Dealing with Expectations and Traditions in Research

Levi Gårseth-Nesbakk and Frode Mellemvik (eds.)

RESEARCH

EXPECTATION

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© 2018 Levi Gårseth-Nesbakk, Frode Mellemvik, Salvador Carmona, Barbara Czarniawska, Sten Jönsson, Jan Mouritