci where I have had the opportunity to present and reflect on my work, which includes the EAA 2010 Doctoral Colloquium and the 2011 Imagining Business workshop hosted by IE Madrid, held in Segovia. I especially want to thank HEC and Martin Messner for letting me attend the research seminars at the department of accounting and management control in the fall 2010. One of their seminars was with Paolo Quattrone. Because of the intense afternoon traffic in Paris I had the opportunity to talk with him in a taxi from HEC to the CDG airport for a couple of hours. If it was not for this talk I am not sure I had started reading Gilles Deleuze's work. In the taxi we discussed research and among other appreciated comments Paolo Quattrone suggested me to start looking into Deleuze's writings. And the deleuzian theory turned out to be element that bounded my thesis together with the claim I wanted to write. I also want to give my thanks to the assessment committee, Professor Bino Catasús (Stockholm University), Senior Lecturer Ann-Christine Frandsen (University of Essex) and Professor with special responsibilities Allan Hansen (Copenhagen Business School), for their thorough reading of the thesis and much appreciated comments.

At the department of Operations Management at CBS my thanks will go in two directions: to my supervisors and to my fellow ph.d. students. I have

been very happy to discuss my research with Ivar Friis, who acted as my co-supervisor. Even though we did not always agree academically, he could get me "down to earth" after sometimes writing what he referred to as "extremely psychedelic theory". He always acknowledged my academic claims and supported me in doing it the way I did. A special thanks will go to my main supervisor Jan Mouritsen. I am very grateful for the opportunity to have him as a resource and discussion partner. Jan has been a great inspiration and aspiration for me during the whole ph.d. period. Even though always being critical towards my writing Jan supported me in doing what I did the whole way through, which I am very thankful for. I will also give my thanks to the rest of the management accounting researchers at the department for helping me along the way. As mentioned I owe a special thanks to the other ph.d. fellows at our department. Especially Thomas Frandsen, Peter Andreasen, Alex Yu Lichen and Linn Gevoll have always been helpful when we have discussed theoretical claims in our ph.d. corridor, which we did almost everyday. And also their willingness to drink a lot of coffee and through that keep up the good working spirit has surely made its traces throughout the thesis. Without my fellow students I am sure this would have been a lonesome process.

My last thanks will go to my family. My mom has always been there to help us out during pressed periods and especially the last couple of months before the submission deadline she has been a great help to keep our family together and taking care of our children. And thanks to my children, Oscar and Alba, who have given me a space at home to disconnect from the thesis and by doing so have helped me not to become crazy in the writing process. Finally, many many thanks to my beloved wife Christina, who has always supported me in using a research approach nobody else at the department had experience with, and encouraging me to keep going in that direction.

## Simulacrum

*There's supposed to be something pretty abstract called labor that one can buy and sell, in situations that either mark a basic social injustice or establish a little more social justice. But Godard asks very concrete questions, he presents images touching on what exactly is being bought and sold. What are some people prepared to buy, and others to sell, these not necessarily being the same thing? A young welder is prepared to sell his work as a welder, but not his sexuality by becoming an old woman's lover. A cleaning lady's happy to sell the time she spends cleaning but won't sell the moment she spends singing a bit of the "Internationale" - why? Because she can't sing? But what, then, if one were to pay her for talking about not being able to sing? A specialist clockmaker, on the other hand, wants to get paid for his clockmaking efforts, but refuses to be paid for his work as an amateur filmmaker, which he calls his "hobby"; but the images show that the movements he makes in the two activities, the clock making sequence and the editing sequence, are so remarkably similar that you can mistake one for the other. But no, says the clockmaker, there's a great difference of love and warmth in these movements, I don't want to be paid for my filmmaking. But then what about filmmakers and photographers who do get paid? What, furthermore, is a photographer himself prepared to pay for? He's sometimes prepared to pay his model. Sometimes the model pays him. But when he photographs torture or an execution, he pays neither the victim nor the executioner. And when he photographs children who are sick, wounded, or hungry, why doesn't he pay them? Guattari once suggested at a psychoanalytical congress that analysts should be paid as well as analysands, since the analyst isn't exactly providing a "service", it's more like a division of labor, two distinct kinds of work going on: there's the analyst's work of listening and sifting but the analysand's unconscious is at work too. Nobody seem to have taken much notice of Guattari's suggestion. Godard's saying the same thing: why not pay the people who watch television, instead of making them pay, because they are engaged in real work and are themselves providing a public service? The social division of labor means it's not only work on the shop floor that gets paid but work in offices and research laboratories too. Otherwise we'd have to think about the workers themselves having to pay the people who design the things they make. I think all these questions and many others, all these images and many others, tear apart the notion of labor.*

Gilles Deleuze, *Negotiations*, p. 39





## Summary

There is a tendency in accounting theory, both external reporting and management accounting, to express a representational ideal. This to be understood in the sense that accounting information, independent on whether it is reported externally or used for control purposes internally, ought to represent something underlying, whether this is revenue, costs, performance or other things inscribed in the accounting information. In some cases the underlying is not an object, but a procedure which is developed with the purpose of standardising the calculations as to become comparable (Financial Accounting Standards Board, 1980a).

In the beginning of the 1970's in the accounting information literature, simultaneously with the foundation of the American Financial Accounting Standards Board (FASB), an academic discussion regarding which qualitative characteristics accounting information ought to have, emerges (e.g. Ijiri, 1975, Hines, 1988 og Ingram and Rayburn, 1989). This was caused by FASB's work on a conceptual framework Standard of Financial Accounting Concepts (SFAC), which was meant as a guide to the standard setters in the development of new accounting standards/principles. A new notion, representational faithfulness, was introduced in SFAC no. 2. The discussion about representational faithfulness is equivocal and no unambiguous definition of what representational faithfulness actually is. This has occasioned a range of dialogues about the representativity of accounting information, the accounting setters' roles and effects of disclosure of accounting information.

Simultaneously with the dialog in external reporting discussions regarding management control, the purpose of using accounting information to this end and which qualitative characteristics that constitute a good management control design (performance measurement design). In this stream of literature the principle of representing are expressed too, because the literature talks about representing employee effort, or performance, and through incentives construct

a structure in the organisation, that in all situations make employees act in the interest of the firm and make decisions that benefits the firms owners in the best possible way, given the information available to decide upon (Kerr, 1975, Jensen and Meckling, 1976 og Lazear and Gibbs, 2008). A more recent stream in the management accounting literature (actor-network theory inspired management accounting research) problematises the ideal of accounting information are representations (its representativity) by suggesting to understand calculations as inscriptions rather than representations. And inscriptions, as they are treated in this research stream, act as re-presentations (Chua, 1995). This means they do not only represent, but rather presents (in a new and another way, which through translation has achieved a certain form) the phenomenon which is calculated (e.g. Robson, 1992, Robson, 1992, Chua, 1995, Mouritsen et al., 2009). The implication of conceptualising accounting information as inscriptions, or re-presentations is that the inscriptions collectively form the reality as it is understood by the actors in the network and thus do not represent, but rather constitute, the reality.

With basis in the problematisation of accounting information as representations and re-presentations the thesis studies the representativity of accounting information through a longitudinal study lasting 1.5 years in a medium sized Danish company, owned by an international group. The theorisation in the thesis emanates from poststructuralist theory primarily of the authors Deleuze (2004), Deleuze and Guattari (2004) og DeLanda (2006), by raising the following research question: How is the representativity of accounting information unfolding in practice when accounting information is understood as simulacra? How are managerial dilemmas and tensions brought about by the representativity (and repetition) of accounting information and what is the consequence for decision making and control?

The empirical analysis of the thesis consist of three rhizomatic stories about how the representativity of accounting information becomes problematic because it inscribes a strong idea about which action possibilities a company faces. The problem lies in the concern that accounting information is not representing anything in itself, it rather constitutes a sign of a range of signs which has to be decoded in order to assign it with a meaning (signification). Understanding ac-

counting information in this way lets us study how the management's action possibilities are framed by accounting information, but more important, that the firm's action possibilities are not limited by the space of possibilities accounting information traces and thus there will always be options which are not called for within the space of possibilities the accounting information constitutes. In this way it will make sense to call for thinking opportunity also outside the space of possibilities management technologies sets the scene for. In other words: if actions are always justified with reference to derived financial effects which are not representing »the reality« but are rather decoupled from reality through its repetition (Deleuze, 2004), then it is easy to imagine that the space of possibilities within the regime of signs the accounting information constitutes (Deleuze and Guattari, 2004), delimits another space of possibilities when the firm's potential might be bigger. This is proved through the three rhizomatic stories in the thesis, where each of them emphasise different repetitions' significance for decision making and control.



## Resume

Der er en tendens til at regnskabsteori, både form af ekstern rapportering og økonomistyring, udtrykker et repræsenterbarhedsideal. Dette skal forstås på den måde, at regnskabsinformation, hvad enten det rapporteres eksternt eller bruges til styring internt, har karakter af at repræsentere noget bagvedliggende, hvad enten der er tale om omsætning, omkostninger, præstation eller andet, som indskrives i regnskabsinformationen. I nogle tilfælde er det »bagvedliggende« endda ikke et objekt, men en procedure, som har til formål at ensrette kalkulationerne med det formål, at de bliver sammenlignelige (Financial Accounting Standards Board, 1980a).

I litteraturen omkring regnskabsinformation opstår der i begyndelsen af 1970-erne, sammen med grundlæggelsen af det amerikanske Financial Accounting Standards Board (FASB), en akademisk diskussion vedrørende hvilke kvalitative karakteristika, regnskabsinformation bør have (se f.eks. Ijiri, 1975, Hines, 1988 og Ingram and Rayburn, 1989). Dette blev afstedkommet af FASB's arbejde på et konceptuelt rammeværk (Standard of Financial Accounting Concepts (SFAC)), som skulle guide standard setterne i deres udvikling af nye regnskabsstandarder. Et nyt begreb, repræsentationel nøjagtighed (engelsk: representational faithfulness), blev introduceret i SFAC nr. 2. Diskussionen omkring repræsentationel nøjagtighed er flertydig og der findes således ikke en klar beskrivelse for hvad repræsentationel nøjagtighed egentlig er. Dette har afledt en række dialoger omkring repræsenterbarheden af regnskabsinformation, regnskabssetternes rolle samt effekterne af offentliggørelse af regnskabsinformation.

Sideløbende med konversationerne om kvalitative karakteristika ved ekstern rapportering opstår der også diskussioner vedrørende økonomistyringsinformation som adfærdsstyrende teknologi (engelsk: management control eller performance measurement), målet med at benytte økonomistyringsinformation til dette formål samt hvilke kvalitative kriterier, som giver et godt økonomistyringsdesign

(performance measurement design). Også i denne del af litteraturen udtrykkes repræsenterbarhedsprincippet, idet man her taler om at repræsentere medarbejdernes flid, eller præstation og igennem incitamenter skabe en struktur i organisationen, som i alle situationer får medarbejderne til at handle i virksomhedens interesse og træffe beslutninger, som tilgodeser virksomhedens ejere på bedst mulig vis, givet de informationer, der er til rådighed (Kerr, 1975, Jensen and Meckling, 1976 og Lazear and Gibbs, 2008). En senere strøm i økonomistyringslitteraturen (aktør-netværksteori inspireret af økonomistyringsteori) problematiserer dog idealet om økonomistyringsinformation som repræsentation/denne repræsenterbarhed ved at foreslå, at vi skal forstå kalkulationer som inskriptioner snarere end repræsentationer. Og indskriptioner, som de er behandlet i denne litteratur, er re-præsentationer. Det vil sige at de ikke bare repræsenterer, men derimod præsenterer (på ny og på en anden måde, som igennem en translation har opnået en bestemt form) det fænomen, som kalkuleres (f.eks. Robson, 1992, Robson, 1992, Chua, 1995, Mouritsen et al., 2009). Implikationen ved at konceptualisere regnskabsinformation som inskriptioner, eller re-præsentationer, er at inskriptionerne får en virkeligheds-konstituerende rolle fordi de kollektivt former virkeligheden, som den forstås af aktørerne i netværket og således repræsenterer de ikke virkeligheden, men konstituerer den.

Med baggrund i denne problematisering af regnskabsinformation som repræsentationer og re-præsentationer, studerer denne afhandling repræsenterbarheden af regnskabsinformation (økonomistyringsinformation) igennem et 1,5 år langt longitudinalt studium af en mellemstor dansk virksomhed, som ejes af en international koncern. Afhandlingens teoretisering udspringer fra poststrukturalistisk teori, primært af forfatterne Deleuze (2004), Deleuze and Guattari (2004) og DeLanda (2006), ved at rejse følgende forskningsspørgsmål: Hvordan udfolder repræsenterbarheden af regnskabsinformation sig i praksis, når regnskabsinformation er forstået som simulacra? Hvordan foranlediger regnskabsinformationens repræsenterbarhed (og repetition) ledelsesdilemmaer og spændinger og hvad er konsekvensen for ledelsens beslutningstagen og styring?

Afhandlingens empiriske analyse opregner tre rhizomatiske fortællinger, som handler om hvordan regnskabsinformationens repræsenterbarhed bliver problema-

tisk, fordi de indskriver en stærk forestilling om hvilke handlemuligheder, en virksomhed står overfor. Problemet ligger i, at regnskabsinformationen ikke repræsenterer noget i sig selv, det konstituerer derimod et tegn eller en række af tegn, som skal dekodes for at give mening. Denne måde at forstå regnskabsinformation på lærer os således at se hvordan ledelsens handlemuligheder irammes ættes af økonomistyringsinformationen, men vigtigere endnu, at virksomhedens handlemuligheder ikke af afgrænset indenfor det mulighedsrum, økonomistyringsinformationerne optegner og der således altid vil være handlemuligheder, som ikke fordes indenfor det mulighedsrum økonomistyringsinformationerne konstituerer. Således vil det give mening at anfordre til at tænke mulighed ogsåudenfor det handlerum, ledelsesteknologierne lægger op til. Sagt med andre ord: hvis handlinger i praksis altid retfærdiggøres med reference til afledte finansielle effekter, som ikke repræsenterer »virkeligheden«, men derimod snarere er dekoblet fra virkelighed gennem deres repetition (Deleuze, 2004), så er det nemt at forestille sig, at mulighedsrummet indenfor det tegneregime (Deleuze and Guattari, 2004), økonomistyringsinformationerne konstituerer, afgrænser et andet mulighedsrum, hvori virksomhedens potentiale måske er endnu større. Dette påvises igennem de tre rhizomatiske fortællinger i afhandlingen, som hver især lægger vægt på forskellige repetitioners betydning for ledelsesansvarlighed.





# Contents

<b>Contents</b>	<b>xv</b>
<b>List of Figures</b>	<b>xix</b>
<b>List of Tables</b>	<b>xix</b>
<b>I Introduction and Domain Theory</b>	<b>1</b>
<b>1 Introduction</b>	<b>3</b>
1.1 Research question . . . . .	7
1.2 Perspective of the thesis . . . . .	8
1.3 Contribution to domain literature . . . . .	9
1.4 Structure of the thesis . . . . .	12
<b>2 Theory of accounting qualities</b>	<b>13</b>
2.1 Introduction to the theory chapter . . . . .	13
2.2 Accounting Theory: Representational faithfulness and other ac- counting qualities . . . . .	18
2.2.1 Financial Accounting Standards Board (FASB) . . . . .	18
2.2.2 Accounting: a system of accountability relationships . . . . .	20
2.2.3 Qualitative characteristics in the work of IACPA's study group . . . . .	22
2.2.4 Performance measurement criteria in Ijiri 1975 . . . . .	22
2.2.5 SFAC no. 2: Qualitative characteristics . . . . .	25
2.2.6 Accounting qualities in IAS . . . . .	31

2.2.7	Summary of accounting qualities . . . . .	32
2.3	Research on faithful representation . . . . .	33
2.3.1	The purpose of a framework of qualitative characteristics of financial reporting . . . . .	33
2.3.2	Discussion of the "reality" accounting represents . . . . .	35
2.3.3	Summary of the theory on qualitative characteristics of ac- counting . . . . .	41
2.4	Management Control: Performance Measurement Criteria . . . . .	45
2.4.1	Performance measurement for control . . . . .	46
2.4.2	The emergence of qualities of performance measurement: alignment problem . . . . .	47
2.4.3	Incentives and controllability . . . . .	50
2.4.4	The value of information: risk, precision and sensitivity . .	53
2.4.5	Myopia, bias and precision . . . . .	54
2.4.6	Congruity and diversity . . . . .	58
2.4.7	A set of performance management criteria . . . . .	60
2.4.8	Summary of performance measurement criteria . . . . .	63
2.5	Constructivist approaches to accounting information and perfor- mance measurement . . . . .	67
2.5.1	ANT research on accounting qualities . . . . .	68
2.5.2	Deleuzian perspective on accounting qualities . . . . .	74
2.5.3	Summary of constructivist accounting research . . . . .	79
2.6	Conclusion on the literature study . . . . .	82

## II Theoretical Approach and Methodology 85

### 3 Theoretical Approach 87

3.1	Deleuze's <i>Difference and Repetition</i> . . . . .	88
3.1.1	General concepts and complete concepts: blocking . . . . .	89
3.1.2	Eternal chains of repetitions and the simulacra . . . . .	91
3.2	The rhizome . . . . .	94
3.3	Deleuze in the social: Assemblage Theory . . . . .	97
3.4	Machinic assemblages and regimes of signs . . . . .	99

3.4.1	Machinic assemblages . . . . .	100
3.4.2	Regimes of signs . . . . .	102
3.5	Positioning the theoretical approach . . . . .	105
3.6	Concluding remarks on the theoretical approach . . . . .	109
<b>4</b>	<b>Methodology</b>	<b>111</b>
4.1	Epistemology: The thought-experience relationship . . . . .	113
4.2	Ontology . . . . .	120
4.3	Case study design . . . . .	123
4.3.1	Selection of the case . . . . .	123
4.3.2	Collecting data . . . . .	124
4.3.3	Working with the data . . . . .	127
<b>III</b>	<b>Empirical Stories and Theorisation</b>	<b>131</b>
<b>5</b>	<b>Discorp Denmark A/S: Introducing the case company</b>	<b>137</b>
<b>6</b>	<b>Reporting and the chart of accounts as rhizomatic multiplicities</b>	<b>139</b>
6.1	Deterritorialising the general ledger table: repetition of registration	140
6.2	Design of the new general ledger: repetition of reporting . . . . .	144
6.3	Chapter conclusion . . . . .	150
<b>7</b>	<b>Rhizomatic time-space movements. Becoming revenue centre</b>	<b>155</b>
7.1	The controller manual . . . . .	156
7.2	The rhizomatics of becoming accountable - delegation of budget responsibility . . . . .	159
7.2.1	Planning the budget . . . . .	162
7.2.2	Evaluating the performance . . . . .	164
7.3	The framing of decision freedom . . . . .	166
7.3.1	The sales and marketing budget . . . . .	166
7.3.2	The budget letter . . . . .	172
7.3.3	Transfer prices . . . . .	174
7.4	Chapter conclusion . . . . .	179

<b>8</b>	<b>Tracing the future. Market movements and the revenue calculation</b>	<b>183</b>
8.1	Description of the market . . . . .	185
8.2	The market conditions in motion: sales criteria . . . . .	188
8.3	The private clinics market and the sales criteria. Time, quality and profitability . . . . .	194
8.4	Chapter conclusion . . . . .	201
<b>IV</b>	<b>Discussion and Conclusion</b>	<b>205</b>
<b>9</b>	<b>Discussion</b>	<b>207</b>
9.1	Setting the scene for theorisation . . . . .	208
9.2	Dilemmas and tensions for decision making: the representativity of accounting . . . . .	209
9.3	Dilemmas and tensions for control: accounting simulacra . . . . .	216
<b>10</b>	<b>Conclusion</b>	<b>223</b>
	<b>References</b>	<b>231</b>

# List of Figures

2.1	SFAC no. 2. Hierarchy of accounting qualities . . . . .	26
5.1	Organisational diagram Distech Holding Ltd. . . . .	138
6.1	Size of accounting table . . . . .	152

# List of Tables

2.1	Summary of literature on accounting qualities . . . . .	42
2.2	Summary of literature on performance measurement criteria . . .	64
2.3	Summary of literature on constructivist accounting research . . .	79



# Part I

## Introduction and Domain Theory





# Chapter 1

## Introduction

In the 1970's, simultaneously with the founding of the Financial Accounting Standards Board (FASB), the development of a theoretical foundation of qualitative characteristics of accounting information was initiated. The work had to deal with "the criteria which should be used in the process of corporate scorekeeping" (Burton, 1973). Until the 1960's objectivity had been one of the principal ideals of accounting information (e.g. Wojdak, 1970 and Ijiri and Jaedicke, 1966). However, accountants and accounting scholars moved away from objectivity as an ideal for accounting information. This was acknowledged by FASB in their conceptual framework no. 2 (SFAC no. 2) and they developed the concept »representational faithfulness« as a reliability criterion to substitute »objectivity« (Financial Accounting Standards Board, 1980a).

This thesis concerns accounting qualities and the representativity of accounting information. It will concentrate on what representational faithfulness could mean and analyse how it unfolds in practice. The purpose is to analyse how this ideal of representational faithfulness of accounting information creates dilemmas and tensions in practice. This is studied with departure in Ijiri (1975)'s claim that accounting information is meant to render somebody accountable to somebody else.

The author's interest in the field stems from the problematisation poststructuralist and performative theory offer to the accounting domain. The point in the

theory applied in this thesis is that information is only one entity of an assemblage<sup>1</sup> that constitutes *management* or *managing*. Thus, the theory applied offers an alternative way to understand accounting information and to study accounting information from that perspective will hopefully give new insights to how accounting information performs in practice, and cast light on some of the dilemmas the representativity of accounting information occasions. More specifically, the object-representation relationship presupposes that representation is a homogenous object constituted by the object it represents and that we can measure the variability between object and representation (Deleuze, 2004) (i.e. precision of the representation in the performance measurement literature). However, from the poststructuralist perspective applied in the thesis representations are understood as assemblages of relations of exteriority to objects in movement, which problematise the object-representation relationship. In line with this theory the starting point of the empirical study is to conceptualise accounting information as a sign<sup>2</sup> (signal/signifiant) which requires the reader to assign it a meaning (signification/signifié) (Deleuze and Guattari, 2004)<sup>3</sup>.

### Theoretical basis of control systems

*»Broadly speaking, the goal of management control research is to develop a better understanding of how and why control systems work in various situations and what can be done to improve them from the perspective of organisational goal attainment. «*

Merchant and Otley (2007, p. 790)

---

<sup>1</sup>The concept »assemblage« is discussed in the theoretical approach in chapter 3.

<sup>2</sup>»Signs« will also be elaborated in chapter 3.

<sup>3</sup>Accounting information is in the thesis understood as calculations; sometimes comprising of one calculation, other times more than one calculation. Accounting information and accounting calculations are therefore used indiscriminately, because it may seem artificial to draw a categorical boundary between the two. Therefore accounting calculation is not seen as a mathematical endeavour because as soon as the calculation is a part of management control, it informs too. Accounting is associated with counting. Accounting can therefore be understood as "to count" which is more than what calculating does. But as soon as calculating's prefix is accounting, then it becomes a matter of calculation in order to count, or to compare (Oxford English Dictionary, 2012a).

Merchant and Otley (2007)'s quote stresses the theoretical relevance of this thesis. The thesis articulates a problematisation which originates in existing research's conceptualisation of accounting information as representations<sup>1</sup>, and it analyses how the representativity of accounting performs in control systems.

The thesis reviews two theoretic streams of research related to accounting qualities; the realist stream and the constructivist stream<sup>2</sup>. The realism stream claims accounting to be representations and it is in this stream of research the notion representational faithfulness has emerged. For performance measurement this view implies that performance measurement must represent the »true« performance of employees. This view is articulated in the following formula (Lazear and Gibbs, 2008):

$$PM = PM(A, H, e_{1...k}, \varepsilon) \text{ (Source: Lazear and Gibbs, 2008, p. 234 and 238).}$$

PM in the formula is the performance measure of an employee and  $e$  is a variable for the employee's effort in a single tasking or multitasking setting (where  $e_{1...i}$  expresses the employee's effort on tasks 1-i or the multiple tasks'/single task's partial aspects related to the performance metric respectively).  $A$  expresses the employee's abilities,  $H$  expresses the employee's human capital and  $\varepsilon$  is the uncertainty of the measure. The rationale behind the formula is that the performance measure should represent the employee's effort.

The other stream of management control literature is the actor-network theory inspired accounting research, which is a counter-movement to the realism research. This research leaves the understanding of accounting as representations by acknowledging calculations as constructions. From this perspective performance measures are employed to convince actors and align them toward the same

---

<sup>1</sup>This is in line with actor-network theory inspired accounting research which also question the ontological validity of accounting as representation. This will be elaborated in the review of ANT research on accounting qualities in chapter 2.

<sup>2</sup>The realist and constructivist stream is discussed in Staunæs and Sondergaard (2005) and Mik-Meyer and Järvinen (2005). In Feldman and Pentland (2003) they conceptualise the distinction as »ostensive« and »performative« strands, and in Hopper and Macintosh (1998) the realism strand is discussed under the notion "conventional" and "traditional" control literature. The thesis primarily use "realism" and "conventional accounting literature" to refer to this literature.

interests. Therefore, performance measures act in this literature as intersement devices (Callon, 1986), or as reality constituents in the sense that they create images, or propositions that frame the way reality is perceived (Chua, 1995 and Mouritsen et al., 2009).

Both realist accounting research and the actor-network theory inspired accounting research consider agency of employees to be framed by the accounting calculations. The numbers in a sense eliminate the employees' freedom to think irrespective of the numbers. As we will see in this thesis, this mediated thinking can be inadequate for making decisions. In order to analyse this, accounting information is considered as signs rather than representations, or inscriptions. This is why this thesis understands the representativity of accounting as an inappropriate idea, in accordance with the actor-network theory inspired accounting research.

Starting from understanding accounting calculations as signs, it could be interesting to study accounting as *repetitions*, because the notions of *repetitions* and *difference* from Deleuze (2004) allow us understand how accounting acts not as representations nor inscriptions, but as assemblages of signs that actualises the world in the form, humans understand it (i.e. it constitutes the reality, but not in the sense that this is the "true" reality. Inherent in the notion of signs lies the possibility that the sign could be signified differently). In this sense repetition is not the same as representation. Characterising accounting as repetition can say something about convergence of the meaning and performance of accounting information. Accounting repeats accounting, but within the repetition is also difference. This opens the possibility of inconvergence when repetitions are incomplete.

The implication of studying accounting as repetitions and difference also challenge the ideal of accounting as representation, which is articulated in the accounting theory reviewed in chapter 2 of the thesis<sup>1</sup>. It also adds to the actor-network theory conceptualisation of accounting calculations as inscriptions by understanding calculations as simulacra<sup>2</sup>. The deleuzian concepts of difference,

---

<sup>1</sup>The ideal of accounting as representation is in the rest of the thesis referred to as the *representational ideal* of accounting.

<sup>2</sup>Simulacra is from a deleuzian perspective slightly different conceptualised than the Bau-

repetition and simulacra will together with other related concepts be elaborated further in the theoretical approach in chapter 3.

## 1.1 Research question

The research question of the thesis has emerged from the literature study of accounting qualities (chapter 2), which shows a dominant presumption about accounting information in the conventional accounting literature; accounting is perceived as representation, and closing (the representation, or calculation) is possible. Even though actor-network theory inspired studies of accounting (also reviewed in chapter 2) move away from this presumption (accounting as representation), this stream of accounting theory still treats the calculations (inscription) as closure; the actor-network is able to be closed and the calculation can stabilise in the form it has (constituted by the network). But theories of Deleuze (2004), Deleuze and Guattari (2004) and Law (2004) indicate that closing calculations could be more a hope than an actual end<sup>1</sup>. In the Deleuzian conceptualisation this means that repetition of calculations are not repetitions of the same (Deleuze, 2004), but repetitions of difference. Based on that, the following research question is examined:

- *How is the representativity of accounting information unfolding in practice when accounting information is understood as simulacra? How are managerial dilemmas and tensions brought about by the representativity (and repetition) of accounting information and what is the consequence for decision making and control?*

The thesis builds on Ijiri (1975)'s point that accounting is constructing accountability relationships. Based on that, accounting technologies for decision making and control are creating accountability relationships, and therefore, accountability is a concern in the analysis too.

---

drilladian concept employed in e.g. (Macintosh et al., 2000).

<sup>1</sup>Newer actor-network theory agrees with that point, e.g. Latour (2005) and Law (2004). However, this part of actor-network theory is not mobilised in the actor-network inspired theory on accounting qualities yet. The reason for not basing this thesis on the newer actor-network theory is accounted for in the section *Positioning the theoretical approach* in chapter 3.

The research question concerns the relationship between representativity of accounting information and managers' thinking. Both in the sense how opportunities and profitable decisions are justified, but also about what meaning people ascribe to accounting information. The notion »representativity« is used as a notion for the ability to represent something (the possibility to close the representation and the closure's appropriateness as representing what it purports to represent). Representativity is therefore concerned with the object-representation relationship (where the object can be material or immaterial, e.g. an accounting standard followed). Thus, by studying representativity of accounting information the thesis will provide insight into representational faithfulness of accounting information and its consequences for managers' decision making and control.

### 1.2 Perspective of the thesis

The appropriateness of models or methods, as well as their limits is discussed within a range of scientific discourses in organisational studies and accounting literature (Clegg et al., 2006 and Chapman et al., 2006). As explained above this thesis will concentrate on two of the streams of management accounting research; the realism stream and the constructivism stream. It will explain how the representational ideal, articulated in the conventional accounting literature, becomes problematic when the link between reference and referent dissolves. It will do so by extending some of the concerns actor-network theory inspired accounting research raises regarding representativity, by applying a poststructuralist perspective, which is intended to complement and extend the actor-network inspired accounting research, mainly consisting of Deleuze (2004), Deleuze and Guattari (2004) and DeLanda (2006).

By applying deleuzian theory to the field of management accounting the purpose is to show how the problems of general models or concepts departs not only in their precision of representing something (e.g. Merchant, 2006), neither in their social complexity measured as relational connections between objects and individuals (e.g. Latour, 1987), but in people's treatment of them as representations. It is the ambition to show how it would gain new insight into what management ac-

counting actually could be by understanding conceptual management models<sup>1</sup> as repetitions of concepts. Repetitions which carry with them differences, that lead to performances of the management models, one would not be able to anticipate (Hopwood, 1983 and Hopwood, 1987).

### 1.3 Contribution to domain literature

This thesis gives an explanation, which is not found in existing accounting literature, of why management technologies have many ends. It does so by introducing deleuzian theory as an extension and alternative ontological view to the present constructivist research on accounting qualities<sup>2</sup>.

The accounting domain literature consist of two streams. Firstly publications from institutions of accounting setters, i.e. FASB and IASB/C, research on the qualitative characteristics of accounting and qualities (criteria) for performance measurement and secondly, emerging as a counter movement to conventional accounting theory, accounting research based on actor-network theory (where Robson (1991) and Robson (1992) are some of the seminal articles). The two streams of research are different from each other on their ontological assumptions where the first tends towards the positivism ideal of research while the other offers a constructivist view of accounting.

The literature study of the domain theory results in a theoretical problematisation of how »representational faithfulness« is understood in existing literature and how a representational ideal is articulated in the conventional literature and problematised in the constructivist literature.

The thesis contributes to existing research by conducting a case study of management accounting in a company over a period of 1,5 years. The case study

---

<sup>1</sup>Which there are an unlimited number of. E.g. BSC, EVA, ABC, ABM, Target Costing, Budgeting, TQM, EFQM etc.

<sup>2</sup>As will be elaborated in the section *Positioning the theoretical approach* in chapter 3 more recent sociological actor-network theory, i.e. Law (2004) and Latour (2005) come closer to deleuzian concepts of repetition, difference and simulacrum, e.g. in Law (2004)'s conceptualisation of hinterland and (Latour, 2005)'s conceptualisation of plasma, and the relationship between these concepts and the specific links in actor-networks.

is used to understand how representativity of accounting information unfolds in the particular circumstances and what its consequences for accountability is (Ijiri, 1975).

The thesis claims that accounting information does not *represent*, and therefore the treatment of accounting information as more or less precise representations, or estimates of something »underlying« (e.g. firm or employee performance, or effort provided), creates performances brought about by the complexity of the movements in the assemblages constituting the accounting calculations. The conception of accounting information as representations of something is therefore challenged by the complexity of assemblages in movement and the signification (generation of meaning) of the calculation. The point is that management, or managing, emerges because there is always a disconnect between the accounting information and the world in which they act. Thus, from this perspective, organisations should give the managers the possibility to think and act independent on the accounting information, with a smaller emphasis on accounting information as the reference point by which to decisions are justified. Accounting information should rather be used as a dialogue partner and it should be avoided to elevate it to a position where accounting alone determines whether a decision is good or bad.

The thesis shows this through three empirical matters. The first is how the structure of the chart of accounts becomes different because the structure intermingles with the particular movements of the world. This affects the way reports can be assembled. The second shows how the internal accounting structure moves because of different significations of the accounting information and how accounting information performs as a sign whose meaning is not given (which is the reason for different significations). The different significations lead to interventions from HQ which affects the managers' decision space and this changes their ideal of a profit centre to perform more like a revenue centre. The difference in significations of the information is important for control because they express opinions about employee performance. The third matter raises a concern about the budget as a means of tracing the market, through calculation of revenue. This shows how being an "accountable manager" is assembled in by the planning and evaluating activities of the performance management process. Moreover, it shows how the



managers' decision freedom becomes constrained by multiple movements within the management accounting structure, and that these movements are effects of the signification(s) of the performance measures, the budget provides. The point is that the budget traces a certain version of the future, but could be many tracings. But the remarkable point is that there could be many propositions about what the future actually is when it is actualised, too. Potentially, many different realities exist on the same time and they are effects of which assemblages that construct and signify the actuality/-ies. Thus both the tracing of the future and the actualisation of the future is heterogenous.

## **1.4 Structure of the thesis**

**Part I** of the thesis covers the introduction and the domain theory.

**Chapter 1** introduces the thesis, its research question and contribution.

**Chapter 2** reviews literature on accounting qualities and focus on two alternative theoretical positions.

**Part II** Covers the theoretical approach of the study and methodology.

**Chapter 3** outlines the theoretical approach of the thesis.

**Chapter 4** discusses the methodology. The chapter concentrates on the epistemological and ontological concerns and eventually discusses the case study design.

**Part III** comprise of the empirical stories of the thesis.

**Chapter 5** introduces the case company.

**Chapter 6** shows how the structure of the chart of accounts is effectuated by rhizomatic movements and how performance evaluation becomes an assemblage of the past, the presence and the future both in terms of the rhizomatic movements that have to be dealt with in the registration practice.

**Chapter 7** analyses how the management accounting structure in the case company becomes problematic because it is a general structure in which rhizomatic movements of the organisation is not accounted for. Thus, the rhizomatic movements moves the performance of the accounting structure from being a profit centre to perform as a revenue centre.

**Chapter 8** concentrates on the relationship between accounting »representations« and the market from which the revenue line of the budget is constructed. The point of this chapter is to show how accounting information is a blocked concept (a sign) which can be conceptualised as simulacrum rather than representation.

**Part IV** makes up the discussion and conclusion of the thesis.

# Chapter 2

## Theory of accounting qualities

### 2.1 Introduction to the theory chapter

This chapter elaborates the theoretical domain the thesis will concern. The chapter will cover financial accounting theory and management control theory. Financial accounting theory is reviewed for two reasons: firstly, the boundary between financial accounting information and management accounting information is sometimes artificial to draw because financial accounting theory is used for internal control purposes as well (as is the case in the company studied in this thesis too) and thus, qualitative characteristics of financial accounting information is influential for management control too. Secondly, because there has been a systematic discussion about accounting qualities and representational faithfulness, which is important for the claim in this thesis as well as because it indicates the representational ideal that dominates in accounting theory.

Management control theory is covered because it deals with decision making and constructing incentives for taking good decisions. Management accounting is concerned with a coordination problem and a motivation problem and somehow assumes that a solution to both problems can be designed by choosing the right calculations (or management models). The dialogue about accounting qualities is not as structured in the management accounting literature, but when it comes to representativity of accounting information several concerns in the theoretical conversations indicates the information to be representational: bias assumes that we

know »the true«, earnings management assumes that »we know«. What appears to be at stake in the very centre of the accounting literature is a problem of alignment; that managers makes the right decisions for the owners (what Merchant (2006) treats under the notion of congruity). The point is therefore to emphasise a concern about constructing appropriate effects in a performance measurement design. However, within this line of thinking lies the assumption that it is possible to know »the truth« and that accounting information represents the truth or certain aspects of it.

Despite both financial accounting and conventional management accounting express a representational ideal, the literature treats representational faithfulness as an explicit, distinct concern. Representational faithfulness is systematically treated in financial accounting, but management accounting is more diverging in their conceptualisation of accounting information as representations (as in e.g. Lazear and Gibbs, 2008's algebraic notion of performance measure and effort) or re-presentations (as in e.g. Chua, 1995). But both financial accounting, conventional management accounting and the actor-network theory inspired accounting research consider accounting information as a frame within which decisions take place and are justified. The representational character of accounting information is treated in both the financial and conventional management accounting literature streams and both are reviewed in order to gain an understanding of how accounting representativity and the connection with managers' thinking and acting is handled in the literature. Actor-network theory inspired accounting research is reviewed too because they provide counter-movement to the representational ideal. In this theory accounting is treated as reality-constituent rather than reality-representative.

The theory chapter is structured as follows. First, theory of accounting qualities with special attention on representation faithfulness is reviewed with the purpose of presenting the the main claims, the theoretical conversations consist of. This will be done with departure in financial accounting theory because the theoretical conversation about representativity of accounting information emerged in this field. The financial accounting qualities sections will be followed by a review of management control literature (performance measurement) with spe-

cial attention on qualitative characteristics of performance measures. As we see in this section, the distinction between financial accounting qualities and performance measurement qualities is not very clear which is evident in e.g. Merchant (2006) who borrows research theory from financial accounting when developing his framework of qualitative criteria. Thereafter the scholarly work about performativity of management accounting representations is processed with focus on actor-network theory accounting research and deleuzian accounting research. Both reviewed with the same ambition as the other sections: to obtain an understanding of how accounting calculations are understood and problematised as representations. The part on financial accounting qualities is bigger than on performance management qualities and constructivist accounting research which might seem an uneven weighting while considering the research question and theoretical approach. However, there is a very mundane explanation on that. The theory on financial accounting qualities is much more extensive than theory on performance measurement qualities and constructivist research on representativity of accounting information. Therefore, in order to review the literature consistently the sections on financial accounting qualities cover more pages than the other part of the chapter.

The selection of publications to be reviewed in the chapter is done mainly by database searches combined with an analysis of how the publications relates to each other as a discussion<sup>1</sup>. The very first part of the chapter presents accounting principles literature on accounting qualities. This is done by reviewing publications from main accounting institutions such as FASB and IASC/B together with a review of the sources, the standard setters use when aligning accounting qualities. The sources for the review in the second part, the theory of representational faithfulness, is selected by a data base search on *representational faithfulness* and *faithful representation* and the intersection between searches on *conceptual framework* and *economic reality*. The following section, performance management criteria, did not return a useful result in data base searches. Probably because Merchant (2006) is the very first attempt to align criteria in the performance

---

<sup>1</sup>This is done by reviewing title, abstract and bibliography to see who the article discusses with

management literature. Therefore the papers covered in that section was found by reviewing sources from Lazear and Gibbs (2008) and Merchant (2006) and combining these with a database search on *performance measurement criteria* in the abstract. The articles used in the constructivist research has been selected by focusing on Robson (1991) and Robson (1992) and following the ANT papers quoting these seminal papers. This is not meant as a method for developing a exhaustive review of the ANT accounting literature, but rather to follow the conversation and understand how accounting representations are perceived in this literature. The deleuzian accounting literature is selected by a data base search on the intersection between *deleuze* and *accounting*, *deleuze* and *performance measurement* and *deleuze* and *management control* in the abstract.

Before entering into the literature of financial accounting qualities, a piece of writing about the boundary between financial accounting and management accounting will be described.

### **Watts on the boundary between financial accounting and management accounting**

As described in the introduction to the theory chapter some differences arguably exist between external reporting (or financial accounting) and internal reporting (or management accounting) and there might seem to be a logical boundary between the two fields of research. However, such a boundary can be too overemphasised, if it means that research in the one domain are carried out without considering the other domain. Watts (2003a) and Watts (2003b) argue that accounting standard setting is influential on managerial behaviour:

*"FASB attempts to ban conservatism in order to achieve "neutrality of information" without understanding the reasons conservatism existed and prospered for so long are likely to fail and produce unintended consequences. Successful elimination of conservatism will change managerial behavior and impose significant costs on investors and the economy in general".*

Watts (2003a, p. 207)

He continues:

*"Researchers and regulators who propose the inclusion of capitalized unverifiable future cash flows in financial reports should consider the costs generated by their proposal's effect on managerial behavior".*

Watts argues that the boundary between financial accounting and management (or, more precisely, managerial behaviour), which have been argued in the performance management literature, can be problematic because accounting standards influence the behaviour of managers. The study object here is the concept of conservatism which, according to Watts, FASB tries to eliminate from accounting standards in favour of neutrality in accounting information. Whilst Watts main argument is tailored around the need for conservatism in accounting he explicitly addresses criteria for performance measures, derived from contracting theory. Obviously, in contracting, verifiability is a crucial matter. But what becomes interesting in the following years after this publication is the "timeliness" of information. As Watts states it "Timeliness avoids dysfunctional outcomes associated with managers' limited tenure with the firm, often referred to as the manager's limited horizon" (p. 211). The argument in both Watts (2003a) and Watts (2003b) is that financial accounting standards influence managerial behaviour and therefore plays a significant role in reducing moral hazard of managers and thereby increasing the value of the firm. This means that, according to Watts, accounting standard setting certainly has control elements which normally are considered an internal accounting matter. Therefore, the boundary between the two, external and internal accounting, is not very clear from a control perspective.

### 2.2 Accounting Theory: Representational faithfulness and other accounting qualities

Qualitative characteristics of accounting emerged in the 1970's when one of the major accounting institutions, the Financial Accounting Standards Board (FASB) initiated its work on accounting qualities.

This section will cover the qualitative characteristics of accounting covered by FASB and the theories they apply in their development. The Financial Accounting Standards (FAS) were published by FASB with the first, FAS 1, in 1973. Prior to this the Accounting Principles Board (APB) had issued accounting standards in the U.S., but APB did not deal with accounting qualities per se.

#### 2.2.1 Financial Accounting Standards Board (FASB)

In 1973 John C. Burton published the article "Some general and specific thoughts on the accounting environment" in the Journal of Accountancy. What is interesting about this paper is firstly that it dates back to the year 1973 when the Financial Accounting Standards Board (FASB) were founded as the US accounting standards setting body and secondly that John Burton was chief accountant at the U.S. Securities and Exchange Commission (SEC), an institution closely collaborating with The Accounting Principles Board (APB) and later FASB (Burton, 1973).<sup>1</sup> Historically FASB replaced the APB in 1973 which according to Burns was thought of as an improvement of the standards of accounting measurements<sup>2</sup>.

The work of FASB materialised as the first statement (FAS 1) in 1973<sup>3</sup>. The title was "Disclosure of Foreign Currency Translation Information" (Financial Ac-

---

<sup>1</sup>this chapter reviews the literature on representational faithfulness. The method for constructing the chapter is not to make a key words search in a scientific data base in a certain time period, but to trace the conversation back and try to construct an understanding of key work within their domain. In order to do so it is the plan to present the academic conversation about representation faithfulness to show the claims made about it and how scholars treat the matter.

<sup>2</sup>APB was founded by the American CPA institute (IACPA) and was therefore not independent of IACPA, which could be problematic. FASB was independent and therefore had better structural conditions for succeeding as a standard setter (Burton, 1973)

<sup>3</sup>The FAS standards were later superseded by the US GAAP.



counting Standards Board, 2011). As the title indicates this very first statement did not literally treat accounting qualities. The only indication as to qualities of accounting was its emphasis of accounting for foreign currency as "translation practices to facilitate assessment of possible implications with respect to its financial position and results of operations" (paragraph four). Thus, here we see that accounting (at least the practice of valuing accounts in foreign currency) is not understood as a one-to-one representational activity, but as an act of translation.

Before the March 1975 issue of FASB statement no. 5 "Accounting for Contingencies" none of the prior statements dealt particularly with representativity or faithfulness. But in the statement no. 5 FASB introduced contingencies into financial reporting. A contingency were defined as "an existing condition, situation, or set of circumstances involving uncertainty as to possible gain or loss to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur" (Financial Accounting Standards Board, 1975). The uncertainty element was manifested as three possible scenarios of the likelihood of a future event (or set of events) happening. Probable, reasonably possible and remote. Each representing the likelihood of the occurrence of the event with probable as the most likely and remote as the least likely. The idea of the statement was to make companies disclose the loss contingencies as accruals.

Again, this statement touch only the edge of representativity without mentioning it directly. The ideal is the same as in FASB statement no. 1: to strive to make the distance between representation and referent as short as possible, to minimise the difference between model and object. FASB discusses this by aligning a claim of integrity of financial statements. The argument went: if the event was not probable (referring to the three scenarios) and the amount could not be reasonable estimated then the recognition would erode the integrity of the statement (p. 22).

Parallel to the publication of financial accounting standards FASB published a number of concept standards (SFAC's) too. The abbreviation SFAC comes from "Statements of Financial Accounting Concepts". The SFACs is where the accounting qualities debate emerged from. The intention of the concept standards was to set "objectives, qualitative characteristics, and other concepts that guide

selection of economic phenomena to be recognised and measured for financial reporting and their display in financial statements or related means of communicating information to those who are interested". The SFAC's was meant to work as »meta standards« meaning that they would be guides to FASB's development of accounting principles (Financial Accounting Standards Board, 1978). The first SFAC (SFAC no. 1) was issued in November 1978 and concerned was entitled objectives of financial reporting. In addition to discussing this the statement introduced the quality of usefulness, defined as follows: "financial reporting should provide information that is useful to present and potential investors and creditors and other users in making rational investment, credit, and similar decisions. The information should be comprehensible to those who have a reasonable understanding of business and economic activities and are willing to study the information with reasonable diligence" Financial Accounting Standards Board (1978, p. 16-17).

Even though the idea of information usefulness requires a definition of which qualities that makes information useful, this aspect of the discussion was not opened in SFAC no. 1. It only states that usefulness must be a balancing or trading-off of relevance, reliability, and other criteria accounting information.

### 2.2.2 Accounting: a system of accountability relationships

Parallel to the FASB publications Yuri Ijiri published the research book "Theory of accounting measurement" as one of the first academic works on accounting theory after the FASB was founded. Some interesting movements are found in the preface in which Ijiri states his viewpoint on accounting<sup>1</sup>: "Accounting is a system designed to facilitate the smooth functioning of accountability relationships among interested parties" (p. ix). Ijiri's move toward accountability is interesting because it emphasises the accountability issue of organisational relationships. The question remains, though, how are individuals made accountable and through which means?

Ijiri explains how three parties are involved in the constructing of account-

---

<sup>1</sup>Which may be inspired by work of The Study Group on the Objectives of Financial Statements (American Institute of Chartered Public Accountants, 1973), in which chapter 4 is about accounting and accountability.

ability: the accountant (the accountable entity), the accountee (the entity which the accountant is accountable to) and the accountant (p. ix). The accountant is accountable for "his activities and their consequences for the benefit of the accountee" (p. ix, paraphrased). The entity left is the accountant. The accountant's role is, according to Ijiri, to act as a third party in the relationship between accountant and accountee. And this third party, the accountant, can be a book-keeper, an auditor or an authoritative body. And here is where FASB as well as other authoritative bodies enters the accountability network.

According to Ijiri, the purpose of the accountant (the standard setter) is to "assist the accountant in accounting for his activities and their consequences and, at the same time, provide information to the accountee" (p. ix). For standard setters such as FASB this implies that the performativity of their principles is pervasive both on individual (firm) level and on societal (macro economic) level. Standard setters have to align the principles in order to make sure the accountant is made accountable for his activities and their consequences and they must provide the accountee with this information. As can be seen, the question then becomes one of making an accounting representation which represents the underlying activity and the question of legitimacy of representations is thus a matter of whether the representation represents what it is and not what it is not (Moore, 2007). And this matter is a matter for the accountant (the standard setter) to make sure the principles enable the representation to represent what it is rather than what it is not.

Ijiri problematises management accounting further with respect to this point, by stating how performance measurement is a matter of measuring economic performance of the accountant. And in order to do so, performance measurement theory suggest the accountee to set goals for the accountant to achieve (Ijiri, 1975, p. 33). And those goals by definition are propositions about the future. The problem is whether accounting representations is a sufficient means for constructing the accountability relationship<sup>1</sup> between accountant and accountee. Ijiri ends this thought by stating that the financial statement is only the top of the iceberg.

---

<sup>1</sup>the construction of the accountability relationship means "to account for", which Ijiri defines as "to explain a consequence (e.g. a cash balance) by providing a set of causes (e.g. cash receipts and disbursements) that have collectively produced the result.

The important elements are the system behind these statements.

### 2.2.3 Qualitative characteristics in the work of IACPA's study group

The American Institute of Chartered Public Accountants had in the early 1970's appointed a study group to work on objectives for financial statements. In 1973 their work was finished and published. In this publication a chapter was dedicated explicitly to qualitative characteristics of accounting (chapter 10).

The study group's suggestion for qualitative characteristics of reporting consists of the following points: 1) Relevance and Materiality, 2) Form and Substance, 3) Reliability, 4) Freedom from bias, 5) Comparability, 6) Consistency, and 7) Understandability (American Institute of Chartered Public Accountants, 1973, p. 57-60).

Within the seven characteristics an emphasis on the representation's link to the underlying activity is indirectly mentioned several times, e.g. by stating that substance must govern the reporting rather than form. But even more interesting is the presence of future benefits. Whether to include those, the Study Group argues, must be a matter of their "substantive economic characteristics", not their technical form as propositions about the future. In addition to substance the information is required to be reliable. The point is that 100% accuracy between information and object cannot be achieved, but reliability (understood as precision) of financial information must generally be high. And furthermore, data limitations and possible measurement errors is suggested to be disclosed to the user too (p. 58). This indicates the ideal that representation and referent must be closely linked and not only that, but also that they believe it *can* be closely linked.

### 2.2.4 Performance measurement criteria in Ijiri 1975

Accountability and performance measurement is closely connected because in order to be accountable, Ijiri argues, the accountant must know the goals of which he

is accountable to the accountee. In Ijiri's book from 1975 he argued for two criteria for performance measures, for the measure to be univocal and unambiguous: the criteria of hardness and the criteria of objectivity.

**Hardness** The hardness of a measure refers to the ambiguity of a measure. As Ijiri explains: "a 'hard' measure is one constructed in such a way that it is difficult for people to disagree. A 'soft' measure is one that can easily be pushed in one direction or the other" (Ijiri, 1975, p. 36). As an example, cash balance is a hard measure whereas goodwill is a soft measure. The question here is one of reliability of measurement. A high reliable, unambiguous measure, is hard, and an unreliable, ambiguous measure is a soft one. Not only is the measure itself the turning point of hardness. The process of constructing the measure, the transformation from facts to figures, is important. If this process is verifiable, the hardness of the measure is higher. And, obviously, the rules used to calculate the measure should be restricted in such a way that the figure is reliable (this point refers to the rigidity of the calculation). (Ijiri, 1975, p. 36).

**Objectivity** According to Ijiri objectivity in accounting measurement does not relate to the representation representing an "existing external reality"<sup>1</sup>. Ijiri's ontological point of departure for the purpose of discussing objectivity is that "we may accept, at least for the sake of the argument, that there is a reality outside the mind" (Ijiri, 1975, p. 36, paraphrased). Because of the meta theoretical problem of whether there is accounting numbers outside the accounting calculation waiting to be discovered by accountants or whether the accounting calculations themselves construct the facts, the discussion of objectivity becomes problematic. Ijiri therefore argues that objectivity must be a matter of *consensus* among "the persons who perceive the object in question" (p. 37). Therefore the value of the firm is considered to be objective if there is consensus among the value (which is not the case and therefore the value of the firm is a subjective measure which's value depend on the assumptions made in the valuation method). As a

---

<sup>1</sup>The question of whether such a reality exists is a metatheoretical question which Ijiri does not discuss in detail.

working condition to test the objectivity of a measure Ijiri suggests to set a group of measurers who are going to measure the same object. After they have assigned a value to the object, one can calculate the variance of the measurements. If the variance is low, close to zero, the objectivity of the measure increases. With respect to that, objectivity is more a matter of standardising assumptions and calculative methods, but the relations between assumptions and reality is not discussed here. Ijiri borrows the AICPA study group's criteria "freedom from bias" to extend the perspective of objectivity. The idea is that the measurers, who agree on the value of a measurement, must be independent from each other, meaning that not only is objectivity a matter of reliability, it is also a matter of validity<sup>1</sup>.

Where objectivity is argued to be an adequate criteria for external reporting it might not be suitable in situations where people have different interests. In such situations, Ijiri argues, the criteria of hardness suits much better, as it eliminates the possibility of questioning the valuation. Simply because the "freedom from bias" criteria cannot be satisfied in such situations because the presumption is that people act opportunistic. Their self interest is preferred (Williamson, 1985).

Ijiri's discussion of identifiability is very interesting from the point of view of this thesis. Ijiri treats this from the theoretical notions of surrogate and principal. The surrogate is a thing used to "convey information about the state of something else" (Ijiri, 1975, p. 40) and the principal is the thing or phenomenon represented by the surrogate. Ijiri explains the surrogate-principal relationship as one of representation.

*»A surrogate is related to a principal by means of a rule of representation. If P is a set of all varieties that the principal can assume and S is a set of all varieties that the surrogate can assume, then the representation rule is considered a function that maps P into S. «*

(Ijiri, 1975)

---

<sup>1</sup>In statistics reliability refers to standard deviation or variance and validity refers to systematic bias.

This notion of the representation rule shows a unidirectional relationship between principal and surrogate. More importantly Ijiri states that in order for the surrogate to work intendedly as information about the principal, the user must be able to decode the message to find out about the state of the principal. As Ijiri describes: "identifiability is the most crucial quality for a surrogate to have [...] A surrogate without identifiability is [...] like a a clock that does not keep time or a car that does not run. These items may still be useful in some respect but certainly not for their intended purposes." (Ijiri, 1975, p. 41).

### 2.2.5 SFAC no. 2: Qualitative characteristics

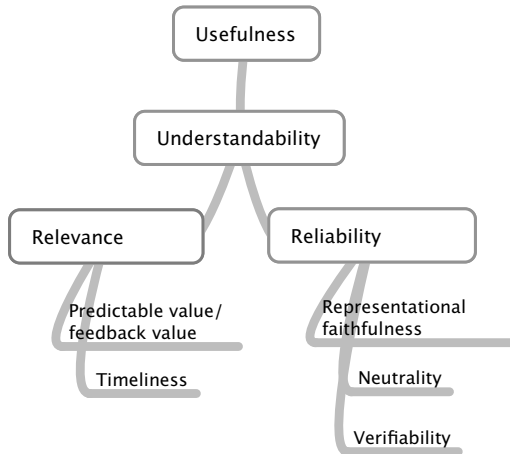
In 1980 FASB published their 2nd SFAC publication which is an extension of the 1978 discussion in SFAC no. 1 on qualitative characteristics of accounting. The focal point of the standard is not financial reporting in general, as it was with SFAC no. 1, but accounting *information*. The scope of the standard was therefore more narrow than its predecessor.

SFAC no. 2 aligns some of the same qualitative characteristics as found in Ijiri (1975) and the work of IACPA's study group from 1973. SFAC no. 2 constructs a hierarchy of accounting qualities starting from top (the most important) with "usefulness" which was the central part of SFAC no. 1. The subsequent level of the hierarchy is understandability, in which FASB argues that information provided is of no use if the user cannot understand it. Therefore, usefulness and, following that, understandability are qualities prior to qualities inherent in the information itself.

The level following understandability is decision specific qualities of which relevance and reliability are the most important ones. According to SFAC no. 2 relevance and reliability qualifies the information as being useful. Relevance is defined as timely information and predictability value and/or feedback value. Reliability is defined as information having representational faithfulness and being verifiable and neutral (Financial Accounting Standards Board, 1980a).

The discussion regarding relevance stresses an important assumption regarding the connection between information (representation) and the past and the future (reality). First of all relevance is defined as information that "can make

Figure 2.1: SFAC no. 2. Hierarchy of accounting qualities



Source: own production  
(based on Financial Accounting Standards Board, 1980a)

a difference to decisions by improving decision makers' capacities to predict or by providing feedback on earlier expectations" (p. 5), but more importantly "knowledge about the outcomes of actions already taken will generally improve decision makers' abilities to predict the results of similar future actions. Without a knowledge of the past, the basis for a prediction will usually be lacking". The interesting point here is the idea of similarity. If the future is similar to the past, then information about the past will have predictable value. This means that for information to be relevant the future must (at least to some extent) be similar to the past. But the question is whether such an assumption is productive for the performance of management accounting representations.



Figure 2.1 shows that reliability is defined as representational faithfulness, neutrality and verifiability. It is representational faithfulness that indicates something about the assumption of the representational ideal of accounting. Representational faithfulness was a new term introduced in SFAC no. 2 and cannot be found in any of the previous books or papers on qualitative characteristics of accounting. It relates to the AICPA study group's discussion of reliability even though in SFAC no. 2 it is more precisely defined:

*»The reliability of a measure rests on the faithfulness with which it represents what it purports to represent, coupled with an assurance for the user that it has that representational quality [...] Reliability rests upon the extent to which the accounting description or measurement is verifiable and representationally faithful [...] Representational Faithfulness (means) correspondence or agreement between a measure or description and the phenomenon that it purports to represent (sometimes called validity) «*

Financial Accounting Standards Board (1980a, pp. 6 and 10)

SFAC no. 2 claims that the matters that distinguish better information from inferior information is primarily relevance and reliability (p. 14). FASB touches on the problem of representation and referent by discussing cartography as a metaphor for accounting. The information is the map and the accountant is the cartographer. In relation to this FASB claims it to be problematic to design a "general purpose" map that aims to satisfy all user needs. Such a map is problematic because the cartographer, exactly as the accountant, must make choices on which information to include.

### **Scope of SFAC no. 2.: internal or external decision making**

Some readers would argue that the qualitative characteristics in SFAC no. 2 is developed for external stakeholders and the principles do not apply to internal matters such as the concerns management accounting usual deals with. However,

FASB is concerned with qualities that makes accounting information useful in general. SFAC no. 2 discusses explicitly this link between financial reporting and internal control as a matter of assessing stewardship (i.e. efficiency, effectiveness and integrity of the steward and the steward stewarding for a range of stakeholders. Not only the owners, but also for example bond holders (p. 18)). The SFAC states that financial reporting is designed to provide information useful to decision making carried out by suppliers, lenders, employees, owners, and customers (p. 17). As we see in the list, internal stakeholders (employees) are present as well as external ones. Furthermore, performance appraisals of stewardship as well as internal economic decision making are activities included in the scope of the SFAC no. 2. Therefore, the qualitative characteristics stated here can not be said to be delimited to external use only, it applies to internal decision making as well.

*»Financial reporting includes not only financial statements but also other means of communicating information that relates, directly or indirectly, to the information provided by the accounting system - that is, information about an enterprise's resources, obligations, earnings, etc. [...] Financial reporting should provide information that is useful to managers and directors in making decisions in the interests of owners.«*

Financial Accounting Standards Board (1980a, p. 9 and 21)

Altogether SFAC no. 2 is not limited to deal with decision making for external parties, as should be evident internal concerns for control is covered too. Therefore, the qualitative characteristics applies to internal decision making and performance appraisals likewise<sup>1</sup>.

---

<sup>1</sup>The perspective of external stakeholders were introduced explicitly in SFAC no. 3 in paragraphs 10 - 13 in which FASB stated that the "definitions in this statement are of economic things and events that are relevant to investment, credit and similar decisions and thus are relevant for financial reporting" (Financial Accounting Standards Board, 1980b). Investment were later in paragraphs 11 - 13 defined as a concern for owners. Thus, from SFAC no. 3 and onwards financial reporting was dealt with only as a matter of decision making and therefore not a matter for internal control.

### SFAC no. 2. on Representational Faithfulness

In the discussion of reliability FASB argues accounting decisions<sup>1</sup> always to be in a tension between relevance and reliability, meaning that an increase in relevance will imply a decrease in reliability and vice versa (Financial Accounting Standards Board, 1980a). Reliability is conceptualised through a metaphor of drugs. Either can drugs be reliable in the sense that it cures what it claims to cure (which in accounting is conceptualised as effectiveness) or in the sense that the label on the drug corresponds to the content. Reliability in SFAC 2 is defined as the latter: that the label corresponds to the content. In order to stress this point FASB introduces the notion of representational faithfulness mentioned in section 2.2.1. Representational faithfulness is defined as follows:

*»Representational faithfulness means correspondence or agreement between a measure or description and the phenomenon it purports to represent.«*

Financial Accounting Standards Board (1980a)

The question FASB realises is the problem of representing what it purports to represent. SFAC no. 2 problematises this through a simple example of costs of acquiring assets:

If the inventory consists only of good A and good A is bought 3 times during january in quantities 10, 13 and 16 at the prices DKK 105, DKK 120 and DKK 113 and the company gets a discount of 10% for each piece more than 20 they buy each month (which means they got 10% discount on the last 19 pieces) , how can we know what the cost of each good is? The first 10 products are easy to value. They cost 10 each. But what about piece no. 11, 12, 13 or even worse, piece no. 21? Depending on the registration it might be possible to calculate the value of each product. And if the last 16 pieces was bought strategically in order to obtain the bonus on these 16 pieces because the bonus exceeds the inventory cost

---

<sup>1</sup>Decisions related to recognise assets and liabilities, value them and eventually prepare financial reports

of those 16 pieces, we even have to account for the purchasing politic in the cost estimate. Beyond that the cost of estimating purchase costs will probably exceed the benefit and therefore companies often use some inventory conventions such as FIFO, LIFO avg. cost price etc. The next problem becomes one of pricing: how do we price precisely if costs are estimates that do not reflect any »true value« of what it purports to represent? This means that prices, as derivatives of costs, are not reflecting the »true value« for the firm too because they are referring to a singular referent (the specific good sold) and not the collective in which they are part (the order of a quantity of goods). This is important because the collective is an effect of not only operations, but also politics of purchasing and possibly other microsociological movements too, which makes it impossible to decompose the collective to the sum of its individuals.<sup>1</sup>

The example is a very simple problematisation of representational faithfulness. If we consider manufacturing cost calculations, depreciations or estimates of the future (for example market values of assets) the link between representation and referent becomes even more sophisticated. An example of this is assets: an asset expresses a value. But this value, whether recognised at historical cost, market value or depreciated cost rely on a condition about the future. If the asset has a future value the asset book value could be faithful. But the faithfulness here relies on the assumption that the asset represents a future value to a customer. This means that not even market values, but also historical costs are faithful only to the extent that the proposition about future value is true. The problem is therefore whether a cost calculation as valuation of assets expresses faithfully the future value of the asset<sup>2</sup>(Financial Accounting Standards Board, 1980a and Financial Accounting Standards Board, 1980b).

What becomes maybe even more interesting is the SFAC no. 2's discussion regarding the relation between reliability and predictability. "Reliability as a quality of a predictor has a somewhat different meaning from reliability as a quality of a measure" (paragraph 75). FASB addresses this point very precise by stating that accounting reliability is not to be judged in its predictability of

---

<sup>1</sup>This example is an extension of the example of acquiring assets described in SFAC no. 2 paragraph 65-67.

<sup>2</sup>The same applies to liabilities. The difference, however, is that liabilities often rely on contractual agreements between lenders and borrowers.

the future, but oppositely on the relation between representation and referent. Because the predictability depend on a lot of other factors too, e.g. forecasting model (which SFAC no. 2 denotes predictive model) the information's reliability must not be determined based on that.

### 2.2.6 Accounting qualities in IAS

In 1989 the IASC framework was published. It was very similar to the SFAC framework<sup>1</sup>.

The qualitative characteristics aligned to ensure usefulness in the IASC framework are understandability, relevance, reliability and comparability<sup>2</sup>. IASC adopted FASB's concept of representational faithfulness when operationalising reliability. Reliability was here defined as follows: "Information has the quality of reliability when it is free from material error and bias and can be depended upon by users to represent faithfully that which it either purports to represent or could reasonably be expected to represent" (IASC Foundation Education, 2007).

When comparing to SFAC no. 2 two differences in the definition occur. Firstly, SFAC no. 2 states that the representation, in order to reliable, must be coupled with an assurance for the user (verification) which emphasise the information's "representational quality". The second difference is that the IASC framework not only argues that the information must represent what it purports to represent, but in extension of that "could reasonably be expected to represent". A guess on why the definition includes this expectation in the definition is because IASC allows for discounting future cash flows in valuations in the balance sheet. Furthermore, in FASB's SFAC no. 2 they denote it *representational faithfulness* whereas in the IASC Framework it is defined as *faithful representation*. This vocabular difference could be to stress faithful representation as a quality of the activity of representing which concerns the process of representing not leaving the criteria as quality of the end, the *representation*. But this argument is only partially evident in the

---

<sup>1</sup>FASB and IASC worked in the 1980's totally independent of each other. However, as it looks the SFAC framework highly influenced the work on the IASC framework (Hendriksen and Breda, 1992, p. 241).

<sup>2</sup>IASB denotes these as "principal qualitative characteristics" (IASB Foundation Education, 2007, p. 18).

IASC framework through its emphasis on process rather than product.

Even though slight differences between the SFAC standards and the IASC framework are evident, they are still founded on the same representational basis, that representation and referent can be reliably linked. In FASB's work they refer to this as representational faithfulness where in the IASC work they refer to it as faithful representation<sup>1</sup>.

### 2.2.7 Summary of accounting qualities

The financial institutions' work on accounting qualities and representational faithfulness articulates an understanding of accounting information as representing something. However, it is very difficult to qualify a definition of what it actually should represent faithfully and therefore no one talks deliberately about accounting information as representing an »underlying economic reality, or truth«. Therefore, they rather talk about process: instead of representing something underlying, representational faithfulness is about reporting according to standards. Thus, a procedural faithfulness more than an ontological faithfulness. But important as to this thesis, the work on accounting qualities strongly articulates a representational ideal, namely that accounting information is constructed to represent something. In Ijiri's work a surrogate that represents the state of its principal.

Even though the definition of representational faithfulness is problematic and FASB uses metaphors to give a direction for what it could mean, the notion is repeated within later attempts of constructing frameworks for accounting qualities (The IAS Framework).

Thus, it looks paradoxically that representational faithfulness is a matter which the standard setters can not even themselves define, which might indicate a problem as to what role representativity in accounting information has.

---

<sup>1</sup>Reliability is not operationalised as faithful representation alone. Four other sub-characteristics of reliability are evident too (Substance over form, Neutrality, Prudence and Completeness). These, however, are not directly the main focus of this thesis and will therefore not be addressed explicitly. One thing, that should be mentioned though, is the principle of conservatism which is not to be found in the IASC framework. However, Prudence refers to a "degree of caution" that makes assets not being overstated and liabilities/expenses not understated" (IASC Foundation Education, 2007, paragraph 37).

Where this section set the scene for the representational ideal in articulated in accounting theory (the representativity of accounting information), the next section will review the academic debates around representational faithfulness and the questioning of the existence of an underlying economic truth.

### 2.3 Research on faithful representation

While the previous section concerned the standard setting bodies this section reviews academic articles on the topic of representational faithfulness or faithful representation<sup>1</sup>.

#### 2.3.1 The purpose of a framework of qualitative characteristics of financial reporting

In 1981 Donald Kirk, Chairman of FASB, published an article where he expressed the need for a conceptual framework for standard setters of accounting standards (Kirk and Horngren, 1981). It can be seen how this framework intended to "serve as a system of accountability for the board in fulfilling its public responsibility" (p. 83) and to align the individuals within the standard setting bodies to adopt the same perception of "reality":

*»Without a framework, it is difficult for a standard setter to assess the contention that a particular method of accounting better reflects "economic reality" or is more "useful" than an alternative method. Reality is personal to the observer: a framework helps identify the particular facet of reality that is most useful and that should be or can be measured in financial statements.«*

Kirk and Horngren (1981)

---

<sup>1</sup>A discussion of fair value accounting vs historical cost accounting is evident in the domain of faithful representation and there are proponents and opponents of both measurement techniques. However, fair value accounting is not explicitly what this thesis is concerned with and therefore the dialogue on issues related to cost recognition is not part of the theory.

In the same article Charles Horngren raised an important question: *Why* is FASB building a technical framework? He argued it to be based on an axiomatic belief: "if we only had a foundation, deductive logic would lead us to the correct answer".

From an efficiency viewpoint it might be true that a framework is needed because it makes decision making within standard setting easier when the standard setters have a general framework upon which to justify their standards. However, another problem is whether the framework gets so much power that it manages to persuade people who work with accounting (whether it is financial accounting or management accounting) about this representational ideal, and maybe even persuades that the underlying economic reality really exists out there.

Vickrey (1985) argues that an analysis of normative information qualities (NIQ's) such as the ones FASB develops in the SFAC no. 2 framework must be built on the relation between information system qualities and usefulness on individual level. The article is written from a information economics (IE) point of reference. From that perspective information system qualities are to meet the criteria of normativity only to the extent that they are useful on the level of the individual. Vickrey explicitly states it important to remember that different NIQ's (such as the ones FASB develops) lead to different accounting policy decisions. This expresses the NIQ's used as an axiomatic point of reference in order to be able logically to account for the effectiveness of policy making decisions. Normative is defined as "qualities which are individually necessary and collectively sufficient for usefulness in probability revision in the context of expected utility maximization" (p. 116). This means that the focus in this paper explicitly is on utility maximisation in economic decision making. Thus, Vickrey questions the purpose of a framework (of accounting qualities) just as Kirk & Horngren. But where Horngren discussed purpose and social choice between constituencies, Vickrey's focus is on the qualitative framework isolatedly.

In 1986 David Solomons published an evaluation of the conceptual framework in the Journal of Accountancy (Solomons, 1986a). While he argued against the skepticism about the need for a conceptual framework, he argued for a scepticism for the outcome of the project (which had been running for 9 years). Solomons



does not explicitly evaluate the SFAC no. 2 but a text box on representational faithfulness shows as an example how actuaries' many assumptions about the future are problematic to the notion of representational faithfulness because "some or all of these assumptions will prove not to be in accordance with the way things turn out" (p. 121). Unfortunately, Solomons does not discuss the notion of economic reality and the idea underlying transactions but possibly he agrees with the ideal of accounting information as representation. However, he explicitly states that the outcome of the conceptual framework is very weak - "a lost opportunity" to paraphrase him. This standpoint is summed up in the very last paragraph "A "guiding model of the overall order", a "utopia", a "guiding conception of an internally consistent model" - this is what the conceptual framework might have been. In my judgment the result of the board's work falls dismally short of this ideal".

### 2.3.2 Discussion of the "reality" accounting represents

Parallel to the publication of the article in Journal of Accountancy Solomons also published a book at Oxford University Press entitled "Making Accounting Policy" (Solomons, 1986b). In this book chapter 5 was devoted to SFAC no. 2. In this book Solomons explains the problematics of the notion of "economic reality": accountants are striving "to present a picture of economic reality in an enterprise's financial statements. [...] economic reality [...] is incapable of precise definition". Again, he reflects the notion of representational faithfulness to pensions: "virtually none of the factors that determine the ultimate cost of a pension plan to an employer can be foreseen accurately during the working lives of the employees covered by a plan". This illustrates the problem of economic reality and estimates about the future very well.

In 1988 Ruth Hines published a paper in Accounting, Organizations and Society with the intriguing title "Financial Accounting: In Communicating Reality, We Construct Reality" (Hines, 1988). This article is not directly related to qualitative characteristics of financial reporting but has a strong claim about accounting representations in general.

What is interesting in the article is Hines' strong emphasis on the problema-

tisation of what an organisation is (and its boundaries to what it is not) and its relation to the idea of representational faithfulness. Hines problematises the point of realisation, especially goodwill. She argues that financial matters become real only to the extent they are *real*-ized which is not related to a certain event happening that realises, but related to a calculative decision of realising the matter.

Hines explicitly relates these concerns with financial accounting. She argues that nobody really knows what "the full picture" is and therefore the notion of "a true, a fair view of something - depends on people deciding that they have the full picture" (p. 252), which is the same case for faithful representation, is somehow assumes that we know what the »right representation« is. The paper was not explicitly directed towards proponents of the conceptual framework even though its claims were aimed precisely towards the adequacy of an ideal of representing a so-called »real« underlying economic reality.

In 1991 Hines published another article in *Accounting, Organizations and Society* specifically aimed at the performance of standard setting when it comes to construction of the reality (Hines, 1991). This paper focuses on the problematic relationship between the financial accounting and the »economic reality«. Again, Hines argues that the thinking inscribed in the notion of faithful representation and the ontology's consequences for conceptual prescriptive accounting models is evident for literally all accounting theory: "As pointed out previously, the FASB's CF reflects the reasoning of members of the accounting profession, and industry, and user groups. It is a process of reasoning, maintaining the assumption of an objective, intersubjective world as central.." (p. 319). When arguing for how this ontology have been inscribed in the FASB framework, she argues that the standard setters somehow just know this that it is possible to represent faithfully (i.e. there is a referent (a principal) of which the representation is a surrogate, to use Ijiri's conceptualisation of accounting representation.). She compares that to the Azande tribe whose members "know that an oracle exist" and thus they do not question the oracle's existence at all (Hines, 1991).

This ontological problematisation of representational faithfulness is repeated in several other research articles as well. For example Ingram and Rayburn (1989) in their response to Robert G. Ruland argue that accounting reports are distor-

tions of reality and that "accounting reports are not maps of reality, because there is no empirical referent for much of the information contained in accounting reports" (p. 58). Therefore the »truth« of accounting reports is in Ingram and Rayburn (1989) considered as a "subjective understanding to be manufactured and agreed upon".

The discussion of qualities of accounting is ongoing and Solomons (1991a) continues the discussion of Ruland and Ingram & Rayburn discussion by criticising the work of Tony Tinker (Paper Prophets). In (Tinker, 1991) he argues that ideals such as representational faithfulness rather than being ontological claims in essence are epistemological standards because they are effectuated by the epistemic position (the economic world is out there). Solomons responds to that in (Solomons, 1991b) where he argue that both he and Tinker agree on the fact that accounting representations are socially constructed. In this article, however, Solomons keeps his prior standpoint: *because* accounting is social constructs, we need ideals such as representational faithfulness and other qualitative characteristics to assess accounting standards<sup>1</sup>.

Donegan and Sunder (1989) published their analysis of off-Balance Sheet reporting (such as operational leasing or strategic alliances) and its relations to qualitative criteria. They analysed reporting problems from different reporting perspectives, one being decision usefulness/representational faithfulness and another being contract theory/game theory. Donegan and Sunder (1989) acknowledge the problematics of qualities such as representational faithfulness and decision usefulness by claiming that "it may be the case that the best solutions deviate from the solutions generated by the RF and DU criteria"<sup>2</sup> (p. 207). They claim this by juxtaposing the contract theoretic perspective of reporting with the representational faithfulness perspective. From a contract theoretic perspective it might be that the optimal solution compromises representational faithfulness because action/reaction decisions are made based on game theoretic Nash deci-

---

<sup>1</sup>The conversation between Solomons and Tinker is very briefly presented here because the main matter of it is whether accounting setters should consider economic consequences of the standards they develop or not. This discussion is irrelevant for the research in this thesis.

<sup>2</sup>RF is the abbreviation of representational faithfulness and DU is the abbreviation for Decision Usefulness.

sion rules rather than rules of representational faithfulness or decision usefulness. This implies, in practice, that the "game" drifts toward a Nash equilibrium where the qualitative criteria is compromised. Even though Tinker's work is much more radical in its claims, Donegan and Sunder (1989) comes to the same conclusion through a game theoretic perspective.

Following the work of Donegan and Sunder, Homer Kripke initiated a similar discussion regarding the conceptual framework in 1989 when he published "Reflections on the FASB's Conceptual Framework for Accounting and on Auditing" (Kripke, 1989). His claim is that FASB failed to do a good job when they developed the framework: "in my opinion, the Board's earnest effort has failed" (p. 11). The critique goes on internal consistency between standards and conceptual standards and as an example Kripke applies representational faithfulness to the definition of an asset in SFAC no. 3 in which he concludes the same as previously showed in this chapter about the problem of representing faithfully the value of the future (because an asset is defined as "a probable future benefit that involves a capacity...to contribute directly or indirectly to future net cash inflows" (p. 15)). Hence, it is problematic to measure assets on a cost basis when they are defined as value. An interesting standard building on this problematisation materialised in the October 2008 amendment to IAS39 ("Financial Instruments: Recognition and Measurement"). The amendment allowed reclassification of certain non-derivative financial assets "out of the fair value through profit or loss category". This meant that financial companies could reclassify e.g. bonds ("hold-to-maturity investments") from fair value to amortised cost prices and recognise the valuation difference in the profit/loss statement. But only if they planned to keep the bond to its maturity. This is an example of a standard amended to reflect the ideal of representational faithfulness. Obviously the new measurement for hold-to-maturity investments were more representationally faithful<sup>1</sup>. Kripke's work criticised the work on the FASB conceptual framework because he finds the standards inconsistent and including conflicting qualities

---

<sup>1</sup>The story about the amendment to IAS39 is obviously not present in Kripke's 1989 article as the amendment came 19 years after his article but it is included here to exemplify how representational faithfulness and its relation to future cash flow on bonds could be a matter of use.

(relevance/verifiability/reliability). He concludes that a framework like FASB's is confusing both for accountants and for auditors. His recommendation would be that the FASB should appoint an overriding quality of accounting information which should be representational faithfulness. This could qualify the auditor opinion too: "representational faithfulness to the events and results of the period on which the opinion is expressed". By doing so the auditor would be able to "conclude that the set of financial statements adequately mirrors the economic activity it reports" (p. 65, quotation marks removed). Thus, Kripke articulates strongly a pre-understanding that accounting information has representational qualities and represents something (economic activity).

Kripke's article was commented by 3 following articles in *Journal of Accounting, Auditing and Finance* written by Ronen and Sorter, Burton and Kirk. Even though Ronen and Sorter (1989) argue that Kripke's critique is "fair and constructive" (p. 67), they disagree with his conclusion (that accounting "should be aimed toward becoming consistently useful and representationally faithful" (p. 68)). They do so not because consistency and representational faithfulness are wrong ideals, but because where Kripke indicates that the case of the FASB framework (and prior trials) proves the development of a common framework is impossible, Ronen and Sorter argues that the ideals require logical analysis based on definitions of the ideals (i.e. a framework). They take the critique seriously but argues, equally to David Solomons, that a board such as FASB must strive toward a framework that represents faithfully the economic reality rather than taking game theoretic self-interest optimums under consideration. John Burton's response to Kripke is mainly pointed at Kripke's solution in which he proposes a pragmatic approach to standard setting "driven by the underlying principles of consistency, representational faithfulness, and usefulness" (Burton, 1989, p. 79)<sup>1</sup>. The last response to Kripke's work is offered by Kirk (Kirk, 1989). As the former chairman of FASB it is not surprising that he defended the need for a framework to "point the user of the framework in a direction generally believed to be in the best interests of the public" (p. 85). Kirk criticises Kripke's sug-

---

<sup>1</sup>Burton's response is not relevant for the thesis, because the article is a reflection on the failure of the FASB work and ascribes the problem to one of politics where Burton end with stating that "While Professor Kripke and I clearly have some differences in detail, I believe we are on the same basic wavelength working toward the same objective" (p. 81).

gestion of a pragmatic approach to standard setting<sup>1</sup> to be useless in practice because of lack of definitions of the core elements consistency, representational faithfulness and usefulness. He concludes by stating that the reconceptualisation proposed by Kripke is unnecessary. In the dialogue between Kripke and Kirk, Kirk stated that FASB purposefully left the notion of the economic reality out of the definition of representational faithfulness in the 1980 framework because »economic reality« is an abstract term which would not benefit the standard setting work, because it leaves space to a discussion about what the economic reality is. What is interesting about this, though, is that they interchanged the idea of conformity with the economic reality with ”..what it purports to represent”. As can be seen in the description of the FASB framework this changes the ideal of representational faithfulness from being one of coherence between representation and referent where the referent used to be the ”economic reality” but became the ”label” of the representation (the label on the drug). This implies that historical cost can be a faithful representation if the representation states this as its referent. Therefore representational faithfulness became a matter of being explicit about the standards which accounting calculations comply with, i.e. its ”label”. Thus, representational faithfulness expresses an epistemological, or procedural faithfulness rather than an ontological faithfulness. But representativity is still articulated; the information *represents* something, it acts as a surrogate of a principle.

In 1993 Bushman and Indjejikian published an article in which they suggested that distorted accounting information (i.e. *unfaithful* representations) can be beneficial when the use is stewardship. This claim argues it to be problematic to construct a set of qualitative criteria for ”useful accounting information” that applies to a broad set of accounting purposes. They align the argument in a compensation scheme context where compensation contracts are to be developed in multitasking settings (p. 766 for an elaboration). The point is that performance is measured on aggregate performance measures. In this setting, Bushman and Indjejikian suggest that biased measures can make the use of performance measurement go beyond the ordinary limits aggregated measures are typically

---

<sup>1</sup>Which he says is adopted from law: learn from experience.

criticised for. The purpose of the paper is to show that a *general* purpose framework covering both stewardship and economic decision making can hardly be obtained, because of the difference between the purposes (decision making and directing employee behaviour through incentive schemes).

The last article to mention which covers representational faithfulness is Gibbins and Willett (1997). They did an attempt to bring the discussion of accounting back from decision usefulness (relevance) to representational faithfulness by raising the question about what accounting numbers actually represent (about the wealth-creating activities of firms). Their point was that accounting data is socio-technically constructed from "an underlying data generating system that defines the statistical character of the resulting data" (p. 128). They claim the accounting system is the back end of the financial reports, which in their view is a layer, a disclosure filter, put on the measurement of economic events which is a problem to idea about a direct relationship between accounting information and representational faithfulness. They give several examples of how the representation becomes problematic in relation to "faithfulness" because of the registration of transactions and that the choice of measuring e.g. stock movement at LIFO, FIFO or average costs (p. 157-158) leaves the number with statistical properties which becomes problematic for faithful representation. Thus, they say, the link between registration and measurement and the underlying economic event is significant for the becoming of faithful representation of accounting information.

### 2.3.3 Summary of the theory on qualitative characteristics of accounting

Early research from the 1970's and onwards, starting with the construction of FASB and Ijiri's work on accounting as accountability is concerned with the usefulness of accounting information to different ends. One of these ends is accountability, or, as it later became, control enforced through performance measurement.

The discussion about qualitative characteristics, especially representational faithfulness is ambiguous and the literature is not to be able to define consistently what representations actually are faithful to, apart from "what it purports

## 2. Theory of accounting qualities

---

to represent”. Some equate this with an underlying economic truth while others claim it to be about following procedures and being faithful to the way calculations are described to be carried out (e.g. historical costs versus fair value is not a matter of representing a »true« economic reality, but rather to specify how the value is constructed). Others again criticise the whole stream of writing for representativity not to be adequate to explain what accounting is.

Some authors are proponents of the idea of representational faithfulness while others are opponents. The review of discussions within the literature is summarised in the table 2.1.

Table 2.1: Summary of literature on accounting qualities

Author(s)	Claim
Hines	The reality is not represented by accounting information, but co-constructs reality when assets are <i>real</i> -ised).
Vickrey	Proponent of the conceptual framework and representational faithfulness. Argues for normativity to be the turning point of a framework’s qualities. Shows adequacy/ inadequacy of criteria by stating the aim as utility maximisation.
Kirk	Proponent of representational faithfulness, but not as representing an »underlying economic reality« but rather representing what it purports to represent (epistemological or procedural faithfulness)
Horngren	Probably proponent of the representational faithfulness ideal, but emphasises the problem of a constitution as a common agreement between constituent parts. Thus he is proponent of the procedural faithfulness and not ontological faithfulness.
Continued on next page	



## 2. Theory of accounting qualities

Author(s)	Claim
Tinker	opponent of representational faithfulness. The notion is effectuated by the epistemic position that the economic world is out there.
Solomons	Proponent, but argues that the »economic reality« is almost impossible to represent (using the example of representing faithful the value of pension plans).
Kripke	Proponent of ideals of accounting qualities, but opponent of the ontological conception of representational faithfulness as a possible ideal (it is problematic to on a cost basis when they are defined in SFAC no. 3 as value).
Ronen and Sorter	Opponents of the ideal of representational faithfulness and suggests that financial standard setters work on frameworks that makes accounting a faithful representation.
Ingram and Rayburn	Opponents of "representational faithfulness". They state that accounting reports are distortions of reality because there is no empirical referent for much of the information contained in accounting reports
Burton	Proponent of the framework and procedural representational faithfulness.
Kirk	Proponent of procedural faithfulness. He argues that FASB left the notion of the economic reality out of the definition of representational faithfulness because »economic reality« leaves space to a discussion about what the economic reality is.
Bushman and Indjejikian	Opponents of representational faithfulness as ideal. They argue that it is not always good for stewardship assessment.
Continued on next page	

---

## 2. Theory of accounting qualities

---

Author(s)	Claim
Gibbins and Willett	Opponents of representational faithfulness. They show how measures becomes stochastic variables which means that a recognition as direct/discrete numbers are problematic.

What the literature study indicates is linked to the claim in Tinker (1991) about epistemic positions. Rather than being ontologically representational faithful, the standards in essence become epistemologically representational faithful. Rather than being faithful to the world, representational faithfulness is more about being faithful to the standards themselves, which means representational faithfulness becomes a procedural faithfulness more than an ontological faithfulness<sup>1</sup>. This point is reflected in the ambitions of the standards. One ambition is to represent faithfully the underlying economic reality, but another thing is comparability. Comparability is not as much about being ontologically "representational faithful" than being "epistemologically, or procedurally, "representational faithful". We must be faithful to the standards, else wise comparability is compromised.

But what it also shows is that the representational ideal is very strong in the financial accounting theory, especially though the development of accounting qualities. This is emphasised in the literature, but also in the fact that representational faithfulness as a notion survives throughout discussions and are still present in IASB and FASB's frameworks in 2010 and also in the common framework FASB and IASB published together in 2012 (in the 2012 framework it is denoted faithful representation (Ernst & Young, 2012)).

Because of its inscription as an SFAC and in the IASC conceptual framework and the later convergence frameworks the principle of representativity of

---

<sup>1</sup>This understanding of faithfulness is indicated in Ingram and Rayburn (1989) too where the authors state that "we are not so much interested in the empirical phenomena in accounting policy as in how the phenomena can be abstracted and defined in some consistent and comparable way.

accounting information applies to financial accounting and financial reporting. But the thesis argues that representativity of accounting information is equally important for internal accounting (management accounting), as we will see in the next section. In management control theory, there is just as in financial accounting theory, a presupposition of accounting information as representations, or re-presentations, as we will see.

### 2.4 Management Control: Performance Measurement Criteria

Ijiri's work showed how performance measurement is used differently by different stakeholders. Owners assess performance probably to assess the return on the investment in the company (investment decision making) whereas the board assesses performance of managers in order to align their behaviour with the company's overall goals (control) (Zimmerman, 2009). Performance measures for different purposes must be designed differently which means performance measures for investment decisions might focus on revenue, contribution margin, EBIT, annual result, return on assets, return on equity etc. Those measures are logically inadequate to use for behavioural control purposes because it is hard to understand how individual employee behaviour affects such measures<sup>1</sup>.

As will be evident in the following section which reviews literature on performance measurement criteria a strong correlation between financial accounting qualities and performance measurement criteria seems to be evident. Maybe this could be because of the fact Ruth Hines aligns in Hines (1991) that the extensive work in terms of money, publications and legislation which have been done around the development of financial conceptual frameworks "is an important discourse about the practice of financial accounting, analysis of which can lead to insights into the constitutive nature of both accounting practices and reasoning processes" (p. 314). Hines explicitly says that when a discourse is narrated as far-reaching as it is in the work of both FASB, IASC and later IASB it shapes the way people reason. Therefore it is argued to create this strong link between

---

<sup>1</sup>This is elaborated under the performance measurement criteria section below

accounting for external purposes (financial accounting) and accounting for internal purposes (such as performance measurement). Along with this argument it is also evident that many companies use data for external reporting for their internal control purposes as well (maybe in order to be "cost effective" which is one of the criteria for a good performance measurement system)<sup>1</sup>.

### 2.4.1 Performance measurement for control

In 2006 Kenneth A. Merchant published the article "Measuring general managers' performances: Market, accounting and combination-of-measures systems" in the *Accounting, Auditing and Accountability Journal*. The motivation for writing the article was, as he stated it in the abstract "While comprehensive sets of evaluation criteria have been applied to financial accounting choice issues, this is the first such approach in management accounting" (Merchant, 2006, p. 893). In the paper he develops a set of criteria to be used in the design and evaluation of performance measurement in management accounting (i.e. for the purpose of directing employee behaviour in a certain way). As can be seen, the set of criteria can be understood as management accounting's equivalent to the qualitative criteria of financial accounting developed in SFAC no. 2 and later in the IASC framework and IFRS framework.

The section reviews papers considered to be important for the understanding of performance measurement design. But before doing so it is necessary to specify the problem performance measurement is said to be a solution to. The problem is one of decision making (Zimmerman, 2009): to be sure decisions are made most efficient with respect to the firm's interest (Lazear and Gibbs, 2008). This is modelled through various means (organisational design, job design, allocation of decision rights (decision management/control) and performance measurement.). The point in the literature<sup>2</sup> is to align the organisational design, job design and decision rights structure with the company's strategy and capital structure<sup>3</sup> from

---

<sup>1</sup>Which they for example do in the company analysed in this thesis

<sup>2</sup>The literature here refers to economic theories such as transaction cost economics and agency theory.

<sup>3</sup>Also called pay off structure

a marginal analysis point of view. When that is done a performance measurement system can be designed so that decisions are made in the interest of the firm.

The problem of designing a space for efficient decision making is (at least) two dimensional: it has a motivation aspect and a coordination aspect (Friis, 2011). This dualistic problematisation stemmed from the 1950's and 1960's proposal of "bringing the market inside the firm" (Baker et al., 2001). The motivation aspect (or the motivation problem) departed from the transaction cost economics assumption of opportunistic behaviour (Williamson, 1985) and later agency theory (Jensen and Meckling, 1976) while the coordination aspect is a matter of designing a decision making structure where perceived optimal decisions are aligned with the "real" optimal decision of the firm. An example is decisions which carry with them externalities to other parts of the organisation. If externalities are not incorporated in the incentives system the decision maker might not consider them in relation to their decisions and hence the decision, even though it is made under optimal motivational conditions, does not lead to the best effect measured on firm level value (Hansen, 2007 and Merchant and Shields, 1993)<sup>1</sup>.

### 2.4.2 The emergence of qualities of performance measurement: alignment problem

In 1975, the same year as Ijiri published the book "Theory of Accounting Measurement", Kerr published the article "On the folly of rewarding A, while hoping for B" in the Academy of Management Journal. The purpose of the article is to show how reward systems affect behaviour of employees. Kerr describes a number of empirical stories in which the reward system affects behaviour. One example is orphanages. The primary goal might be to place children in good homes, but because of the way money is allocated (based on number of children in the orphanage) the behaviour of the management might be opposed to the goal: keep the children in the orphanage longer because of money and prestige value of the

---

<sup>1</sup>For example signified in the example from Boise Cascade Corporation where the costs of supporting computers were biased downwards in order to stimulate PC use. Another example is Tektronix Portable Instruments Division's use of imprecise cost estimates to direct attention to other performance areas than costs (Merchant and Shields, 1993, p. 78-79)

manager<sup>1</sup>. But if the reward system is changed to pay off for placements of children, then, by borrowing from experience with rehabilitation centres, another problem emerge: then the managers might work for placing the children who are easiest to place and give a lower priority to other children (Kerr, 1975). Another example is from universities in which "society *hopes* that teachers will not neglect their teaching responsibilities but *rewards* them almost entirely for research and publications" (p. 773). Kerr shows a number of other examples where behaviour is based on optimising rewards rather than doing what is in the best interest of the organisation (whether it is public or private).

The most relevant part of Kerr's article for this thesis is the "four general factors" that may "be pertinent to an explanation of why fouled up reward systems seem to be so prevalent". *First*, he points toward the »objective« criterion stating that "many individuals seek to establish simple, quantifiable standards against which to measure and reward performance" This, he argues, is influenced by a fascination with the "objective" criterion and is efficient only in highly predictable areas within organisations (p. 780). Everywhere else such performance metrics cause goal displacement. *Second*, some aspects of tasks are more visible than other aspects which means those visible aspects tend to be measured more frequently than the others. *Third*, Kerr argues the undesired behaviours might be effects of hypocrisy. Simply because the researchers argue for them to exist, it still might be that the rewarder gets the desired behaviour. *Fourth*, he argues that "undesired" behaviour is assessed from an efficiency viewpoint, but other goals might also be desired (e.g. moral goals). Therefore this a priori definition of efficiency might not always be the best. The point is that we do not (always) know the actual desired of the rewarder. As can be seen Kerr do not explicitly set up ideals for performance measurement, but he shows how a desired behaviour can be problematic to achieve. He argues that some rewarders are too concerned with objectivity in performance measures.

The costs of monitoring employee behaviour were introduced to agency theory in Jensen and Meckling (1976). In this article the authors developed the concept

---

<sup>1</sup>"Total organizational size will determine largely the director's prestige at the annual conventions, in the community etc." (p. 772). The larger the organisation, the more prestigious.

of agency costs and showed how insider ownership and outsider ownership created different problems in relation to maximising the total value of the firm. The paper contains several important points in relation to this thesis. Firstly, the definition of agency relationships:

*» We define an agency relationship as a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent. If both parties to the relationship are utility maximizers, there is good reason to believe that the agent will not always act in the best interests of the principal. The principal can limit divergences from his interest by establishing appropriate incentives for the agent and by incurring monitoring costs designed to limit the aberrant activities of the agent «*

Jensen and Meckling (1976, p. 5)

The solution of the align interests of the principal(s) and the agent is through the construction of incentives and to monitor the agent's behaviour. The point is that constructing a space where the principals and agents' interests are aligned is costly (agency costs  $\neq 0$ )<sup>1</sup>. What is interesting about this paper is their move away from structuring contractual relations as the solution to the agency problems to the one of providing incentives (p. 7). Jensen and Meckling do not, however, discuss very detailed how to monitor behaviour. The only means they mention is monitoring through "auditing, formal control systems, budget restrictions, the establishment of incentive compensation systems which serve to identify the managers interests more closely with those of the outside equity holders" (p. 26). This implies as ideal for performance measurement that agents' interests must be aligned with the firm's interest. Beyond this objective for performance measures, Jensen and Meckling is silent about how performance measures should

---

<sup>1</sup>Agency costs are defined as the monitoring expenditures by the principal, the bonding expenditures by the agent and the residual loss (The dollar equivalent of the reduction in welfare experienced by the principal as a result of the divergence between the agent's decision and the decision that would maximise the welfare of the principal).

be constructed. The only paragraph in which they discuss it is on p. 46 "since management is a continuous decision-making process it will be almost impossible to completely specify such conditions without having the bondholders actually perform the management function"<sup>1</sup>. Of course they argue that this is impossible because of the problem of specifying ex ante future management decision making.

### 2.4.3 Incentives and controllability

Demski and Feltham followed up on the incentive dimension of Jensen and Meckling's article by studying budgetary control systems (Demski and Feltham, 1978). The paper offers a "consideration of such questions as the type of standards that should be used, whether the evaluation should be confined to factors controllable by the subordinate, and the extent to which participation in setting the standards is desirable" (Demski and Feltham, 1978, p. 336). The quote indicates that Demski and Feltham, among two other concerns, focus their paper on the controllability aspect: whether factors evaluated should be controllable for the subordinate. The underlying logic of budgeting as control system is that "compensation paid for labor services depends, in part, on the relationship between actual and standard performance" (p. 337). The problem of contracting for certain performance levels implies is caused by the "costliness of precisely observing skill and effort levels" (p. 337). Therefore, Demski and Feltham argue, performance contracts are often based on other indicators such as output (e.g. piece rates or sales). What we can see is, from this agency-theoretic viewpoint, that ultimately if we had perfect information with no information asymmetry, we could write complete contracts that maximised output for the given resource structure of the firm. Depending on how perfect information is conceptualised, this might be true. But more importantly, perfect information is an ideal which is not achievable in real life. We cannot measure skill and effort precisely, even if we had unlimited resources for doing so, because, as Miller (1992) argues, skills and effort are psychological parameters determined by personal cost curves of employees and those personal cost curves are only known by the subordinates

---

<sup>1</sup>The paragraph is from a section that discusses directing employee behaviour by imposing constraints on manager's behaviour in bond contracts (a control means for external stakeholders).



themselves and not the principal. Budget based contracts are by definition output based and the benefit to the owner comes from production efficiency and improved decision making (Demski and Feltham, 1978, p. 337-338). Demski and Feltham argue that a performance measure in an incomplete market cannot pay for a specific effort level but must rely on other measures, i.e. output measures that tells something about employee effort. In the model the work's output is modelled as  $x = p(s, a, q, h)$  where  $x$  is the output,  $s$  is the randomness of the output (the uncontrollable part of the output),  $a$  denotes his effort,  $q$  denotes the capital, the worker is provided and  $h$  denotes his skills (p. 342). Thus, they introduce into their model the controllability problem. The fact that output, or performance measure, might look good while effort is low, or look bad while effort is high. This is the classical distortion of the worker's risk (which is modelled as  $\sigma_{pay}^2$ , the variance of pay). The question one can raise is; if  $h$  is constant (which it typically is in the short run), effort ( $a$ ) and randomness of output ( $s$ ) is unobservable but the capital provided ( $q$ ) and output ( $x$ ) is observable, how, then, is the relation between effort, risk and output ( $a$ ,  $s$  and  $x$ )? In the mathematical models it is possible to assume certain things, but the question is how the relations between  $a$ ,  $s$  and  $x$  turns out in real life? The article states that controllability is an issue but must be dealt with by "reasonable information costs"<sup>1</sup>(p. 357). As they state (and ascribe to themselves) the accounting literature suggests that performance measures should "encompass only that which is controllable by the worker" (p. 356). This is the accountability principle. But it means for the accounting representations that the ideal must be that they represent what they purports to represent. How, else, can anyone be claimed to be held accountable for achieving the standard outputs, if they are not "representationally faithful" (to use the vocabulary of the conceptual frameworks) but simulacra?

An extension on the informativeness of performance measures and controllability was suggested by Holmstrom in his 1979 article "Moral Hazard and Observability" (Holmstrom, 1979). Holmstrom takes as his point of departure the

---

<sup>1</sup>This argument is derived from the theory of the perfect market where perfect information is available and that we can go toward this ideal by investing heavily in information which means that information can minimise  $s$ . The question is whether this is true or not. We actually do not know.

imperfectness of information and the derived need for improvements of the informativeness of such contracts by raising the question "when can imperfect information about actions be used to improve on a contract which initially is based on the payoff alone?" (p. 74). As Holmstrom shows "any additional information about the agent's action, however imperfect, can be used to improve the welfare of both the principal and the agent". He proves this mathematically by modelling a repairman's work and an event  $y$  where a component failed. When introducing this signal  $y$  into the performance measure  $s(x, y)$  he proves that both the firm and the repairman will be better off if the signal  $y$  is informative, meaning that signal  $y$  signifies if the event was controllable by the repairman or not. This has later been translated into the informativeness principle stating that "In designing compensation formulas, total value is always increased by factoring into the determinant of pay any performance measure that [...] reduces the error with which the agents choices are estimated and by excluding performance measures that increase the error with which effort is estimated" (Milgrom and Roberts, 1992, p. 219). The informativeness principle is important because it shows that both the principal and the agent is better off when the signal  $y$ , which is informative, is included in the performance measure. However, as Holmstrom argues, the proposition does not say anything about how valuable signal  $y$  is, even though this aspect is important when considering the cost of providing information with signal  $y$  (p. 88). However, it still signifies that the performance measure should be "representationally faithful" even though it is based on imperfect information (even though Holmstrom does not refer to representational faithfulness in the article).

Baiman and Demski (1980) argue that accounting information is used in both the firm's performance evaluation and in control systems. Even though they model very elegantly different information sets available to the agent in different time periods (the acquisition of superior information after contracting) they do not claim anything about criteria for the design of performance measures.

### 2.4.4 The value of information: risk, precision and sensitivity

In 1982 Gjesdal went a step further in investigating the information problem (Gjesdal, 1982). The focus of the article is on "the value of information" which was conceptualised as improved risk sharing and the construction of incentives. Gjesdal introduces the marginal value of control information systems as depending on the cost of information. "some information systems are costlessly available" (p. 373). Value ranking information systems is defined as a maximisation of the principal's preferences with respect to outcome ownership (principal, agent or both) and agent pay. Hence an action must optimise outcome of actions (x). This is alignment of interests. When discussing incentives, Gjesdal argue for a relation between incentives and risk: " Risk lowers the agent's level of utility which influences his action preferences" (p. 383). By recalling that risk is the variance of pay in agency models this implies that the more risky the performance measure, the correlation between variation in effort provided and variation in performance measure decrease and, subsequently, pay becomes less dependent on effort provided. Therefore risk is an important aspect of providing incentives.

From this performance measures should deal with two concerns; alignment of interests and risk.

Banker and Datar (1989) models linear aggregation of performance measures through two imperfect signals,  $y$  and  $z$ . The linear aggregation,  $\pi = \pi(y, z)$  models the aggregate measure  $\pi$  in terms of linearity of the form  $ly + mz$  (p. 22). The problem relates to Holmstrom's informativeness principle; when we know a signal (here denoted  $z$ ) is informative, Holmstrom argues that it should be included in the performance measure, but his article does not suggest how the relative weighting of the two signals should be decided upon. The criteria to which Banker and Datar assess performance measures are sensitivity and precision. The definition of the two criteria are as follows: "The sensitivity of a signal measures the extent to which the expected value of a signal changes with the agent's action, adjusted for the correlation with the other signal which may also change with the agent's effort. Precision indicates the lack of noise in a signal" (p. 22). This means that precision is measured as the inverse variance:  $\rho = \frac{1}{\text{var}(PM)}$  and sensitivity

as the derivative of PM with respect to effort:  $\mu = \frac{\Delta E(PM)}{\Delta(e)}$  where  $e$  denotes the agent's effort (adapted from p. 29)<sup>1</sup>. Another important concern for the design of performance measures in Banker and Datar (1989) is controllability: "Proposition 5 suggests that non controllable corporate overhead expense will be used in the construction of the optimal performance evaluation measure if and only if this accounting signal is correlated with controllable divisional profits". Then "overhead costs,  $z$ , provide information about the agent's action choice a even though  $a$  does not directly influence  $z$ ". This means that Banker and Datar prioritise informativeness higher than controllability.

Hence, Banker and Datar (1989) model performance measures constructed with three qualitative ideals in their analysis; precision, sensitivity and controllability.

The ontological premise of a so called underlying reality is not relevant here because performance measures used for control purposes (in the principal agency relationship) are not purporting to represent an underlying economic reality, but rather designed to represent and direct the agent's effort (through incentives). Therefore precision and sensitivity is control equivalents of representational faithfulness: the more precise and the more sensitive the more "faithful" the PM represents the agent's effort.

### 2.4.5 Myopia, bias and precision

In 1990 Merchant published a study about the dysfunctional effects of financial control systems (Merchant, 1990). The focus of the article is on manipulation and myopia (of financial controls), and their causes. This article argues, in accordance with Kerr (1975), that dysfunctional effects of financial controls are significantly more evident in companies with uncertain environments. The study builds on interviews and a statistical survey. Secondly, the paper argue that if "felt pressure to meet targets" is high, then it encourages to short-term orientation (myopia). This means that Merchant in this 1990 article creates the foundation for further studies as to *why* control systems acting this way creates these outcomes.

---

<sup>1</sup>Obviously the sensitivity function is more complex if the two signals  $y$  and  $z$  are internally correlated. However, the complexity of the function is not relevant for the purpose of this thesis.

Agency theory and behavioural accounting, as we have seen, assumes certain characteristics about human behaviour which means conclusions in such studies are somehow constrained by these assumptions<sup>1</sup>. The question is, on the micro level, whether these explanations hold? Why do people manipulate or become myopic when the "environment" is uncertain and what does this uncertainty mean? From the literature study the article aligns an argument about pressure. The proposition is that "pressure to meet financial targets tends to increase the incidence of managers' manipulation" (p. 301). The problem in the literature is, according to Merchant, that the relation between "reliance on accounting measures of performance and manipulative behaviours" is not straightforward. As an example Merchant borrows an argument from Hirst stating that the relation is influenced by environmental uncertainty<sup>2</sup>. Hirst, Merchant argues, "speculated that these findings were due to the effect of accounting measure completeness.." (p. 301). Environmental uncertainty in Merchant's model was operationalised through an "environmental rate-of-change instrument" (p. 304). The instrument measures change in six categories of the environment: 1) buying patterns and requirement of customers, 2) distributors' attitude, 3) Industry buying patterns, 4) competitors' strategies, 5) technical development relevant to this profit centre's business, 6) changes in production processes (p. 304 footnote 9, adapted from earlier research). While being an interesting perspective on control system effects, the study do not prove a significant relationship between environmental uncertainties and manipulation or "management myopia". The survey is limited by the facts that behaviour is not observed, but the study's account for the managers' behaviour is based on the managers' written answers to questions rather than actual observation. The paper does not intend to align an argument of how to design performance measurement systems in general, but address a question about which (unintended) effects performance measurement can result in and why (the causes). Therefore the article opens some interesting claims in relation to this thesis, especially the performance of the completeness criteria of performance

---

<sup>1</sup>e.g. that employee's act opportunistic with guile

<sup>2</sup>"Where environmental uncertainty was high, the relationship between emphasis on accounting measures of performance and perceived (job related) tension was positive, but where uncertainty was low, the evaluation-tension relationship was negative" (Merchant, 1990, p. 301, on Hirst 1980 and 1983).

measurement systems.

Differences between information qualities for financial reporting and information qualities for directing employee behaviour (control) becomes evident in Merchant and Shields (1993), which raises a question in extension to the Merchant (1990) paper about how organisations intentionally could use some insights from research on unintended effects of performance measurement systems in their performance measurement system design. The article deals with accuracy/inaccuracy of performance measurement. It defines accuracy as "precision" and "freedom from bias" (p. 76). The article shows how it can be beneficial sometimes to sacrifice accuracy in order to direct employee behaviour in a certain way (which means that companies exploits the knowledge on unintended effects intentionally). This means that the article can be read as an elaboration of Banker and Datar (1989)'s argument about precision and sensitivity<sup>1</sup>. Where Banker and Datar (1989) argue the precision and sensibility is valuable qualities of performance measures Merchant and Shields give several empirical examples of how inaccurate measures (biased or imprecise) lead to a desired behaviour. This shows how it can make sense to breach qualities for financial reporting/accounting information for economic decision making such as freedom from bias and reliability in order to direct peoples attention toward different performance indicators, different economic decisions (e.g. discounts) or different behaviour (the level of IT use). The empirical examples in the article suggest that the role of the accounting information used for control purposes changes from being one of representing economic conditions to being one of constituting a certain behaviour and that is why control are fundamentally different from economic decision making, which means that the general purpose of the accounting frameworks are problematic<sup>2</sup>. However, this aspect of the use of information does not change the agenda of

---

<sup>1</sup>Merchant and Shields (1993) shows how inaccuracy can lead to a higher degree of value because it aligns interests of owner and worker

<sup>2</sup>As argued the standard setters themselves does not limit themselves from the stewardship dimension of accounting information which in the end is an assessment of the manager's performance. The problem is whether one can isolate the performance assessment from the direction of employee behaviour. Management control/performance measurement is about making people act according to the interests of the firm which creates this constitutive role of accounting information and several articles show that financial accounting information for external reporting is used for internal control purposes too.

the research. Writes still strive to develop a framework, or set of criteria, for assessing a "good" performance measurement system and for guiding the design of performance measurement systems. Even though Merchant and Shield move in the direction of a behavioural perspective of accounting, they still believe in a "truth" or so called "underlying economic reality":

*»The cost pads are intended to prevent the salespeople from giving discounts that "shave prices down to the true cost level [...] Why a system which includes bias known to the decision makers improves decision making is not clear; that understanding must await further research in cognitive psychology.«*

Merchant and Shields (1993, p. 77)

As Merchant and Shields indicate the idea of rational decision making is too simple (else wise people would take into account the biases and act as if they were not there).

Kim and Suh (1993) introduces the notion of incentive efficiency and incentive effectiveness. The article draws on the work of Banker and Datar (1989) and Bushman and Indjejikian (1993) when operationalising efficiency by emphasising precision. Incentive efficiency "concerns how precisely the incentive devices [...] convey the true outcome" (p. 41) and therefore is a determinant of the quality of the performance measure. Incentive effectiveness "concerns the end result" (p. 40) which means that effectiveness is a matter of personal cost of working, or as Kim and Suh denote it "the private cost of exerting effort" (p. 40). This means that the article primarily mobilises two concerns of performance measurement: the precision of the measure, which is the efficiency of the measure, and the intensity of the pay, the effectiveness. As they state it if the private cost of exerting effort is very high, then it is too costly to induce a certain effort and on the other hand if the private cost is low then it is almost costless to induce effort. Kim and Suh (1993) therefore support the design ideals of Banker and Datar (1989) and Bushman and Indjejikian (1993).

### 2.4.6 Congruity and diversity

Congruity and diversity of performance measures used to evaluate and motivate managers was introduced in Feltham and Xie (1994). The article introduces three problems of performance appraisals: the information asymmetry of managers' actions (the impossibility of directly observing managers' actions), the observation of the full consequences of managers' actions and the effects of uncontrollable events. The article differs from other approaches to the problem by introducing into its model a "multidimensional representation of the manager's actions" (p. 430). This does not refer to single tasking/multi tasking but rather that the model measures performance through multiple measures. The point of the article is that if additional performance measures are introduced, risk and non-congruity can be reduced. The basis criteria for performance measures in Feltham and Xie's model are therefore congruity, precision<sup>1</sup> and controllability and a solution can be to use diverse measures of performance. Thus, we see that performance measurement in Feltham and Xie (1994) takes the form  $PM = PM(e_{1...i}, \epsilon)$ , where precision refers to  $\epsilon$  and congruity refers to the relation between the action of the agent (directed by the performance measure) and the firm payoff  $x$ . The idea of congruity is that when a measure is 100% congruent the firm value varies perfectly with variations in the performance measure. But not only that; the performance measure varies perfectly with variations in employee effort and therefore firm value varies with variations in employee effort. Controllability is important because it reduces risk for the manager and therefore increases the incentive efficiency. By drawing on prior research Feltham and Xie argue that uncontrollable events are productive to include if they positively correlate with unidentified events which means that controllability as an overall principle is beneficial only if the uncontrollable events are uncorrelated with other events not measured/identified.

As already argued in literature financial performance measures create management myopia which is intuitive as many financial measures relates to the present financial period which is often one year<sup>2</sup>. Myopia conflicts with the congruence

---

<sup>1</sup>Precision measures noise in the performance measure.

<sup>2</sup>This might come from financial accounting because a financial period is defined to be maximum one year in e.g. IAS 1(Ernst & Young, 2012, p. 77).



quality of performance measures. Ittner et al. (2003) does not explicitly deal with criteria for designing performance management systems, but study the choice of a specific solution to the problem of myopia: as suggested in prior literature one solution is to use multiple performance measures in combination with subjective performance evaluations where the manager's superior subjectively assess the manager's performance based on the multiple performance measures. Prior literature argues that subjective evaluations can be beneficial because they take into account also "non contractible information" and therefore reduce the weighting problem of multiple performance measures. The article shows how a solution always creates new problems to deal with: when solving the problem of myopia by introducing multiple measures, a weighting problem emerge. By solving the problem of weighting by introducing subjective evaluations the evaluation gives preference to financial performance measures, reintroducing the problem of myopia, favouritism and controllability<sup>1</sup>. Ittner et al. (2003) concludes that the success of performance measurement systems may be far more complex than technical attributes such as qualities or criteria can account for: "implementation issues may be far more important to the success or failure of balanced scorecard systems than the scorecard's technical attributes [...] Future research on scorecard adoption and performance consequences must move beyond the measurement of these attributes to encompass the entire implementation process" (p. 754).

A framework for "analysing the operation of management control systems" was proposed in Otley (1999). Because the article concentrates on the operation of a given performance measurement system<sup>2</sup> the framework departs in the objective of the management control system. It then considers strategies and plans, level of performance needed, reward structures and information flows (feed forward and feed back loops). The operation of a management control system is in Otley's

---

<sup>1</sup>Ittner et al. do not explicitly denote it controllability, but they write that it introduced "uncertainty in the criteria being used to determine rewards" (p. 754). This means that managers did not know how they could control pay because of noise in the reward criteria, i.e. a problem of sensitivity (remember sensitivity =  $\Delta E(PM)/\Delta(e)$ ).

<sup>2</sup>David Otley prefers the notion "management control system", but as he argues in Otley (2003) management control systems and performance measurement systems are both conceptual notions of the same control systems.

view dependent on the implementation<sup>1</sup>. This means that the framework is much more emphasising processual perspectives of the operation of control systems than the prior literature on performance management suggests. The processual emphasis also require organisations continually to work with the five dimensions of performance measurement:

*The questions<sup>2</sup> themselves appear to remain constant, but organizations need to continually develop new answers to them. This is because the context in which the organization is set is constantly changing and new strategies need to be developed to cope with new operating environments.*

p. 365 (footnote added)

Because of this processual claim that the management control system must continually be aligned with the changing context, Otley do not prioritise explicitly criteria for a "good" performance measure. However, as prior literature does, Otley ascribes to the "congruity" criteria when discussing shareholder value as objective and financial performance measures. Other criteria such as precision, risk and controllability is not mentioned. Therefore, the means to achieve a valuable management control system shifts from being a design problem to being an adaption problem (adaption to a changing environment).

### 2.4.7 A set of performance management criteria

The first attempt to assemble a list of design criteria for performance measurement was made in 2006 in Merchant (2006). By reviewing literature on management control the article develops a list of "criteria for evaluating measurement alternatives" (p. 894). The list consist of an assemblage of the ideals discussed in the preceding part of this section. The list of design criteria looks as follows.

---

<sup>1</sup>Where implementation is operationalised as strategies, plans, targets, rewards and feedback.

<sup>2</sup>"The questions" refer to the five dimensions of the operation of management control systems.

- Congruent with the organisation's objectives
- Controllable by the manager whose behaviours are being influenced
- Timely
- Accurate
- Understandable, and
- Cost effective to produce

As the list indicates none of the criteria are new to the theory of performance management. But what is new is the attempt to assemble them in a list that satisfies the objective of such a framework: "for motivational (decision-influencing) purposes, a measure or a combination of measures should have all of the following qualities" (p. 894). Congruence and controllability is discussed previously and will not be elaborated further. Accuracy is two dimensional: the first dimension is precision (which has been discussed in Banker and Datar (1989) and Feltham and Xie (1994) as the inverse variance in the performance measure) and the second dimension is objectivity, meaning freedom from bias which is found in various research from the work of the IACPA study group and Ijiri (1975) and later Merchant and Shields (1993). Understandability comes from the theory of financial accounting qualities (SFAC no. 2) and is mentioned in Vickrey (1985) too. The argument is intuitive: if information is not understandable, it is not informative and thus cannot be used for motivational purposes. Therefore understandability means that managers must "understand what the measure reflects; i.e. how the measure is calculated" (p. 897) and know how they can influence the signal. The last criteria, cost effectiveness, is evident in Jensen and Meckling (1976) and Kim and Suh (1993). Cost effectiveness is a relevant concern even though it can be hard to understand which it is necessary for motivational purposes (which is what Merchant argues the list is made for). Of course the idea is, as with any other economic decision, to consider costs of designing a performance measure relative to the benefit in terms of incentive efficiency. The list of design criteria shows how Merchant juxtaposes criteria, or qualities, both from the financial reporting

domain and from the management control domain in order to make a comprehensive list of design criteria. The ontology of the framework is very close to the one in the financial accounting standards: The belief in an underlying "truth" which it is possible to represent.

Kominis and Emmanuel (2007) extends Merchant (2006) by studying "managerial perceptions [...] of the performance measurement, evaluation and reward system" (p. 49). While Merchant (2006) addresses performance measurement for general managers, Kominis and Emmanuel (2007) study middle management. The article adopts the expectancy-valence theory as starting point where motivation is modelled as a function of the perceived value (valence) of an outcome and the perceived probability (expectancy) of achieving the outcome. They combine the E-V model with prior management control theory. Based on that, the SEM model in the article models motivation as a function of "perceived probability that effort will lead to reward (E→R)" and "perceived value of rewards (V)" (p. 54) where the "E→R" variable are modelled as *perceived* attainability (of standards), accuracy (of measures) and dependency (between performance and rewards). Kominis and Emmanuel (2007) support the claim that congruence, controllability<sup>1</sup> and accuracy is adequate performance measurement criteria. However, they distinct themselves from Merchant by emphasising the managers' perception: is it therefore in this article not modelled as objective facts, but as perceptions in the minds of managers that makes the difference. Another interesting point is that the model in the article shows the relation between performance measurement and motivation to be dependent on the "value of extrinsic rewards" meaning that the link between performance and rewards is significantly influencing the motivation. This means that, in this study, Merchant's criteria is a back-end that enables the motivational aspect of performance measurement systems whereas without the performance-reward relationship managers would not be motivated. Merchant does not explicitly align the performance-reward relationship as a criteria for performance measurement systems (even though his discussion about different performance measures is touching upon rewarding). Therefore, Kominis and Emmanuel (2007)'s model suggest that the effectiveness of performance measure-

---

<sup>1</sup>Controllability is in the article modelled as "attainability of standards" which expresses the effort-performance targets relationship.

ment systems cannot be said to exist without a link between performance and rewards. Thus, if managers do not perceive extrinsic rewards to be valuable, then they are not becoming motivated to perform in accordance with the performance measurement system<sup>1</sup>.

Merchant and Otley (2007) will serve as an ending of the performance measurement theory section. While reviewing literature on control and accountability several important concerns are raised in this article. An important point that reflects a problem of the literature reviewed in the preceding part of this chapter is the accountability-orientation in control systems. The point is, as argued in Ijiri (1975), that control systems makes people become accountable for "their actions or for the results they or their organization produce" (p. 791). Merchant and Otley reflect on the ontology of accounting representations and opposes themselves to the belief in an "underlying" economic reality: "if one could measure an organisation's "true" performance over time, one could judge the congruence of a measure." (p. 792). The problem is two-dimensional: one the one hand it is a question of what the performance is about: if it is economic performance, is it then shareholder value, and on the other hand, how future consequences of present actions should be considered. Therefore, Merchant and Otley does not ascribe to the ontology of an underlying economic reality. But even more interesting, the article raises the question "why do we generally hold managers accountable for much more than they can control" (p. 793)? Here we see the controllability, as an accountability concern, is not a straightforward notion. Generally, performance objectives are about future states of the company, but many things happen, which is not inscribed into performance measures. Thus, people are held accountable for phenomena out of their reach.

### 2.4.8 Summary of performance measurement criteria

Management control theory do no systematically deal with criteria for measurement before Merchant (2006)'s attempt to develop a set of criteria. The literature have been concerned with the overall objective of aligning performance measures

---

<sup>1</sup>Where extrinsic rewards in the article are defined based on their instrumentality: the rewards attained as a consequence of performing an activity.

---

## 2. Theory of accounting qualities

---

with the organisations' overall goals. The following table summarises the reviewed literature's points about criteria for performance measures.

Table 2.2: Summary of literature on performance measurement criteria

Author(s)	Claim
Kerr (1975)	It is difficult to align performance measures with the rewarder's goals, especially in areas of organisation's which are not highly predictable. Kerr further problematise this because of the fact that it is not (always) possible a priori to know the rewarder's actual desired behaviour.
Jensen & meckling (1976)	Argues for solving the principal-agency problem (the agency relationship) by constructing incentives that aligns interests.
Demski & Feltham (1978)	Argued that the factors evaluated in performance measurement should be controllable for the subordinate. They argue that precision of a measure can be achieved by using more costs on the performance measurement design.
Holmstrom (1979)	Holmstrom argues that as soon as a signal says something about an agent's performance, it should be included in the performance measure because the performance measure therefore becomes more aligned with the principal's interest.
Gjesdal (1982)	Focus on the value of information and argues that risk is important because higher levels of risk means that pay becomes less dependent on effort provided.
Continued on next page	

---

## 2. Theory of accounting qualities

---

Author(s)	Claim
Banker & Datar (1989)	Models precision and sensitivity in their analysis of performance measures. The more precise, the less variance in the measure and the more sensitive, the higher the correlation between changes in employee effort and performance measure value. Thus, precision and sensitivity is equivalents of faithful representation (of employee effort).
Merchant (1990)	Dysfunctional effects of control systems are more evident in companies with uncertain environments. And myopia is encouraged if there is a high "felt pressure" to meet targets (especially net income and budgeted expense targets).
Merchant & Shields (1993)	It is not always beneficial to make accurate measures when the measure is used for directing employee behavior. Sometimes biased or imprecise measures lead to higher value because it gives incentives to make decisions which are more congruent with the organisation's objectives. By articulating bias and precision Merchant and Shields (1993) believe in a "true" economic measure, or an "underlying" object, or phenomenon, the calculation refers to.
Kim & Suh (1993)	Introduces incentive efficiency, which concerns the relationship between incentive devices (performance measures) and the "true outcome". Thus, they articulate an idea of a performance which is "true" and which can be represented by the surrogate.
Continued on next page	

---

## 2. Theory of accounting qualities

---

Author(s)	Claim
Feltham & Xie (1994)	Argues for measuring performance through multiple measures. The point of the article is that if additional performance measures are introduced, risk and non-congruity can be reduced.
Ittner et al. (2003)	The success of performance measurement systems may be far more complex than their technical attributes such as qualities or criteria can account for.
Otley (1999)	Otley argues for a processual perspective of the performance of management control systems, starting at the objective of the control system and then considers strategies and plans, level of performance needed, reward structures and information flows. The operation of the control system is in the article's view dependent on the implementation(i.e. strategies, plans, targets, rewards and feedback).
Merchant (2006)	Aligns a list of performance measurement criteria and discusses different measures in accordance with the list. The list consist of congruity, controllability, timeliness, accuracy, understandability and cost efficiency.
Kominis and Emmanuel (2007)	The article studies performance measurement for middle management though an expectancy-valence (E-V) model. E-V models motivation as a function of the perceived value (valence) of an outcome and the perceived probability (expectancy) of achieving the outcome. The article supports congruence, controllability and accuracy as qualities of management control systems.
Continued on next page	



Author(s)	Claim
Merchant & Otley (2007)	Claims that control systems are accountability-oriented in the sense that control systems makes people become accountable for their actions or for the results they (or their organisation) produce. They mobilise a problematisation of measuring "true" performance and from that argue that managers are held responsible for much more than they can control.

The management control literature reviewed is concerned with the same problematisation of whether it is adequate to understand performance measures as representations. The majority of the literature articulates the representativity of performance measures as representations of effort, or employee performance while others problematise the pre-concern for developing technical attributes to be used for designing a successful system (e.g. Ittner et al., 2003, Otley, 1999 and Merchant and Otley, 2007). The theory, however, do not deals as systematically with the representativity of performance calculations than do financial accounting theory through the notion of representational faithfulness. However, the literature review indicates that models articulate the representational ideal of accounting in the sense that performance measurement is about presenting through calculations (or subjective performance evaluations) employee effort, or performance.

### 2.5 Constructivist approaches to accounting information and performance measurement

An alternative to the normative paradigm of accounting theory (section 2.4) exist in constructivist research. Within this domain the dominant methodology in accounting research is actor-network theory<sup>1</sup>. This section will review the

---

<sup>1</sup>Foucauldian inspired research is a strong tendency in accounting scholarship too, but because of its emphasis on discourse formations of accounting technologies and their implications

important actor-network theory studies of accounting qualities and their implications for the performance of accounting information. And after that, Deleuzian accounting research (which is still not very extensive) will be presented.

### 2.5.1 ANT research on accounting qualities

In 1991 Keith Robson had an article in *Accounting, Organizations and Society* in which Actor Network theory's concept of translation was mobilised to describe how particular accounting calculations and techniques were translated into "wider social, economic and political discourses not normally associated with the apparently neutral technical discourse and practices of accounting" (Robson, 1991, p. 566). In 1992 Robson published an article specifically on how accounting numbers can be understood always as being *more* than a representation. The paper is a theoretical discussion with the point that accounting information, even though it is a reduction of the reality it represents, is always more than a mere representation, it is an inscription. »More« because the inscription enables action at a distance. But the inscription, in accordance with Robson's 1991 article, is a translation from qualities to numbers. On p. 688 Robson exemplifies this by the example of counting cars. Counting cars relies on a classification of the qualities that constitute a car and thus counting is a translation from qualities to a number. The same applies to accounting numbers. An inscription is translation. And it allows for action at a distance. Robson aligns a set of qualities of inscriptions (adapted from ANT): mobility (the inscription must be able to travel), stability (a stable relationship between the inscription and the context to which it refers - or to the conventions that co-constructs the inscription), combinability (ability to accumulate, aggregate, tabulate, recombine them to establish new relationships and calculate norms to comparison). Thus, Robson challenge the notion of accuracy or representational qualities of accounting information by stressing the fact that it is their mobility, stability and combinability that forms their significance rather than their qualitative characteristics as "neutral" representations of *something*. We loose something in the translation (particularity) and we gain

---

for individuals and organisations (governmentality), and because of its pre-concern with disciplining and power, this literature is not reviewed here (Miller and O'Leary, 1987, Miller, 2001, Hopper and Macintosh, 1993 and Hopper and Macintosh, 1998).

something else (ability to act at a distance). But as we see the very notion of translation and the definition of inscription means something has to happen to construct difference, difference is mediated by the translation.

Preston et al. published an ANT study of budgeting and responsibility design in hospitals in the UK in 1992 (Preston et al., 1992). The paper is not specifically aiming at accounting qualities but is concentrated on studying the network that constitutes the fabrication of the budget and its effects. The article studies budgeting as a process of black-boxing (Latour, 1987). It is done to challenge the normative view of budgets as a design / implementation relationship with a well-defined purpose and effect (Preston et al., 1992) by showing how the black-boxing is negotiations between various actors and how these negotiations frame the budget as well as the responsibility design to become what it becomes.

*»We [...] see it as naive to assume that by simply assembling the components of a system, that the desired or officially intended outcome will be achieved.«*

Preston et al. (1992, p. 567)

Here we see the articles focus on the constructing and effects of a technology and process rather than a specific analysis of the calculations themselves. However, their frame of analysis is one where they show how accounting facts are products of fabrications and how responsibility is seen to change with the introduction of budgets from one where clinicians were responsible for managing to one where they were financially responsible (resource utilisation and financial performance). Thus, Preston et al. (1992) do not study intend to claim something about accounting information in itself but the budget network accounting information engages with to fabricate a management budget and responsibility design.

Mouritsen et al. (2009) correspond to Robson's ontology of accounting numbers by showing how accounting calculations do not represent, but mediate, translate and redesign business ideas of companies. Calculations translate the links

between innovation and wider organisational concerns. For difference to happen, this too requires the activity of remobilisation or re-visibilising other insights of what presence is. Thus, Actor-Network theory do not believe representational faithfulness to be a quality of inscriptions. Not because there is no reference between representation (inscription) and object, but because the relationship is translation rather than representation. However, Mouritsen et al. (2009) do not question the object itself, or more precisely, the being of calculations. As they state:

*»The visibility, insight and knowledge produced by management accounting calculations rarely concern the details of innovation practices. It rarely creates deeper knowledge about the intricacies of innovation activities; it typically creates insight about links between innovation and wider organisational concerns which are mediated via short or long translations, where length reflects the number of elements taken into account.<*

Mouritsen et al. (2009, p. 739)

Here Mouritsen et al. (2009) do not question the existence of the world *per se*, but the point is how we create insight about it through calculations, and the longer calculations are, the more elements of the world is taken into consideration. Thus, from this perspective, calculations provide "competing propositions about the relevance of technical artefacts and link them to innovation strategy and sourcing strategy" (p. 739) and the calculations themselves are considered material objects. As a consequence of that the idea of difference must necessarily be that in order to construct the tensions and challenges that create difference, the calculations must be moulded, and longer or shorter translations challenge the calculations' propositions of the world. Thus, the network of the calculation must be extended, added with other element, in order to create new insights about the world.

Another ANT article covering accounting as a means for representing is Chua (1995). In the paper accounting is conceptualised as a means for imaging. This

means that accounting is constructing images which present the organisation. As we see, Chua (1995) discusses the representational qualities of accounting. Already in the introduction the article aligns a critique of the idea of reality as something »out there« by quoting Ian Hacking's *Representing and Intervening*: "It will be protested that reality, or the world, was there before any representation or human language" (p. 111). The paper argues that accounting representations are not representations of something »underlying«, but accounting is a process of fabricating an »economic reality«. This means that the »reality« comes after, or simultaneously with, the fabrication of the accounting image (inscription).

Chua's paper is a critique of the ideal of representativity and representational faithfulness. Chua shows how certain images of reality are produced and how the reality-representation relationship is turned around by showing how accounting constructs the organisation (the hospital) in a certain way. Moreover, as she shows, fabrications are treated as being reality; calculations *become* the »truth«.

Dambrin and Robson (2011) study the performativity of performance measures through the theoretical lens of »circulating references« (Latour, 1999). The authors show how weak performance measures gain performativity and how the representation should be understood as "tracing" rather than "representing". Thus, as Chua (1995), Dambrin and Robson (2011) leaves the conceptualisation of accounting as representation and study it as "intervention, performance and a technology for action at a distance" (p. 429, paraphrased). The authors conceptualise "weak" performance measures as measures which cannot represent the "real" performance, which is the case in their case setting because of regulatory limitations (the pharmaceutical industry). This is paradoxically because they do not discuss how this "weakness" or "strength" describes the relationship between the represented (the "drug reps's performance") and the representation (the performance measure). As they write:

*»In our view, the pharmaceutical industry has a number of distinctive elements that enables an exploration of its performance measurement practices to reveal problems of flawed or imperfect numbers. «*

Dambrin and Robson (2011, p. 445)

The definition of weak and strong numbers relate not to the interior design criteria of the measure, but to the (missing) ability "to trace them back up to the practices of those who performed" (p. 433). From the actor-network theory's point of view (Latour, 1999), in order to become a strong reference, it is necessary to be able to trace it back to its origin. However, as we see in Dambrin and Robson (2011) weak links perform too. It is not necessary to be able to reverse the circulating reference for it to perform as a management technology. Thus, as they in a sense support Macintosh et al. (2000)'s claim by showing that the performance measure constructs a hyperreality where the link between representation and object disappears because of legislation. Thus, they come close to a discussion of what representing is; they state how actor-network theory defines "strong" inscriptions as ones where representation and object can be traced, and "weak" inscriptions as ones where the link cannot be traced. However, they do not explain why it could be that weak performance measures perform too, other than for the reason that the network black-boxes the calculation in a way, and the drug rep's do not dissent it. People believe in its validity (p. 446).

ANT research's emphasis on accounting as constituting the reality may sound as if noting (of interest) exists outside the "representations". But how can this be true? Would this mean the world would not move if we did not have representations? The point of departure in this thesis is that the world would certainly move even if we did not have the accounting (or other) representations that constitutes the reality. The problem is rather about the direction of the movement: when certain representations are constructed, does it mean it directs movement of organisations to the better in financial terms? The point of departure for analysing this is, as stated, that something exist "outside" the representations. Something which is unstructured and moves independent of the representations of it.

The last article to mention in this stream of research is Busco et al. (2007). The article is the opening paper of a special issue on management accounting change of the journal *Management Accounting Research*. Busco et al. (2007) are distinct on their view on the stability/change dichotomy and states that translations "are constantly shifted, mediated and renegotiated. Management account-

ing change always entails a difference, a movement, a variation" (p. 128). They continue by stating "if we were to think though that this translation stopped at some point in time [...] we would be back to the issue of recognising that we have agents separated from the object of change". Here Busco et al. (2007) articulates their ontology of the reality: reality is in constant translation and thus moves without necessitating separate agents to initiate the change. The article is concerned with accounting practices and systems, i.e. the networks that constitutes management accounting and not so much the nature of accounting objects themselves. Quoting Latour (2005) they argue that "every agent is an actor-network for her or his agency is diffused and not stably located in a centre from which change is thought to be prompted". However, they do not discuss the relations constituting the agent. The agent is an agent and the calculation is an ontological object<sup>1</sup>, however complex its network is in terms of relations to past, present and future (absences and presences) (p. 132). As we see difference is carried along as networks and their inherent translation processes transform and because these translations happen constantly change is the ontological premise rather than an effect. However, this still builds on an assumption of transformations in the actor-network. The closest they come to the ontology of objects (and hence; accounting calculations) is their notion of heteromogeneity. This notion shows how objects become strong because they appear homogenous, but its homogenous identity was constructed because of its heterogenous nature. They state the same with Balanced Scorecard: "The BSC is performable not because it forces users in certain directions, but because it leaves the potential adopters free to enact the space which is offered within it" (p. 137).

To sum up the focus in ANT literature show how the space of possibilities exist within the framing, the objects constructs. This is interesting because the authors do not write much about the performance of the space outside the framing. But this "outside" of inscriptions is in ANT literature discussed in the later research streams in both Law (2004) under the notion *hinterland* and in Latour (2005) under the notion *plasma*. Thus, in a sense, the management accounting studies

---

<sup>1</sup>The authors do not explicitly discuss calculations, but this is an analytical consequence of the view of agents as networks.

mobilising ANT is constrained by two concerns: an emphasis on management existing only/primarily within the framing networks of inscriptions construct and an a priori emphasis of »materialism«: the research concerns calculations and networks of objects without considering the *hinterland* or *plasma*. Therefore, while acknowledging the ANT research claims and building on the same ontological ground<sup>1</sup>, this thesis will theoretically depart in a problematisation of the relationship between the accounts (the "representations") of the reality and the "reality" (the actuality/-ies they inscribe).

Even though inscriptions problematise the accounting standards' ideals of representational faithfulness and representability, the calculations within this literature still achieves an "objective" singular ontology when they are mobilised in practice (hence the notion *heteromogeneity*). Thus, even though this literature problematise the realism research discussed previously in the chapter, they still support the argument that the representations, or calculations, become ontologically secure, i.e. they become "facts"<sup>2</sup>.

The problem not addressed in this research stream is how all the unstructured becoming of the world is performing relative to the networks constructing the management models mobilised in managerial practices. Even though the management inscriptions are heterogenous constructs, they are still prescribing the reality organisations find themselves within.

### 2.5.2 Deleuzian perspective on accounting qualities

The theorisation of accounting from a Deleuzian perspective is still emerging<sup>3</sup>. This section will discuss the deleuzian research which relates to accounting qualities with the first article published in 2005.

Harney (2005) theorises not specifically about accounting, but about labour and management. He touches upon calculations in his writings about "miracles" and "miraculating".

---

<sup>1</sup> »Heterogeneity« and »multiplicity« .

<sup>2</sup>Ontological security is not meant to reflect Giddens' concept, but rather are meant as people do not question their existence and ontological nature.

<sup>3</sup>The search explained in the introduction to the theory chapter returned 6 results.



*»Capital is like a body without organs, unproductive in itself, all surface and no depth. But because labor, or what they call the production machines, takes place on the surface of this body without organs, it comes to appear that the body without organs, or capital, is the source of wealth. Labor is recorded, captured on this surface and also miraculated, made to appear like it arose from this body without organs, and was caused by this body without organs, by capital. «*

Harney (2005, p. 587)

As we see in the quote the miracle means that value look like it has arisen from capital. And making capital look like the source of value is actually what management is about. Management "increase labor's value, by making workers work harder or with more cooperative knowledge without paying them more, or by remixing living labor with the labor embodied in machines, technology, and science, or indeed by rearranging or recalculating any of these components to increase the quantity and quality of what is produced in a given period [...] Deleuze and Guattari note that this technique makes capital look like the source of value and the key to producing more value and this takes the form of a miracle since capital is at any other moment utterly unproductive" (p. 587-588). Thus, management becomes the "miraculating machine" that makes capital look like the source of value.

This is not directly referring to accounting, but financial information is a capitalisation of phenomena and we see how capital extends broader than a translation from matter to form (representation).

Davison (2008) studies the "narratives and pictures in annual reporting" through theory of repetition (e.g. Deleuze, 2004). Davison shows how contents of annual reporting are exposed to repetition. However, Davison (2008) do not analyse accounting numbers, but limits herself to texts and pictures. The article argues that intangible assets are accompanied with words and pictures to "emphasise the existence of intangible assets whose recognition is often inadequate under the traditional accounting framework" (p. 792).

This is interesting because it touches upon Ijiri (1975)'s criteria of identifiability. If the surrogate is to explain the state of the principal, then it would not require additional information. Thus, the necessity of adding a text or picture to the financial calculations of intangibles point towards a representational problem of identifiability<sup>1</sup>.

Davison concludes by stating that "the corporate annual report is today a space of multitudinous signs". But where Davison focus on words and pictures, she do acknowledge accounting as signals as well<sup>2</sup> even though she does not include it in her analysis. And the analytical approach she suggest to theorise about signals, is the relationship between signals and meaning, or signifiant and signifi.

In 2009 Neu et al. went a step further in applying Deleuze's theory to study accounting in their article "Accounting assemblages, desire, and the body without organs" (Neu et al., 2009). The article applies a governmental view to understand accounting as a means for modernising development countries. They do so by studying the Latin American country El Salvador with the research focus "how assemblages of people and accounting come to shape that country's domain of governance" (p. 320).

Neu et al. stress the point that many supranational organisations such as the World Bank and the International Monetary Fund as well as NGOs advocate for accountability and transparency to be important for the modernisation of development countries. As the authors write, their findings show "how accounting may contribute to the at-times "over-organized" nature of the modernization field" (p. 321). The paper do not address accounting qualities explicitly, but shows how accounting interacts in an assemblage of modernisation and that desire drives the territorialisation of modernisation in certain ways, where desire is simultaneously moving with the movings of the assemblage.

Accounting is in the article not presented as a means for representation. Accounting is viewed as constructing an assemblage that "creates a firm inside/outside distinction" (p. 331, paraphrased). This is done with a concern for being able to follow the flow of monies, how monies "would be disbursed and to

---

<sup>1</sup>Davison's emphasis is that words and pictures adds "flesh to corporate identity, to emphasise markets, products and other facets of a company's life" (p. 793).

<sup>2</sup>Signals is the opposition to representations.

whom” (p. 330). In the accounting assemblage, an element relates to accountability, which is about ”generating accounts that allow the international organizations to evaluate the effectiveness of their monetary contributions” (p. 334). Accountability is thus a matter between the account giver and the account receiver. In the article performance evaluation is conceptualised as a ”surveillant assemblage” where the concept of accountability is combined with the performance indicators (i.e. a technology). Thus, accounting and especially performance evaluation ”accounts” is here considered an assemblage that constructs certain ”lines of flight” which directs the way the accountability assemblage moves. The accounting assemblage is therefore not viewed as a representational element, but rather as a process of becoming; continuous territorialising and deterritorialising movements:

*»Interview participants acknowledged that the emphasis on performance indicators and accountability encouraged the reterritorialization of government.«*

Neu et al. (2009, p. 335)

With basis in the presentation of accounting as engaging in assemblages of accountability and surveillance the authors claims accounting to over-organise the modernisation as a ”rationalist application of these techniques that had the effect of interrupting desire’s inherent productivity and substituting in its place a concern with interests” (p. 344). Thus, accounting reterritorialised itself in the El Salvador as a government form.

As we see Neu et al. (2009) do not analyse accounting techniques by themselves, but takes a governmental perspective (Miller and O’Leary 1987 and Miller 2001) on the link between the accounting assemblage and the modernisation of development countries. They show the point that accounting information is understood as signals when they state accounting ”through its ability to encode and decode, permits common conversations across development bodies” (p. 345).

The last Deleuzian accounting study to present here is Martinez (2011). The article explains that Deleuzian theorisation of accounting is very scarce but argues

Deleuzian concepts to be able to enrich the scholarly conversation about what accounting does. However, while Neu et al. (2009) develops an analysis frame from some of Deleuze's concepts, Martinez (2011) focus mainly on deleuze's concept "society of control" from a theoretical point of view. He does so to extend the discussion Macintosh (Hopper and Macintosh, 1993, Macintosh, 1994 and Macintosh, 2002) raises from 1993 onwards about accounting and control as "technologies or techniques of discipline such as hierarchical surveillance, normalizing sanction, and examination" (Martinez, 2011, p. 200). Martinez therefore seeks to broaden the discussion of accounting that emerged from accounting research based on Foucault's works in *Discipline and Punishment* with special attention on the panopticon.

The article theorises management control as "a component of modality of power exercised through overlapping digital information networks that extend throughout the social landscape" (p. 202). Even though the article does not treat accounting or the qualities of accounting in relation to its representational character, as we see from this point of view accounting is understood as having effects that ramify much wider in a social context than what realism literature presuppose. The close relationship between actor-network theory and Deleuzian theory is articulated in the fact that Martinez (2011) position his analysis as an extension of actor-network theoretical accounting literature as well as Macintosh's work. Martinez' argues through Deleuze's "society of control" that the emergence of accounting and IT technologies problematise the foucauldian literature's use of the panopticon metaphor:

»*Rather than the disciplinary factory-as-prison enclosure and its analogous forms (barracks, hospitals, family etc), the society of control has given way to the corporation, "a spirit, a gas" [...], that, lacking specific shape, volume or permanent location, permeates throughout the social landscape.* «

Martinez (2011, p. 204-205)

Here we see how accounting and technology is argued to be constructing an assemblage of control which is not materialistic in its form, but rather, it is

rhizomatic. Thus, accounting is an object (a calculation), but at the same time it expresses intensities of control which extends wider as an assemblage than the mere ostensive qualities of calculations.

To sum up on the deleuzian inspired accounting research still no study applies the theory on a particular accounting practice in a particular organisation where the study object is accounting and its qualities. The closest we come to such a study is Neu et al. (2009) and their discussion of the dispersion of accounting techniques and the accountability-assemblage. Thus, in order to understand the performance of accounting as representing from a deleuzian/deleuzeoguattarian perspective, further studies are needed.

### 2.5.3 Summary of constructivist accounting research

The constructivist accounting research reviewed in this section consist of actor-network theory inspired accounting research and (the very scarce) deleuzian accounting research. The reviewed literature is summed up in the following table.

Table 2.3: Summary of literature on constructivist accounting research

Author(s)	Claim
Robson (1991)	Introduces the actor-network theory to accounting research. The article shows how the ANT concept of translation will be beneficial to understand "the specific associations, connections or "positive" relations that are made between accounting and its social context" and through that gain insight into extending the impact of accounting to understand how it translates into societal, economic and political discourses.
Continued on next page	

## 2. Theory of accounting qualities

---

Author(s)	Claim
Robson (1992)	Accounting is more than a mere representation; it is an inscription which emerges through translation. And the inscription has effects which ramify in directions the conventional accounting literature do not anticipate.
Preston et al. (1992)	Studies budgeting as a process of black-boxing. It challenges the normative view of budgets as a design / implementation relationship with a well-defined purpose and effect by showing how black-boxing is a process of negotiations between various actors and how these negotiations frame the budget as well as the responsibility design.
Chua (1995)	Accounting is an imaging device which constructs images, which present the organisation. The world is not there before the calculation, but comes after, or simultaneously with, the fabrication of the image of it (the (re)presentation).
Mouritsen et al. (2009)	Calculations create new insights about different concerns by providing competing propositions that visibilise and re-visibilise what presence is. The calculations do no represent, but mediate, translate, and redesign business ideas of companies.
Dambrin & Robson (2011)	The article shows how weak performance measures gain performativity and how the representation should be understood as "tracing" rather than "representing". Weak performance measures are conceptualised as the missing ability to trace the performance measures back to the practices of the people who performs.
Continued on next page	

Author(s)	Claim
Busco et al. (2007)	Discusses the stability/change dichotomy. They argue that translations "are constantly shifted, mediated and renegotiated". Therefore change is an inherent part of translation because translations in principle never stops. Because calculations are translations too, this means that calculations simultaneously with the calculation induce change. Management technologies are conceptualised as heteromogenous, meaning that they appear homogenous, but is constituted by a network of relations between heterogenous actors.
Harney (2005)	Studies labour and management from a Deleuzian viewpoint. The article argues for capital to be a surface on which labour takes place and makes capital and management appear as if they are the means from which value emerge.
Davison (2008)	The article examines the repetition of texts and pictures in annual reporting and argue that intangibles are accompanied with words and pictures to emphasise their existence.
Neu et al. (2009)	Studies accounting as a means for modernising development countries from a Deleuzian perspective. Accounting is in the article not viewed as representation, but as a construction of an assemblage that creates a firm inside/outside distinction, used to track the flow of monies. Performance evaluation "accounts" is in the article considered as an assemblage that constructs certain "lines of flight" that directs the way the accountability assemblage moves.
Continued on next page	

---

## 2. Theory of accounting qualities

---

Author(s)	Claim
Martinez (2011)	Argues that Deleuzian theorisation of what accounting does will enrich the scholarly conversation about accounting. The article emphasises accounting as a technology of discipline where Deleuze's writings about the society of control can give new insights to the existing accounting research based on Foucault's Discipline and Punishment.

The constructivist accounting research is radically different from the conventional accounting literature in its perception of the ends (effects) of what accounting does. The theory leaves accounting as representations by showing how accounting constructs the reality in which companies act and creates new insights about what the business is about. Moreover it is shown how the link between re-presentation and what it purports to represent, at best, is evident as an "auditable" trace, meaning that the reference is there to qualify the inscription as an object (circulating reference).

The literature reviewed in the chapter will all together be summed up in the conclusion in the next section.

### 2.6 Conclusion on the literature study

The chapter has reviewed literature on accounting qualities with attention on how the representativity of accounting information/calculations is understood in existing accounting research.

The work which have been carried out to define criteria for financial reporting and evaluating managers' performance strives toward constructing information that measures faithfully values on phenomena such as assets, or activities that depreciates assets. The work strives to develop sets of criteria that guides accountants in developing such accounting information and accounting principles



respectively. This is productive in the sense that it makes it possible to compare financial reports and thus supports the usefulness criteria in this respect.

Performance measurement as treated in Merchant (2006) and other similar works is about directing employee behaviour by representing certain aspects of the organisational value creation through calculations and set goals and reward structures for the employees based on the performance measures. When doing so the calculations select certain aspects of the organisation to be represented. The problem is whether these representations actually are faithful or accurate to »what they purport to represent« (i.e. employee effort or performance).

As discussed in the previous sections of the chapter, the ontological conditions of accounting information can not unambiguously defined in the literature. In the conceptual frameworks this was acknowledged already in SFAC no. 2 where they stated that *objectivity* was not a relevant ideal, because the relation between reference and referent could not be understood as objective. Thus, the matter would be about representing faithfully what the information purports to represent. However, this lead the analysis to understand representational faithfulness as a matter of following the right procedures (procedural faithfulness) rather than representing something underlying. Ijiri stated accounting to be about rendering people accountable, and therefore the analysis which will be provided in the empirical part of the thesis will reflect on how representational faithfulness is unfolding in practice and which consequences it has for what accountability is.

Representational faithfulness is not reflected literally in the management accounting research but in e.g. Merchant (2006) it is connected to the notion of controllability and, among others, Merchant and Shields (1993) discusses accuracy and precision. The point in this literature is that representational faithfulness and, on the whole, the conceptual frameworks, can be understood as conditions that makes it possible to keep employees accountable to the signification of the performance calculations. A counter-movement to the conventional accounting literature has emerged in the constructivist accounting literature. This stream of research understands accounting calculations radically different from the conventional literature by showing how accounting fabrications have many other effects than the conventional accounting literature is concerned with. Accounting

information is in the part of the literature inspired by actor-network theory conceptualised as inscriptions, where inscriptions are significant different from representations in the sense that inscriptions are not representations of the anything, but constructs propositions about the world. Propositions which inform users about certain matters of concern and which constitutes the world in the form, users understand it. This view implies that when calculations are constructed differently, through different tensions and challenges that form the calculation to become what it becomes, the organisational concerns, accounting inscriptions concern, moves too. But this part of literature focus on construction and closure of accounting calculations. The actor-network theory inspired accounting research presumes that closure is possible. It theorises about this closure in the sense that performativity of accounting calculations change only to the extend where the network is challenged and must be renegotiated, where renegotiation means excluding some, or including other, concerns (the elements of the network change for the performativity of the network to change).

Deleuzian accounting research offer a different perspective of the performativity of accounting. However, literature in this stream of constructivist accounting research (or, more broadly, post structuralist accounting research) is scarce and the studies present today do not deal with accounting calculations per se, but takes a broader perspective by theorising how capital and management is performing, or how accounting is a disciplinary technology.

**Part II**

**Theoretical Approach and  
Methodology**



# Chapter 3

## Theoretical Approach

This chapter will discuss the theoretical approach of the thesis and position it relative to actor-network theory inspired research on accounting qualities. The approach is grounded in Gilles Deleuze's philosophical scholarship and his collaboration with Felix Guattari (Deleuze, 2004 and Deleuze and Guattari, 2004). This will be extended with Manuel Delanda's Assemblage Theory (DeLanda, 2006). Deleuze's writing is a comprehensive philosophical work and therefore, in this chapter, the thesis will discuss the parts of Deleuze's philosophy used to analyse the empirical phenomenon of representativity of accounting information. Thus, to theorise about the research question the thesis will start from Deleuze's *Difference and Repetition*, its implications for the world as simulacra and its problematisation of representational thinking. This will be extended with Deleuze and Guattari (2004)'s *rhizome* and *regimes of signs*.

*Difference and Repetition* is a thorough philosophical endeavour and considered to be Deleuze's masterwork. As Williams (2003) states it:

*»Deleuze is not working on a subsection of philosophy defined by an earlier movement, in the way, for example, some research projects can be described as Cartesian, even though they may have original discoveries of their own to impart. Instead, earlier philosophical structures and the worlds that they imply are profoundly shaken by 'Difference and Repetition' [...] Like most works of great philosophical originality,*

*the book is as difficult as it is important.* «

Williams (2003, p. 1)

Williams emphasises in the quote that *Difference and Repetition* excels in originality and, maybe therefore, it is a very difficult book to read. Nonetheless, it is beneficial to accounting scholarship because it allows to talk deeper about what accounting practice is, i.e. how accounting performs in organisational/organising environments (Hopwood, 1978 and Hopwood, 1983)<sup>1</sup>.

In order to help conceptualise and understand what the deleuzian scholarship, especially *Difference and Repetition* is about, the thesis draws on the book itself and on two other works on Difference and Repetition. These are Williams (2003)'s "Gilles Deleuze's difference and repetition" and Hughes (2009)'s "Deleuze's Difference and Repetition".

The point of this chapter is to introduce the two concepts that frames the research question and the analysis. The concepts are sign and rhizome. However, many other concepts exist in the deleuzian theory and to be able to use the two concepts analytically, other concepts has to be presented as well. These count difference and repetition, blocked concepts, simulacra, rhizome, assemblage, machinic assemblages and regimes of signs. This means that some of the concepts explained in this chapter will not explicitly be drawn on as analytical concepts in the empirical part of the thesis.

## 3.1 Deleuze's *Difference and Repetition*

Hughes (2009) claims that *Difference and Repetition* can only be understood partially by reading the book alone, because of its notations, writing style and Deleuze's meanings. For that reason this section will provide the selections from

---

<sup>1</sup>The terminology "organisational environments" may sound as treating organisations as a stable entity, but this would contradict with Deleuze's scholarship. In this thesis organisational environments are characterised as assemblages of movements which continually construct and reconstruct what the organisation is, and thus organising environments is a better term to describe this than organisational environments.

*Difference and Repetition* used in the thesis, by drawing on the book itself and Williams (2003) and Hughes (2009). The purpose of this section is not give a detailed account of *Difference and Repetition's* critique of representation philosophy, but the ideas behind the critique is explained in overall terms through empiricism.

Empiricists claim that perception of objects happen when our senses send information to our mind about the object we look at (DeLanda, 2006). The mind combines this information with our prior experience in order to find a representation that suits the object we engage with. The question, among many others, Deleuze raises, it whether this can be an adequate understanding of how the human mind works. If this is the explanation, how is the representations themselves then constructed? Representation philosophy would say that representations are inherent in the objects and therefore exogenous to the mind, but this is where Deleuze disagrees. Deleuze thus offers a philosophical understanding where representations are not explanations in themselves. In contrast, representations are part of what is going to be explained and in order to do so he introduce the notions of repetition and difference. However, the notions are not used as they are signified them in daily language, which we will see later in the chapter.

#### 3.1.1 General concepts and complete concepts: blocking

One of the problems raised within the deleuzian scholarship is how one can theorise concepts and change. Deleuze is interested in the processes of becomings of objects and its consequences for concepts and this thesis' applies these concerns on accounting objects such as budgets, financial statements or balance sheets. Hughes (2009, p. 36) illustrates deleuze's theory on the general concept of a drop of water and discusses the generality/particularity relationship of the drop.

*»You can say "this is a drop of water", meaning that you recognise this drop as a drop insofar as it participates in the general concept drop of water, a concept which applies to all drops. But you could also say that this particular drop is different from all the others. It is, for example, here and not there, now and not later [...] if you were*

*God [...] you could follow the drops descent in reverse, all the way back up into the clouds, through all of its various paths determined by the winds, to the point at which evaporated water molecules first condensed into that singular drop and so forth. All of these moments in the individual drops history and future taken together constitute its complete concept and, importantly, this concept excludes all other drops and their concepts. The drop's individual difference is included in its concept. «*

Hughes (2009) p. 36, original emphasis

In the quote the analysis of a concept means that the particularity of it does not depend on concepts themselves, but how long the analysis of the concept is extended. If you stop at "this is a drop of water", you generalise the concept but lose its particularity. This is what Deleuze denotes "blocking" (Deleuze, 2004), or "blocked concepts" (Williams, 2003). The point is that blocked concepts "never satisfactorily corresponds to a particular object" (Williams, 2003, p. 40).

The same applies to accounting concepts. The immediate difference between the drop of water and an accounting technology is that the first is a physical object and the second it a immaterial object. However, this difference between the nature of the concepts is not a problem for applying the Deleuzian scholarship about repetition as an analytical tool to explain the concept and idiosyncrasy. For the analysis in this thesis, the idiosyncrasy of the accounting technology expresses the difference by which its performance will become different than the expected performance of the general concept, e.g. performance management information such as the budget or financial statements. The reason is that the differences of complete concepts opens up for rhizomatic movements, which will make the performance of the concept move. Deleuze's theory is translated into a sociological concern in DeLanda (2006)'s assemblage theory. From the perspective of assemblage theory, the meaning of a concept and its performance is not defined by its interior parts. Conceptual objects engage in relations of exteriority to other objects that together constitute the becoming of the object. Thus, the meaning and performance of a budget is defined not by technical characteristics



of the concept of the budget, but by the exterior relations that makes the budget in practice (DeLanda, 2006). Thus, in practice the complete concept of an accounting technology becomes something else than the general concept of e.g. a budget describes. This applies to all other objects in the assemblage too. And therefore, because of the repetition of the concept, it becomes different.

This section has discussed the concept-object relationship and in accounting this applies to the theoretical concepts and their actualisation in practice (e.g. the budget as a theoretical concept and a budget as an empirical object). There is, however, another related problematic, simulacra, which is articulated through eternal chains of repetitions. Blocking is about the relationship between general and complete concepts, simulacra is about the repetition of concepts.

#### 3.1.2 Eternal chains of repetitions and the simulacra

One of the cornerstones in *Difference and Repetition* is its counter-intuition to the stability-change dichotomy. Repetition intuitively can be understood as repetition of the same and in this sense repetition carries with it stability. But just as complete concepts are not the same as their generalities, for Deleuze repetition can not be repetition of the same. When repetitions happen, they carry along difference. The difference in repetitions is in this thesis understood as the product of relations of exteriority that are repeated. Therefore, the object which is repeated is changed simultaneously with the repetition<sup>1</sup>. Difference is not a measurable difference like for example a difference between Balanced scorecard and KPI scorecards (as Kaplan and Norton outlined in Kaplan and Norton (2001)). In the deleuzian perspective difference is always part of repetition on the level of the particular. Difference is not necessarily in itself identifiable, but conditions the movement of objects in an assemblage, and therefore difference is inherent in

---

<sup>1</sup>This is inspired by DeLanda (2006)'s assemblage theory and do not correspond perfectly with Deleuze's writings in Deleuze (2004). For Deleuze difference within repetition is connected to the virtuality and actuality of things. But the terms virtual and actual will not be used in this thesis because they are theoretical notions developed to argue for the philosophical claim of difference as something in itself and are difficult to apply to empirical studies. The only thing I will mention regarding difference and the virtual/actual is that for Deleuze difference is not the actual distance between things, but, on the contrary, variations in the virtual dimension of things.

repetition. Thus, repetitions of objects are not a matter of models and copies. Repetitions are rather repetitions of other repetitions in endless chains.

Deleuze explains how this is connected to the simulacrum:

*»The simulacra is the true character of the form - the "being" of that which is. When the identity of things dissolves, being escapes to attain univocity, and begins to revolve around the different. That which is or returns has no prior constituted identity: things are reduced to the difference which fragments them, and to all the differences which are implicated in it and through which they pass [...] difference does not lie between things and simulacra, models and copies. Things are simulacra themselves, simulacra are the superior forms, and the difficulty facing everything is to become its own simulacrum, to attain the status of a sign. «*

Deleuze (2004, pp. 80 and 81)

Thus, as Deleuze argues in the quote, the being of that, which is, is simulacra. When the mind engages with something, it fixes its identity. Though this fixation, which comes from the mind, that something becomes simulacrum. This, happens because the matter, which's identity has been fixed, repeats difference. And this repetition makes the matter distinct from the form. Thus, form is simulacra which do not relate to the matter as representation. Therefore, simulacra relates to the habitual repetition of memory. The human memory contains fixed representations of things (Williams, 2003) but these do not correspond to the actual things we engage with. The mind makes a synthesis of the information from senses with the memory's representations and makes the mind believe the actual thing to be a copy of the representation from memory. And as Deleuze states in the quote above when the identity of things dissolves the difference of things show up; things are constituted by their difference and the differences inscribed in them.

As Williams notes:

*»Pure Differences are the other face of all actual things - there is no such thing as a well-defined actual life. Deleuze claims that all our representations, senses and concepts of identities are illusions (nothing fixed is real).«*

Williams (2003, p. 13)

In relation to the Deleuze's quote above, Williams goes so far as to say that there is no such thing as a "real" (actual) life. All the things humans experience (through the perception of the life we live) and the memory humans get from experiences are illusions because our mind fixes the actuality which, if the deleuzian theory of difference and repetition is true, are univocal representations of difference.

Williams continues by bringing up the claim of eternal chains of repetitions:

*»Simulacrum is a member of a repeated series that cannot be traced back to an origin of the series or back to an origin outside the series.«*

Williams (2003, p. 27)

This relates to the thesis in the sense that simulacra cannot be differentiated from the differences they carry along in order to trace them back to an origin that exist outside the simulacra. The particular performance of the simulacra is therefore possible to reduce to an origin outside the series of repetitions that construct the simulacra. In an accounting setting this means that the particular performance of accounting information cannot be reduced to the model from which the information is constructed. The performance is just as much, or maybe even more, a matter raising from the difference implicated in the accounting information, to use Deleuze's own vocabulary.

To sum up difference and repetition turns around the understanding of what difference is and what repetition is.

Difference is not something opposite to repetition. Repetition is difference, because things change. When we understand something "as the same", it is the mind that makes us experience this "sameness" through the mind's representations. This is why Deleuze argues the world as it is perceived by humans not to be »real«. We live in simulacra. Actual things are illusions of the virtual differences they express.

## 3.2 The rhizome

The rhizome is a concept through which it is possible to explain the movements of social phenomena. In biological terms the rhizome refers to a certain part of some plants close to its roots. The rhizome is under certain conditions able to reproduce the plant vegetatively. If even a very small part of the rhizome is removed and planted elsewhere, the plant can reproduce itself there. If an animal eats of the rhizome it might disperse small parts of the rhizome on the ground and reproduce the plant as new plants. The implication is that it is impossible to anticipate where the plant reproduce and which connections the plant makes to other entities (Deleuze and Guattari, 2004, p. 7 and Encyclopædia Britannica Inc., 2012).

The deleuzeoguattarian concept of the rhizome is developed in Deleuze and Guattari (2004). Deleuze and Guattari explains their use of the rhizome as follows:

*»It is tracings that must be put on the map, not the opposite. In contrast to centered (even polycentric) systems with hierarchical modes of communication and preestablished paths, the rhizome is an acentered, nonhierarchical, nonsignifying system [...] the rhizome has no beginning and no end; it is always the middle, between things, interbeing, intermezzo. The tree is filiation, but the rhizome is alliance, uniquely alliance. The tree imposes the verb "to be", but the fabric of the rhizome is the conjunction [...] This conjunction carries enough force to*

*shake and uproot the verb "to be".* «

Deleuze and Guattari (2004, pp. 23 and 27)

The quote shows that the rhizome conceptualises continuous becoming. Becoming that comes from the acentered conjunctions ("conjunctions" here means links, or relations.) that move the assemblage rhizomatically without underlying »structural order«. The rhizome is, as (Deleuze and Guattari, 2004) write in the quote, to be contrasted with centered systems. It is acentered, nonhierarchical and nonsignifying. The authors argue that the rhizome contradicts the root-tree which is organised with a root system, a trunk, branches and leaves. This structure organises the tree. However, Deleuze and Guattari argue, the root system and the rhizome are always intermingled with each other and cannot be understood as two opposite models. The two are always present at the same time, the one as structural organising (the root-tree) and the other as continuous movements in relation to the particularity in which it operates (the rhizome). The example is from plants: even when they have a root, trunk and branches, they, too, have an outside that constructs a rhizome with the wind, animals, humans. In terms of accounting and management control this means that accounting signifies a structural organised system, the accounting system, but this system has an outside which connects with the particular and thus the performance of the structural system becomes realised by the structure and its rhizomatic side, which moves the performance by the rhizomatic conjunctions it is exposed to. Thus, both the signifying structure of the accounting system and the nonsignifying rhizomatic movements happen and the performance of the accounting system is an effect of both sides of the control system<sup>1</sup>.

*» While claiming to be traditional Deleuze nevertheless defines philosophy in an unusual way as the art of forming, inventing and fabricating concepts (Deleuze and Guattari, 1994, p. 2). It has nothing to do with*

---

<sup>1</sup>In the chapter "the smooth and the striated" Deleuze and Guattari explains how the structured system (the accounting system) constructs a space for striatisation whereas the rhizome constructs a space for the smooth. And the space of the smooth is always surrounded by the striated or vice versa

*contemplation, reflection, or communication (ibid., p. 6). At its deepest level it is the creation of concepts [...] This description suggests the famous rhizome concept, a multiplicity whose parts are interconnected but not according to an underlying structural order, where connections can be made at any point to any point, where new branches can grow and old ones regenerate and reconnect. The rhizome is an image of what philosophy should be, a complex, ungovernable place of spontaneous encounters and devisings standing in sharp contrast to all the efforts of systems of established power to capture, block, channel and control the force it expresses. «*

Heywood (2002)

The quote explains that the rhizome is contrasting with all systems of established power. But not only that. The rhizome is multiplicity. It is interesting especially for this "principle of multiplicity" (Deleuze and Guattari, 2004, p. 8). As Deleuze and Guattari state, within multiplicity there is no axis, or taproot. The multiplicity does not have an object or a subject but only "determinations, magnitudes, and dimensions that cannot increase in number without the multiplicity changing in nature" (p. 9). As a consequence there are no points in a rhizome that forms a structure, its fabric is multiplicity. Thus, the concept is there along with other signifying structural systems, but the two are entangled in each other in a complex relationship.

The rhizome ontology relates to many phenomena, including identity, by showing how things move and connect with other multiplicities in complex ways. Bidima and Warren (2005) discuss identity through the notion of the rhizome:

*» "They (Deleuze and Guattari) established a perspective [...] of thinking, a thinking of the root and of the rhizome. The unique root is one which kills its surroundings whereas the rhizome is a root that extends towards an encounter with other roots". On the basis of this distinction, Glissant challenges atavistic notions of cultures that define their*

*identity in terms of territory, origin, and ancestry. He opposes to this the idea of composite cultures, which, in the image of a rhizome, disregards territories and de-emphasizes genealogies and unilinear affiliation, thus giving rein to pluralities. «*

Bidima and Warren (2005). Brackets added.

The quote shows how Bidima and Warren (2005), by drawing on Glissant, applies the concept of rhizome to a problematisation of the identity of culture. In the same way the rhizome is able to explain how management technologies (which's general models can be understood as the management technology's tap-root) will extend and connect in the particularity it acts within which changes the identity of the particular management technology. This means, we cannot understand two management technologies that build on the same general model, e.g. the Balanced Scorecard, as the same. Their performances are co-constructed by rhizomatic connections they develop in the particularity they are mobilised within (the principle of multiplicity).

Accounting practice is in this way understood rhizomatically because it connects and moves with the assemblage, is constitutes. One side of it is the signifying model which prescribes a certain performance, the other side is the rhizomatic which challenges and constructs particular becomings of the technology.

### 3.3 Deleuze in the social: Assemblage Theory

In this section the argument from Deleuze's theory will be extended to concern the social. Assemblage theory (DeLanda, 2006) is interesting in two respects. Partly because it builds on Deleuze's theory and partly because of its ontological claims. DeLanda writes in his introduction to "A New Philosophy of Society":

*»Assemblages, being wholes whose properties emerge from the interactions between parts, can be used to model any of these intermediate entities: interpersonal networks and institutional organizations are assemblages of people; social justice movements are assemblages of*

*several networked communities; central governments are assemblages of several organizations; cities are assemblages of people, networks, organizations, as well as of a variety of infrastructural components, from buildings and streets to conduits for matter and energy flows; nation states are assemblages of cities, the geographical regions organized by cities, and the provinces that several such regions form.<*

DeLanda (2006, p. 5)

The quote explains how assemblage theory extends the analytical level from being one concentrated on the particularity of objects in the section about difference and repetition, to become one concerning larger entities, e.g. interpersonal networks or institutional organizations. By applying an assemblage approach to accounting it will be possible to understand the performance of the accounting technology together with the rhizomatic movements that happen simultaneously.

Besides this point assemblage theory is interesting to this thesis because of its ontological claims. As Delanda writes, some social scientists (as well as accounting scholars) performs their research on implicit, uncritically accepted, ontological foundations (DeLanda, 2006, p. 7). With this starting point the question assemblage theory raises is whether the implicit ontology of thinking in models and information as representations is appropriate to give a thorough understanding of how accounting performs in the social context.

Delanda explains the productivity of constructing an approach based on assemblage theory and other scholarly work on Deleuze's philosophy, to theorise about social phenomena, with reference to theories of relationships of interiority. As he writes (pp. 8-10) assemblage theory aims to understand the part/whole relationship of assemblages not as mechanistic totalities with interior relations (which means that components of totalities are constituted by their relations to other parts and that the totality is an unproblematic whole which's performance is composed of its inherent parts alone). But, by drawing on Deleuze's thinking, assemblage theory is concerned with capacities of entities rather than properties of entities. Capacities which first and foremost acknowledges the multiplicity of the whole and its relations to exterior assemblages, but also inscribe the idea of



movements and becomings and thereby problematise the stability of performance of a whole when its capacities to interact moves (DeLanda, 2006, p. 10).

DeLanda, paraphrasing Deleuze, explains the problem of reducing wholes to its constituent parts as follows:

*»'Relations do not have as their causes the properties of the [component parts] between which they are established ...' although they may be caused by the exercise of a component's capacities. In fact, the reason why the properties of a whole cannot be reduced to those of its parts is that they are the result not of an aggregation of the components' own properties but of the actual exercise of their capacities.«*

DeLanda (2006, p. 11) (original brackets)

DeLanda emphasises in the quote the rhizome as a principle for organising in contrast to arborescence<sup>1</sup>. Connections in this sense is therefore exterior as they connect to rhizomes and develop rhizomatically in unanticipatable (nonsignifying) ways (Deleuze and Guattari, 2004). Thus, even though arborescent structure exist, it will always interact with the rhizome. Thus, the performance of arborescent organisations always emerges from the actual exercise of its capacities when it interconnects with the rhizome.

For accounting objects assemblage theory claims that there is no »underlying« essence of the object (i.e. the behaviour-directing mechanism of certain accounting information). Its significance is constructed in the assemblage that mobilises the object in order to perform something and the rhizomatic movements and arborescent organising of the accounting technology mix together and together constitute the performance of the accounting technology.

## 3.4 Machinic assemblages and regimes of signs

Together assemblages of signs form machinic assemblages. For Deleuze all things humans engage with are signs and when understanding the sign in a certain

---

<sup>1</sup>Arborescence means having the form or characteristics as a tree; organised as a tree.

way it is done so because the mind ascribes meaning to the sign. Machinic assemblages form wholes, that affect the meanings ascribed to signs. This section discuss machinic assemblages and their relation to thought and thereafter turn to regimes of signs.

#### 3.4.1 Machinic assemblages

Deleuze and Guattari think about the existence of free statements in their work on machinic assemblages. In their discussion of machinic assemblages the existence of a free will (treated some places in the scholarship as pure thinking) is questioned. They argue that »pure thinking« does not exist and statements are always products of machinic assemblages:

*»There are no individual statements, only statement-producing machinic assemblages [...] For the moment, we will note that assemblages have elements (or multiplicities) of several kinds: human, social, and technical machines [...] We can no longer even speak of distinct machines, only of types of interpenetrating multiplicities that at any given moment form a single machinic assemblage [...] Each of us is caught up in an assemblage of this kind, and we reproduce its statements when we think we are speaking in our own name; or rather we speak in our own name when we produce its statement. «*

Deleuze and Guattari (2004, p. 40-41).

The quote illustrates Deleuze and Guattari's metaphysics about the world, humans and agency. There is, according to Deleuze and Guattari, no free will, no "pure desire". There are statement-producing machines (abstract machines) which produce the statements, humans speak. They continue:

*»There are no individual statements, there never are. Every statement is the product of a machinic assemblage, in other words, of collective agents of enunciation (take "collective agents" to mean not*

*peoples or societies but multiplicities). The proper name (nom propre) does not designate an individual: it is on the contrary when the individual opens up to the multiplicities pervading him or her, at the outcome of the most severe operation of depersonalization, that he or she acquires his or her true proper name. The proper name is the instantaneous apprehension of a multiplicity.<*

Deleuze and Guattari (2004, p. 42)

Here Deleuze and Guattari (2004) claims that individuals are depersonalised by the multiplicities pervading them. What they say is that thought-experience relationship that happen in humans' minds is a complex assemblage emerging by the multiplicities the human is connected with. Therefore, the notion of machinic assemblages is a counterclaim against the phenomenological ideas of subjectivism. As they state it, our perception of the world and articulation is constituted by the multiplicities that "interpenetrate" us and makes our perception of the world become what it is.

Machinic assemblages of multiplicities are therefore treated differently than for example institutions in institutional theory. The difference lies in the ontology of movement of the assemblages. Institutions articulate a notion of stability, but this is not the case for machinic assemblages. They move continually (fixity is an illusion) and thus the abstract machine transforms.

In accordance with Deleuze and Guattari (2004)'s work on assemblages, Delanda outlines a model of the subject where the subject is emerging as relations of exteriority among contents of experience (p. 47). In that conceptualisation experience constitutes the representations in memory. But as discussed in a previous section of this chapter this is a synthesis of past assemblages of multiplicities which is not representing the presence. It is chains of repetitions that constitute the representational fixity that forms memory, and memory is a generalisation of the particularity of the assemblage that the synthesis strived to represent (Deleuze, 2004, p. 91). Thus, memory is also simulacrum, constituted by the passive synthesis of mind. This means our perception of the world builds on

mental representations which themselves are simulacra emerging from synthesis of the past. And these frame the perception we have of the world. In Delanda's terms, those framings are constructed by social assemblages, which are not to be considered stable, but moving multiplicities that interconnects in the mind of the human. Thus, experience through memory makes us understand things and beings in certain ways as fixities. But the fixities are illusions, the object is always more than the memory's synthesis of it.

#### 3.4.2 Regimes of signs

As described machinic assemblages frame humans' being and understanding of the world. Deleuze and Guattari (2004) devote a chapter (chapter 5) to the connection between sign and signification, which is at least as important for understanding the theoretical approach to the study as is machinic assemblages. In chapter three of Deleuze and Guattari (2004) they talk about regimes of signs and the signifiant (signal) signifié relationship (the generation of the meaning of the sign). They do so because the notion of regimes of signs explains the relationship between signifiant and signifié. As mentioned, signs are assemblages of multiplicities and thus the sign is not understood as a sign of a thing:

*»...why retain the word sign for these regimes, which formalize an expression without designating or signifying the simultaneous contents, which are formalized in a different way? Signs are not signs of a thing; they are signs of deterritorialization and reterritorialization, they mark a certain threshold crossed in the course of these movements [...]*

*Next, if we consider regimes of signs using this restrictive definition, we see that they are not, or not necessarily, signifiers. Just as signs designate only a certain formalization of expression [...] signifiante itself designates only one specific regime among a number of regimes existing in that particular formalization.*

*In any case, content and expression are never reducible to signified-signifier [...] Expression can never be made into a form reflecting content. «*

Deleuze and Guattari (2004, p. 75-76)

Here Deleuze and Guattari argue that the relationship between sign and signification is also multiplicity. Sign - signification is therefore a matter of exterior relations to the assemblage that territorialises or deterritorialises the signification and thus, to explain the sign - signification relationship it is important to understand that signification is constituted by the regime of signs. This is interesting in relation to the analysis in the thesis because accounting information is perceived as formalised expressions. But as Deleuze and Guattari (2004) argue on p. 123 the formalisation in itself is not enough to understand its signification:

*»One can proceed as though the formalization of expression were autonomous and self sufficient. Even if that is done, there is such diversity in the forms of expression, such a mixture of these forms, that it is impossible to attach any particular privilege to the form or regime of the "signifier." «*

Deleuze and Guattari (2004, p. 123)

The complication of understanding signs as signifiers of a thing is based in the argument of difference and repetition, where difference is inherent in chains of repetitions. The signs are therefore "signs of signs" (p. 124). Thus, the signifying regime is the semiotic that constructs signification of meaning. But this signification, as mentioned in the quotes, is only one signification among others (constituted by other regimes of signs). Thus, several regimes of signs can decode the sign and construct a signification of it. The formalisation of information is therefore not enough to understand its signification. Because of the chains of repetitions, the signs are signs of signs (of assemblages of multiplicities), there is therefore not "one" meaning of the sign, no essence. Thus, epistemological

objectivity, which is about following the right formalisation (procedure) in constructing accounting information does not resolve the problem of how the sign (of accounting information) is decoded, because it does not refer to a »thing« or essence, but to continuous territorialisations and deterritorialisations.

#### The signifying regime and lines of flight

Significations and counter-significations create a space for possible conflicts. Different regimes of signs create different significations and thus the possibility of conflict. The reason is that counter-significations potentially embody deterritorialisations of the signifying regime; potential lines of destruction of the signifying regime. When other significations are emerging the signifying regime must therefore respond to that.

*»It incarnates that line of flight the signifying regime cannot tolerate, in other words, an absolute deterritorialization; the regime must block a line of this kind or define it in an entirely negative fashion precisely because it exceeds the degree of deterritorialization of the signifying sign, however high it may be [...] Anything that threatens to put the system to flight will be killed or put to flight itself. Anything that exceeds the excess of the signifier or passes beneath it will be marked with a negative value. «*

Deleuze and Guattari (2004, p. 128-129)

Thus, as we see, the signifying regime is being challenged from other significations. Significations that deterritorialise the signifying regime to a degree it cannot tolerate (absolute deterritorialisation of the signifying regime) will be considered negative and will be pushed toward annihilation (killed) if possible because it "threatens the system to flight" to articulate Deleuze and Guattari (2004)'s »own statement« .

The regimes of signs and machinic assemblages implies that Deleuze's theory can be read as a structural theory. Not in terms of as structuralism but, as some

suggest *radical structuralism*. Williams touches upon this in (Williams, 2005) where he describes how structures clashes together when they meet each other. The budget is one structure, the becoming of the world is another. When those two clashes, movements within structures happen. Not movements to find final solutions to problems, but movements that:

*»Move tensions and blockages on and use them as creative opportunities to reinvigorate life, free of the illusion that one day, thanks to the right truths, all will come to be peaceful, or at least settled in a trend towards peace.«*

(Williams, 2005, p. 64)

Thus, signifying regimes is an analytical concept which can be used to understand how accounting technologies (as arborescent organising) and its significance and performance is a matter not only of the technology's materiality, but in a broader perspective also a matter of the multiplicities running through it and signifying it in a certain way, which again challenges, by potentially deterritorialising it, the movement the signifying regime constructs.

Significations and counter-significations of accounting information therefore constructs a space for conflict about the meaning of the sign (the information), where the obvious line of flight is not obvious and thus constructs becomings which are not anticipatable.

## 3.5 Positioning the theoretical approach

It is the fluidity and emergence of things which are interesting for this thesis' research question and theoretical approach. This section will position the thesis' approach relative to other critical accounting research perspectives. Two predominant streams of research exist in the literature: actor-network theory inspired accounting research, which is also reviewed in the thesis' domain theory, and Foucauldian inspired research (inspired by Foucault's governmentality lecture (Foucault, 1991 and Gordon, 1991), see e.g. Miller and O'Leary, 1987 and Miller,

2001). However, the Foucault literature is predominantly concerned with how things become discursive (Miller and O’Leary, 1987), even though for example Mennicken and Miller (2012) touches briefly upon the territorialising performance of accounting, which is adjacent to the this thesis’ theoretical approach. Foucault talks about discourse as stabilisation in epochs (also resonated in Miller and O’Leary, 1994’s notion of temporary stability of assemblages), whereas Deleuze’s concern is the fluidity and emerging characteristics, performance and organising of things and phenomena. Therefore, the thesis arguably says more to ANT inspired accounting research than to foucauldian accounting research, because ANT shares the concern about emergence, difference and fluidity. With departure in this, the rest of this section will discuss the thesis’ theoretical approach in relation to actor-network theory inspired accounting research.

The similarities between the theoretical concepts mobilised in the previous sections and actor-network theory are significant, especially when it comes to assemblages, territorialisations and deterritorialisations. This might be one of the reasons of why some articles drawing on Deleuze’s theory argues their drawing on Deleuze’s scholarship to be used as an extension of the actor-network theory (e.g. Martinez, 2011). Others again find it necessary to articulate explicitly the differences between deleuzian theory and actor-network theory, to pinpoint their distinct differences (McFarlane, 2011).

As the previous sections argue the cornerstones of deleuzian theory is concerned with emergence, difference and movements. Thus, the articulation of assemblage is co-articulating movements of repetition, assembling and reassembling, into different becomings. The literature review of constructivist accounting theory illustrates that the actor-network theory inspired accounting research is concerned with the emergence of networks. But it does not articulate explicitly difference and movements as effects of repetitions. McFarlane (2011) goes so far as to argue, with reference to other scholars as well, that actor-network theory is predominantly pre-concerned with the stabilisation of networks. However, newer sociological actor-network theory do become more concerned with variation and difference. For example in Latour’s *Reassembling the Social*, in which he argues that actor-networks, whether they constitute sociological, economic or geographical phenomena, emphasise the organised part of a whole, which is much



bigger. Between the organised connections is the unorganised, which Latour denotes plasma (Latour, 2005, p. 241-244). In relation to this point, the deleuzian theory raised in this thesis' theoretical approach do not have a pre-concern for the stabilisation of networks, but rather articulates the variation and difference of networks which could be read as a concern about the performance of the plasma, in Latourian terms (how the multiplicities not inscribed directly in the networks get become concerned with the network through repetitions of difference and through significations and counter-significations. Networks and scientific accounts of them, in Reassembling the Social, could be read as simulacra in the Deleuzian sense because they constitute matters of concern. And they actually assemble as significations of the concern by going back and reconnecting with the world they inscribe (Latour, 2005, p. 253-258).

In the accounting domain Quattrone and Hopper (2005) complements the theoretical approach of this thesis. They do so by keeping heterogeneity an an empirical concern that allows for continuous change in the networks, by studying distance in centralisation/decentralisation. As Quattrone and Hopper (2005) states "[how control is related to integration and establishing order into work activities] is a complex process involving inscriptions, translations, beliefs, mediation, accounting, and information processing technologies, as previous work in this vein illustrates. However, such work needs to avoid modernist approaches based on, or leading to, dichotomies such as principal-agent, controller-controlled, here-there, and before-after to fully comprehend relations between distance, accounting, ERPs, and control" (p. 761, square brackets added). Thus, by letting the heterogeneity unfold they problematise stability by opening up for continuous changes in networks. In their paper this difference is expressed in continuous changes of loci of control which is expressed in their statement that "everybody is king, albeit temporarily" (p. 761). Perhaps even closer this thesis' concern of difference and repetition is Quattrone and Hopper (2006)'s analysis of implementation of SAP where they explicitly state how the technology is heterogeneous. To conceptualise the potentiality of continuous change they introduce the notion of drift which can be read as an emphasis of rhizomatic movement (even though they do not refer to the rhizome). Regarding the technology, SAP, they conclude that "at best SAP is an idea, an absent presence, which instils hopes of order in

those who buy it" (p. 244). And the heterogeneity of the technology makes the management practices drift. SAP never becomes a singular, it is heterogeneous and in a continuous state of drift.

John Law touches upon a similar concern as Latour does in Law (2004)<sup>1</sup> in which he talks about messy social science methods that capture the social in organised frames of explanation. Frames which are not coherent with the presence they inscribe because presence is consisting of movements and heterogeneous multiplicities. Law (2004) argue these frames to be constructed, argued through or against, hinterlands of existing knowledge about the phenomena. Thus, hinterlands are John Laws way of stating different propositions about the reality studied and influenced by research practices and paradigms of research. John Law goes further in his method discussion by discussing out-thereeness (p. 24). And because his own hinterland is from the constructivist/STS research tradition, he does not discuss out-thereeness as a matter where reality is out-there, external and before the human that experience it, but rather discusses whether a hinterland building on the assumption of a pre-established singular world which is "the same everywhere" (p. 25). Law (2004) challenges this assumption by introducing constancy, which can be read as difference and repetition in Deleuze's scholarship. He does so by raising the question "do objects or processes in general stay the same unless they are disturbed (p. 25)? By mobilising concerns about hinterlands and out-thereeness, and eventually multiplicity<sup>2</sup> he takes the actor-network theory closer to the works of Deleuze and his concepts of difference, repetition, simulacra and regimes of signs (which could be one version of hinterlands).

With reference to the above described relations between deleuzian theory and actor-network theory, the Deleuzian frame of analysis is chosen because it signifies difference, variability and movements to an even stronger degree than present actor-network theory of accounting does. Latour's interest in in the things that actually happen, but Deleuze and Guattari problematise this by arguing that we actually never know what happens, because our thinking singularises heterogeneous relations to become a memory. Thus, memory is not the same as the past

---

<sup>1</sup>Law (2004) is inspired by Deleuze and Guattari (2004) by drawing on the notion of assemblage.

<sup>2</sup>Multiplicity is also from one of Deleuze's co-authorships, with Claire Parnet.

actuality, it ought to represent. The point is that we do not not know where the fixity, which is important to construct the regime, comes from. In actor-network theory it is trials of negotiations between actors which makes things happen and things to change (or translate), but for Deleuze and Guattari there are many possible worlds at the same time. Based on that the deleuzian theory extends the assemblage/network analysis by introducing epistemological concepts about interpretation of signs through signifying regimes. By doing so it becomes possible to analyse how the repetitions of practice co-construct movement and difference. Thus, the theory is chosen as analytical frame in order to be able to explain movements around repetitions, difference and simulacra, which are not core concepts within the actor-network theory as yet.

The last concern to point out is about accounting theory. It is not at all the point of this thesis to say anything value-laden about accounting. This thesis could possibly be read as stating that accounting is not good ("anti-accounting"). This is not the intention. Accounting has been shown to be good for many purposes such as for example limiting decision possibilities and managing at a distance. However, this thesis will give some insights into some of the limits of the representational ideal of accounting, which is manifested in both the theoretical domain of accounting as well as in the empirical domain (the case study of the thesis). Additionally, by introducing the concepts from Deleuze's, Deleuze and Guattari's and DeLanda's scholarship, it will propose some of the complexities that can be attached to study the surface (trials of negotiation), which is what actor-network theory does.

## 3.6 Concluding remarks on the theoretical approach

The intention of departing theoretically in Deleuzian theory is to study accounting from the point of view that there is no underlying object to represent. Accounting, from the deleuzian viewpoint is repetition of practices of calculating. Accounting, including management accounting, sets up structures of organising. Structures which engage with other structures, e.g. the structures of the market

movements. Thus, as Williams describe, there will never come a day where the »right truths« will lead the world to peace. Tensions and blockages will continue to arise because of the structural clashes.

One remaining analytical implication of Deleuzian theory still needs to be discussed. The relation between sign and meaning of the sign. Structural clashes are one of the explanations of the emergence and continuation of tensions and the decoding of a sign is another. Because the world is consisting not of essences or representations of underlying concepts, but of eternal chains of repetitions, our experience of the world is a simulacrum; we live in simulacra of repetitions in which we ascribe certain meanings to certain signs. This raises a problem of how to construct a meaning of the sign. Deleuze uses the term "regimes of signs" to explain how signs are interpreted in a certain way (Deleuze and Guattari, 2004, chapter 5). Regimes of signs assigns meaning to the object (the sign). This is an unproblematic part of the becoming. But as soon as more than one regimes of signs engage with each other to construct a meaning, a conflict might occur. A conflict of which meaning becomes dominant. Deleuze and Guattari (2004) do not treat *how* one regime of signs becomes dominant, but the fact that in the tension of becoming dominant another regime of signs must be repressed the other and this creates a space for movement. The regimes must either dissociate themselves from each other.

It should be clear that the theoretical approach applied in this thesis builds on the ontological claim that the world is consisting of simulacra of repetitions where phenomena and things cannot be reduced to essences. Rather, objects are characterised as being assemblages of relations of exteriority which moves through repetitions and meanings are constructed through regimes of signs which again are assemblages of exteriority. In order to understand how accounting is actualised and what it is doing it is therefore necessary to study it in the particular setting that constructs its performance.

# Chapter 4

## Methodology

Chapter 3 outlined the theoretical approach of the thesis, which is the frame in which the empirical study is analysed. This chapter is occupied with research methodology, especially the epistemological concerns of the thesis<sup>1</sup>.

The purpose of the chapter is to discuss the epistemological question »What are we able to know about the world and how do we achieve this knowledge?«. The chapter eventually elaborates the case study design and methodical procedure. But the first aspect to be discussed is how method is understood and the complexity of the performance of method.

### Some words on the perspective

This thesis draws on a poststructuralist perspective, where epistemology it not about being objective and knowledge is not understood as something universally true. The thesis is understood as a territorialised construction coming out of the interaction between many heterogenous assemblages; the study object, the methodical procedure, the scientific domain and domain literature and the researcher. Each of which cannot be reduced to being a singular entity without losing valuable information about the assemblage of knowledge that comes out of it.

---

<sup>1</sup>Epistemology understood within the field of methodology. Therefore the chapter is not meant to discuss epistemology as the collective knowledge of a science in general (the philosophical discipline theory of knowledge), but rather, what knowledge is, how knowledge can be achieved and what the limits of it's validity and truth is.

Epistemology is important to discuss because it frames the thesis' view of research and what method is considered capable of doing (the performance of method). Williams states the epistemological concerns of poststructuralism this way:

*»The limits of knowledge play an unavoidable role at its core. This is the common thread running through poststructuralism [...] Knowledge cannot escape its limits: "It is not surrounded, but traversed by its limits, marked in its inside by the multiple furrows of its margin" (D: 25).«*

Williams (2005, p. 1)

Williams argues that poststructuralist scholars are interested in the boundaries of theories and knowledge whereas, as he says, the limit in structuralism "indicates relative security and stability within a given environment, where the boundaries is seen as less dependable than the centre. For poststructuralism, the core is not more reliable, significant and better known than its limits or outer boundaries" (p. 2). This means that the boundaries of knowledge are studied and problematised by "folding the limit back on to the core of knowledge and on to our settled understanding of the true and the good" (p. 2). This means, that in poststructuralism, the limit is not marginalised. Rather, the limit is rendered as the core of knowledge or research. In this thesis this is done by questioning the representational ideal of accounting, which is taken for granted in conventional accounting theory, by suggesting an alternative conceptualisation of accounting information as signs.

The research method in the thesis builds on an interactionist perspective (Mik-Meyer and Järvinen, 2005)<sup>1</sup>. This has several consequences for the research design. First of all, just as stated above and in the theory chapter, the object of

---

<sup>1</sup>The choice of the work "interactionist" might lead one's thought to social constructivism but this is not the intention. Interaction here means that "the meaning of an action or a phenomenon is created in the interaction between humans or between humans and things" (p. 10, author's translation).

analysis is not understood as something stable, but rather, something in movement, a becoming. This means, as Mik-Meyer and Järvinen (2005) says, that the study object is by definition "fluid, unstable and heterogenous" (p. 9, translated).

The thesis' view on philosophy of science is explained by drawing on deleuzian theory, and it introduces some concerns from Foucault's scholarship as well. Foucault is mainly used in the discussion of questions about truth and knowledge about »the reality«. Foucault will therefore be used only to argue for the thesis' epistemological concern and will therefore not inform the empirical analysis directly. The empirical analysis will draw on the deleuzian concepts discussed in chapter 3. The foucauldian theory used in this chapter will be based on Foucault (1994) and secondary literature by Heede (1992). It is not the intention to review thoroughly the foucauldian scholarship, but to use the claim about "truth" as something, which is historically produced.

### 4.1 Epistemology: The thought-experience relationship

Deleuze mobilises the thought-experience relationship as a description of what constitutes thinking and theorising. Consequently, claims about knowledge must build on the premises of what happens in the relationship between experience and thought<sup>1</sup>. In continuation of the discussion about signs and significations in chapter 3, thinking is always emerging from the engagement with signs because "thought is forced to occur by the sign" (Williams, 2005, p. 76). Deleuze touches on this too:

*»To think is always to interpret - to explicate, to develop, to decipher, to translate a sign. Translating, deciphering, developing are the form of pure creation. There is no more an explicit signification than a clear idea. There are only meanings implicated in signs; and if thought has the power to explicate the sign, to develop it in an Idea, this is because*

---

<sup>1</sup>The comprehension of knowledge as a matter of the thought-experience relationship is inspired by Anne Sauvagnargues key note speak at the 2011 Deleuze Studies Conference.

*the Idea is already there in the sign, in the enveloped and involuted state, in the obscure state of what forces us to think.*«

Deleuze (2008, p. 62)

Etymologically speaking, epistemology comes from the words episteme (knowledge) and logos (word, to learn or discourse). This means that epistemology can be understood as knowledge discourse. The epistemology is concerned with questions such as (Grayling, 2002):

- What is knowledge?
- How can knowledge be achieved, and can it be achieved at all?
- What are the limits of the validity and truth of knowledge?

According to the Deleuzian theory, thinking is a matter of constructing meaning of signs. Constructing knowledge is in this sense is a matter of translating the signs, we engage with. And as mentioned in chapter 3, this is a matter of synthesising the heterogenous assemblage that constitutes the presence, the thought is connected with. But this very synthesis is a translating as well, from signs of movements and becomings, which we cannot comprehend in their ontological, heterogenous and multiple form, to the thought and memory of it.

### **What is truth, what is knowledge about the reality?**

Deleuze's contribution to epistemology is concerned with the cognitive aspects of thinking and memory. Foucault takes another perspective by focusing more broadly on how knowledge and truth are historically situated. One can read Deleuze and Foucault as distinct from each other but Deleuze argues for their commonness in *Negotiations* (Deleuze, 1995) where he states that Foucault and himself analysed the same "mixed forms, arrangements, what Foucault called apparatuses [...] We looked for foci of unification, nodes of territorialization, and



processes of subjectification in arrangements" (p. 86)<sup>1</sup>. Deleuze and Foucault's writings can therefore be read as close allies in terms of philosophy. The discussion in this section will therefore be inspired by both Foucault's writings and Deleuze's repetition and difference, because the assemblage of the two makes the discussion broader than both are individually.

Dag Heede explains the epistemological significance of Foucault's writings in the book "The empty human"<sup>2</sup>. He states it this way:

*»The French philosopher Michel Foucault's scholarship describes one long "de-doctrination"-process where we do not learn very much new but rather learn to see what we already know - or think we know - with new eyes [...] One have to let go of preconceived meanings and illusions about essences inherent in nature [...] to be able to participate in Foucault's endeavours of achieving epistemic free space, breathing space for new thinking, re-thinking and inventiveness. Michel Foucault's writing is a form of anti-knowledge.«*

Heede (1992, p. 7) (Author's translation).

The implications of Foucault's scholarship for this thesis is how knowledge is understood. Foucault was concerned with studying discursive "truths" during the history from the Age of Enlightenment and onwards. He shows, through his archeological approach how "truths" are historically produced, which is consistent with Deleuze's territorialisation of assemblages and the construction of plateaus that allow for certain discursive truths to be perceived as "real" (form "What is philosophy"). The implications of this production of truth means that what we believe is true today will change as discourses transform<sup>3</sup>.

---

<sup>1</sup>These arrangements is what is denoted "Agencements" (assemblage) in Deleuze's writings and "dispositifs" in Foucault's writings (Deleuze, 1995, p. 196). Deleuze argue that their space of is similar, but their ends different (Foucault studies discouse and power, Deleuze studies the emergence of "actuality".)

<sup>2</sup>Translated from Danish. The original title is "Det Tomme Menneske"

<sup>3</sup>Foucault talks about discourse formation and therefore, when discourses change, according to Deleuze's theory of changing plateaus, the discourse transform into something different which allows for different truths

An example of the power of discourse to render ideas/propositions true can be found in his work "Histoire de la sexualité" vol. 1 "La volonté de savoir"<sup>1</sup>. Foucault argues how sexual discourses become "the truth" in the western society and how the discourses act as power mechanisms. Foucault expresses the purpose of his writings in "Histoire de la sexualité" the following way.

*»I would like to emphasise that sexuality is only an example of a general problem which I have been chasing or which has been chasing me for more than fifteen years, and which anyway guides most of my books: in which way, in modern Western societies, is the production of discourses, to which (at least for a certain period of time) a value of truth has been attributed, linked to the various mechanisms and institutions of power?«*

Foucault (1998, preface)

He shows how the perception of sex and sexuality changes from the 17th century until today by repressing sexuality in to the home and transform it into an act of production, or rather, reproduction. The discourse changes dramatically from being unrestrained and outspoken to lock the sexuality up within the homes as an silent act between husband and wife. What is interesting from the perspective of the construction of knowledge, or construction of "truth" is how the discourses shape the ways of normal and anomalous, even pathological, sexuality<sup>2</sup>.

An example that explains this view of normality is homosexuality. In the classical age in Greece, Foucault argues, sexuality was not a matter of gender. It was normality that men had a sexual relation to other men, or boys, as sex was a matter of desire rather than gender. However, this changed for a variety

---

<sup>1</sup>In the thesis the English and Danish translations of the book have been used as sources (Foucault, 1994 and Foucault, 1998).

<sup>2</sup>Foucault's work in Histoire de la sexualité bears two concerns: this discursive inscription of what is considered the "truth" and, maybe more important, the power mechanisms related to the discourses. Power mechanisms that penetrate all the way down to individual behaviour (Foucault, 1994, p. 14 and 24)

of reasons, e.g. because educational institutions was organised as to repress the sexuality through division of dormitories and watching over the pupils at bed time and other means. Different institutions expressed sexual repressive discourses that resulted in a new sexuality of where sex was an act of reproduction more than desire, as it had been earlier.

Foucault claims that society has an inherent need for knowing "the truth" and therefore the distinctions false/true and normal/pathological are strong criteria in Foucault's analysis. These criteria are related to how societal "truth" is a discursive production. Truth is not a matter of objectivism, knowledge about something "out there", but rather, it is a matter of linguifications. Certain groups, or minorities, became invented as the result of this need for "normalisation", for example homosexuals. Homosexuality was seen as abnormal behaviour and the discourses personified the homosexual act, creating the homosexual as a person in the 19th century. A person that was seen as pathological with an "indiscreet anatomy and possibly a mysterious physiology" (Foucault, 1994, p. 52-53). The homosexual transformed from a sexual act to a species. The here point is that homosexuals as a minority, or as humans, is today taken for granted. But it has not always been like that. Before "Westphal's famous article from 1870 about the contrary sexual senses" (Foucault, 1994, p. 53, translated), homosexuality was seen as a sin everybody could perform. It is therefore evident how knowledge is discursively produced, i.e. knowledge is constructed by institutional discourse formations<sup>1</sup>.

---

<sup>1</sup>Competing theories to poststructuralist epistemology materialise in different forms, one of which is Mattesich's Onion Model of Reality (OMR) (Mattesich, 2003). OMR is mainly about ontology, but it has consequences for epistemology as well (Lee, 2009). Mattesich argues for how OMR is able to render things or phenomena real in different layers of the reality, starting at the physical-chemical level and ending at the social reality level. This might be adequate as to answer the question about what is real, but what it fails to address is the core problematisation in Deleuze's scholarship; different significations of the same things. Mattesich exemplifies the OMR models capabilities by the example of a stone. A stone is in his wording an emergent property of a structured gathering of different atomic particles that together constructs the stone, which is real at the level of the physical-chemical reality. The problem is, when studying the construction of a stone, it could be many things; different significations of a stone. First of all; all stones are different, also on the physical-chemical level because they are constructed by different component parts, which again, to invite Delanda into the discussion, constitutes relations of exteriority, relations that structure the components as they are. Secondly, the meaning of the stone may very well too have different significations: in a rock wall right next to a mountain highway it might serve as protection against rock slides, in an architect's development

The parts of Deleuze's scholarship, which are related to epistemology, discuss the relation between sign and signification, which has been mentioned in chapter 3. Where Foucault argues for discourse to be important for what truth is considered to be, Deleuze conceptualise the things we engage with much more explicit as signs (Deleuze and Guattari, 2004). From that point of view the output from research (most often the written article or thesis) is an effect of the sign-signification relationship. As mentioned knowledge does not escape being a matter of sign-signification because this is what science is doing: giving significations to signs (which is a matter of coding and decoding machinic assemblages, see chapter 3). In difference and repetition Deleuze writes:

*»It is the same every time there is mediation or representation. The representative says "Everyone recognises that . . .", but there is always an unrepresented singularity who does not recognise precisely because it is not everyone or the universal. "Everyone" recognises the universal because it is itself the universal, but the profound sensitive conscience which is nevertheless presumes to bear the cost, the singular, does not recognise it.«*

Deleuze (2004, p. 63)

The quote argues that representations speak for no-one on the level of the particular: everything is different, only "everyone" is universal, but no one is everyone. This indicates that the universal represents something, but it represents generalisations (thesis)<sup>1</sup> of which antithesis is always possible and therefore the general, or *everyone* do not allow for difference in itself, or difference of the particular.

However, the quote also touches upon institutional signification ("*everyone knows*" because the signification is institutionalised), which is elaborated further later in the book (in a section about philosophy):

---

of a table it might serve as constructing a space to talk, dropped from the window on 6th floor in a building it might become a murder weapon. So to sum up: the stone is real, I think nobody would disagree, but to categorise it as a stone and then give it the properties of that category is where the deleuzian theory would differ significantly from OMR.

<sup>1</sup>Generalisations are here a similar concern to the one of »general concepts« in chapter 3.

*»"everybody knows, no one can deny", is the form of representation and the discourse of the representative. When philosophy rests its beginning upon such implicit or subjective presuppositions, it can claim innocence, since it has kept nothing back -except, of course, the essential- namely, the form of this discourse. «*

Deleuze (2004, p. 165)

The quote is about philosophy, but can be applied to other types of research as well: when resting upon "everybody knows" propositions the research can claim innocence, but it repeats the discourse. The point here is that knowledge is a product of the discourse. The implication of this is that there can be many truths depending on which discourses that informs the research. Williams (2005), on Deleuze's *Difference and Repetition*, states it this way: "meaning cannot be objective or defined from within any given system, because it relates different structures to one another" (p. 66). This means that facts cannot be objective as a result of the interior design of the process of fabricating the fact, because the fact is defined within a system of relations that together structure the construction of the fact.

One could argue that the sign-signification relationship is depending on experience. However, from the Deleuzian viewpoint the sign-signification relationship cannot be reduced to experience, because experience, too, is repetitions of other repetitions. Experience is a matter of a relationship between thought and memory, where thought is a synthesis of heterogenous elements. This synthesis renders the thought singular in the mind of the thinker, makes it become memory in a singularised form. This has implications for epistemology; knowledge is singularisation of heterogenous relations, not representation. Based on that it is problematic to ascertain whether some research is "more true" than other research.

## 4.2 Ontology

The etymology of the word »ontology« is a connotation of ontos and logos. Ontos means »to be« and logos means »discourse«. Thus, Ontology is the "to be discourse" or "the understanding of that, which is" (Macintosh and Quattrone, 2010, p. 54). The ontological assumptions of the thesis therefore comprises of the understanding of the world discussed in chapter 3.

Ontology is reciprocally related to the question of what type of knowledge the researcher should produce<sup>1</sup>. Staunaes and Sondergaard (2005) argue that politicians, managers, givers of research assignments and practitioners are often interested in results that can provide measurement of effectiveness of different forms of practices and initiatives (p. 51). They continue:

*»They want results one can act upon, use in policy making or apply to change practices [...] This is the case of a realistic, reality determinist optics or what Molin (2002) designates object reifying research. With a realist view one approaches reality as something with a stable set of delimited phenomena, something 'out there', which allows itself to be determined, researched and described often with the purpose of determining functional dynamics and thereby potential predictions about which possible movements and changes future phenomena could perform or be made to perform.«*

Staunaes and Sondergaard (2005, p. 51-52)

Staunaes and Sondergaard (2005) claim this perspective on usefulness of knowledge to be a reality deterministic view. The matter in this view is whether research results can be applied more or less directly, to render practices more efficient. A related problem is the ontological assumptions of reality determinism; reality is understood as a stable set of delimited phenomena which's future states can be predicted and performed intentionally. As discussed in the deleuzian

---

<sup>1</sup>Reciprocally because the type of knowledge depends on ontology: the understanding of that, which is.

theory applied in the thesis (Deleuze, 2004, Deleuze and Guattari, 2004 and DeLanda, 2006) and the epistemological position (Deleuze, 2004 and Foucault, 1998) this thesis is builds on another set of ontological assumptions. Here the world is understood as complex movements in many directions, which questions the purpose of developing normative frameworks for action. The purpose of this thesis is therefore to reflect over the performance of the representativity of accounting information by folding the deleuzian theory onto the empirical material of the study.

### **The Ontology of Method**

Because of the properties of epistemology, method is a co-constructing activity. This means that - rather than being a recipe on making valid science or a procedure through which science can be separated from non-science - method is a constituent part of data collection, analysis, findings and, as a consequence of that, theorisation too.

Method, or more precisely, the performativity of method and the data, method produces, is a process of becoming. Not because of its internal parts or components, but because of its nature as a territorialising assemblage which is constituted by its relations of exteriority. This view of method departs in Deleuze's ontology but is reflected in the interactionist perspective too (building on symbolic interactionism: "Every social event can be understood as a process where the involved (people) adapt their actions continually to each other" (Järvinen, 2005, p. 27, authors translation). But where Järvinen concentrates on the interaction between humans<sup>1</sup> assemblage theory extends this view by claiming that the interior parts constituting the methodical procedure, e.g. the interview phenomenon, is better understood as relations of exteriority that gather and territorialise in the method, e.g. in the interview situation. This view brings forth the point that it is not the human-human interaction alone, but the relations the humans carry with them to the interview situation, that territorialise and make the interview become what it becomes. Important to emphasise is the coexistence of many possible realities, and, drawing on Silverman, Järvinen argues that the

---

<sup>1</sup>"A central focal point in interactionist analyses is, as the name indicates, the interaction between interviewer and interviewee". (Järvinen, 2005, p. 29, authors translation)

interview brings forth a collective proposition which is one of many "plausible understandings of the world" (p. 29).

To sum up this means that method, even though it must be designed somehow in order to persuade readers of the validity of the findings, *achieves* its validity and are challenged on its validity by the exterior relations that makes the method perform as it does. This view is very much in accordance with Alvesson and Kärreman's view on method as a dialogue partner the researcher must interact with:

*»The empirical material may be mobilized as a critical dialogue partner -not a judge or a mirror- that problematizes a significant form of understanding, thus encouraging problematization and theoretical insights [...] The researcher's preunderstanding, including his or her academic framework(s), may be used as a tool that opens up a dialogue with the empirical material [...] We do not just encounter empirical material and see where it leads us. Rather, we are always doing something with it -framing and constructing it.«*

Alvesson and Kärreman (2007, pp. 1266 and 1269)

The presence of the researcher is not seen as a problem but rather the premise. The researcher will always be there either through personal intervention or through the technologies set up to gather data, or both. It is hard to imagine a method which is not mediated by technology and the researcher.

From the delezian perspective the performance of method is not emerging from the interior parts of a case study design. Rather, and as evident in the preceding sections of the chapter, method is an assemblage, meaning that (social science) method is not achieving its scientific significance through its interior design. Rather, it achieves its qualities by taking into consideration its connections to exterior multiplicities which it engages with, for example all the multiple movements it tries to describe in the empirical field.



The rest of the chapter will elaborate the methodical procedure of the thesis by describing the selection of the case, the data collection and some of the problems related to data collection and, finally, how the data has been worked with in the analysis.

### 4.3 Case study design

It is a good idea to think about the (methodological) procedural design if method is not to become an arbitrary phenomenon which the researcher cannot account for. And accountability is one of the strengths method could perform: to render the researcher accountable for the reliability of the research findings. David Silverman's states that method is something we have to be explicit about and follow the discourse for various reasons, e.g. to be able to get research grants (Silverman, 2007).

#### 4.3.1 Selection of the case

Grounded in the theoretical frame of analysis (chapter 3) and methodological preunderstanding (preceding part of this chapter) of the thesis the case study was chosen to become a longitudinal study of a single organisation in order to be able to gain as much data of the particularities of the movements happening in the organisation as possible. A description of the case company will follow in the first chapter of the empirical part of the thesis.

The case study was planned to start in 2009. The idea was to find a privately held company big enough to work seriously with management accounting as a technology to perform management at a distance. To frame a set of possible organisations it was chosen to concentrate on medium sized companies. The operational definition of medium sized companies was borrowed from the Danish Financial Statements Act's definition of "financial reporting class B" companies (in Danish: Regnskabsklasse B), which is companies do not exceed minimum two of the following three conditions: 1) balance sum of 36m DKK, 2) revenue of

286m DKK, 3) Average 250 FTE during the financial year<sup>1</sup>. The company could be a production company or a service company.

Some companies with Danish HQ near Copenhagen was contacted. Many responded they did not have time to engage in a research project because of reductions in the staff due to the financial crisis, which had started the year before. One of the companies responded with interest in the project and was about to implement a new management accounting practice ultimo 2009 affecting the financial year 2010/11.

This was interesting for the research project and a collaboration with the company was initiated.

### 4.3.2 Collecting data

The data collection consisted of field observations, interviews with managers and the CFO and collection of internal and external documents about the company and the market. The study have mainly consisted of shadowing and interviewing the CFO because it was him who worked with the implementation of the new management accounting practice.

Shadowing was not the »perfect« data collection method. First of all shadowing means the researcher is situated "in one room, one corridor, one branch, although some excursions may happen" (Czarniawska, 2004, 786) and thus will get the story from the situated perspective and many other things might happen other places at the same time. Secondly, for this research project the time dimension of shadowing became a problem. The time use of shadowing is correlating 1:1 with the chronological time of the daily work in the organisation and often a lot of other things than this very project was taking the CFO's time. The benefit of the time used on shadowing was therefore varying a lot and the study was expanded with interviews where many things happening across time and space could be discussed in a shorter time span. Thirdly shadowing was not generating material data. This had to be done by writing field notes which was done at my desk in the company (I was normally placed at the desk right next to the CFO's desk). And as Emerson et al. (1995) elaborates writing field notes is, as any other

---

<sup>1</sup>Numbers are from the 2010 Financial Statements Act.

part of conducting research, not a simple thing:

*»Writing descriptive accounts of experiences and observations is not merely a matter of accurately capturing as closely as possible observed reality, of "putting into words" overheard talk and witnessed activities. To view the writing of descriptions simply as a matter of producing texts that correspond accurately to what has been observed is to assume that there is but one "best" description of any particular event". But in fact, there is no one "natural" or "correct" way to write about what one observes.«*

Emerson et al. (1995, p. 2)

This emphasises the point from Alvesson and Kärreman (2007) that rather than comprehending the target for data collection as resulting in an external, accurate description of reality, data can be understood as a conversational partner when theorising about the phenomena studied.

It can be difficult to align a distinct boundary between collecting field note data and interview data, as both are effects of assemblages constructing the data. The apparent distinction is that when transcribing data it could be the objective to come as close to the recorded speech as possible (Kvale and Brinkmann, 2009). However, conducting interview and eventually transcribing them can be understood as the act of transforming the empirical phenomena to research data exactly as field notes do it. Thus, its performance relates to the interview situation as well as the transcription (Michael, 2004). As to the assemblage constituting the interview session Michael denotes the assemblage »co(a)gency« emphasising the assemblage as a co-agency of which the interview session gains cogency (p. 10). But later in the interview he stresses that something can easily connect with and challenge (deterritorialise) the interview assemblage. He describes a story about a »disastrous interview« where he interviewed an ex-drug user after a period of unemployment. In the interview, which was conducted in her home, he was seated in a sofa and the respondent in an arm chair. The tape recorder was placed between them on the floor:

*»During the preliminary conversation, her pitbull terrier ambled up and sat on my feet. [...] While this conversation was going on, her cat came into the room, and after a few moments of clawing at the tape recorder began to pull it along the ground by its strap. As the cat played with the recorder, I got further and further away from the interview [...] being too distracted by the disappearing tape recorder and the pit bull's liking for my feet.«*

Michael (2004, pp. 12-13)

Michael (2004) claims later in the article that the communication between the interviewer and the interviewee to be »parasitised« by the dog and the cat which explains the heterogeneity of the sociological interaction between the two. From the perspective of assemblage theory this story illustrates very well how the interview assemblage can be deterritorialised very quickly by movements an ex ante research design plan cannot account for. Thus performing interviews affect the data and it is the researcher's task to try to keep deterritorialising »parasites« on a distance. Thus, when conducting interviews, I always tried to do it in a meeting room at a time where the interviewees had a clear space in their calendars for a while.

Often it went well but sometimes the deterritorialising parasites came very close and challenged the data collection. E.g. the 17.06.2010 when the CFO was interviewed he wanted us to make the interview outside on their terrace. Unfortunately it was very windy which I did not see as a problem before I came home to transcribe the interview. It was very hard to hear what had been said and therefore it took very long time to transcribe the interview<sup>1</sup>.

Another parasitised interview happened in January 2011 with one of the sales managers. No meeting room was available and we chose to conduct the interview in the kitchen. Prior to the interview she had told me she had hearing difficulties and therefore wore hearing aids which I did not see as a problem. However, as people opened the door to get a cup of coffee the noise in the room increased a

---

<sup>1</sup>The transcription software could reduce the environmental noise which made transcription possible

lot. And apparently noise in a room makes a hearing aid automatically turn the volume of speech up why she muffled her voice and almost whispered.

However, overall speaking the interviews were conducted successfully as "semi structured" with departure in prepared interview guides. In total the interviews counted 21 interviews with an average of about one hour each and they were all transcribed. The field notes counted 17 days in the company during the period from november 2009 to october 2010 (mainly concentrated in April and May 2010 where the CFO had worked mainly on the new accounting practice).

### 4.3.3 Working with the data

As a consequence of following Alvesson and Kärreman (2007)'s claims the qualitative analysis started during the study and data collection. The interesting »mysteries« that turned up during the field study and interviews framed the eventual focus of the study and theorisation.

While the data was collected, the »mysteries« guided the focus of the interactions with the case. With departure in that the key themes for studying accounting qualities and accountability was selected together with the phenomena that was seen to have a significant implication for the research question. The »mysteries« focused on in this study are the content of the different rhizomatic stories described in the empirical chapters of the thesis. Refer to chapters 6 - 8 for an elaboration.

### Documenting the case study: Transcribing interviews

When the data was collected the interviews were transcribed in Microsoft Word following Kvale and Brinkmann (2009)'s suggestions. However, where Kvale and Brinkmann (2009) suggest the transcription to be a matter of getting as close to the spoken meaning as possible in the written accounts (transcriptions) the transcriptions in this thesis is processed to make the interview situation an immutable mobile (Latour, 1987) whose purpose is to document the empirical matters raised in the case study. The transcription process is thus a space in which the researcher can work together with the interview persons, with the relation-

ship between theory and practice. In this way the heterogeneous assemblage of empirical practice already in the interview becomes a critical dialogue partner for the researcher (Alvesson and Kärreman, 2007). In this respect it is the interview itself which constitutes the space in which theory can be folded onto the empirical episodes presented and discussed in the interview situation. The transcription is therefore understood mainly as a means for documenting and remembering (in accordance with Deleuze (2004) discussion of memory), because the transcription is the process through which the heterogeneity of the interview is transformed into a singular entity: the transcribed text<sup>1</sup>. The interview is therefore always more than the transcribed text, because transcribing singularises the multiplicities pervading the interview.

The interviews was transcribed as close to the spoken words on the tape recorder as possible. However, in order to respect the confidentiality agreement with the case company, the interviews sometimes had to be changed a bit.

### **Analysing: Searching and coding data**

After the data was transcribed the documents together with the field note documents was imported into an NVIVO 8 database. NVIVO was chosen as an IT analysis application for two reasons: to make sure the original data in the word documents was not changed unintended during the analysis (NVIVO imports the word documents into its own database) and because NVIVO 8 is a very flexible technology in terms of coding and searching for data. NVIVO does not force the user to conduct the coding/analysis in any pre-given way (it does for example not require to construct a coding scheme before the coding is carried out). The codes (called »free nodes« in NVIVO) are developed simultaneously with the analysis. Thus, the user has a lot of freedom for developing the coding scheme during the analysis. Another advantage NVIVO has is its query engine which is able to search for queries in all documents in the database in one search. This allows the user to get all passages from all documents imported into NVIVO

---

<sup>1</sup>As Kvale and Brinkmann (2009) claims the transcription is a translation from spoken language to written language. The written language follows different linguistic rules than the spoken language and the meaning can therefore sometimes be lost when transcribing word for word.

when searching for a keyword. For example a query on "transfer price" returns all paragraphs with "transfer price" in it from all documents in the database. The query result links the paragraph returned from the search to the original document in the database from which the passage has been queried. Besides this functionality it is also possible to search the individual documents themselves without using the query engine, if it becomes necessary to search for more results on for example "transfer price" within the queried document. Because of the coding and search functionality NVIVO allows for a flexible analysis without a pre-given structure of both coding and searching and the risk of losing data is minimal. In this way NVIVO helped querying and searching the data needed to describe the "mysteries" encountered during the case study.

### **Theorising: Folding texts onto each other**

The Deleuzian concepts from chapter 3 have organised the case study and the empirical chapters in the sense that they concern repetition and difference, rhizome, significations and regimes of signs and mobilise these concerns in the accounting context. During the case study the ideal of accounting as being representational has been articulated as an epistemological concern in both interviews and text documents. The way the thesis handles this is to follow Deleuze and Guattari (2004)'s point about folding texts onto each other (p. 6). The empirical chapters therefore present accounting in the way, and with the words, accounting has been talked about during the case study. But in the empirical stories, the deleuzian concepts described in the theoretical approach are folded onto the texts in order to theorise and construct a conversation about the empirical data, from the deleuzian perspective.





**Part III**

**Empirical Stories and  
Theorisation**



# Stories of Rhizomatic Practices

This part of the thesis describes three rhizomatic stories. They show how practices become problematic because they are repetitions of prior acts<sup>1</sup>. The stories are connected to each other in the sense that they describe how performance management becomes problematic because the organised structure (the root-tree of the accounting technology) and the rhizome are always entangled with each other. This entanglement between the two creates movements, one could not anticipate. In this respect the stories concern the relationship between models and reality. They show how structured models unfolds in practice and is in a process of becoming, when rhizomatic movements interfere with them and challenge their performance<sup>2</sup>.

The stories concern different levels of analysis. The first story shows how the space of data registration and accounting tables affect performance management in the sense that reporting possibilities become an effect of the rhizomatic movements, the second shows how accountability is the product of multiple movements of the management accounting structure of the company in diverging spatial and temporal directions. The last shows how relations of exteriority to a market of movement problematise performance measurement and the appraisal of managers' performance. Collectively the stories show how the world is always much more than the accounting information's propositions about it. This means that performance management is a multiplicity constructed of many exterior relations that affect how performance is traced in accounting information, and that evaluating

---

<sup>1</sup>Refer to the theory chapter of the thesis for an elaboration of repetition and difference and their relations to assemblage theory

<sup>2</sup>The notion of reality is paradoxical as the notion itself in a sense refer to reality as one universal thing that can be discovered, whereas Deleuze argue that our synthetic understanding of reality never was the reality as it was.

performance is a matter of decoding the signs that signifies performance.

The empirical part is structured as follows. First, in chapter 5, the case company will be introduced. Following that three empirical chapters will be devoted to each empirical story:

Chapter 6 describes the link between the chart of accounts and reporting. It shows how decisions are made in the conversations between organising entities in movement. The entities who converse are the general ledger, the accounting reports and the ideal of a new control technology, and the reporting technology used to report to HQ. The entities have to take into account the rhizomatic movements happening in the practice in which they unfold. When doing so the idea of a new structure of the chart of accounts changes as the initial structure intermingles with the rhizome.

The chapter illustrates how it is problematic to evaluate employee performance by solely consulting a report from the accounting system, because the report is a tracing which includes some elements but leaves others out. When rhizomatic movements happen and intermingle with the rhizome something has to be done. In this case it has been to change the structure of the chart of accounts (which is a quick solution made to be able to continue working (i.e. the book keeping)). Another solution to the problem could have been thought out, but on the compromise of work. The world moves and the calculation follows, but it is always steps behind the movements of the world and is therefore not a representation of it.

Chapter 7 is concerned with the link between accounting information and time and space movements, by showing how the responsibility design is in a constant negotiation with the management accounting structure and rhizomatic movements in the company. This means that the link between employee performance and performance appraisals is shaped by the space of possibilities the managers are offered, but also the signs that signifies their performance. The chapter shows how calculations are always incomplete and this leads to a problem about opportunity: the calculations are tracings which means that already in their construction we know they could have been different, leading to different decisions. Thus, an opportunity space »outside« the accounting calculation exist

because not everything is accounted for »inside« the calculation. The problem that arise is therefore that calculations frame a space of possibilities, but there are opportunities outside the calculations' space of possibilities too. The problem therefore becomes one of whether employees should take into account the opportunity outside the space of possibilities accounting calculations frame and how this is acknowledged in the performance appraisal. Another important aspect of the chapter is the concern that accounting information as a sign acts in a regime of signs. The regime of signs construct and potentially deconstruct the significance (meaning) of the sign and changes the meaning because some signs in the regime counter-signifies it. This is the case for the idea of profit which is deterritorialised by the transfer price calculation.

Chapter 8 is concerned with properties of the budget relative to the market it inscribes in the revenue line. The chapter shows how the performance of a budgeting practice is contingent on the results and how the accounting information act as signs that must be signified in order to become productive<sup>1</sup>. The signification is argued to be constructed as an effect of the regimes of signs that together form the assemblage that signifies the sign in a specific way. This means that between regimes of signs is the possibility of different significations of the same sign, and thus, different actions produced. The performance of the budget therefore becomes unanticipatable in many ways. The paradox here is that we know the market is characterised as movement and difference, but the budget pretends there is no difference.

All together the stories in the chapters 6, 7 and 8 all concern the interconnection between root-tree structure<sup>2</sup> and the rhizomatic movements of practice. They relate to the conceptualisation of accounting as representation by showing how the relationship between the accounting information (the »representation«) and the heterogenous reality it represents is much more complicated than what the

---

<sup>1</sup>Productive in the sense that it does something; creates action. Production is therefore not associated with economic value. It comes from the latin word *producere* (*pro* + *ducere*) which means forth-bring, or bring into being.

<sup>2</sup>Where the root-tree structure refers to the internal structure of the accounting technology, independent on whether it is the chart of accounts (chapter 6), the responsibility structure (chapter 7) or the budget(8).

conceptual representational link between phenomenon and representation suggest. The consequence is that accounting is suggested to be understood as signs rather than representation.

# Chapter 5

## Discorp Denmark A/S: Introducing the case company

Discorp Denmark A/S (hereafter Discorp Denmark)<sup>1</sup> is a subsidiary of the German group Distech Holding Ltd. which owns a range of different brands, two of them being interesting for this case study. The first one is Discorp HighTech and the second is Bodycorp LowTech. The two brands are organised in two different subsidiaries of Distech Holding Ltd. As can be seen in figure 5. Discorp Denmark formally refers to Discorp Intl.

It is common for all brands in Distech Holding Ltd. that they are technological remedies developed to help people with various kinds of physiological disabilities in their every day lives. Products are ranging from prostheses of various kinds to high tech equipment associated with prostheses. Discorp Hightech and Bodycorp Lowtech compete for the same customer base but where Discorp Hightech is the market leading product line when it comes to technological innovation, Bodycorp Lowtech is the holding company's low cost product line. Bodycorp Lowtech products are provided with almost the same technological competitive advantages as the other, but scoped as a low cost product line. Low cost in this case means that customers (public and private hospitals and clinics) are not provided with the same service and after sales support from Discorp Denmark as with the Hightech product line.

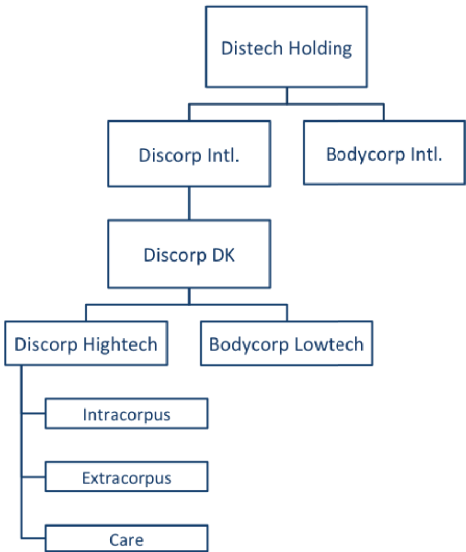
---

<sup>1</sup>All names, brands, product lines etc. are disguised for confidentiality reasons.

## 5. Discorp Denmark A/S: Introducing the case company

---

Figure 5.1: Organisational diagram Distech Holding Ltd.



Discorp Denmark is a production and sales subsidiary. Their production department produces a small complementary part to one of their products: an extra fitting between prothesis and body which is used only in Denmark and only by a small amount of customers. Discorp Denmark is responsible for selling the product lines Discorp Hightech and the Bodycorp Lowtech. The CEO of Discorp Denmark refers to the CEO at Discorp Intl. and do not have a formal connection to the CEO of Bodycorp Intl.

The case study primarily concentrates on control practices between the accounting department and the sales departments in Discorp Denmark. The majority of the products sold in Discorp Denmark is produced at another subsidiary of Distech Holding Ltd. The production subsidiaries are geographically situated in East Asia. Discorp Denmark therefore buys the products at internal transfer prices from other subsidiaries owned by Distech Holding Intl.



## Chapter 6

# Reporting and the chart of accounts as rhizomatic multiplicities

This chapter will describe how the chart of accounts territorialises certain reporting possibilities and how it is in a constant negotiation of territorialising and deterritorialising movements. It does so by addressing the question "How are the repetitions of the registration and reporting practices influencing the management reports and what is its consequences for performance measurement?"

This theme is relevant in relation to the overall research question by showing how repetitions in very technical and simple processes become problematic for the conceptualisation of accounting as representation. The problematic arises because the technical structure of the accounts table is important for how calculations can be constructed (their representational qualities) and also how performance measurement can be assembled by the financial data available in the accounting information system.

The chapter will illustrate how the chart of accounts in the IT system co-evolved with the market movements to which the company adapted their chart of accounts. It shows how the information possible to report in Discorp Denmark is simulacra (Deleuze, 2004) in the sense that it repeats the past through the recording of data within the structure provided in the chart of accounts. Fur-

## 6. Reporting and the chart of accounts as rhizomatic multiplicities

---

thermore it discusses how the relationship between the chart of accounts and the management information is continuously challenged by other deterritorialising elements, e.g. the chart of accounts from the HQ accounting system. A consequence of the repetition of the accounting practices is that the practice that should create overview destructs the overview through its very repetition; the structure becomes complex because the diversity of the repetitions which should make it simple, makes it heterogenous and different. Additionally the chapter shows that accounting information<sup>1</sup> is better understood as tracings, drawing certain versions of the organisation in the information provided in management reports (Deleuze and Guattari, 2004).

The chapter's concern about performance evaluation emphasises that inscribing employee performance into a report is complicated because the construction of the report is an act of tracing some elements while leaving others out, and the overview provided through the chart of accounting and registration of data is destructed by the very repetition of the registration practice.

### 6.1 Deterritorialising the general ledger table: repetition of registration

Discorp Denmark implemented Navision Financials in 2000. This installation had run until 2009 where the company decided to upgrade the Navision system. According to the CFO there were two main reasons for upgrading to the new Dynamics Nav 2009 system: Navision Financials did not allow to export data to Excel (it could only be done by outputting data to HTML format and then importing the HTML data in Excel, but this was a slow and tiresome process with many sources of error) and the chart of accounts had become very complicated. In year 2000 the general ledger table had been constructed with fixed accounts for assets and liabilities, some where grouped, others had their own account number. During the period from 2000 - 2009 the practice had been to create a new accounts every time the general ledger table did not have adequate accounts

---

<sup>1</sup>Which in the mainstream theory reviewed in chapter 2 and in the empirical study is conceptualised as representation.

## 6. Reporting and the chart of accounts as rhizomatic multiplicities

---

for the transactions to be recorded<sup>1</sup>.

According to the CFO the problem had slowly emerged over the last years because accounts referred to specific assets, or liabilities. In the balance sheet a few groups of assets/liabilities had been made, but the majority had been kept on individual account numbers. The consequence was that almost every asset or liability had their own account. As an example, one asset and one liability account existed per subsidiary in the group, one account existed for each product name, other accounts had been created to facilitate registration of certain transactions (for example account no. 27300 was named "Bonus Søren").

The profit/loss statement's account table was even longer: the P/L accounts consisted of 975 individual account numbers (where a minor part of them were summing accounts). They consisted of 5 accounts per product group, each specifying where the product had been sold<sup>2</sup>. Because of the fact that many products were substituted by newer products each year the general ledger table extended rapidly (source: interview 05.11.2009 and excel spreadsheet: "kontoplan til NAV gl og ny incl cognos link.xls"). The same applied to cars:

**CFO:** *Cars. All those different cars. In principle it is the same cost, only on different users. And every time a car disappears and a new one arrives we create a new account. We will stop doing it like that because it results in a totally confused chart of accounts.*

Interview with the CFO, 05.11.2009

The answer to why the general ledger accounts have been incrementally extended to satisfy present registration needs during the period and not radically rethought in order to make a more consistent registration structure was to be found in the Danish subsidiary's connection to the group: According to the CFO "there have been no willingness to refine [the accounting system] because the attitude has always been 'we will get SAP within one and a half years'. But

---

<sup>1</sup>Registration in the section title refers to the practice of registering invoices in the accounting system.

<sup>2</sup>This was a left over from when the company had production in Denmark.

## 6. Reporting and the chart of accounts as rhizomatic multiplicities

---

SAP never came and therefore the subsidiary decided to upgrade Navision to the newest version instead (Dynamics NAV 2009)” (source: notes from briefing, interview 05.11.2009).

Another important point related to the general ledger table’s size is past merger & acquisition activity of Discorp Denmark. The company had existed as a sales subsidiary in Denmark since 1981 where it started with 2 employees. Between 1985 and 1996 a production department were established which produced a variety of products on one single technology. In 1996 the company had grown to 20 employees and they were relocated to a new building. In 2000 the company bought a Danish competitor and the production department was relocated to the acquired company’s facilities 200 km away. The department in Copenhagen continued as a department for the Danish sales managers and general management (the Danish ”HQ”). In 2006 the production Discorp Denmark had were moved to another subsidiary in Distech Holding Ltd. in another country. Another Danish company was at the same time acquired. The acquired company produced a product based on the same technology as Discorp Denmark’s production had been using. The Discorp production department in Denmark therefore began to produce the new acquired product line (source: e-mail correspondence and telephone conversation with the administration & HR manager 17.10.2011).

The accounting system used after both acquisitions were the one Discorp Denmark originally had been using. It was upgraded in 2000 when the first company were acquired. As evident when looking at the general ledger table, new accounts was incrementally created to satisfy the registration needs emerging from the acquisitions (due to new products and to acquisition specific registration needs, e.g. recognition of goodwill) (Source: Field notes, 25.11.2009 and Excel spreadsheet ”kontoplan til NAV gl og ny incl cognos link.xls”).

Apart from the SAP argument it is not exactly clear to the CFO why the general ledger table had not been reconfigured after the acquisitions but only incrementally fixed with new accounts over the period from 2000 - 2009<sup>1</sup>. It looks as it does because it reflects both the practise of creating new accounts when new

---

<sup>1</sup>The employees responsible for the accounting software had quit and therefore it was not possible to talk with them.

## 6. Reporting and the chart of accounts as rhizomatic multiplicities

---

transaction needs occur which cannot be registered on existing accounts and the M&A activity of the company by which a range of new product categories and product groups had been acquired.

Throughout the period from 2000 to 2009 the general ledger table had extended so much that they sometimes faced the problem that when they should create a new account e.g. in the account no. range from 5999x - 6009x (Discorp hightech intracorp P/L account numbers) all sub ranges (e.g. 59991-59999, 60000-60009) had been taken. Therefore they had to move further down in the account table and register new Discorp hightech intracorp products for example in the range 60371-60379. This complicated the reporting because it means product groups and product types are not chronologically registered in the table (and Navision reports by summing account no. ranges):

**CFO:** *Products. Once, I think, the mindset have been that first every sort of one type of products came, all intracorp, then all extracorp came, and then something else should come but unfortunately what happened was that there wasn't enough numbers. And that is also logical if if you continue to create new. That doesn't work.*

**NJL:** *Does that mean you can't create new accounts anymore?*

**CFO:** *No, but they just come below there will still be space for new accounts from no. 705 - 950 but they will not come in the right order.*

**NJL:** *And that creates a problem in the reports?*

**CFO:** *It creates a problem in the reports. It is not well arranged. Then this dimension product-bookkeeping-group has been used a bit to control where they instead end.*

Interview with the CFO, 05.11.2009

The result was that the repetition of the registration practice of creating new accounts when no account could be used<sup>1</sup> together with the two acquisitions had deterritorialised the reporting possibilities of the accounting system. Because everything had been done incrementally the number of accounts had exploded

---

<sup>1</sup>And of course the point that one account was specified for one type of transaction.

ending with 393 balance sheet accounts and 975 P/L accounts. Practically, no reporting was possible except financial reports which according to the CFO was very complicated to make.

To sum up the chapter shows these 4 examples of how the repetition of the registration practice deterritorialises the overview in the general ledger, because it repeats difference into the general ledger table: the repeated use of the original accounting information system, the use of unique accounts for products and assets (such as cars), merger & acquisition activity (bought two companies in 2000 and 2006) and the use of sum accounts to calculate aggregate values used for accounting reporting.

### 6.2 Design of the new general ledger: repetition of reporting

The description above showed how the repetition of the registration practice deterritorialised the overview in the general ledger and thus the CFO's possibilities of making accounting reports. This section will show how another repetition, reporting, deterritorialises the concern of constructing a general ledger that allows for the accounting information reports the company finds reasonable for delegating responsibility to sales managers.

As described one of the main reasons for upgrading Navision was to create a database where data was sorted in an order which would make management reporting possible. In Navision Financials the general ledger table had become badly arranged and management reporting was very complicated to do.

*CFO: I'm using very much time on, in Navision, extracting data to make every single area, especially the sales areas, to make them get some reasonable data to work with. And I am using very much time on creating reports. The manager of the Discorp Hightech Intracorpus and the manager of the brand Bodycorp Lowtech, two of our sales managers, are totally new [...] The Discorp Hightech extracorpus sales manager have been here for a long time but have never really looked at*

## 6. Reporting and the chart of accounts as rhizomatic multiplicities

---

*what and where the products have been sold, it has been on fingerspitzgefühl, and the manager of the Discorp Hightech care product line have had some long term contracts with the public sector which almost made the products sell themselves. They have never been used to manage based on statistics or sales information. That is why I have used a great amount of time and still use time on trying to make reports they can use to something. And that's where this system [Navision Financials] is hard to work with [...] We have made a file that dumps all trade in goods accounts in a given period. They are dumped in a text file which I import to Excel (shows the import on his laptop screen) and then makes a pivot table where I can move it around [...] and try to build some reports to them. I use much time on the link between Navision and the real world.*

Interview with the CFO, 05.11.2009.

One of the main concerns of making an accounting information system that actually facilitated management reporting as the CFO talked about in the quote, was to design a new chart of accounts. The problem for the CFO was to make adequate queries for different management reports. However, this concern, to feed data to management reports in Discorp Denmark, was not explicitly incorporated when designing the new general ledger table. Discorp Denmark was by their group required to report their performance (sales and income statement) for every month. Sales was reported in a web interface to the group's SAP system, the web interface was called SAP IRIS. Income statement and other accounting information for controlling monthly performance and consolidating the group's subsidiaries' accounts to consolidated accounts was done in IBM Cognos.

**CFO:** *I am sure a direct link between the group's general ledger table [in Cognos] and the table we have, once existed. They are close in many passages, but throughout the years they have been passing away from each other. The big lines they are still the same. So that will be a guideline for my new general ledger table, or my reconsidered table.*

## 6. Reporting and the chart of accounts as rhizomatic multiplicities

---

*It will be to make them correspond [to each other], so that it will be relatively easy to make machine loading. Now I am typing it in to the 12 worksheets every month.*

Interview with the CFO, 05.11.2009, square brackets added.

This interview passage shows how the repetition of the CFO's guideline ("the big lines" from the old general ledger system) and reporting monthly performance to HQ becomes important in the design of the new ledger because reporting is taking very long time. In order to design the new general ledger, the CFO eventually made an Excel spreadsheet in which he worked with the design of the new table and the logical links between the Navision Financials table, the IBM Cognos table<sup>1</sup> and the new Dynamics NAV general ledger table. The CFO managed to reduce the amount of accounts to 179 balance sheet accounts and 250 P/L accounts mainly by making product groups in which transactions on different products could be recorded (opposed to the old system where one product type had one account number).

However it turned out that the IBM Cognos general ledger table was too aggregated to be able to capture the detail level Discorp Denmark needed for internal management reporting<sup>2</sup>:

*The plan was to build it [the new general ledger table] consistent with Cognos, but that turned out not to be possible, as it is on a too aggregated level and there would not be room for the details that the company needs. Instead, they have decided to use an "account scheme" which is able to map Navision account numbers to an external chart of accounts and even split them up in proportions and output the new numbers in Excel format.*

Extract from field notes 03.12.2009

---

<sup>1</sup>The IT application used for monthly reporting to the group's accounting department and for consolidation of financial reports.

<sup>2</sup>Which also is evident in the Excel work book the CFO developed: Cognos has 196 balance sheet accounts (17 more than the Dynamics NAV table), but more interestingly 187 P/L accounts (63 less than the new general ledger table, the CFO was designing).



## 6. Reporting and the chart of accounts as rhizomatic multiplicities

---

Thus, to satisfy internal (to managers in Discorp Denmark) and external reporting needs (to HQ in Germany) they used three technologies: Excel, which was going to be used to internal reporting to managers, Cognos, which was used for reporting to HQ and the navision account scheme functionality, which constituted the link between the general ledger table and excel, and the general ledger table and cognos. The general ledger table is very important as to the way performance measurement could be assembled in Discorp Denmark. The CFO expressed how the need for a new performance measurement practice had emerged and that the general ledger table would be structuring the allocation of budget responsibility.

**CFO:** *We are currently introducing - or, it is something we should have done a long time ago, but we are fighting a bit with introducing [short break] the numbers shared out on departments. Before, someone had tried to make such a [short break] system where each department had some money. That the budget were allocated to departments. It has never really been carried through. Before, all costs was recoded on -if it wasn't an unmistakable usage in another department, then it was just allocated to Discorp Denmark. Salaries are still running on Discorp Denmark but from the next financial year it will be allocated too. And currently we are teaching people in the organisation [...] who is accountable for it.*

Interview with the CFO, 05.11.2009

The initial need of a new performance measurement structure (delegating budget responsibility to sales managers) emerged because Discorp Denmark had faced high growth rates the last couple of years and expected this to continue (in other words, accountability emerged because suddenly there were money that could be spent). A look on the new chart of accounts, the CFO designed, shows that the construction had become a matter of solving the technical needs of registering certain transactions for the purpose of reporting them to HQ in IBM Cognos, rather than assembling assembling accountability in the management team, even

## 6. Reporting and the chart of accounts as rhizomatic multiplicities

---

though performance measurement was the CFO's initial concern about redesigning the general ledger table<sup>1</sup>. The data link between Navision and IBM Cognos therefore deterritorialised the performance measurement ideal by reterritorialising the need for reporting to HQ. But the construction of accountable managers through budget responsibility was then, again, reterritorialised by the CFO's use of dimensions, which together with the account scheme could extend the reporting possibilities the general ledger allowed for to cover the delegation of budget responsibility, at least to some extent. Therefore, both reporting to HQ and internal budget delegation survived these continuous movements back and forth between the two contradictory needs because of the account scheme.

25th November 2009 the "Navision project team"<sup>2</sup> met to make a test upgrade of the data base. This was the very first attempt to move data from the Navision Financials chart of accounts to the new chart of accounts.

*Prior to this meeting the company had developed a new chart of accounts and a new way of using dimensions and number series in the new accounting system. The main purpose of the data conversion (from Navision Financials to Dynamics NAV 2009) is therefore to map data from the old database and thereby the old chart of accounts to the new database and the new chart of accounts. The CFO has made a theoretical test of the logic of the new chart of accounts to make sure everything is mapped between the two charts. In principle everything ought to work [...] The new general ledger accounts are built with respect to the charts of accounts in Cognos and IRIS<sup>3</sup>. However, the plan was to build it consistent with Cognos, but that turned out not to be possible, as Cognos is on a too aggregated level and there would*

---

<sup>1</sup>Here performance measurement is considered a technology used to construct accountable managers (this resonates Kirk and Mouritsen (1996)).

<sup>2</sup>The project team is written in brackets because it consist of 2 people only: the CFO and the Navision consultant (an external hired consultant).

<sup>3</sup>As described IRIS is the SAP web interface to report monthly sales performance to HQ. Thus, they register invoices and transactions in Dynamics NAV, but report in IRIS by fetching data from the Dynamics NAV database through the "account scheme" functionality which outputs the fetched data to excel and are afterwards fed from Excel to IRIS.

## 6. Reporting and the chart of accounts as rhizomatic multiplicities

---

*not be room for the detail level that the company needs. Instead, they have decided to use a account scheme, which is able to map Navision account numbers to an external chart of accounts and even split them up in proportions and output the new numbers in Excel format. The logic of the product categories and account numbers are therefore made with respect to IRIS, Cognos, the old ERP system, the CFO's experience and knowledge from prior employments, the account schedule and the internal management accounting reports (in excel format).*

Source: Field notes, 25.11.2009

The quote explains the complexity of designing a new general ledger structure. The structure, as discussed above, has relations to many heterogenous accounting practices which, is the CFO's concern, all of them should work as intended. And therefore small decisions in the upgrade process from the old navision database (with the old general ledger table) to the new database (with the new general ledger table) potentially could strike back in the future and deterritorialise the performance of the reporting practices. In the meeting 25.11.2009 the discussion between the CFO and the IT consultant went around a lot of different aspects of the upgrade. And one of them was how locations, dimensions and department code should be used in the new Dynamics NAV system. They could not find an answer to whether department code, location and dimensions should be mandatory in the new database. The CFO would take this problem back to the office and work further on it. This is interesting because these entries become important for what accountability becomes.

After going through all the technicalities the IT consultant started mapping of data, which should be done before the data conversion was possible. When the data mapping finished, he said "the mapping is done and in fact, it was OK". The CFO then replied "yes, thats what you say" and smiled. Half an hour before that I talked with the CFO about the upgrade process over a cup of coffee in the kitchen:

*He told me he was very curious to see if the IT consultant had programmed the data conversion programs in accordance with what the*

## 6. Reporting and the chart of accounts as rhizomatic multiplicities

---

*CFO had tried to explain about Discorp Denmark's needs and requirements of the new system, and the new general ledger table. But he knew from his past experience that a lot of sense could potentially get lost in the communication between them (accountants and IT professionals).*

Source: Field notes, 25.11.2009

When arguing for everything to be OK the IT professional talked about the technical process itself. It was done successfully. But, as the CFO indicated in the kitchen, he thought more about whether the solution actually would result in what he expected or if something would be lost in the relation between the CFO and the IT consultant. Where the IT consultant saw the project of one of migrating data to a new system, the CFO was concerned with the broader assemblage of constructing a system to measure managers' performance.

To sum up this section showed how repetition of reporting practices deterritorialised the original thoughts about designing a general ledger that allowed for the construction of the internal management reports needed to construct managers accountable through the means of delegating budget responsibility to them. The repetitions treated in the examples in the description are monthly reporting to HQ and reporting to manager internally in Discorp Denmark. Luckily, the CFO discovers the functionality of account schemes which becomes the technology that allows the repetitions of reporting to internal managers exist simultaneous with reporting to HQ.

### 6.3 Chapter conclusion

It is perhaps counterfactual to invent an idea about how reporting and performance measurement could have been if Cognos and Iris had not existed and if the technology, Navision, was even more flexible in terms of registration possibilities. The point, however, is that design of reports and thereby inscribing performance measurement in a model is complicated because it is the act of tracing some elements of the rhizome while leaving others out (Deleuze and Guattari, 2004, p.

## 6. Reporting and the chart of accounts as rhizomatic multiplicities

---

14) and the technology draws the boundaries of that, which is possible to construct. The problem is that the rhizome always moves different than the model and therefore the model is not able to account for everything. Thus, representational faithfulness is not an ontological matter (which existing literature also suggest), but more important; it is not either an epistemological, or procedural matter, because procedures followed (e.g. methods of calculation and accounting standards) are generalisations that do not account for the movements produced by repetitions of the calculations; the fact that even though the process of calculation is closed, or black boxed (Latour, 1999), the things calculations count are in moving and thus the performance of calculations is not stable even though their calculative method stays closed; the performance of calculations is therefore assembled by their relations of exteriority (DeLanda, 2006).

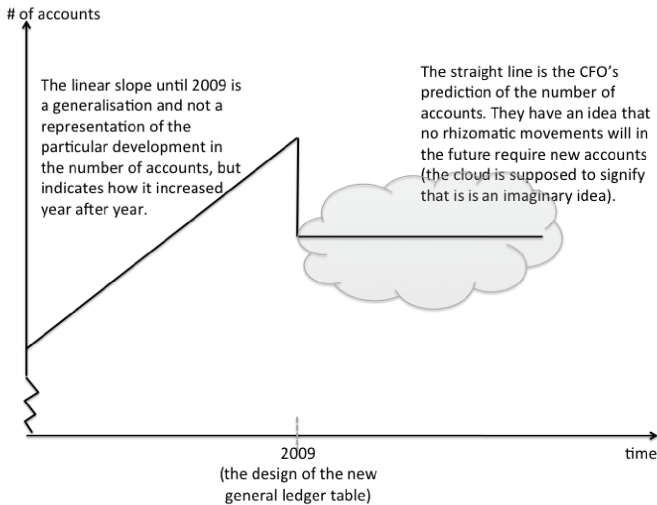
The chapter shows this by arguing that repetition of management accounting practices and their relationship with the general ledger chart of accounts is problematic in relation to understanding the performance of an assemblage as stable. The chapter shows that accounting is a socio-technical construct and qualifies this claim by studying the interaction between reporting possibilities and repetitions of practices. In Discorp Denmark this is expressed by the fact that reporting possibilities are deterritorialised by historical acquisitions because of the repetition of the bookkeeping practice itself. Therefore the CFO in 2009 expressed a need for redesigning the general ledger in order for it to become more satisfactory for future registration needs, both in terms of reporting to HQ and in terms of internal reporting to sales managers. The chapter adds to the discussion about the representativity of accounting information by showing how closed repetitions induce difference that makes the information become different. As can be seen from the construction of the general ledger table, calculations are rhizomatic in the sense that it inscribes not only the process by which the calculative practices are closed, but also the difference emerging from the practices' very repetition. Similar to what Busco et al. (2007) argue, accounting information appear singular on the surface, but when studying them particularly they open up and show themselves as heterogenous, rhizomatic multiplicities. To mention the few repetitions discussed here, the rhizomatic movements that through repetitions

## 6. Reporting and the chart of accounts as rhizomatic multiplicities

becomes inscribed in the general ledger table in Discorp Denmark is past M&A activity and the registration needs following from that and new products and assets. Within the process of designing a new general ledger table the repetition of reporting to HQ becomes the guideline for designing the new layout. The importance of this claim is that the heterogeneity and movement of the general ledger table produced by repetition affects its own performance too. The table satisfied some needs five years ago (e.g. the registration of transactions from merger activity), but those needs are also entangled with reporting today. All the different accounts which are present in the account table, but not used, are there because they cannot be deleted when transactions in the table are registered on the account (interview with the CFO 05.11.2009).

To illustrate the chart of account design figure 6.3 illustrates the relationship between time and the number of accounts in Navision financials and eventually, from December 2009, Dynamics Nav.

Figure 6.1: Size of accounting table



## 6. Reporting and the chart of accounts as rhizomatic multiplicities

---

The figure is not purported to represent the actual development in number of accounts in the general ledger table over the years described. It is meant as illustrating the CFO's idea with designing the new general ledger chart of accounts. He wanted to make accounts that allowed for registration of different assets within a homogenous "category" and use dimensions to extend their usability. Therefore the point was to make a structure that made it possible not to add additional accounts as they had done previously and through that design keep the table workable and clear (the new general ledger table is implemented at the threshold in the figure). This structure makes sense in the sense that it makes summing accounts work and therefore eases the monthly reporting to Distech Holding. However, this process challenged the way Discorp Denmark could report because reporting could only be disaggregated to the level of the registrations, i.e. the accounts and dimensions.

The story of the new general ledger table shows, as mentioned, that the design of the table apart from materialising a »pure need«, expresses de- and reterritorialising rhizomatic movements. The main problem of Discorp Denmark, according to the CFO, was their inability to measure and evaluate managers' performance because they did not have a general ledger table that allowed the construction of the reports they needed in order for the managers to become accountable. Here Deleuze has an important say. He explains how becoming is not linked to representation, for example representing "the accountable manager", or the sales manager, which (can be argued) is the purpose of performance measurement. Rather, becoming is about "I feel". Thus, accountability as such cannot be argued to be produced by for example the hierarchical position of the employee in the company or a certain deterministic performance measurement design, but rather as a feeling of becoming accountable. As Deleuze explains, it is therefore not enough to »look like« a responsible sales manager, but to express "the intensities, speeds, temperatures, non decomposable variable distances" of »feeling« accountable (Deleuze and Guattari, 2004, p. 35).

The point is, through different means, to create a space for accountability, or *becoming-accountable* in deleuzeoguattarian terms where the managers become accountable to the company (accountee). In this sense, accountability as it un-

## 6. Reporting and the chart of accounts as rhizomatic multiplicities

---

folds in this story, is understood as an assemblage of territorialising and deterritorialising movements of which the chart of accounts and its composition have a role to play in terms of becoming accountable. It is a matter of becoming accountable not to the accounting sign (accounting information), but to the company, which is a broader, more complex achievement than merely designing an aligned performance measurement system. It is about designing an assemblage of "intensities, speeds, temperatures, non decomposable variable distances" that together constructs the becoming-accountable. Thus, if the purpose of measuring and evaluating performance is to construct accountability relationships (which Ijiri, 1975, Kirk and Mouritsen, 1996 and Messner, 2009 indicate) then performance measurement design must extend wider than technical measurement concerns.



## Chapter 7

# Rhizomatic time-space movements. Becoming revenue centre

This chapter will move a step away from chapter 6's focus on technical practices of accounting by studying the responsibility accounting structure in Discorp Denmark. The chapter will concentrate on the interrelation between responsibility centre and rhizomatic movements. It will emphasise the territorialisation of the abstract space of the responsibility centre<sup>1</sup> and managers' decision space (called space of possibilities) and will in that respect concern performance measurement as a technology for constructing accountability relationships (Ijiri, 1975 and Ahrens and Chapman, 2002). It does so by raising the following question: "How is the repetition of the internal management accounting structure moving accountability to become different from its design expectations"?

The chapter will argue how the internal management accounting structure moves to render accountability different than Discorp's initial expectations of the design. This elaborates Messner (2009)'s claim that "the reasons why somebody has taken a particular course of action are not entirely clear to this person herself" by showing how actions are justified by the significations of the accounting signs

---

<sup>1</sup>Mennicken and Miller (2012) argue that accounting territorialises abstract spaces, such as responsibility centres.

(accounting information) used to construct accountability relationships.

The chapter begins by describing Discorp's controller manual's take on financial information. This view of financial information is presented with the purpose of showing how accounting information is conceptualised in the Distech group. Subsequently, the chapter describes how the accountable manager is assembled in Discorp Denmark by the planning and evaluating activities of the performance measurement process. Then a discussion of how the managers' decision freedom becomes constrained by multiple rhizomatic movements within the management accounting structure will be presented. The chapter ends with a conclusion that sums up how the accounting movements assemble accountability in a way that makes the assemblage perform different than the initial intention of the management accounting structure. The conclusion argues that the responsibility design moves from being a profit centre design to becoming revenue centre. Not because of new actors engaging in the assemblage, but because of the repetition of the very assemblage itself and the movements or the particularities of the assemblage.

### 7.1 The controller manual

Distech Holding's financial year runs from 1 April to 31 March. For control purposes Distech delegates responsibility to its subsidiaries through the means of a sales budget and a profit/loss budget. Evaluations of the two are carried out on monthly basis. The company use period budgets for a 12 months period specified on monthly basis.

The way budgets are constructed is described in the Distech Holding's controller manual<sup>1</sup>. The controller manual is interesting for at least two reasons. The first is connected with the theoretical review of accounting standards, objectivity, purpose and representational faithfulness of financial reporting. The controller manual includes a mission statement of the finance department of Distech Holding which, among other things, states for accounting and reporting that information must be objective. Later, the controller manual describes that the

---

<sup>1</sup>For confidentiality reasons the texts from the controller manual cannot be quoted directly. Therefore the controller manual is discussed with references to the manual, but without direct quotes.

finance department is responsible for directing the managers' attention to matters with potential substantial financial impact on the company (Source: The Distech Holding's Controller Manual p. 7).

### **Objectivity: fabricating facts**

In the light of the theory of accounting standards which claimed representational faithfulness/objectivity not to be an ontological matter, but a procedural one, the controller manual's definition of objectivity is interesting because financial information in the Distech group must be objective. As discussed in the theory section objectivity, in the positivist sense, does not seem to be a reachable ideal for phenomena such as calculations. This is acknowledged in the definition of objectivity in Distech Holding's controller manual: objectivity is defined as information which is supported with facts. When looking at the etymology of the word »fact«, fact comes from the latin word *factum* which is the supine of the verb *facere*. *Facere* is the infinitive of the verb meaning to make, i.e. *making*. Thus, facts, etymologically speaking, is about making, or fabricating (Sandywell, 2011, p. 292). In this sense if we understand objectivity in controller manual as »supported with facts«, then objectivity refers to the process of fabricating supporting evidence of the accounting information, accounting information supported with fabricating. The problem, however, is where the objectivity, the fabricating, ends. Does the facts have to be objective too (i.e. supported with other facts)? With this definition, objective accounting information becomes a matter of counting the right things rather than counting right (which would have been the positivists' approach to objectivity). And the point is that we could have counted differently and ended with another number. As Williams argue with origin in Deleuze's philosophy "all all our representations, senses and concepts of identities are illusions (nothing fixed is real)" (Williams, 2003, p. 13). If facts are understood as fixations then it means that facts is what makes information become simulacra and thus, facts based accounting do not necessarily lead to good decisions (it could have been different and it is not representing the »reality« ). Facts based accounting is therefore not necessarily good.

### Financial information to direct management's attention

The second important aspect of the mission statement in the Distech Holding controller manual is that finance must direct management's attention to matters which may have substantial financial impact on the company. One can question how this can be done with a system that builds on past transactions.<sup>1</sup> From the Deleuzian perspective »the reality « (or more precise; the actuality) is a continuous movement and becoming inhabit everything. How, then, can the past inform about the present or even the future? If financial information is supposed to inform managers for example about the becoming of the market, it must require the accounts to be ahead of the market and presuppose that financial information knows more, or knows different circumstances than the managers themselves.

Later in the controller manual the budgeting process is described. It described that the annual budget is the main planning tool in Discorp Intl. and it is used to monitor the performance of the subsidiaries (source: The Distech Holding's Controller Manual p. 194).

The budget process is specified very detailed in the manual. The budget process is based on the Budget Letter, which is explained later in the chapter, the subsidiaries' expectations of their country's market development and Discorp's growth opportunities in the market. This indicates, as also explained by Discorp Denmark's CFO that the budget process is decentralised and starts in the subsidiaries. The subsidiaries' expectations are used as »external inputs« to the resource planning in the budget process (p. 194). After the subsidiary has prepared their budget they submit it to HQ. The group's management team reviews the budget, discusses it with the responsible persons from the subsidiary and adapts the budget, if necessary. Finally the Discorp group's board of directors approves the budget.

This process follows the economic decision management model which i.e. Zimmerman (2009) describes. But as we will see, the assembled budget and the world do not correspond to each other and problems emerge which must be dealt with

---

<sup>1</sup>The means by which finance does this is through budgets and budget evaluations which are based on data from the accounting system, i.e. data on past transactions.

locally. However, the central accounting department follows up and intervenes when things go wrong<sup>1</sup>.

### 7.2 The rhizomatics of becoming accountable - delegation of budget responsibility

The Danish subsidiary had not been using budgets as a tool for performance evaluation of managers before the case study began. The former CEO and CFO had had a laissez-faire management style by keeping the budget responsibility at their desks without delegating it to the sales managers. Managers had been expected to perform their jobs satisfactory without the delegation of budget responsibility and this had been a successful management style until now. The administration and HR manager explained how the laissez-faire management style had existed because the mess in the general ledger account table made it impossible to delegate budget responsibility:

**HR manager:** *Actually, I am responsible for the administration and what we use there. But because it has been do badly set up in the system (the Accounting information system), I have never had a budget to work after. So that is really difficult [...] No one can even tell me on the different items, what we used last year on the different items. Because all of it lies in one big messy heap.*

Source: Interview 11.01.2010 (brackets added)

As mentioned no budget responsibility were delegated to the managers but they still knew what was expected of them:

**NJL:** *But even though they didn't have a budget they still knew what was expected of them as sales managers?*

---

<sup>1</sup>where "wrong" is measured as the distance between budgeted and actual results.

## 7. Rhizomatic time-space movements. Becoming revenue centre

---

**HR manager:** *Yes, what they should sell. They knew that of course. They also knew what their sales numbers were. But they didn't know what they spent their money on.*

Source: Interview 11.01.2010

However, some planning of marketing and sales expenditures have happened even though managers did not have the responsibility for spending levels:

**NJL:***How do you manage as manager? How do you make sure [short break] I could hear you have some sales numbers you have to meet or which you have set as targets. How do you follow up on that?*

**Sales manager:***Do you mean activities, campaigns etc.?*

**NJL:***Yes but also for example if you have some KPI's or performance measures or something besides what you have talked about already. And budget etc..*

**Sales manager:***What we do with these performance measures, if we should just call them that. Year after year we plan activities, which is going to happen the single year. And that depends a little bit of [short break] how the market development is [short break]. We look after that when we are in the field. Especially in the production industry. And when we feel like having a grasp of how the pulse of the market is, then we plan our marketing strategy after that. Marketing and sales strategy. And then, once every year, we write down how our activities look, what the target group and purpose with the activity is and what the expected output is on the things. That is essentially the management tool they have on overall basis in relation to what we are going to do when and at what point of time. And then we delegate the tasks internally in the team: who can, relative to other customers etc. etc., participate in those activities.*

Source: Interview 11.01.2010

## 7. Rhizomatic time-space movements. Becoming revenue centre

---

The manager responsible for store and logistics supported the point that the management have been *laizzes-faire*. He explained how the store workers recorded invoices in the books:

**Stores manager:** *They get the article scanned and makes the invoice balance and those things and then they record it [..] We'll get them recorded, if it is going to be stocked or not.*

**NJL:** *ok [short break]. Is there a budget for that?*

**Stores manager:** *Yes there is, probably, somewhere. It is not something..*

**NJL:** *Not something you are engaged with?*

**Stores manager:** *No, no.*

Source: Interview with stock and logistics manager, 2010.01.11

The interview passage was about who did the registration of invoices. But it shows how the stores manager did not get any information about budget capacities or constraints related to his areas of responsibility. What he did back in 2010 and before was to manage the stock and logistics without considering budget implications, at least not directly.

Later in the interview he explained that his concern was to minimise decentralised stock because "it is better that the articles get to the place where they have a overview of where the group can sell them at the moment. This means that they do not order more than they need and therefore, as evident in the field notes from 01.10.2010 they have several delivery methods: China, Vietnam, truck and re-truck. Truck is used when they need articles but can not wait for delivery from Asia (they come from a central stock room in Europe) and re-truck is for articles needed which did not come with the truck order (from the central stock room in Europe too).

The fact that they had *truck* and even *re-truck* shows that the practise was built on the premise of minimising local stock, but this requires flexibility in delivery methods for it to work. A question is whether it is cheaper to have local stock or the need for truck deliveries, which neither the CFO nor the logistics

## 7. Rhizomatic time-space movements. Becoming revenue centre

---

manager knew and the accounting system could not provide data to answer that. According to the stock and logistics manager the Discorp Denmark is charged for the transportation costs. The point here is that the decision space is constrained by the calculations: in this example with local stock the calculation happens cognitively. The decision in this setting is financial, however not tied to budget concerns.

When categorising the management style as *»laizzes-faire«* it might sound as a negative modality of rendering managers accountable. This is not the intention. Rather, it is to show how an "accountable manager" can be different significations depending on its assemblage. In the Laizzes-Faire assemblage it means that certain things are obligatory, as keeping a certain stock and satisfying customers, while other things are optional, as to keep track on the financial effects within the budget. Thus, managing store and logistics is not about being a cost centre and keeping a certain cost budget but is about providing service to customers in terms of security of supply.

### 7.2.1 Planning the budget

In 2009 the CFO in Discorp Denmark together with the CEO decided to change the means by which managers were made responsible. They did so because they had faced high growth the last 10 years and had become a big organisation. Moreover they had developed a new strategy plan through which they expected high growth rates. Based on the historical growth and future expectations they chose to change the responsibility structure (source: interview with the CFO 17.06.2010 and the sales manager for intracorpous 20.01.2011) to be able to act at a distance (Robson, 1991).

They would introduce a new budget practice in which the country's budget would be delegated to managers and followed up on monthly basis. Because the Danish subsidiary was managed as a profit centre the aim with the new budgeting practice was to delegate the responsibility for the achievement of the subsidiary's budget targets to the departments responsible for selling the different product categories. The department managers should therefore have a proportion of the overall budget allocated to them and be responsible for achieving the goals. They



implemented this new responsibility structure in the winter 2009/10 and it was planned to start formally in the budget year 2010/11.

Almost all managers accepted the new responsibility structure the budget outlined. The reason for that, according to the CFO, was because virtually all managers were new in their positions and thus had not been accustomed to the former management style. The only manager who had prior experience as manager in Discorp Denmark had expressed opposition but had been pressed to adapt to the new management practice. The reason for that was that the top management thought his resistance was a matter of his educational background as physiotherapist and his identity as an physiotherapeutic professional which, the top management thought, actually was the real reason for him not to realise the relevance of the new budget practice in his position as sales manager. Therefore they did not find his resistance a fair critique of the budgeting practice, but a problem arising because he did not know what it required to be a sales representative (source: Interview with the CFO 28.09.2010).

The budget for 2010/11 was prepared by the Danish management team and afterwards reviewed and adapted by HQ's accounting department with the Danish managers' acceptance<sup>1</sup>. But as time went on the managers' budget numbers became a larger and larger problem for them:

**CFO:***If we look at our allocation, no not allocation, the division of the budget in the individual areas, it is a bit more problematic that we had thought.*

**NJL:***How?*

**CFO:***[Short break] When we prepared the budget last year in december/january the manager team we have now, they were all of them here, but some of them were new. And it was not taken very serious and it has been hard to get some plans to add up with what they think now, half a year later and after they have acquainted themselves with the business compared with when we (prepared the numbers) departed*

---

<sup>1</sup>According to the CFO the managers did not have an idea of whether the numbers were realistic or not and therefore accepted it as it was.

*from what we have done in the past, because that was what we used as a basis for the numbers. Therefore the reality has become a little bit distanced from [short break] from what we thought. You know, a little bit too distanced. The tendency is that they think new thoughts every 2nd month [...] Especially the marketing and sales budget is problematic.*

**NJL:** *What about sales?*

**CFO:** *Sales is allocated ok and we know who is responsible for which sale and the goals for each month are meaningful. They are too high [...] but that's how it is.*

Source: Interview with CFO 2010.09.28

In the part of the interview following the quote the CFO argues that the market had moved to become even more privatised than it had been in the preceding year and this movement affects the types of products (the technological features) the customers buy. The products are generally a cheaper category and therefore their sales targets in terms of turnover was too high.

### 7.2.2 Evaluating the performance

The budget was inscribed on certain conditions about the market which did not hold (e.g. the proportion of the market which was privatised and the products' average selling price). As one of the managers explains, the group's accounting department intervened with the subsidiary and placed certain obligations on the managers about which activities to conduct in order to try to resolve the problem with the variances between budgets and actual performance:

**CFO:** *As long as we have reasonable results the group's accounting department stays away from details but sets some lines of direction.*

**NJL:** *[...] Control wise they are open as long as you are performing*

## 7. Rhizomatic time-space movements. Becoming revenue centre

---

*well?*

**CFO:** *As long as it is going ok they have kept themselves away.*

Source: Interview 17.06.2010

The Danish CFO explained that the problem did not seem to be because of managers shirking or managers taking wrong decisions (as the group's accounting department's intervention could indicate) but rather one of the model and the world moving in different directions. Diverging directions which the managers should act upon, but directions, which the group's accounting department did not possess knowledge about because they did not know the Danish market conditions<sup>1</sup>, which were radically different from other European countries (this will be discussed in the following section "The Marketing Budget").

In the financial year 2011/12 where the new responsibility structure were set, the budgets were specified on product lines for each department<sup>2</sup>. Whether this allocation on departments was done to comply with the Budget Letter or as a means of constructing budget responsibility locally is actually not interesting. For this thesis the interesting point is what actually happened with the budget responsibility the department managers got, during the year.

The Danish subsidiary was managed as a profit centre. However, because of the movements happening in different aspects of the accountability assemblage the responsibility centre became different through its repetition. The 2011/12 budgets and budget evaluations show that department managers were responsible for revenue and operating expenses<sup>3</sup>. The budget term sheet specified budget targets for each line in the income statement and calculated budgeted gross profit

---

<sup>1</sup>Even though the performance looked reasonable in the performance indicators in the spring 2010 the group's accounting department still enforced certain new processes to the financial management practice in Denmark. They added to the controller manual several new points to follow. For example how to manage credits with an upper limit for period of credit to debtors and even specifying a process diagram of how to set credit periods. The controller manual and its changes was not accessible to me in the spring 2010 and therefore it was not possible to get the documentation of the new control processes.

<sup>2</sup>As evident in the 2011/12 Budget Term Sheet.

<sup>3</sup>Salaries, car expenses, office equipment, travels, marketing and sales expenses and depreciations. Source: Excel file "Budget Intracorpus 11-12.xls".

II, gross profit margin and EBITA (source: Excel file "Kopi af Kopi af Budget term sheet input.xls"). This literally meant the managers became accountable for every single line in the budget even though the objective was to make profit<sup>1</sup>.

### 7.3 The framing of decision freedom

Accounting theory suggests by designing the organisation in a certain way to frame the decision space in a sense that allows managers to control what they are held accountable for. This is the controllability principle found in e.g. Merchant (2006). It is evident in the responsibility design where profit centres are held accountable for both costs and revenue and the matter is about managing profit. In a revenue centre the cost side is of less importance to the centre manager(s) because the managers are accountable for generating revenue. As we will see in this section design of a decision space is a complex task and rhizomatic movements frames the freedom and makes it constantly becoming different. The movements of the accountability assemblage continually changes the intensities of freedom by impairing and amplifying decision rights between HQ and subsidiary.

#### 7.3.1 The sales and marketing budget

The CFO expressed problems in their accountability structure related to the sales and marketing budget. As described the managers were new in their positions when the budget 2010/11 was to be planned, and therefore nobody had any experience as to which budget targets to use to »represent« the market movements.

#### Allocating the marketing budget and fabricating meaning of its signs

The management team managed to allocate budgets between them and got the budget ratified by HQ with some adjustments at the lines where HQ found the development too low. HQ did not have insight into the Danish market, but they intervened in the budget development by adjusting the draft, the CEO and CFO brought with them to the budget week in order to ensure the budgets targets

---

<sup>1</sup>This was confirmed by the CFO in an e-mail 27.09.2011 (the CFO had resigned in june 2011 and was therefore not employed in the company in september).

## 7. Rhizomatic time-space movements. Becoming revenue centre

---

would deliver the desired financial effects such as gross profit, OPEX and cash flow (source: Interview with CFO 28.09.2010). Thus, the ratification was not about market opportunities, but about making sure budgets was planned as to achieve the desired derived financial effects.

The CFO did not see the budget allocation or target setting as a problem when they did it. But at the meetings where the managers got their marketing and sales budget allocated to their departments, they did not know the implications for their future sales performance. The CFO explained a problem related to the allocation process:

**CFO:***Lets start in the positive way. Regarding the monthly follow up we had the idea that we should use the format of sending sales numbers and expenditure numbers out and then the managers should comments on a front page (of the excel report) about what money they have used and why they have sold so much or not so much. And the format and templates work fine. If we look at the part regarding allocation, or not allocation, division of the budget between areas, it is a bit more problematic than we expected.*

**NJL:***How?*

**CFO[.]***We never got the original budget divided and an accept that it was going to be like that.*

Source: Interview with CFO 2010.09.28

The allocation of marketing budget created two problems. First of all the activities planned to be held in the 2010/11 budget year was mainly decided on basis of what they had done the year before and the requirements for marketing and sales activities in the budget letter. This meant the managers during the year did only have a relatively small proportion of their marketing budget to spend, the rest was allocated to certain activities already during the budget planning process. And they were not allowed to exceed the costs planned in the budget

because of the tight focus on keeping within the limit of Operating Expenditures (this will be elaborated later in the "budget letter" section).

Moreover, the accounting department in Discorp Denmark reported budget performance every month to Distech Holding's HQ. Because the accounting system in Denmark and in HQ was not linked, the numbers were reported "by hand" by one of the Danish accountants. This implied that HQ did only get aggregated numbers and they could not analyse tendencies very detailed as they could on other subsidiaries that had the same accounting system.

The activities HQ suggested to conduct was therefore perceived by the managers as unnecessary interventions that spent the managers' time which was already limited. This shows how their action on accounting calculations work. A larger and larger distance between the »performance representation« (the budget) and the market emerged and HQ acted upon the information they had available which was detached from the sales conditions in the market.

From a deleuzian perspective of representations one could argue that the managers act on the same information as HQ. However, the difference lies within the regimes of signs that together form the meaning of the sign. In HQ another assemblage territorialises the the meaning they assign to the sign and thus the managerial actions perceived necessary differs from the understanding the Danish managers have. One manager expressed:

**NJL:***Let's talk about reporting. Which reports and which information you use in your work.*

**Sales manager:***Every report I get [short break] is based on old customer data and that is reports sent to Germany as well and they are not edited. It is the same reports as we used last year too and because of the municipal merger last year a lot of those customers..*

**NJL:***What do you mean when you say they are not edited?*

**Sales manager:***The information is in fact good enough. The problem is that in the report I get look like there is a lot of decrease here and there. If there isn't any sale [short break] no, that's because the customer do not exist anymore. And that is because the accounting*

## 7. Rhizomatic time-space movements. Becoming revenue centre

---

*system query accounts that have had activity within the last two years. [...] that means red red red red red red. And that is not how it actually is [...]. It is not because we are falling behind on reporting, it is because our market in Denmark is so hard to identify. Who are the customers, how do they pay, who are you going to meet and so on. It has actually taken me a whole year to figure out and as late as yesterday the CFO and I had a meeting where I told him which future reports I need and how they must be built.*

Source: Interview 2011.01.20

The manager indicated the complexity of the Danish market relative to the rest of Europe. In Denmark, her direct customers are public sector branches but the end users are citizens. The payment comes from a central office in the public sector and they set rules about how and when payments are going to happen. In order to make information useful (for informing aggregately about past sales) it is not reasonable to use the same reporting template as other countries do, because in other countries end users and customers are the same individuals. This problem is further complicated by the fact that reports are messy when the world moves different than the reporting template:

**Sales Manager:***Something [a customer] that used to have the name Horsens Fysioterapi is today called FT Horsens. Because the reports we send to Germany and because we are not entirely meeting the sales targets - neither my product line or Discorp Denmark as a whole, they are micromanaging down there. They are saying "hey they are not visiting Horsens Fysioterapi". No we aren't because we visit FT Horsens which is exactly the same. We are using very much time on different explanations all the time, we are using much time on the explanations because the reports are not transparent".*

Source: Interview with Sales Manager 20.01.2011

## 7. Rhizomatic time-space movements. Becoming revenue centre

---

Here the product manager talks about the interventions when the »performance representation« (the monthly profit/loss statement) differ from the planned targets. In these situations the managers are controlled by a signification of the »performance representation«. A signification they do not believe in themselves; they are under pressure to obey the orders from HQ even though they know it is wrong.

This is a problem for accountability because the managers' actions are framed within the significance (constructed meaning) of the signifier (accounting information). Another implication of this theorisation is about opportunity. HQ acts as if the budget alone constitutes the opportunity space, by acting based on the information alone, but the manager expresses that it would be more beneficial to consider opportunity to be present outside the boundaries of the accounting information too. This understanding means that opportunity exist in the market and financial information is derived effects of that market. The managers' decision space is therefore a matter of prosperity:

**NJL:***I thought they let the subsidiaries decide a lot of things themselves?*

**Sales Manager:***Yes. In times with progress.*

**NJL:***Ok.*

**Sales Manager:***Then they (the subsidiaries) are allowed to make decisions. When there are no progress, corporate decides [short break] everything.*

**Sales Manager:***The CEO wanted to hire business men. And we want some things, we see some markets, we see something. [...] We are a very very special country if you compare with the rest of the world. [...] They listen to us and what we say but they do not give in.*

Source: Interview with Sales Manager 20.01.2011

This shows that managers are meant to have a close connection with the market. But when things start to move contradictory with the plans (of derived financial effects) for various reasons, HQ intervenes by pressing managers



to undertake certain activities without considering the local circumstances the managers explain.

### Utilising the marketing budget to exploit the rhizome

The manager responsible for the Discorp Hightech product line (the largest product line in Discorp Denmark) had been employed in the company for many years. As mentioned he was a physiotherapist of training and it was hard for him to become the manager the new budgeting practise pushed him towards becoming. In the late summer 2010 he came on sick leave because of stress. The CFO said it was probably because of the new budgeting practice that put too big a pressure on him and as a solution to the absent manager the CEO was appointed as temporary manager for Discorp HighTech. In the fall 2010 the CEO could see a problem with the sales in Discorp Denmark as a whole and therefore had to do something. He decided to use a big proportion of the marketing budget left to the rest of the year on a big launch of a new product in the Discorp HighTech product line. Discorp Hightech amounts to approximately 80% of the annual sales and therefore it was, the CFO argued, probably a good place to spend some money if it could generate sales growth. In Discorp, the CFO argued, there was a strong emphasis on financial performance indicators and one of the most important indicators to meet was Operating Expenditure (OPEX). Because of the significance of OPEX the decision raised a new problem in Discorp Denmark because the CEO's allocation of the marketing expenditure meant that he used other product managers' marketing budget and the consequence was that the other managers could not spend money on keeping up the relation to their customers or start activities they found important for generating revenue growth<sup>1</sup>.

The managers were still held responsible for the budget they had planned prior to the financial year and because of the CEO's two positions in the Discorp Denmark (CEO and product manager), one of the managers expressed that they understood the decision as the CFO exploited his power as CFO to promote

---

<sup>1</sup>The control literature would probably discuss the temporary manager's *ability* to use money he did not have in his budget, but according to the CFO this was possible only because he was the acting CEO too and therefore had a credit card to use for the purposes as CEO.

the product line he himself was responsible for as temporary product manager (source: Interview 20.01.2011). In a later interview another manager reflected more broadly on the decision and proposed that it could have been the best use of the money for Discorp Denmark. However, this manager was responsible for the Bodycorp product line and therefore the decision did not affect his budget because it was part of Bodycorp's financial planning and not Discorp Denmark (Interview 28.09.2011).

The interesting point raised in this episode is about who has the right to money and acting on rhizomatic movements in the market. The CFO broke with the marketing plans but if the plans were perceived >wrong<, why not break away from them? From the other managers' perspective, who were affected by his decision, the question went on whether he acted opportunistic or whether it actually was the best decision to take in the firm's interest. The OPEX number had apparently gained such a privileged place that it was able to move some of the marketing budgets from the other managers to the CFO's cost responsibility as product manager. If OPEX had not been a fixity they should keep within, the CFO could have chosen to spend more than they had planned.

This is connected with opportunity and whether opportunity lies within or outside calculations. The peculiar aspect of the story is that the rhizome actually works here: the CFO manages to disregard the accounting information and think without the budgetary constraints which were not working.

The story shows how the assemblage of accountability inscribed in the budget technology was deterritorialized by the OPEX performance indicator. OPEX occasioned the line of flight that moved accountability into another becoming and this restricted other managers' possibilities of starting new marketing activities.

### 7.3.2 The budget letter

As mentioned above Discorp Holding (HQ) intervened when the monthly financial reports did not meet the targets set in the budgeting process. This was not the only intervention into the subsidiary's budget they made. In their "Budget Letter", they outlined different actions which affected the managers' marketing budgets.

The budget letter<sup>1</sup> explains the group's expectations to the local subsidiaries performance. The introduction in the letter shows this by arguing that the growth in local currencies were good in the financial year 2011/12, but because of a strong currency in the group's home country relative to some of the subsidiary currencies the group's growth in profit before interest, tax and amortisation (EBITA) had decreased significantly. Therefore, they articulated in the budget letter, the following year had to create substantially higher profitability levels. These were to be achieved through growth in the revenue line and cost management (Source: The Budget Letter 2012/13 p. 3)<sup>2</sup>.

### **Intensified cost management**

The group argues for the last years' increase in operating expenses (OPEX) to come from sales force and customer service headcount increases and investments in structures and processes to make the organisation scalable. The cost increase exceeded the revenue increases and therefore they stressed the target of profitability increases in the following year (Budget letter p. 3).

Additionally the budget letter states that subsidiaries are not allowed to budget net increases in headcount. If increased headcount is needed a business case must be attached that "proves the additional headcount will boost your sales growth over the targeted growth rate" (p. 3). This is obviously important because the business case is a claim for the future: nothing about the future is certain and therefore it can be hard to "proof" this boost.

### **Requirements to revenue growth**

Later in the budget letter the group provided requirements to the target setting: The overall sales growth of the Discorp Intl. product line is set to 8-10%. The overall sales growth of the Bodycorp Intl. product line is set to 11-13%. And in specialised the Budget Letter for the scandinavian countries the target revenue

---

<sup>1</sup>The only budget letter accessible was the 2012/13 letter and because of that, the paragraphs below is written based on that source.

<sup>2</sup>Due to the confidentiality agreement with the company it is not possible to quote the budget letter.

## 7. Rhizomatic time-space movements. Becoming revenue centre

---

growth was even higher for the Bodycorp Intl. product line. In Denmark it was set to 20%.

Because the budget letter for 2011/12 was not accessible it is not possible to see how the requirements for the 2011/12 budget was set. However, when asking the former CFO<sup>1</sup> responded "my memory tells me that the growth targets was not specified on departments/product lines but the expectation was one aggregated increase for the whole subsidiary. How the growth in sales should be divided was a matter for the individual local CEO but exposed to severe discussions with sales managers etc. in Discorp Intl., especially when the increase was not perceived as big enough from the group's perspective"<sup>2</sup>.

The budget letter, as discussed, transforms the notion of accountability. While accountability initially in Discorp Denmark was about delegating responsibility to managers to act on local conditions, accountability transformed into a calculative act of delivering the financial performance planned in the budgeting process.

### 7.3.3 Transfer prices

One of the levers of managing profit is pricing <sup>3</sup>. However, in Discorp Denmark the very calculation of profitability became problematic because the CFO did not believe their calculation was right. Because of the Distech Holding's transfer price model the CFO calculated contribution margins by deducting the transfer price from the sales price. But he knew the transfer price was settled to minimise tax payment in Denmark and thus the contribution was an effect of that. These concerns made him believe the contribution margins and thus annual results was wrong.

---

<sup>1</sup>He quit the job in June 2011 and this question was asked in an e-mail as of 30 November 2011.

<sup>2</sup>Source: e-mail correspondence with former CFO 30 November 2011.

<sup>3</sup>Microeconomic theory suggests, depending on the price elasticity, that companies can either increase or decrease prices to influence customer's buying behaviour.

## 7. Rhizomatic time-space movements. Becoming revenue centre

---

**NJL:***If you change the price with 10% would the transfer price then be changed 10% too?*

**CFO:***Yes, but only once a year.*

**NJL:***Yes, but only once a year. That is important. Because if you start to change it continually the tax hammer will fall.*

**NJL:***Yes. It is a bit complicated with those transfer prices.*

**CFO:***It is very complicated [short break] the problem is [short break] then the managers come and ask me, look, I am buying this product to that price in Germany. That means I have a lot of space to offer discounts and still earn money on it [short break] eh, yes... eh.*

**NJL:***Yes that's a bit hard to answer.*

**CFO:***That's a bit hard, or "should I rather sell"..*

**NJL:***Don't you know the real costs?*

**CFO:***I don't know the real costs so that they can come and ask "which of those two should I sell?" (gesticulates that he cannot answer).*

**NJL:***That's interesting.*

**CFO:***Yes, that's very, that's a bit awkward.*

Source: Interview with CFO 28.09.2010

When the yearly budget in February each year were ratified by HQ the accountants began their work to optimise transfer prices to reduce the tax payment in Denmark (because the corporation tax is lower in Germany), within the legal boundaries of IFRS (Source: interview 22.04.2010). This was done to satisfy shareholders' interests, but as we will see the transfer price that came out of the calculation became problematic for managing the Danish subsidiary as profit centre. Already in April 2010 the CFO indicated a problem for the managers regarding transfer prices:

**NJL:***How are the budgets specified? Do they have some overall sales targets to meet and do they have some costs they..*

**CFO:***They can spend, yes.*

## 7. Rhizomatic time-space movements. Becoming revenue centre

---

**NJL:***Is it only marketing costs?*

**CFO:***No it is all the costs [short break] they, more or less, have an influence on. Of course there is a grey zone and we are not precisely aware of what is in the grey zone [short break] but there are salaries, there are marketing costs, there are travel expenses, there are telephone costs, cars for their sales staff, yes, entertainment costs. You know, unit variable costs are not included in this exercise because it is determined not so much of [short break] you know, if you sell one or another product within the product line does not mean very much because it is a transfer price setting according to the model that says it has to result in the right bottom line. And we get the same contribution margin in percentage terms independent on which product they sell.*

Source: Interview with CFO 22.04.2010<sup>1</sup>

In the quote the CFO raised a question regarding the relationship between transfer prices and how the cost represents faithfully »what it purports to represent«, which later became a larger problem for profit calculations than he explained in this interview. The ontological question was therefore not if it was the right things the calculations described, but rather if it was a good description. And he did not believe it to be a good description: in a later interview, he explained that the contribution margin derived from the transfer price calculations became the same for each product:

**NJL:***The sales departments are only oriented towards sales prices. They are not charged for the purchase prices, I mean, the prices you pay to the production subsidiaries for the products?*

**CFO:***No because [short break] we have a transfer price model where*

---

<sup>1</sup>In a field observation 11.08.2010 where the CFO filled out their tax forms I asked him again if the holding company optimises transfer prices to reduce tax. He said yes and showed me a document with transfer price calculations and legal rules and how the transfer prices were calculated within the legal boundaries.

## 7. Rhizomatic time-space movements. Becoming revenue centre

---

*the profit in percent, no, not the profit, the margin in percent on every product is the same. But yes, of course it is better in terms of money to sell more high-tech products than low-tech but if we count so much on money as we do then if they sell for 1000 DKK, yes, for 100.000 DKK, if it is one or another product they sold is irrelevant for how much we get in contribution ratio there.*

Source: Interview with CFO 28.09.2010

In the allocation of the budget to product managers the CFO decided to allocate the product costs to the budget he was responsible for himself because of the transfer price calculation. As the CFO argued the implication of the transfer price calculation was that managers could not control the contribution margin of their products and hence should not be held accountable for it. However, this concern related to the fact that Discorp Denmark was managed as a profit centre and that their main concern should be to generate profit. Because profit was calculated as contribution margin (gross profit) minus operating expenses, this responsibility design became really complicated to achieve as the CFO did not believe the contribution margin was »true«.

Discorp Denmark's accounting system contained one cost of good sold table (CoGS) and therefore the company did not know to what extent they could reduce prices without losing money<sup>1</sup>. The CFO had explained that the transfer price had been calculated to get a net income equal to the market standard in the income statement (in order to comply with IFRS). Therefore, if they reduced prices but did not sell more units than planned (Which they typically did not because discounts in Discorp Denmark were given to try to increase sales to the level planned in the budget but not above the planned amount of units sold) the net income would decrease and possibly even become negative, because the transfer prices were fixed and changed only once per year (Source: Interview 28.09.2010).

---

<sup>1</sup>They knew, of course how their calculation would look but not because this was considered "wrong" they did not believe it.

## 7. Rhizomatic time-space movements. Becoming revenue centre

---

The point the CFO raised here is the complexity of the profitability calculation. Profit opportunity exist in the market movements but the profit calculation inscribes gross profit (and therefore profit too) as the difference between sales price and transfer price. Thus, if there is a relationship between prices and demand (which the CFO indicated) they cannot exploit this relationship because they do not believe the calculation counts the right things. Another problem is the decision about which products to sell. Is it more profitable to sell the cheaper, low-tech products or is it more profitable to sell the expensive, high-tech products? The CFO's reasoning to this problem was very down-to-earth, based on the accounting information he had available:

**CFO:***we get the same contribution margin in percentage terms independent on which product they sell. Of course it would be better if everything they sold was the most expensive product but [short break] we recognise that by rewarding them in to an extent for selling up<sup>1</sup> [..] The profit is very much equal to the revenue. Therefore we use the term average selling price a lot. The higher the average selling price, the higher the profit. Because the selling price, no, our purchase price is set as a percentage of the selling price.*

Source: Interview 22.04.2010

Here the CFO explained it to be better if managers sold more expensive products. However, in this respect »better« means better for the Danish subsidiary's financial statement. However, the CFO acknowledged in the interview 28.09.2010 that they actually did not know how the decision affected the profitability of Dis-tech Holding. The consequence was that *when* they wanted to change prices they turned to HQ to get the price changes approved:

---

<sup>1</sup>By "selling up" he means selling from a higher product category and the categories reflect the technological aspects of the products and hence the price. Therefore, selling up means selling more expensive products.



**CFO:***If we can feel we have to change the price significantly then we must take the discussion with Germany about whether they will allow us to reduce the price so much. To get in to that market and stay on the market or [short break] forget that market.*

Source: Interview 28.09.2010

To sum up the consequence of the »wrong« profitability calculation is that price changes become controlled by HQ. Because of the transfer price Discorp Denmark is not able to make economic decisions related to profitability on other lines in the budget than the revenue line (operating expenses was not variable during the budget period). But Germany knows the manufacturing cost and therefore the transfer price makes Denmark dependent on consulting the group's accounting department every time they want to make profitability decisions. In the end this altogether means that managers are accountable for a budget which they hardly can control. They control their own activities but the levers directly related to the financial effects visible to German accounting department, in the reports Denmark sends each month, are much more complicated to understand and change. Therefore the business unit responsibility design means that Discorp Denmark (the managers and the CFO) is concerned with the revenue line only.

### 7.4 Chapter conclusion

This chapter shows how the accountability performance of the responsibility centre design of Discorp Denmark is produced by an assemblage of exterior relations (DeLanda, 2006) between the subsidiary itself, HQ, the market and the group's accounting department, all of which are not analytically treated as singularities, but in themselves multiplicities of heterogenous moving elements. This assemblage deterritorialises the profit centre ideal because of various movements that together reterritorialises the responsibility centre with the possibility only to control sales activities within a very narrow space of possibilities. Thus, the performance of the responsibility practice becomes focused on the revenue line

## 7. Rhizomatic time-space movements. Becoming revenue centre

---

only, because the managers and CFO/CEO in Denmark are not able to influence transfer prices or operating expenditure. These are set by HQ in Germany through different means, e.g. a budget letter and monthly follow ups on Discorp Denmark's monthly performance. The chapter argues this to happen not only because of materialistic movements (the movement of the budget letter to become more constraining in terms of what to spend money on), but also because the financial information reported to HQ is not representations, but signs whose signals potentially have multiple significations, and diverging significations between HQ and Discorp Denmark becomes the matter by which some actions are understood as good while others are bad. Sometimes HQ's signification becomes dominant and thus they press the Danish managers to conduct certain actions while other times the Danish managers' signification determine which action they conduct.

The chapter shows that the budget relates to (at least) two regimes of signs. In Denmark the managers understand financial information as an effect of market movements and their activities within the market but the group's accounting department, according to the CFO, understands it as financial information under which to satisfy shareholder interests. To point is how to translate the sign into a meaning related to owner's interests. The actions of the group's accounting department indicate that they construct a different meaning from the sign than do the managers. Therefore, they force managers to do certain things in order to deliver the results they planned, but without listening to managers' argumentation about why the calculations turn out as they do. This indicates a conflict of what owners' interests are. Is it to deliver the planned results (and avoid acting on the potentiality of the market as it moves) or is it to make the same decisions as the owners would have done if they had been in the situation, the managers were. In this case the multiple significations means two things: the profit centre becomes closer to what in theory is understood as a revenue centre. For accountability and representational faithfulness it means that we do not actually know what managers are accountable for, because the reality(-ies) they act in is much more complex than what accounting calculations are able to inscribe. Therefore, in Discorp Denmark accountability is not to construct a structure by which managers make the same decisions as would owners. Rather, it is about making

managers deliver the numbers calculated in the budgets well knowing, according to the CFO, that it is propositions about a certain future that do not happen; the budget is a tracing of the future but it is at the same time a simulacrum that relies on regimes of signs to decode its significance (Deleuze and Guattari, 2004). In Discorp the signifying regime (the "decoding" that wins (Deleuze and Guattari, 2004, 245) and thus signifies the actions that happen) becomes the regime in HQ, i.e. the sign signifies financial well being of the company. This implies that accountability becomes a matter of acting in accordance with the rules set by HQ in their business reviews with managers and in the budget letter. This materialises as propositions about how to earn money in the market.

Deleuze explains that the overcoding happening by HQ (they counter-signify what the Danish sales manager have already signified) becomes a "line of active destruction" (Deleuze and Guattari, 2004, p. 149) that in this case destructs accountability in the form of profit centre management. The managers are by HQ deprived of the freedom of acting that would make them capable of acting on the market movements. They did so by sometimes in their monthly business reviews making the managers scapegoats for their actions by justifying actions in terms of performance relative to the budget even though they tried to act on the market movements as good as they could given the market information and accounting information available. This means that the actual financial performance relative to the budgeted financial performance expresses a boundary of toleration of managerial behaviour. But this boundary is defined as calculations of other calculations within a structure given by the accounting system, i.e. simulacrum (refer to chapter 6) and thus not a representation of employee performance.



## Chapter 8

# Tracing the future. Market movements and the revenue calculation

This chapter<sup>1</sup> will extend the analyses in chapter 6 and 7 by broadening the level of analysis beyond the legal boundaries of the company. Where chapter 6 concerned the technical registration practices and chapter 7 concerned the internal accounting structure, this chapter will concern the external link between Discorp and the market in which it operates. The chapter will concern the exterior relationship between budget and market by studying the link between the revenue line of the budget and the market it strives to inscribe.

The chapter will take a perspective on the budget where its internal composition is described as a root-tree structure<sup>2</sup> of the financial effects of the budget period. From that perspective the problem with the budget is that it traces a certain, generalised version of the future which never satisfactorily corresponds to a particularity the company operates within (Williams, 2003, p. 40), because the particularity is characterised entangling the root-tree structure and the rhizome.

The chapter will relate the above described perspectives of the budget to per-

---

<sup>1</sup>The title uses the notion of tracing, which in Deleuze and Guattari (2004) is used as an alternative to representation. Tracing is the process of copying something by the use of tracing paper. Tracing means that some aspects of the original are traced while others are left out.

<sup>2</sup>Refer to chapter 3's discussion of root-tree versus rhizome.

## 8. Tracing the future. Market movements and the revenue calculation

---

formance measurement by studying the link between budget and market as an assemblage of exterior relations. It will address the question "How is the relationship between market movements and revenue in the budget affecting the appraisal of managers' performance and their decision making"? This question will be addressed by showing how the sales activities planned by the product managers are challenged by the tracing, the budget provides (the representation), and the market movements. The chapter will describe how political interventions in the market problematise the composition of the budget and because the budget and the market is organised differently, the managers in Discorp face an ambiguity about where to allocate their effort and resources. Either they could choose to do their best to perform relative to the budget and planned activities or they could choose to acknowledge the market movements which is not envisaged in the budget. And this relation between budget and market has implications for both performance appraisals and representational faithfulness of accounting information.

The chapter concludes that the line items in the budget are signs with no inherent, (from within) given meaning. The meaning of the sign is given by the process of signifying the sign. A problem therefore emerges about how the signs are signified. The calculations in the financial reports are understood as financial effects at HQ but are signified as representations of the market movements in the Danish subsidiary. And these two significations do not cohere with each other. The consequence of this divergence is that the Danish managers can choose either to do their best to perform on the assumptions built into the budget (e.g. exploit existing sales channels as much as they can) or they can choose to react on the market movements which they have not incorporated into the budget. This raises a problem of opportunity. Because of the budget's tracing and signification(s) an opportunity space exist both »inside« and »outside« the budget calculations. Furthermore, the ambiguity of the signification of accounting signs raises a question about how profitability is actually achieved in Discorp Denmark. For appraising performance this means that the signification of profitability affects the managers' decisions and actions, but also the justification of the managers' decisions (whether they have taken »good« or »bad« decisions in terms of prof-

## 8. Tracing the future. Market movements and the revenue calculation

---

itability). Finally, it is argued, accounting information provides a tracing of other assemblages (the market) and thus, representational faithfulness of accounting information is not achieved by following procedures for calculations. This means that accounting information is not representing, it is simulating.

### 8.1 Description of the market

Discorp Denmark sells products to Disabled persons. In Denmark the equipment is paid for by the public sector. As end user can choose to receive the equipment from public hospitals or from private hospitals. According to the CFO from the customer perspective there are small differences between the two<sup>1</sup>. Private hospitals have shorter waiting lists and the end user will get the equipment faster than through public hospitals. However, in private hospitals end users pay partially for the equipment themselves and the other part is paid by reimbursement from the public sector directly to the private hospital. The reimbursement is a fixed amount independent on which technological class the product belongs to. Therefore, if end users get a prothesis the reimbursement will cover the cost of the cheapest variant and if they want a better product (either in terms of quality or technology) they have to pay the cost difference to more expensive variant themselves.

**CFO:***It has developed in the direction of privatisation of the market so the market we sell on buys another type of products (lower category). But that's what it is. The development per month is good enough if just they had bought the better product category in the private sector then it had been fine. It is not that they buy poorer products but where the public hospitals choose the best to make sure the address the problem there is a tendency that the private hospitals cover the immediate needs and not more than that.*

Source: Interview with CFO 28.9.2010 (brackets added).

---

<sup>1</sup>Source: Interview 17.06.2010, 28.09.2010 and 22.06.2011

## 8. Tracing the future. Market movements and the revenue calculation

---

In public hospitals the waiting lists are longer but the end users do not have to pay anything themselves. The public sector normally offers products from the 2nd best category but even if you get most expensive product the public sector covers the whole cost. The reason from this, according the Discorp Denmark's CFO, is that public hospitals' purchase price of the equipment is the same price as the private hospitals', but the price end users pay at private hospitals must to cover other costs too (orthopaedic test, adjustment of protheses etc.). The public sector buys the products from the best category to a lower price than the reimbursement private hospitals get and therefore they are able to offer high-tech products without an additional payment from the end user.

In 2002 the public sector created the opportunity to open private hospitals and get their costs reimbursed (source: note from the National Audit Office of Denmark). The reason was to reduce waiting lists on public hospitals. therefore the market became more and more occupied by private hospitals and in 2009 when the case study began Discorp Denmark sold for approx. 40m DKK to public hospitals. The division of sales in units was in 2009 approximately 45% to the public sector and 55% to private hospitals and orthopaedist clinics. In terms of revenue it was approximately 60% to the public sector and 40% to the private sector<sup>1</sup>.

**NJL:** *The big ones (customers) are public hospitals?*

**CFO:** *Yes. That's how it used to be 2,5 years ago. The market has moved towards privatisation in Denmark. Because of the long waiting lists [short break]. Then it has been like people opening their own private practice where they can offer our products to customers after ending their education as orthopaedist and about one year of employment elsewhere. There has been a lot of small clinics like that. But within the last year they have really started to gather in chains for full speed. Therefore our customers become bigger and bigger.*

Source: Interview with CFO 17.06.2010

---

<sup>1</sup>source: Interview 28.09.2010



## 8. Tracing the future. Market movements and the revenue calculation

---

Discorp Denmark had a growth opportunity emerging from market movement from public to private sales. They had built up a close collaboration with one of the chains which grew aggressively in 2009 and this collaboration had provided a source for growth in their supply to private clinics. But this raised two problems: Firstly, as the CFO stated, Discorp managed to sell the same amount of units as planned but because of the difference between the categories the private orthopaedists buy and the public hospitals buy the revenue became lower than budgeted. And because of the fixed contribution ration between products (which was the result of the transfer price calculation) this was reflected directly in the contribution margin, gross profit and net profit/loss for the year. However, as this indicates, the simplicity of the contribution ratio (a percentage of the sales price fixed within a very small interval) resulted in a very complex financial problem which materialised severely as negative net income and comprehensive reduction of owner's equity: retained earnings from the financial year 2008/9 to 2011/12 was negative in all financial periods reducing the equity with 66 % in the period despite significant capital boosts from Distech Holding<sup>1</sup>.

The years 2004<sup>2</sup> to 2009 had been characterised by privatisation. But another issue arose: the orthopaedic treatment of patients could become an opportunity for generating profit in the private clinics and therefore a part of the reimbursement could benefit to owners' wealth<sup>3</sup>. The market's profitability potential materialised in a concentration of the clinics into chains, which will be discussed later in the chapter.

---

<sup>1</sup>The capital boosts added up to three times the size of equity in 2008. Source: Discorp Denmark's annual reports for the years 2008/9, 2009/10, 2010/11.

<sup>2</sup>In 2004 the reimbursement value had been increased from 9.000 DKK to 14.000 per prothesis because the waiting lists on public hospitals had not been affected by the opening of private clinics.

<sup>3</sup>Even though, according to the note from the National Audit Office of Denmark, generating profit was not the intention of the privatisation.

### 8.2 The market conditions in motion: sales criteria

When the public sector buys products from suppliers like Discorp, they do so by sending out a tender which suppliers can respond to through a tender offer. In 2010 the public sector procurement department changed their decision criteria. The reason for doing so was according to the CFO to reduce their purchase prices to save money. But changing sales criteria means changing market conditions for Discorp.

Before 2010 the process of calculating prices in a tender offer had been a relatively straightforward activity. The suppliers had to calculate prices given certain categorisations defined in the tender (e.g. technological sophistication and certain sales levels) (source: Interview 28.09.2010).

**CFO:** *It has been a very loose tender. Everybody, generally speaking, who wanted to sell orthopaedic devices in Denmark, who got them approved, could become suppliers to the public sector. [...] The focus have more been directed toward that the products, which were delivered, could solve the problems, the patients faced. The price is of course an element but not one of the ones they have focused stiffly on. It looks like they want to tighten that a bit.*

Source: Interview with CFO 28.09.2010

However, they did not know how the weighing in the 2010 tender would be and anticipated some changes:

**CFO:** *In the public sector tenders, when they are going to assess which suppliers they choose, then every thing gets some points and they will be weighted. And if the price gets a significant larger [short break] and we feel that rather than reducing the price with 100 DKK or so*

## 8. Tracing the future. Market movements and the revenue calculation

---

*to satisfy we have to change it significantly then [short break] we must take the discussion with Germany about whether they agree to reduce the price so much. To get into the market or forget the market.*

Source: Interview 28.09.2010

The CFO argued that if the weights of different elements of the tender was not changed too much, they would calculate tender offer prices based on existing prices and the estimated financial effects of changes in other elements of the tender, such as requirements to guarantee and technological sophistication.

The tender for 2011 was announced in october 2010. It's content and decision criteria was significantly changed from the prior tender in 2009. In 2009 the tender stated the supplier selection to be based on the following weighting criteria: Price: 35%, Functionality 30%, quality 20%, refurbishment possibilities 10%, aesthetics 5%. Thus, selection of suppliers were a heuristic calculation where price mattered, but other dimensions of the supplier decision outweighed the price with 65% against 35%.

In the october 2010 tender stated the prices to be calculated for each product in 5 different price categories divided by service guarantee. The decision criteria were weighted as in 2009 but with other weights: price: 75%, Functionality 20%, Service guarantee length: 5%. Thus, the price became significantly more important as to which suppliers to select.

As the tender required the suppliers calculated their tender offer and submitted them in November 2010. However, the tender was closed early December 2010 with the following reason.

*"The tender supplier has closed the tender without entering into any framework contracts. This has been decided because the tender has not been satisfactory. The tender supplier will launch a new tender there*

## 8. Tracing the future. Market movements and the revenue calculation

---

*where the orderer will try to optimise the competition by changing the tender”.*

Source: Tender Supplemental information December 2010<sup>1</sup>.

The Danish CFO explained how the tender had been perceived especially problematic because of the change of the significance of the price in the supplier selection decision. According to his knowledge the reason for withdrawing the tender was because one of the suppliers had offered prices 20% below the other suppliers and thus won almost all the whole tender leaving only small demands to other suppliers.

In addition to that the October 2010 tender had been problematic in the sense of calculating prices for extended service guarantee. The tender specified suppliers to calculate service guarantee as an extra charge in percentage terms. Following up on that one of the suppliers asked if they were to calculate this percentage as a general extra charge independent of which product it was related to, which the orderer agreed upon. This decision became a problem for the calculation because when the percentage had to be a fixed number the cost in absolute terms varied a lot: "If a product costs 5.000 DKK and another product costs 10.000 DKK then 3% or 10% is not the same" (Source: Interview 29.11.2010).

The public sector procurement department issued a new tender tender in December 2011. In this tender they left the idea of using a weighting of decision criteria for supplier selection purposes. The tender specified the end users' needs by dividing the needs into 12 different categories. These categories specified the technological requirements for the products offered in each category and each supplier could only offer one product per category. Besides the technological requirements the tender obliged suppliers to provide four years of guarantee on the products and specified that repair under the guarantee agreement had to be carried out within 72 hours<sup>2</sup>.

---

<sup>1</sup>withdrawal-supplemental-information-TED-101209.pdf. Printout from the TED website as of 23.04.2012.

<sup>2</sup>Source: general agreement 2011.

## 8. Tracing the future. Market movements and the revenue calculation

---

The tender explained how a new supplier selection method was to be carried out. Within the 16 categories the tender provider would contract with 5 suppliers for each category. The supplier with the lowest price would be chosen to enter into framework contract no. 1, the 2nd cheapest supplier would be chosen to enter into framework contract 2 et cetera. The tender specified the public sector's product selection as follows: the hospitals must choose the products within the category with the cheapest price (framework contract no. 1) with some exceptions<sup>1</sup>.

Again, the CFO's anticipations about a stronger focus on prices, was even more evident in this tender. The decision was to be made on prices alone, within the 16 product categories. To sum up on the price significance of the tender, the Discorp's sales criteria in the public sector market changed from being about technology and features of the products in 2009 to become a 100% matter of prices within the different categories. The supply to the public sector was forecasted to be around 200.000.000 DKK in total, which indicates the size of the tender (Source: Tender January 2011<sup>2</sup>).

The tender was open well over one month. Ultimo January 2011 the new tender was withdrawn too. One of the suppliers had reported a complaint regarding the tender:

*"The orderer has received a complaint regarding the planning of the tender. It is the orderer's opinion that we have a good case in relation to the complaint. There is of course process risk associated with the complaint case just like it is very resource demanding both in terms of time and money. Additionally, it is not desirable to complete the tender as it meets resistance in large parts of the market [...] with this in mind the orderer has chosen to end the tender without entering into any framework contracts. The orderer plans to launch a new tender*

---

<sup>1</sup>The exceptions cannot be mentioned without violating the agreement of anonymity but they are restricted to very special conditions as for example if suppliers are not able to deliver on time.

<sup>2</sup>tender-A-2011.pdf.

## 8. Tracing the future. Market movements and the revenue calculation

---

*regarding the delivery”.*

Source: tender-additional-information-A-2011.pdf

The quote states that the complaint case could result in longer proceedings and thus the tender could drag on. The new 2011 tender was meant to start from 01.01.2011 and thus should have been active for one month when the tender was withdrawn the second time. According to Discorp Denmark’s CFO they sold their products to the prices in the 2010 tender in the period while the new tender was not yet completed (i.e. the prices from the tender which was published in September 2009).

But the uncertainty from tender process created uncertainty in the planning of the next financial year. As discussed earlier, around 60% of the annual revenue was from the public sector and hence this proportion of the revenue was set after the tender was closed and contracts were written. This created a managerial problem because the Danish top management team was wedged in between the market movements described above and the holding companies’ strong emphasis on holding the financial targets (described in section 7 of the thesis). When interviewing the CFO about the budget impact of the tender, he responded:

**CFO:** *We have, in terms of management accounting, happened to end up in the worst situation imaginable. We got a budget approved in Germany for the next financial year [short break]. Both us and Germany knows it is too high on the sales side. We know with predominant probability that the public tender in Denmark will result in other prices. And that is not prices which increase [short break]. So what will happen is probably a reduction in our revenues in the coming year. And therefore, they [the german accountants] say, we have to, because it is not only 5 DKK it is probably around 20% of the revenue.*

**NJL:** *Really? Will the prices change so much?*

**CFO:** *Not necessarily but with all the derived effects, that they will buy another type of products [short break].*

**NJL:** *OK, yes.*

## 8. Tracing the future. Market movements and the revenue calculation

---

**CFO:** *Or, if we do not decrease prices enough, then other suppliers will get the contract. 20% is perhaps the worst-case scenario, but it is not unrealistic. If we lose 20% on revenues then we have to save some money. On OPEX. And that was a clear statement from them [Germany], if you [short break] what's it called, lose revenue, they will cover some of it, which is the margin<sup>1</sup>, and then we must cover the rest of the loss. So now we are sitting here with a budget and because the public sector procurement department did not announce when they expect us to get the prices, and the only thing we know it that it takes at least four more weeks to get new prices [...] We know that suddenly we will get the budget screw. We cannot use more money. But we don't know yet if we are lucky and the public procurement department becomes absorbed in politics and that there will be no decision before after the summer holiday [...] Then last year's prices will count until then.*

Source: Interview with CFO 25.02.2011

The CFO explains how tender process made complicated the planning of the budget for the next budget year. HQ together with Discorp Denmark decided to approve a budget which they knew was conditioned on historical values both in terms of prices and quantities which, they supposed, did not prescribe the financial future of Discorp. Thus, they hoped the political interventions<sup>2</sup> would be postponed to the second half of 2011 because this would means their budget assumptions would be more precise in terms of prices and quantities, as the 2010 tender would frame the prices and demands.

No new information regarding the 2011 tender was announced before the end of june 2011. In june the public procurement department sent a new preliminary announcement to the market regarding their general agreement for 2011-2012.

---

<sup>1</sup>Here he refers to the contribution margin, that they cover the contribution margin opportunity loss.

<sup>2</sup>The changes in the supplier selection criteria in the tender was by the CFO explained to be caused by the political emphasis on the re-establishment of the Danish economy.

## **8. Tracing the future. Market movements and the revenue calculation**

---

The tender material had been sent to public consultation and they would await the response before writing a new tender. In July 2011 the public consultation had ended and a new tender would be developed. It was announced in September 2012 with deadline for submitting offers in October 2011. In February 2012 this tender was withdrawn too because many offers did not contain adequate information of the suppliers service organisation and thus did not meet the tender's minimum requirements. They withdrew the tender because the number of suppliers whose offers were accepted was considered too small to bring about a sufficient competition. Thus, a new tender was thus announced in the end of March 2012 and the deadline was primo May 2012 (the deadline was afterwards postponed to medio May, but due to the significance of the historical negotiations back and forth between the public sector procurement department and the suppliers, we will not show any more)<sup>1</sup>.

The tender turned out to move in the direction the Danish management team hoped. However, this did not solve the problems for the 2011 accounts because not only did the politics affect the public sector because they made some changes to the reimbursement rules for the private hospitals as well.

### **8.3 The private clinics market and the sales criteria. Time, quality and profitability**

Before 2010 the prices has not been considered a very important decision factor in public sector tenders. As evident in the preceding section in 2010 35% of the decision had depended on the price and there had not been a tough competition on prices. According to the CFO the important sales criterium had been technological advancement of the products and an intention of having a number of suppliers rather than depending on one. However, the prices had been important in another respect:

---

<sup>1</sup>Source: The Tenders Electronic Daily website. <http://ted.europa.eu>.



## 8. Tracing the future. Market movements and the revenue calculation

---

**CFO:** *There is a rule if we sell it cheaper to other customers than the public sector then the public sector must have the same price offered. That means we cannot sell at prices below the tender offer prices on the private market [...] or rather; we can do that, but it is interconnected. And the private clinics do not want to pay more than the public sector and they certainly will find out which prices the public sector buys at. It's just to call them and ask.*

Source: Interview 28.09.2010

The tender offer had specifically stated that if suppliers reduced their »standard prices« to a price below the tender offer price, the public sector must be offered the same price. This could sound relatively unproblematic if discounts are not affecting standard prices, but the CFO expressed a concern for *when* something was considered to affect standard prices or not. They were afraid of when the public sector procurement department would treat something as changes in the list prices and therefore Discorp developed bonus arrangements with customers. In these bonus arrangement customers were rewarded a bonus at the end of the year if they bought a certain amount of products<sup>1</sup>. Thus, discount campaigns to a single private clinic or a chain of clinics would not be possible, as they were afraid it would carve out the revenue.

Because of the interconnectedness of prices between private clinics and the public sector Discorp Denmark used other means to grow in sales. After a tender has been closed and contracts were written with suppliers the sales to the public sector is more or less fixed (the supply levels are part of the contracts) and therefore the growth opportunities exist mainly in the sales to private clinics. And the CFO expressed that their sales often arose because customers find one certain feature which is very interesting and then they focus on that. And, according to the CFO "this feature is often the price (laughs) or costs"<sup>2</sup>.

In 2010 the government worked with a plan for re-establishing the Danish economy. This covered Discorp's market in the sense that the politicians chose

---

<sup>1</sup>source: e-mail conversation with the former CFO 17.04.2012.

<sup>2</sup>Source: field notes 29.09.2010

## 8. Tracing the future. Market movements and the revenue calculation

---

to reduce the maximum value of reimbursements to private clinics. In 2010 the reimbursement had been 17.000 DKK for each prothesis but was reduced with to 14.500 DKK valid from 1.1.2011<sup>1</sup>.

The specific rules regarding *what* the reimbursement covered was not changed:

*»The reimbursement will cover orthopaedic test, prothesis, adjustment of prothesis, service and guarantee, including VAT [...] In cases where the the costs of the privately retrieved prothesis is lower than the reimbursement, the reimbursement can only be paid corresponding to the real expenses.«*

Source: "suggested-change-of-social-act-2010-b.pdf"<sup>2</sup>.

The rules articulate the notion of "real". The legislation is thus changed to save money on the Budget. The rules of reimbursement thus touches upon the representational faithfulness of costs. If real costs was actually calculable, the reimbursement rule would mean that there is no room for profit for the private clinics (profit = reimbursement - costs).

But the CFO argued the market to be about profitability which is also emphasised when looking at the financial statements of private clinics. In the Danish market for private orthopaedic clinics the market had consisted of many small clinics each individually owned by the founder, who by law had to be orthopedist. But the last two years the CFO explained how chains of clinics appeared in the market, where one company owned a number of branches. The largest private orthopaedic chain, OrthoSpecial, grew rapidly since their entrance on the Danish market in 2008 by opening new clinics and acquiring other clinics<sup>3</sup>. In 2010 OrthoSpecial acquired another chain, OrthoPro. The acquisition made Or-

---

<sup>1</sup>Source: "suggested-change-of-social-act-2010.pdf".

<sup>2</sup>"Real" is the English translation of the Danish word "faktisk". "Faktisk" can also mean "actual" but in this context it has been translated with "real" because this is the translation closest to the Danish meaning of the sentence.

<sup>3</sup>Source: OrthoSpecial's webpages. The name and financial numbers are disguised for reasons of confidentiality. However, the sign of the names and numbers are strived to not become affected

## 8. Tracing the future. Market movements and the revenue calculation

---

thoSpecial the largest chain of orthopaedic clinics in Denmark with 34 branches. ProthesisPro is the 2nd largest retail chain with 15 branches.

At first look the financial statement of OrthoSpecial do not give the impression of the company being profitable. Its annual result is -7.2m DKK. However, if impairment of goodwill (8m DKK) is deducted from the statement the result is +800.000 DKK. The fact that the acquisition of OrthoPro resulted in Goodwill (the company recognised 32.1m DKK of the price of the merger as goodwill) emphasise the fact that they have expectations of making profit in the market. Else wise, according to the recognition criteria for recognising intangible assets acquired in a business combination, goodwill would not have existed:

*An intangible asset should only be recognised if: [IAS 38.21]  
'(a) it is probable that the expected future economic benefits that are attributable to the asset will flow to the entity; and  
(b) the cost of the asset can be measured reliably.'*

Ernst & Young (2012, p. 1204)

The IFRS GAAP explains further that:

*"The cost of the intangible asset is its fair value at the acquisition date [...] the fair value reflects expectations about the probability that the future economic benefits embodied in the asset will flow to the entity. [IAS 38.33] [...] In other words, the existence of a fair value means that an inflow of economic benefits is considered to be probable."*

Ernst & Young (2012, p. 1204)

As a consequence of the definitions, when recognising goodwill the company and its auditors calculate expectations of future economic benefits, i.e. profit<sup>1</sup>.

---

<sup>1</sup>This applies if IFRS/IAS is followed. However, the Danish accounting rules reflect the same treatment of goodwill (ÅRL §§33, 43, 122).

## 8. Tracing the future. Market movements and the revenue calculation

---

The financial statement of the 2nd largest chain shows how it is possible to generate profit even though only »real« costs of the company's activities are covered by the reimbursement. The first explanation is related to the end users' self payment. When self-payment is required it is paid in addition to the reimbursement and thus the self-payment might become profit in the P/L statement. However, another explanation related to objectivity on ontological or epistemological levels is about what constitutes »real« costs. ProthesisPro gives the indication that »real« is a matter of following procedures (epistemologically real) rather than being an ontological matter. ProthesisPro acts as the parent company of ProthesisDenmark and reports according to the Danish Financial Statements Act's accounting class B. This means they do not have to prepare consolidated financial statements.

The interesting point regarding real costs lies in the P/L account »financial income«. In 2008 the financial income was 8.200 DKK. In 2009<sup>1</sup> it was 2.9m DKK and in 2010 it was 12m DKK.

While searching for an explanation<sup>2</sup> organisational rearrangements became apparent in the years 2009 and 2010: In 2008 ProthesisPro had five clinics as subsidiaries directly included in the annual report and ProthesisDenmark (whose name in 2008 was ProthesisCopenhagen) had 5 employees on average during the year with staff charges adding up to 1.6m DKK. In 2009 they changed the financial year. Therefore the next annual report covered 1.1.2009-30.6.2009. The staff charges added up to 478.000 during that period. In the following annual report, 1.7.2009-30.6.2010 staff charges increased to 12.5m DKK.

As evident in ProthesisPro's accounts goodwill the financial year 2009 (1.1-30.6.) was the period where the 2.9m DKK were recognised in »financial income«. In the annual report for 2009/2010 for ProthesisPro (1.7.2009-30.6.2010) only one subsidiary was mentioned. In the management's review section of the annual report they stated that the other three subsidiaries had been merged with

---

<sup>1</sup>The 2009 report covers the half year period 1.1.2009 and forth because the company changed its financial year.

<sup>2</sup>I tried to get an interview or an explanation from the CFO of ProthesisPro, but he would not collaborate. Therefore I searched in the annual reports to get an idea of where the money came from.

## 8. Tracing the future. Market movements and the revenue calculation

---

ProthesisCopenhagen in July 2009<sup>1</sup> which explains the increased staff charges. The name was eventually changed to ProthesisDenmark. Thus, the 2.9m DKK and the 12m DKK is probably the cost of the acquisitions and thus reflected the book value of the company plus goodwill. Thus, in ProthesisPro additional goodwill of 3.1m DKK was recognised. One of the acquired subsidiaries had a goodwill asset of 900.000 DKK which together with the new acquisitions ended with a goodwill account of 4.0m DKK.

Depending on how the calculation of "real" costs of orthopaedic test, prothesis, adjustment, service and guarantee is carried out these money might be allocated to the costs reimbursed by the state<sup>2</sup>. Here we see how actual costs is not a matter of ontology, because of the ontological status of goodwill. The value of goodwill is the derivative of two valuation methods which together constitutes a simulacrum of a future economic benefit of the acquisition. But in this case where ProthesisDenmark is the owner of both the acquired and acquiring companies and do not have to prepare consolidated accounts this cost is evidently simulacrum occurring as an effect of different assumptions in different valuation methods. But the acquisition actualises the simulacrum: if The 2.9m DKK and the 12m DKK added together gives the price of the acquisition, the transaction actualises the future benefit into cash (the acquiring company *pays* the transaction price to the acquired company's owner). Thus the asset values (by definition) expresses future benefit from the asset ownership, but the acquisition actualises the future benefits as actual money in a transaction.

The indications of striving to construct profit by recognising goodwill is not directly evident in any interviews, as the chains would not participate in the research project. But when big, international chains as OrthoSpecial take over small private clinics why should we expect them to do so without considering profit potential? The CFO in Discorp explained:

**CFO:** *The largest Danish chain has been acquired by a French chain.*

---

<sup>1</sup>Source: Annual reports for ProthesisPro in the period 2008-2011.

<sup>2</sup>This is not evident in their annual report and thus it cannot be proved with certainty, as the company did not want to participate in an interview.

## 8. Tracing the future. Market movements and the revenue calculation

---

*And [short break] they are very, very tough regarding what they want to pay in procurement. That's fair enough. But it is extremely hard to compete on that account, so something happens there. And I don't know if it pays off but the big suppliers [retail chains] will secure their market by avoiding to buy from this chain.*

**NJL:** *They know what Discorp products costs in Italy too, I suppose.*

**CFO:** *Of course they do.*

*[..]*

**NJL:** *Are they allowed to buy the products in Germany and send them to Denmark?*

**CFO:** *Yes, they are allowed to do that.*

Source: Interview 25.02.2011

In a previous interview he had explained how the international chains were really hard to do business with:

**CFO:** *The real chains, they are hard as nails, they are more international. They buy directly from Distech. And then they dump the prices or put a big pressure on them. They have a very close focus on prices.*

Source: Interview 28.09.2010

This stresses the point that the private market moved towards a profit focus. Why would the big chains press prices down if not to make profit? Why would we believe it be to do the end user and public sector a(n economic) favour? Together with the recognition of goodwill as its implications for what really costs are, the description of price sensitivity indicates that the market competitors perceive the market as a way to generate profit, even though it was not the intention by privatising the market in 2000, according to the note from the National Audit Office of Denmark.

## 8. Tracing the future. Market movements and the revenue calculation

---

*If the price on the prostheses surgery exceeds the reimbursement price the citizen will pay the difference himself. According to the Ministry of the Interior and Health the reimbursement on 14.000 DKK<sup>1</sup> to a greater extent reflect the actual costs of the operation which would mean that the citizen will have no or only a small self-payment and therefore make the private offer more attractive.*

Quote from the note from the National Audit Office of Denmark.

National Audit Office indicates that the rules of reimbursement was meant as a means to reduce waiting lists on treatment of hearing difficulties on public hospitals. The intentions of the rules had according to him, and which is also reflected in the phrasing in the reimbursement rules, never been to construct a market where companies could profit on hearing aid treatments. However, as evident in the annual reports analysed above companies have a bottom line and this bottom line will always be positive or negative. And when the bottom line is positive it means that reimbursement + self-payment<sup>2</sup> exceeds the actual costs and the company generates profit. Thus, costs calculations have relations to the past and the future and therefore it is impossible to discover an »actual« cost. The »actual cost« is a simulacrum.

### 8.4 Chapter conclusion

This chapter shows how the relationship between the financial performance calculations and their referent (market specific conditions and sales activities) becomes a managerial problem. The market is inscribed in the first line of the budget, the revenue line. Revenue is in the income statement of Discorp Denmark is a generalised calculation which consists of quantities and average sales prices. These two dimensions of revenue, accounts for every movement that happens in the market.

---

<sup>1</sup>The reimbursement value set in 2002.

<sup>2</sup>The web pages of OrthoPro and OrthoSpecial state the self-payment to be between 0 for the cheapest prostheses to around 22.000 for the most expensive prostheses (for each). Whether 22.000 is a "small self-payment" is a matter of definition but as it exceeds the reimbursement price it could look problematic in relation to the National Audit Office's statement in the quote.

## 8. Tracing the future. Market movements and the revenue calculation

---

In the description of the market of privatisation and tender repetitions we see how repetitions of the two in the market repeats difference (in the sense difference is theorised in chapter 3), but that the calculation in the budget pretends there is not difference. In this way accounting becomes the language that summarises diverging heterogenous elements which continually moves, and the accounting calculations overlook many of these movements. Thus, when the budget is there, it is always something else than the activities it envisages.

The unexpected in this chapter is the logic. There will always be tenders, there will always be acquisitions and concentrations, there will always happen a lot of movements that have happened before. But it has no learning effect and the budget thus becomes a stable set of unstable assumptions about the market development. The privatisation brought along an element of profit potential. And cost savings in the public sector procurement brought along price emphasis in the tenders. Thus, the assemblage constituting the heterogeneity of the market formed an machinic assemblage where cutting prices became an important concern. And because of the internal composition of the financial structure in Discorp, the Danish sales managers could not react to this market movement. As a profitability centre Discorp Denmark's target was to deliver profit to the holding company. But if prices were to be reduced (from the tender) and they would be pressed to sell cheaper products (the private clinics) this meant their contribution margin would decrease, as the contribution ratio was fixed only once a year. And even though the CFO expressed a mistrust to the contribution margin they were still required to save their cost increase in OPEX expenses. The revenue generated in the Danish market did not meet the targets and while contribution ratio and operating expenses were fixed, the annual result became negative in the financial year 2009/10 and 2010/11 not because of they did not sell, but because the contribution margin calculation was territorialised around minimising tax payment.

The relationship between markets and the financial calculations (budgets and profit/loss statement) showed how managers was tangled up between the market difference and the financial structure. In this way the reality the managers live inside is a simulacrum in the sense that the managers act as profit maximisers



## 8. Tracing the future. Market movements and the revenue calculation

---

in a space where the profitability calculation is framed by conflicting concerns for revenue and tax minimisation, which together makes the profit calculation untrustworthy. The financial calculations are therefore signifies differently between HQ and Discorp Denmark; they assign a different meaning to the financial signs. According to the Danish managers HQ treated the accounting signs as representations of the financial situation, but in Discorp Denmark they were seen as effects of the market movements. As a consequence the Danish managers were pushed by HQ to carry out some activities which, from the Danish managers' perception of the market would not create any additional sales. The consequence was, as the CFO stated, that the only thing they could do was to sit down and hope the tender offer would drag on.

This shows how opportunity lies both within and outside the budget calculation. As the story shows opportunity takes place within the calculation in the sense that Discorp Denmark is not allowed to exceed OPEX and are not allowed to sell cheaper products than planned without a equivalent reduction in sales prices or increase in revenue (revenue as average sales price x quantity sold). But they actually manage to do things too, to convince the German HQ that their interventions do not always make sense on the Danish market. Their reason is that the budget do not account for the tender process. This is unexpected because the events, which are critical, are actually not anticipated in the budget model, because the budget is always less than the market, and always after the market (the market moves before we see the effects in the budget). The budgets therefore pretend there is no difference and thus is not capable of inscribing the divergence and heterogeneity of the market becomings.



## Part IV

# Discussion and Conclusion



# Chapter 9

## Discussion

This chapter will discuss the thesis' contribution by relating the empirical findings with the literature reviewed in chapter 2. The stories in the empirical chapters are connected by the fact that they unfolded in the same organisation, and all of them touched upon the representational characteristics of accounting information and how it affects managers' accountability. Thus, the stories show different movements within the assemblage that constitutes accountability. Their purpose is to describe how these movements relate to the representativity of accounting information and the principles of accountability.

In the thesis, until now, accounting has been articulated through different notions: information, calculations, representations, re-presentations, inscriptions and signs. Some of the terms are used interchangeably while other signifies different conceptualisations about what accounting is: information and calculations are as mentioned in the thesis' part I used interchangeably; accounting information is calculations, sometimes comprising of more than one calculation (income statement), other times comprising of only one calculation (revenue), sometimes disaggregated (customer sales performance) other times aggregated (operating expenditure). Representations denote the accounting calculations' quality to represent, i.e. the notion of representations assume accounting information to be representative. Accounting conceptualised as representations are widely spread in the financial accounting research as well as in conventional management control research. Re-presentations and inscriptions come from the constructivist accounting research (Chua, 1995). In the thesis they have the same meaning; in-

scriptions re-present something (where »re-present« is opposed to »represent«). Re-presentations and inscriptions problematise the direct relationship between object and representation, or principal and surrogate by claiming the inscription (the re-presentation) to be different from the object it inscribes through translation (Robson, 1991). Chua (1995) explains it as follows: "Patients, doctors, nurses, cooks, cleaners and their diverse activities (operating, writing care plans, freezing meals, mopping floors) were now re-presented as a set of inscriptions that collectively made up the Model's HOSPITAL" (p. 129). Thus, the concept of re-presentations emphasise the constituent quality of inscriptions; they collectively form the reality as it is understood by the actors in the network, and therefore it concentrates on studying the fundamentally different effects accounting inscriptions produce than the ones expected in the conventional management control literature. Accounting signs, or simulacra, is the conceptualisation of accounting calculations used in the theoretical approach in this thesis. It accentuates that meaning is not built into accounting information per se; the sign has to be signified in order for it to make sense (the signification generates a meaning of the sign), and management dilemmas arise when significations differ.

### 9.1 Setting the scene for theorisation

The thesis have been written around two main research activities carried out in the period from 2009-2012. The first activity have been the literature study and the second a case study conducted over 1,5 years in the company Discorp Denmark. The two parts, the literature study and the case study, have connected to each other through the research question. The movements in the case study have resulted in movements in the research question and literature study as well, in order to make a consistent theoretical contribution to the management accounting domain. The result of the movements back and forth between case study, literature study and research question have been to make an analysis of the representativity of accounting, especially with attention to the principle of representational faithfulness. This has been done to understand which problems, accounting could be occasioning, from the perspective of analysing information as simulacra, by raising the research question "How is the representativity of

accounting information unfolding in practice when accounting information is understood as simulacra? How are managerial dilemmas and tensions brought about by the representativity (and repetition) of accounting information and what is the consequence for decision making and control?”

Throughout the review of accounting qualities and research connected to the development of the qualitative frameworks in FASB and IASB/C together with a review of how management accounting information is understood in the management control literature, the thesis has identified a tendency in accounting theory to articulate a ideal of accounting as representation, meaning that the conventional accounting theory treats accounting information, or calculations, as representations of something. Even though the early quality of objectivity of accounting was discarded already in the beginning of the 1970’s accounting standard setters still denote a quality faithful representation today. In the management control literature the majority is about performance measures that ought to represent employees’ effort or performance. However, a counter stream of research against the mainstream tendencies lie in actor-network theory inspired accounting research which conceptualise accounting calculations not as representations, but as inscriptions (which was described in the beginning of this chapter). Thus, this literature moves away from accounting as representations toward accounting as re-presentations, where the the link between object and inscription is not about representing faithfully, but rather to have an audit-able trace from inscription to matter.

### 9.2 Dilemmas and tensions for decision making: the representativity of accounting

The literature study shows how the representativity<sup>1</sup> of accounting information is dealt with as an ambiguous phenomenon and no agreement seem to exist in the literature about what accounting represents or whether it represents anything at all. However, conventional accounting literature articulates accounting as representation (not in the sense of an object-representation relationship, but as

---

<sup>1</sup>Refer to the research question in chapter 1 for the thesis’ definition of representativity.

an epistemological representation where the representation is meant to represent the calculative method or accounting standard followed to conduct the calculation). The literature on financial accounting qualities emphasise a discussion of accounting information's »representational faithfulness« (Financial Accounting Standards Board, 1980a). Ijiri explicitly discusses accounting as representation through the notions of principal and surrogate (Ijiri, 1975) and other contributions relate the faithful representation to be about being honest to the "label"<sup>1</sup> of the accounting calculation, where the label is understood as the calculative method or accounting standard, which is followed in the calculation (Kirk, 1991, Solomons, 1991a and Kripke, 1989). In the management control literature the representational quality of performance measures is about representing employee effort, or performance, but the representativity of performance measures to this end is not treated very systematic in this literature. Because of the transition of the representational quality of accounting information between financial accounting literature and management control literature the thesis goes from representational faithfulness to representativity, which in the thesis is the notion for the ability of information to represent something.

As described above actor-network inspired accounting research offers an alternative understanding where calculations are understood as inscriptions that do not represent, but re-present the reality (which means that the inscription gets a reality-constitutive role; it co-creates the way we understand the reality). The rest of the section will discuss the empirical stories of the thesis against the conventional management accounting literature *representing through accounting*, and following that, it will discuss it against the actor-network theory inspired accounting literature *re-presenting through accounting*.

### Representing through accounting

Accounting information is in literature dealt with as a means for representing, and from this view the notion of representational faithfulness emerged in the literature. The actor-network inspired accounting research has challenged this view by introducing the notion of inscriptions, which is not seen as representation,

---

<sup>1</sup>Refer to chapter 2 for an elaboration of representing the "label" of accounting information.



but re-presentation. The two strands of literature are discussed below, by relating them to the empirical chapters of the thesis.

### **Representing - registering accounting data**

As we see in chapter 6 and which is also evident in Gibbins and Willett (1997) accounting reports are effectuated by the structure in the accounting system which problematise its "representational quality" because already in the registration a tracing (Deleuze and Guattari, 2004) happens where a transaction is translated to a book value record. While new transactions are not able to be recorded in the existing structure of the general ledger table, the recording entity must react on this by opening a new account or recording the transaction on an inappropriate account. However, this is not the only tracing happening in the accounting registration. As FAS 1 argues some aspects of accounting information is translation<sup>1</sup> but it can be generalised as to every single transaction recorded is a tracing from a social phenomenon (e.g. multiple sales activities) into a number registered in the accounting system. Thus, cash value of e.g. 100 is a tracing of a social phenomenon into a value (and its value again is to be translated from 100 into a social phenomenon when the value is to be utilised). Quattrone (2004)<sup>2</sup> touches upon this in his description of the cashbox in the Society of Jesus in the 16th century. The cashbox padlock needed two keys to be opened. One which was kept by the procurator and one which was kept by the rector. Thus, when cash had to be spent the two had to meet and align their interests, which differed because the procurator was in responsible for economic affairs while the rector was responsible for the college's missionary, pedagogical and economic activities. Thus, cash value of 100 is argued here to be a translation of a very complex social phenomena of alignment of interests into a monetary value. The thesis' description of registration and reporting's relationship with the general ledger account table extends Quattrone's point of alignment of interests to show how the general ledger is a means through which different activities are performed. The chapter

---

<sup>1</sup>In FAS 1 valuing foreign currency is treated as translation.

<sup>2</sup>Quattrone (2004) is not reviewed because it is not dealing with representativity of accounting, but the emergence of accounting by giving an alternative explanation of the emergence than »mainstream interpretations« of the purpose and performance of accounting do (economic decision making, measuring and allocating resources.).

(chapter 6) shows that a strong relationship between general ledger structure and reporting possibilities exist. Thus, while existing research already acknowledges the notion of an economic reality to be problematic and lead to a discussion about what that actually could be and therefore argues that representativity is about following certain calculative methods, or accounting principles, chapter 6 shows that even if we follow these methods, reports are mediated by past repetitions of the accounting practice itself and the difference it induces on the structure of the general ledger account table. The point is that the general ledger table is the smallest level of disaggregation possible to report through the accounting information system the structure of the general ledger table render only some reports possible to be constructed while others can not be constructed. Thus, accounting information represents not only the procedures and methods for calculating (as existing research), but also repetition of past registration and reporting activities, which change the general ledger account table when the table, as it is, does not satisfy the registration needs they are confronted with then the actuality<sup>1</sup> moves.

### Representing good and bad accounting information

When it comes to managers' decisions in the discussion of the success of faithful representation, Donegan and Sunder (1989) and Bushman and Indjejikian (1993) agree on the presumption that we know, or are able to know »the truth« (and therefore we can also theorise about how »non-faithful representations« or »distorted« representations perform). One could imagine that through calculation we come to some kind of truth, but from the perspective of this thesis it is unreasonable to presume that one can judge whether accounting information is »true« or not. In the thesis' conceptualisation, accounting information is not treated as representations, but as signs. This implies that accounting information needs to be decoded in order to assign it a meaning. Even though Donegan and Sunder (1989) and Bushman and Indjejikian (1993) argue representational faithfulness not to be a good ideal, they do so by articulating a view where it actually is possible to design a faithful representation. This is the point where

---

<sup>1</sup> Actuality is the thesis' notion for "reality", but because the very existence of reality is being problematised in the deleuzian theory, actuality is used instead, as it inscribes possibilities for many different actualities to be present at the same time.

this thesis suggests it is actually not possible to distinguish »good« accounting information from »bad« accounting information, in terms of its performance relative to an intended purpose. The reason is that performance of accounting information is an effect of an assemblage of signs which constitutes its meaning (Deleuze and Guattari, 2004).

The problem of making faithful representations also relate to the use of accounting information to justify managers' actions as good or bad performance. The thesis suggest that accounting information is always less than the world it tries to inscribe and therefore the use of accounting information to justify decisions that take into account the rhizomatic movements of the market in which the managers operate, will sometimes lead to a result which the managers do not find reasonable, because the frame of justification (the accounting information) do not know the particular circumstances, the managers makes their decision within. Thus, the effects in the accounting simulacrum might look »bad«, but the manager finds it the most efficient decision given the particular circumstances of the decision situation.

### **Representing performance**

The thesis' chapter 7, about how responsibility centre ideals become different through the repetition of the accounting structure within the firm, touches upon the notion of representational faithfulness in the sense of representing managers' performance in management accounting information (Lazear and Gibbs, 2008, Merchant, 2006, Merchant and Shields, 1993 and Kerr, 1975) in order to motivate them to act in the firm's interest. The theoretical extent of this part of the accounting theory is broad and it strives to prove that by representing (or sometimes mis-representing, e.g. Merchant and Shields, 1993) employees' effort the cost of opportunistic behaviour exceeds the costs of the performance measurement system. In this literature we see, too, the representational ideal; that it should be possible to represent employees' effort, and performance, (faithfully). This is the case not only in the modelling of alignment of interests where employees' performance is to be aligned with the firm's interests, but also in the controllability criterion, which is extensively used in the theory (Demski and Feltham,

1978, Holmstrom, 1979, Banker and Datar, 1989 and Merchant, 2006). As we see in chapter 7, representational faithfulness is very hard to prove in an empirical setting, because the representation is always less than the actuality it strives to inscribe (the performance measures is "blocked"). Because of repetitions of an accounting structure which inscribes the movements of the world on conditions of stability, the performativity of the performance measures will move. This means that for example controllability is a very difficult notion, which is seen in for example the description of how the reports to the group's HQ in Germany makes HQ understand the sign of the accounting information in another way than do the Danish manager, and HQ therefore presses her to carry out certain actions. The chapter shows how the assemblage of accountability which is built on premises of representational faithfulness (according to their controller manual) moves because the world inscribed in the management accounting information in the income statement is much more complicated than the calculation allows for. E.g. the operating expenditure (OPEX), which could be considered a resource for revenue generation in the profit centre (in accordance with Demski and Feltham (1978)'s notion of capital in their model) becomes so strong that it does actually change from being a resource to becoming a constraint.

### Representing sales activities

The problematisation of the representativity of management accounting information is perhaps most evident in the empirical chapter 8 where the revenue line of the budget is analysed with regard to its representativity for market sales. In that chapter we see how the revenue line constitutes a generalisation of what is happening on the markets. Sales activities are planned in the budget process and the plans are translated into sales revenue and market activities. However, because of the strong concern for keeping the costs within the limits set in the budget (not exceeding the planned operating expenditure) it becomes difficult to rearrange sales activities if new opportunities arise.

The importance with relation to representation is that accounting information as explained in chapter 8 counts past transactions but at the same time pretends as if there is no other difference and therefore, the budget is not capable of

inscribing the divergence and heterogeneity of the market becomings.

### **Re-presenting through accounting**

The constructivist accounting research that builds on actor-network theory introduces a fundamentally different conceptualisation of what accounting information is (e.g. Robson, 1991 and Chua, 1995). In this stream of management accounting literature the authors take a step away from accounting as representations by introducing the notion of inscriptions. They distinguish inscriptions from representations through the notion of translation (Robson, 1991) which means that the inscription is not the same as the object(s) it inscribes. Thus, there is still a representational link between object and referent, but this link is more for auditing purposes than for representational purposes; the inscription is a translation of something, but not a representation of it, and therefore the consequence of mobilising the inscription leads to many ends (e.g. Chua, 1995 and Mouritsen et al., 2009).

Repetition, in actor-network theory of accounting, equates similarity because something in the network has to be changed in order for the network (or black box) to perform differently. But this is where this thesis argues repetition to lead to difference: because repetition is repetition of a blocked concept, it will always induce different; repetition repeats difference. So when closure of a network in actor-network theory inspired accounting research is stable until the network breaks down or a new actor engages with the network, which means that repetition is repetition of the same until the network is changed, this thesis argues that change happen not only by relational changes (Andon et al., 2007)<sup>1</sup> but also because repetitions also repeats difference. And the point regarding representations/inscriptions/simulacra is that it will be productive in this literature to conceptualise accounting inscriptions even more radically distinct from representation. This is what has been done in the chapters 7 and 8 to show how the understanding of accounting information as simulacra (Deleuze, 2004) allows us to theorise about its performance differently than what the actor-network theory

---

<sup>1</sup>Andon et al. (2007) is not reviewed in chapter 2 because their claim relates to the management accounting change literature and not the representativity literature.

approach proposes.

Thus, while ANT conceptualises accounting information as inscriptions that expresses translation from object to referent this thesis suggests to comprehend accounting information as simulacra (signs) which require signification for it to gain a meaning. This leads to the point regarding representational faithfulness that accounting from this thesis' point of view is not representing, it is simulating<sup>1</sup>.

### 9.3 Dilemmas and tensions for control: accounting simulacra

The claim that the understanding of accounting information as simulacra opens new possibilities for understanding the performance of (management) accounting, has strong implications for management control. Both in terms of performance measurement, the construction of an accountability relationship between accountant and accountee (Ijiri, 1975), and also the use of performance measurement systems for evaluating employee performance.

While acknowledging accounting information as signs (Deleuze, 2004) we disregard its representational qualities and state the judgment of firm performance as an effect of an assemblage of signs which together form the understanding of what the firm's performance is. This implies that performance (firm's or managers') would be different, if information was constructed differently, or different when repetition repeats difference (Deleuze, 2004). Therefore, the use of accounting information as a reference of which managers' decisions and actions are justified as good or bad performance (as mentioned briefly above) is problematic for two reasons. Firstly the justification depends on a normality of which good and bad can be judged (the normality is inscribed in target setting both in terms of absolute and relative targets) and secondly because the justification is made on

---

<sup>1</sup>Oxford English Dictionary defines the verb to simulate as follows "to imitate the conditions or behaviour of (a situation or process) by means of a model" (Oxford English Dictionary, 2012c). This definition resonates the notion of accounting as simulating, because accounting is calculation (imitation) by the means of a model (e.g. accounting standards or management accounting models such as costing models).

the basis of accounting calculations, which are not representations of underlying performances.

### **Accounting simulacra and idiosyncratic knowledge**

As we see in the management control literature the majority is about design concerns; how to design a »good« measure/calculation (e.g. Ijiri, 1975, Jensen and Meckling, 1976, Demski and Feltham, 1978, Holmstrom, 1979, Gjesdal, 1982, Banker and Datar, 1989, Feltham and Xie, 1994 and Merchant, 2006). The point is to represent employees' effort (e.g. Ijiri, 1975 and Lazear and Gibbs, 2008) and align incentives of the employees with the firm's interests, and by doing so direct their behaviour in desired ways.

The thesis argues in the empirical chapters 7 and 8 that design concerns inscribe a generalised simplification of the complex actuality in which (in the case of Discorp Denmark) managers act. And this simplification has at least three significant implications: representing, justification and thinking. Because models are in themselves generalised simplifications of the actuality they are not always right. They act as a assemblage of signifiants which together constitutes the basis of which a meaning of the actuality is synthesised. Thus, information is not representations, it is signs. And treating them as representations will lead to a peculiar decision space which is not framed of market movements and idiosyncratic knowledge of the local conditions (Kirk and Mouritsen, 1996) but of the inscriptions and performing relative to the inscription. This might be a good solution if it is possible to perfectly align the value creation from the actions emerging from behaving in accordance with the performance measure but the problem is whether it is possible to align the assemblage of signs with the firm's interest. The stories in the two chapters show that Discorp Denmark is not able to do so because the rhizomatic movements of the world are always faster than the information which constitutes the frame of justification. Thus, the claim is that it would be productive to acknowledge that the inscription counts always less than the world it purports to inscribe (in line with Kirk and Mouritsen (1996), and elaborating Messner (2009)'s claim that "the reasons why somebody has taken a particular course of action are not entirely clear to this person herself"). This

means, when the accounting information constitutes the frame of justification is used to justify managers' actions that time and space becomes important. The frame does not inscribe the particular movements managers act within. Thus, managers act inside time and space while the frame is outside. For managers it means that they come to know more than the accounting calculation. For Discorp this means that HQ in Germany knows something about performance levels of subsidiaries because they can compare their monthly reports.

The Danish managers explain that Germany is thinking in terms of financial performance only. The paradox is that the frame of justification itself (the financial information reported to HQ) suppress the financial performance of the subsidiary relative to the rhizomatic movements of the market because, through repetition of the measurement, the coercive control from HQ become tighter and tighter, because HQ believes that subsidiary performance could be better than it actually is, and therefore intervenes more and more. In the end it means that Discorp Denmark do not even believe in their own profit calculation and therefore cannot make profitability decisions.

For managers' thinking the claim is closely related to the justification of actions. The problem is one of the signification (meaning) of the assemblage of signs (the regime of signs). Because the regime of signs is different between accountors and accountees (here the accountors are local managers in Denmark and the accountee is the HQ (Ijiri, 1975)) they understand the meanings of the signs differently. As Deleuze and Guattari states it, "We call any specific formalization of expression a regime of signs" (Deleuze and Guattari, 2004, p. 111). Thus, the formalisation of expressions in the accounting reports reported to HQ forms a regime of signs whereas the assemblage in which the managers act form another regime of signs. Thus, the meaning assigned to how managers perform and what their performance is potentially differs between the regimes of signs. This is paradoxically because the managers (as the CFO in Discorp Denmark explained early in the case study) are employed to make profit and utilise their local knowledge to generate that profit, but when the financial signs are understood of HQ as the managers performing bad, they intervene reduce their space of possible actions by pressing them to carry out certain things. Action is therefore constituted on basis of the accounting simulacra rather than on the basis of managers' idiosyncratic



knowledge, which compromises the very reason for the managers' employment. Sometimes the actions HQ presses managers to carry out seem senseless from the point of view of the regime of signs of the local managers but reasonable from the regime of signs of HQ. And managers' regime of signs are assembled »closer« to the market in which they operate which could indicate that they know more than HQ, in terms of market specific tendencies. This is interesting in the study of the thesis because there is a conflict between HQ and local managers. Accounting is a very strong focal point but in the case study, managers need to know other things as well, besides accounting. There is knowledge in the accounting sign but it does not manage to become perfectly territorialising, i.e. it does not exist as an obligatory passage point which cannot be avoided. Action can go round the accounting information. The other things managers know comes from their interaction with the market. This knowledge seem more unformalised than accounting information and perhaps also more fragmented. It is not even managing to territorialise into an assemblage, but even though, it is important as to which decisions managers take. Together with the accounting signs this means that accountability is constituted partly through accounting simulacra, but more through idiosyncratic knowledge.

To sum up the study articulates opportunity and decision space as something which is framed within the calculations, but possibilities also exist outside calculations. The contradictory point to actor-network accounting theory (Chua, 1995 and Mouritsen et al., 2009) is that the study shows how managers' knowledge becomes important in the respect that accounting is not always an obligatory passage point. Decoding accounting signs become important as to explain why managers' decisions sometimes are territorialised around accounting calculations but at other times respond to rhizomatic movements, which are not inscribed in the accounting calculations. Thus, accounting territorialises, but are continually deterritorialised by the idiosyncratic knowledge of the managers.

### **Accountability as a machinic assemblage**

In terms of the management control theory reviewed in chapter 2, accountability happens internally between owners and managers through various technologies

including accounting representations that render managers accountable. The stories in the empirical chapters show how accountability can be understood as an abstract machinic assemblage which is constituted by continuous territorialising and deterritorialising movements. Thus, the accountability assemblage is weak because the repetitions of accounting practices challenge it and makes it become different. Accountability is thus conceptualised an assemblage of heterogenous movements and when the technologies repeat themselves, the heterogeneity unfolds and the repetition bring difference which transforms accountability to become different (the interplay of being accountable to accounting calculations and market movements). Accountability therefore dissipates beyond accounting calculations to customers relationships, political interventions, global mergers and conflicts of decoding accounting between different regimes of signs.

To sum up, the point of the thesis regarding accounting information is that we can always see something (the accounting calculation) but is it something else we should comprehend? This point is twofold: first of all it means that the meaning of accounting inscriptions are ascribed to regimes of signs that forms the meaning and thus different meaning constructions might emerge between regimes of signs and open a space for controversies to arise. The other dimension of the point is that in the use of accounting information one might understand their direct performativity (e.g. the meanings constructed within a regime of signs) but indirect performances are also evident such as the implications of accounting inscriptions on the accountability assemblage claimed in this thesis. This point leans toward Deleuze's claim on actualities and virtualities: the actualisation of something draws with it differences in virtualities that cause the actuality to move. And this movement cannot be intended because one cannot grasp the difference in the virtual. Therefore, accounting information performs on two levels: the actual level which provide information one can act upon (even though we don't know how to comprehend the meaning of the inscription because there is not "underlying" essence of the information, meaning is given to it) but it also occasion movement because of its very repetition. The managers in the study is held accountable for meeting the financial performance inscribed in the budget but this is pointless because the budget do not represent. And on top of

that the budget becomes counter-productive because the managers have another description of the market than the accounting calculations in the budget.



# Chapter 10

## Conclusion

In the literature study of the thesis it is shown that the discussion of representativity and representational faithfulness is heterogenous, and no one seem to be able to explain what faithful representation actually means, other than that the information should represent what it purports to represent. The literature is heterogenous, but all seek toward closure; closure in the sense that the »representation« (or inscription) can be closed, or completed. But based on the claim of heterogeneity (DeLanda, 2006), it could be that closure gets the performativity that it creates the calculation, but the repetition of the calculation makes closure become a hope in practice. Repetition accentuates the significance of the fact that uncertainty will still remain, even though the calculation is closed. Repetition therefore has implications for accounting and accountability, and therefore the thesis raised the following research question, based on juxtaposing existing literature with Deleuze's theory of repetition and difference:

*How is the representativity of accounting information unfolding in practice when accounting information is understood as simulacra? How are managerial dilemmas and tensions brought about by the representativity (and repetition) of accounting information and what is the consequence for decision making and control?*

The point is that if we allow for heterogeneity and movement to come into play the repetition of "a to a to a" becomes problematic because the constituent parts constituting "a" moves, and therefore, the repetition of "a" is understood

as "a to a to a to a' to a' to a" to a" to b". Slowly, though repetitions, "a" becomes different because of movements in its constituent parts. This is how the analysis approaches management accounting information, in order to permit heterogeneity and movements to unfold and tell something about their significance for accounting information's performativity and consequences for managing.

The thesis studies representativity of accounting and its consequences for managers' accountability in a longitudinal case study in a Danish subsidiary of a multinational holding company. The case study was conducted in the period from November 2009 - june 2011. The study was conducted by a field study and interviews with managers, especially the CFO (21 interviews and 17 days of field study during the period).

The thesis answers the research question by asking three questions that emerged from the interconnection between the field study and research question. Each question is asked within the scope of the research question. The three questions are the ones that guided the writing in the three empirical chapters of the thesis and the questions are answered in the partial conclusion of the chapter that it concerns. The three questions are the following:

Question chapter 6:

How are the repetitions of the registration and reporting practices influencing the management reports and what is its consequences for evaluating performance?

Question chapter 7:

How is the repetition of the internal management accounting structure moving accountability to become different from its design expectations?

Question chapter 8:

How is the relationship between market movements and revenue in the budget affecting the appraisal of managers' performance and their decision making?

The questions add to the overall research question by focusing the chapter it concerns on a specific matter in the case study, which is related to the research question. Together, the answers to the three questions forms the thesis' answer to the overall research question.

As regards the question raised in chapter 6, about the influence of repetitions of the registration and reporting practices, it is shown how the repetitions of the registration practice creates problems because the repetitions transform into rhizomatic movements. The practices was initially constructed to provide overview of the financial state of the company, by enabling the accounting information system to provide financial statements on individual account level as well as aggregated level (income statement and balance sheet). Through the repetition of this practice new registration needs emerged, which made the company open new accounts continually. Thus, the new registration needs changed the structure in the chart of accounts and paradoxically the repetition deterritorialised the overview. The repetition of the practice of reporting monthly performance to the German HQ challenged the design of a new chart of accounts. The design was initially a concern about constructing an account structure that enabled the new performance measurement practice Discorp Denmark's CEO and CFO decided to develop in 2009. The new general ledger table turned out to be constructed in order to ease the monthly reporting to HQ and this implied that the new general ledger table in the Danish accounting information system was structured closely to the accounts structure in IBM Cognos (which was used for reporting). Therefore, in the process of constructing the new account table, a conflict between developing management reports (performance measures) that rendered the Danish sales managers accountable in the way the CEO and CFO wanted it in Discorp Denmark and the monthly reporting to the German HQ emerged. It turned out that the monthly reporting to the German HQ was stronger and the account structure in IBM Cognos (the IT system used to report monthly performance to Germany) framed the structure in the new general ledger. Thus, the Danish management reports had to be developed within the accounts structure that reflected IBM Cognos' structure, which in the first place had not been considered adequate for the the Danish management reports. The point is that the monthly reporting managed to deterritorialise the initial concern of the account table design leaving the Danish management reports to be developed within the table structure that satisfied monthly reporting to Germany. However, the CFO found a new feature in the accounting information system called "account scheme" which happened to reterritorialise the initial concern of generating useful management reports for

the Danish managers too. The design of the account table created some constraints because it is not possible to disaggregate reports more than to the level the account table and account scheme allows for. The CFO's design concern was therefore either to construct an account table that would enable the construction of information that gave managers the opportunities to act or to solve the problem of monthly reporting to Germany.

The theoretical conclusion which can be drawn from this is that inscribing employee performance into a report is complicated because the construction of the report is an act of tracing some elements of the rhizome while leaving others out. This is seen in the case by the extreme increase in the number of accounts which eventually deterritorialised the reporting ideal. Moreover, the rhizome will always move differently than the report and the report is not able to account for everything. A consequence of the repetition of the accounting practices is that the practice which was supposed to create overview, destructs the overview through its own repetition. The structure becomes complex because the diversity of the repetitions, which should make it simple, makes it heterogenous and different.

For representativity of accounting information this implies that faithfulness is not an ontological matter nor an procedural or epistemological matter, because procedures are generalisations that do not account for the movements produced by repetitions of calculations.

The question in chapter 7, regarding how repetitions of the internal management accounting structure moves accountability to become different is answered by studying the movements of accountability, the repetition of the management accounting structure creates when rhizomatic movements intervene and changes the structure. It is shown how the repetitions of the accounting structure induce difference in the sense that more and more control is introduced, because the financial performance signified in the accounting calculations becomes worse than expected. The decision freedom of the profit centre managers in Denmark is reduced by pressures from HQ to do certain specified acts. Some reductions articulated orally in telephone conversations and others through the means of budget letters and other requirements through budget target setting. Furthermore the company's transfer price calculation deterritorialises the profit calculation by



overcoding the significance of financial performance to be about optimising tax on the cost of trust in the contribution margin calculation.

This point amplifies the problem of making profitable decisions because nobody (in Denmark) can make a convincing calculation of profitability. Thus, the movements in the internal management accounting structure assembles accountability as a socio-technical construct that de- and reterritorialises as an effect of its own repetition. The result is that the managers do not know what to be accountable for; they are controlled as a profit centre, even though they cannot control anything but revenue (through the means of activities in their respective markets) because of interventions from the German HQ. These intervention happen through the means of monthly business reviews and tightened rules about the allocation of resources to sales activities in the budget letter. Accountability is thereby shown to be a fragile ideal which continually de- and reterritorialises and thereby changes the decision freedom of managers held responsible.

For representational faithfulness the transfer price calculation shows how accounting information is a simulacrum and gives rise to different significations of the accounting information. The implication, it is argued, is that managers do not know »the reality« in which they operate. They know it only through the regime of signs that constitutes the assemblage that through synthesis construct a singular understanding of that reality. Thus, the reality in which they operate is simulacrum rather than reality<sup>1</sup>.

The theoretical implications of these empirical concerns is that the managers' space of possibilities (the managers' action possibilities) moves with the repetition of the management accounting structure. Accounting information is not representation, but signs, and therefore has to be signified, which is the act of constructing a meaning of the sign (coding the sign). However, HQ sometimes overcodes the accounting signs. This overcoding becomes a »line of active destruction« for the local managers' action possibilities; not because their decision rights are taken away from them by placing them at other organisational units, but because the repetition of the accounting practices makes the calculation of profit become untrustworthy for the local managers and therefore they cannot use

---

<sup>1</sup>Where reality is understood as "that, which is real", or "quality of being real" (Oxford English Dictionary, 2012b).

accounting information for profitability decision making purposes. And secondly, the repetition of the accounting practices entails more rules about what to spent sales and marketing costs on. This shows how difference occurs through repetition of the accounting practice because of two concerns: the accounting signs do not represent the actual performance of employees, but are tracings (as discussed in the question to chapter 7 above) that traces only certain parts of the presence and the accounting signs are decoded in order to assign them with a meaning, and the regimes of signs locally (subsidiary) and globally (HQ) do not decode the signs identically.

The question raised in chapter 8, how the relationship between market movements and the revenue in the budget affects the appraisal of managers' performance and their decision making, bring about a discussion about the budget as a model of the reality and its relation to the presence and future it models. It is shown how the performance is not as much about *representing* in accounting information as it is about decoding the accounting information's signification (assign it a meaning). Many times this signification is effectuated by a machinic assemblage that leads to the same signification (an example of this is whether or not the activities and labor in the simulacrum in the very beginning of the thesis (quoted from Deleuze, 1995) is questioned, as Deleuze does, or not). The point is that when assemblages of signs signify something, they do so because they engage in a regime of signs that together constructs its signification.

But because the regimes of signs are different between loci, the significance will be different too. In the case study it is shown how two meanings of the performance signs (performance relative to budget targets) exist. One which managers articulate and one which HQ articulates. This raises a problem of opportunity: managers' opportunity lies both »within« and »outside« the boundaries of actions, the accounting representations (simulacra) construct. Thus, managers can choose either to perform relatively to the budgeted targets or relative to their regime of signs constituting the reality in which they operate. By doing the first, accountability is framed within the boundary of the representations but might cause the opportunity to be too narrow and thus create financial effects (understood as the values of the calculations) which are lower than if the opportunities

outside the representation were considered too. Thus, while considering accounting performance calculations not as representations, but as simulacra, opens the opportunity to acknowledge the managers' thinking about their market position and opportunities to a wider extent than if opportunity is considered within the boundary of the performance inscribed in the budget targets alone.

The theoretical insight chapter 8 provides is how the relationship between the revenue line and the market movements becomes a managerial problem. The market is difference, constituted by heterogenous movements of repeated merger and acquisition activity and repeated tender offers, but the budget pretends there is no difference. Therefore, accounting becomes a language that summarises diverging heterogenous elements of the market. But the budget pretends there is no difference and is therefore not capable of inscribing the divergence and heterogeneity of the market becoming into the revenue line. The consequence is that opportunity is framed within calculation, but because they are tracings, opportunity exist also outside calculations (in the unstructured becoming of the market which is not accounted for by the tracing).

To sum up the thesis shows how representational faithfulness as an ontological or epistemological concern is both problematic conceptualisations of faithfulness with regard to the management accounting information studied in this thesis. From the deleuzian perspective applied, it is claimed that accounting information acts as signs (simulacra) which are not representations of anything but repetitions of past practices. The consequence is that accounting information together with other objects in the managers' assemblage (DeLanda, 2006) constitutes a simulacrum, or simulation, the management acts within. Thus, for accountability this means that accountability is framed both within accounting information, but also outside it, because everything cannot be counted in the calculation (Kirk and Mouritsen, 1996) (in Deleuzian terms it is a blocked concept Deleuze, 2004 and Williams, 2003). Dilemmas and tensions emerge when the ontological or epistemological faithfulness of accounting information is overemphasised and thus different significations are not acknowledged (one regime of signs »overcodes« the sign). In the case study of the thesis these tensions reify as decisions which happen to comply with the accounting information, even though the managers

who decide believe the management information to be detached from the reality they real-ise. Accountability is therefore continually de- and reterritorialising in different forms which problematise what managers are actually accountable for. Sometimes it is their profit generating activities while at other times it is derived financial effects (simulacra) in their income statement.

### **Future areas of research**

This thesis applies poststructuralist research by Gilles Deleuze, Felix Guattari and Manuel DeLanda. It is one of the first, if not the first, attempt to apply Deleuze's theory of Difference and Repetition (Deleuze, 2004) and assemblages (Deleuze and Guattari, 2004 and DeLanda, 2006) to the field of accounting in a particular study of an accounting assemblage in an organisation. The evidence indicates that by studying accounting as signs (simulacra) which are repeated, we will be able to theorise about some of the inadequacies of treating accounting information, or calculations, as representations of something.

However, this thesis is not extensive enough to challenge the predominant concern of accounting as representation and thus more research in this area is required. The thesis propose the treatment of accounting information as representations to produce undesirable effects, not because of bad design or employees' moral hazard, but because the ontological conception of accounting information as representations means that the information gets too much power by understanding it as a representations of the reality in which managers act. Thus, the normative point would be that accounting information is productive in the sense that it makes people act, but the actions might very well be undesired if the organisation do not acknowledge the limits of the calculations' truthfulness.

# References

- Ahrens, T. and C. Chapman (2002). The structuration of legitimate performance measures and management: day-to-day contests of accountability in a u.k. restaurant chain. *Management Accounting Research*.
- Alvesson, M. and D. Kärreman (2007). Constructing mystery: empirical matters in theory development. *Academy of Management Review*.
- American Institute of Chartered Public Accountants (1973). *Objectives of Financial Statements*. American Institute of Chartered Public Accountants: The Study Group on the Objectives of Financial Statements.
- Andon, P., J. Baxter, and W. F. Chua (2007). Accounting change as relational drift: A field study of experiments with performance measurement. *Management Accounting Research* 18.
- Baiman, S. and J. S. Demski (1980). Economically optimal performance evaluation and control systems. *Journal of Accounting Research* 18(Supplement).
- Baker, G., R. Gibbons, and K. J. Murphy (2001). Bringing the market inside the firm? *American Economic Review*.
- Banker, R. D. and S. M. Datar (1989). Sensitivity, precision, and linear aggregation of signals for performance evaluation. *Journal of Accounting Research*.
- Bidima, J.-G. and N. D. Warren (2005). Philosophy and literature in francophone africa. In *A Companion to African Philosophy*. Blackwell Publishing (Blackwell Reference Online 30 May 2012).

- Burton, J. C. (1973). Some general and specific thoughts on the accounting environment. *Journal of Accountancy*.
- Burton, J. C. (1989). A commentary on the reflections of homer kripke. *Journal of Accounting, Auditing and Finance*.
- Busco, C., P. Quattrone, and A. Riccaboni (2007). Management accounting issues in interpreting its nature and change. *Management Accounting Research* 18.
- Bushman, R. M. and R. J. Indjejikian (1993). Stewardship value of "distorted" accounting disclosures. *The Accounting Review*.
- Callon, M. (1986). Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay. *Sociological Review Monograph* 32.
- Chapman, C. S., A. Hopwood, and M. D. Shields (2006). *Handbook of Management Accounting Research*, Volume 1. Elsevier.
- Chua, W. (1995). Experts, networks and inscriptions in the fabrication of accounting images: A story of the representation of three public hospitals. *Accounting, Organizations and Society* 20.
- Clegg, S. R., C. Hardy, T. B. Lawrence, and W. R. Nord (2006). *The SAGE Handbook of Organization Studies*. SAGE Publications.
- Czarniawska, B. (2004). On time, space, and action nets. *Organization* 11(6).
- Dambrin, C. and K. Robson (2011). Tracing performance in the pharmaceutical industry: Ambivalence, opacity and the performativity of flawed measures. *Accounting, Organizations and Society*.
- Davison, J. (2008). Rhetoric, repetition, reporting and the "dot.com" era: words, pictures, intangibles. *Accounting, Auditing & Accountability Journal*.
- DeLanda, M. (2006). *A New Philosophy of Society*. Continuum International Publishing Group.
- Deleuze, G. (1995). *Negotiations*. Columbia University Press.

- Deleuze, G. (2004). *Difference and Repetition*. (originally published in French by Presses Universitaires de France, Paris, 1968). Continuum.
- Deleuze, G. (2008). *Proust and Signs*. Continuum.
- Deleuze, G. and F. Guattari (2004). *A Thousand Plateaus*. Continuum.
- Demski, J. S. and G. A. Feltham (1978). Economic incentives in budgetary control systems. *The Accounting Review*.
- Donegan, J. and S. Sunder (1989). Contract theoretic analysis of off-balance sheet financing. *Journal of Accounting, Auditing and Finance*.
- Emerson, R. M., R. I. Fretz, and L. L. Shaw (1995). *Writing Ethnographic Fieldnotes*. The University of Chicago Press.
- Encyclopædia Britannica Inc. (2012). *Rhizome (Online Academic Edition, Retrieved 30 May 2012)*. Encyclopædia Britannica Inc.
- Ernst & Young (2012). *International GAAP 2012. Generally Accepted Accounting Practice under International Financial Reporting Standards*. Ernst & Young.
- Feldman, M. S. and B. T. Pentland (2003). Reconceptualizing organizational routines as a source of flexibility and change. *Administrative Science Quarterly*.
- Feltham, G. A. and J. Xie (1994). Performance measure congruity and diversity in multi-task principal/agent relations. *The Accounting Review* 69(3).
- Financial Accounting Standards Board (1975). *Statement of Financial Accounting Standards No. 5. Accounting for Contingencies*. Financial Accounting Standards Board.
- Financial Accounting Standards Board (1978). *Statement of Financial Accounting Concepts No. 1. Objectives of Financial Reporting by Business Enterprises*. Financial Accounting Standards Board.
- Financial Accounting Standards Board (1980a). *Statement of Financial Accounting Concepts No. 2. Qualitative Characteristics of Accounting Information*. Financial Accounting Standards Board.

- Financial Accounting Standards Board (1980b). *Statement of Financial Accounting Concepts No. 3. Elements of Financial Statements of Business Enterprises*. Financial Accounting Standards Board.
- Financial Accounting Standards Board (2011). *FASB Pre-Codification Standards* (<http://www.fasb.org/st/>). Financial Accounting Standards Board.
- Foucault, M. (1991). Governmentality. In *The Foucault Effect - studies in governmentality*. The University of Chicago Press.
- Foucault, M. (1994). *Viljen til Viden (Seksualitetens historie 1)* (Danish translation of *Historie de la sexualite*). Det lille forlag.
- Foucault, M. (1998). *The History of Sexuality Vol. 1: The Will to Knowledge*. Penguin.
- Friis, I. (2010/2011). Komplette præstationsmålinger: om at fremme en fælles forståelse af præstationsmål. *Økonomistyring & Informatik*.
- Gibbins, M. and R. J. Willett (1997). New light on accrual, aggregation and allocation, using an axiomatic analysis of accounting numbers' fundamental and statistical character. *ABACUS* 33(2).
- Gjesdal, F. (1982). information and incentives: The agency information problem. *Review of Economic Studies*.
- Gordon, C. (1991). Governmental rationality: an introduction. In Burchell, Gordon, and Miller (Eds.), *The Foucault Effect - studies in governmentality*. The University of Chicago Press.
- Grayling, A. C. (2002). Epistemology. In *The Blackwell Companion to Philosophy*. Blackwell Publishing (from Blackwell Reference Online, Retrieved 03 May 2012).
- Hansen, A. (2007). Multi-tasking, resource allocation and pay-for-performance. CBS Working paper.



- Harney, S. (2005). Why is management a cliché? *Critical Perspectives on Accounting*.
- Heede, D. (1992). *Det Tomme Menneske*. Museum Tusculanums Forlag.
- Hendriksen, E. S. and M. F. V. Breda (1992). *Accounting Theory*. Irwin.
- Heywood, I. (2002). Deleuze on Francis Bacon. In *A Companion to Art Theory*. Blackwell Publishing (Blackwell Reference Online, Retrieved 30 May 2012).
- Hines, R. (1988). Financial accounting: In communicating reality, we construct reality. *Accounting, Organizations and Society*.
- Hines, R. (1991). The FASB's conceptual framework, financial accounting and the maintenance of the social world. *Accounting, Organizations and Society* 16(4).
- Holmstrom, B. (1979). Moral hazard and observability. *The Bell Journal of Economics* 10(1).
- Hopper, T. and N. B. Macintosh (1993). Management accounting as disciplinary practice: the case of IT under Harold Geneen. *Management Accounting Research*.
- Hopper, T. and N. B. Macintosh (1998). Management accounting numbers: Freedom or prison - Geneen versus Foucault. In A. McKinlay and K. Starkey (Eds.), *Foucault, Management and Organization Theory*. SAGE Publications.
- Hopwood, A. (1978). Towards an organizational perspective for the study of accounting and information systems. *Accounting, Organizations and Society* 3(1), 3-13.
- Hopwood, A. (1987). The archeology of accounting systems. *Accounting, Organizations and Society*.
- Hopwood, A. G. (1983). On trying to study accounting in the contexts in which it operates. *Accounting, Organizations and Society* 8(2/3).
- Hughes, J. (2009). *Deleuze's Difference and Repetition*. Continuum International Publishing Group.

- IASC Foundation Education (2007). *IFRS - A Guide Through International Financial Reporting Standards (IFRSs)*. IASC Foundation Education.
- Ijiri, Y. (1975). *Theory of accounting measurement*. American Accounting Association.
- Ijiri, Y. and R. K. Jaedicke (1966). Reliability and objectivity of accounting measurements. *The Accounting Review* 41.
- Ingram, R. W. and F. R. Rayburn (1989). Representational faithfulness and economic consequences. *Journal of Accounting and Public Policy*.
- Ittner, C. D., D. F. Larcker, and M. W. Meyer (2003). Subjectivity and the weighting of performance measures: Evidence from a balanced scorecard. *The Accounting Review* 78(3).
- Järvinen, M. (2005). Interview i en interaktionistisk begrepsramme. In M. Järvinen and N. Mik-Meyer (Eds.), *Kvalitative metoder i et interaktionistisk perspektiv*. Hans Reitzels Forlag.
- Jensen, M. C. and W. H. Meckling (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*.
- Kaplan, R. S. and D. P. Norton (2001). Transforming the balanced scorecard from performance measurement to strategic management: Part i. *Accounting Horizons* 15(1).
- Kerr, S. (1975). On the folly of rewarding a, while hoping for b. *Academy of Management Journal* 18(4).
- Kim, O. and Y. Suh (1993). Incentive efficiency of compensation based on accounting and market performance. *Journal of Accounting and Economics* 16.
- Kirk, D. J. (1989). Reflections on a "reconceptualization of accounting": A commentary on parts i-iv of homer kripke's paper, "reflections on the fasb's conceptual framework for accounting and on auditing". *Journal of Accounting, Auditing and Finance*.

- Kirk, D. J. (1991). Commentary. completeness and representational faithfulness of financial statements. *Accounting Horizons*.
- Kirk, D. J. and C. T. Horngren (1981). Statement in quotes. *Journal of Accountancy* 151(4).
- Kirk, K. and J. Mouritsen (1996). Spaces of accountability: Accounting systems and systems of accountability in a multinational. In R. Munro and J. Mouritsen (Eds.), *Accountability. Power, Ethos and Technologies of Managing*. Thomson Publishers.
- Kominis, G. and C. R. Emmanuel (2007). The expectancy-valence theory revisited: Developing an extended model of managerial motivation. *Management Accounting Research* 18.
- Kripke, H. (1989). Reflections on the fasb's conceptual framework for accounting and on auditing. *Journal of Accounting, Auditing and Finance*.
- Kvale, S. and S. Brinkmann (2009). *InterView - introduktion til et håndværk*. Hans Reitzels Forlag.
- Latour, B. (1987). *Science in Action*. Harvard University Press.
- Latour, B. (1999). *Pandora's Hope : Essays on the Reality of Science Studies*. Harvard University Press.
- Latour, B. (2005). *Reassembling the social: an introduction to actor-network-theory*. Oxford University Press.
- Law, J. (2004). *After Method: Mess in Social Science Research*. Routledge.
- Lazear, E. and M. Gibbs (2008). *Personnel Economics in Practice*. Wiley.
- Lee, T. A. (2009). The ontology and epistemology of social reality in accounting according to mattessich. *Accounting and the Public Interest*.
- Linstead, S. and T. Thanem (2007). Multiplicity, virtuality and organization: The contribution of gilles deleuze. *Organization Studies*.

- Macintosh, N. B. (1994). *Management Accounting and Control Systems*. Wiley.
- Macintosh, N. B. (2002). *Accounting, accountants, and accountability: poststructuralist positions*. Routledge.
- Macintosh, N. B. and P. Quattrone (2010). *Management Accounting and Control Systems. 2nd edition*. John Wiley and Sons.
- Macintosh, N. B., T. Shaerer, D. B. Thornton, and M. Welker (2000). Accounting as simulacrum and hyperreality: perspectives on income and capital. *Accounting, Organizations and Society*.
- Martinez, D. E. (2011). Beyond disciplinary enclosures: Management control in the society of control. *Critical Perspectives on Accounting*.
- Mattessich, R. (2003). Accounting representation and the onion model of reality: a comparison with baudrillard's orders of simulacra and his hyperreality. *Accounting, Organizations and Society* 28(5).
- McFarlane, C. (2011). The city as assemblage: dwelling and urban space. *Environment and Planning D: Society and Space*.
- Mennicken, A. and P. Miller (2012). Accounting, territorialization and power. *Foucault Studies*.
- Merchant, K. A. (1990). The effects of financial controls on data manipulation and management myopia. *Accounting, Organizations and Society* 15(4).
- Merchant, K. A. (2006). Measuring general managers' performances: Market, accounting and combination-of-measures systems. *Accounting, Auditing & Accountability Journal* 19(6).
- Merchant, K. A. and D. T. Otle (2007). A review of the literature on control and accountability. In C. S. Chapman, A. G. Hopwood, and M. D. Shields (Eds.), *Handbook of Management Accounting Research*. Elsevier.
- Merchant, K. A. and M. D. Shields (1993). Commentary on when and why to measure costs less accurately to improve decision making. *Accounting Horizons*.

- Messner, M. (2009). The limits of accountability. *Accounting, Organizations and Society*.
- Michael, M. (2004). On making data social: Heterogeneity in sociological practice. *Qualitative Research*.
- Mik-Meyer, N. and M. Järvinen (2005). Indledning: Kvalitative metoder i et interaktionistisk perspektiv. In M. Järvinen and N. Mik-Meyer (Eds.), *Kvalitative metoder i et interaktionistisk perspektiv*. Hans Reitzels Forlag.
- Milgrom, P. and J. Roberts (1992). *Economics, Organization and Management*. Prentice Hall.
- Miller, G. J. (1992). *Managerial Dilemmas*. Cambridge University Press.
- Miller, P. and T. O’Leary (1994). The factory as laboratory. *Science in Context*.
- Miller, P. B. (2001). Governing by numbers: Why calculative practices matter. *Social research* 68.
- Miller, P. B. and T. O’Leary (1987). Accounting and the construction of the governable person. *Accounting, Organizations and Society*.
- Moore, N. (2007). Icons of control: Deleuze, signs, law. *International Journal for the Semiotics of Law*.
- Mouritsen, J., A. Hansen, and C. Ø. Hansen (2009). Short and long translations: Management accounting calculations and innovation management. *Accounting, Organizations and Society*.
- Neu, D., J. Everett, and A. S. Rahaman (2009). Accounting assemblages, desire, and the body without organs: A case study of international development lending in latin america. *Accounting, Auditing & Accountability Journal*.
- Otley, D. (1999). Performance management: a framework for management control systems research. *Management Accounting Research* 10.
- Otley, D. (2003). Management control and performance management: whence and whither? *The British Accounting Review* 35.

- Oxford English Dictionary (2012a). *Accounting*, n. (Online. Retrieved 11 Dec 2012). Oxford English Dictionary.
- Oxford English Dictionary (2012b). *Reality*, n. (Online. Retrieved 30 May 2012). Oxford English Dictionary.
- Oxford English Dictionary (2012c). *simulate*, v. (Online. Retrieved 11 Dec 2012). Oxford English Dictionary.
- Preston, A. M., D. J. Cooper, and R. W. Coombs (1992). Fabricating budgets: a study of the production of management budgeting in the national health service. *Accounting, Organizations and Society*.
- Quattrone, P. (2004). Accounting for God: accounting and accountability practices in the Society of Jesus (Italy, XVI–XVII centuries). *Accounting, Organizations and Society*.
- Quattrone, P. and T. Hopper (2005). A time-space odyssey: management control systems in two multinational organisations. *Accounting, Organizations and Society* 30.
- Quattrone, P. and T. Hopper (2006, September). What is IT? SAP, accounting, and visibility in a multinational organisation. *Information and Organization* 16(3), 212–250.
- Robson, K. (1991). On the arenas of accounting change: The process of translation. *Accounting, Organizations and Society*.
- Robson, K. (1992). Accounting numbers as "inscription": action at a distance and the development of accounting. *Accounting, Organizations and Society*.
- Ronen, J. and G. Sorter (1989). Reflections on "reflections on the fasb's conceptual framework for accounting and on auditing". *Journal of Accounting, Auditing and Finance*.
- Sandywell, B. (2011). *Dictionary of Visual Discourse: A Dialectical Lexicon of Terms*. Ashgate Publishing Limited.

- Silverman, D. (2007). *A very short, fairly interesting and reasonably cheap book about qualitative research*. Sage Publications.
- Solomons, D. (1986a). The fasb's conceptual framework: An evaluation. *Journal of Accountancy*.
- Solomons, D. (1986b). *Making Accounting Policy*. Oxford University Press.
- Solomons, D. (1991a). Accounting and social change: a neutralist view. *Accounting, Organizations and Society*.
- Solomons, D. (1991b). A rejoinder. *Accounting, Organizations and Society* 16(3).
- Staunaes, D. and D. M. Sondergaard (2005). Interview i en tangotid. In *Kvalitative metoder i et interaktionistisk perspektiv*. Hans Reitzels Forlag.
- Tinker, T. (1991). The accountant as partisan. *Accounting, Organizations and Society* 16(3).
- Vickrey, D. W. (1985). Normative information qualities: A contrast between information-economics and fasb perspectives. *ABACUS* 21(2).
- Watts, R. L. (2003a). Conservatism in accounting part i: Explanations and implications. *Accounting Horizons* 17(3).
- Watts, R. L. (2003b). Conservatism in accounting part ii: Evidence and research opportunities. *Accounting Horizons* 17(4).
- Williams, J. (2003). *gilles deleuze's difference and repetition a critical introduction and guide*. Edinburgh University Press.
- Williams, J. (2005). *Understanding Poststructuralism*, Chapter 1. Acumen.
- Williamson, O. E. (1985). *The Economics Institutions of Capitalism firms, markets relational contracting*. The Free Press.
- Wojdak, J. F. (1970). Levels of objectivity in the accounting process. *The Accounting Review*.
- Zimmerman, J. L. (2009). *Accounting for Decision Making and Control* (6th ed.). McGraw-Hill.





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

## 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*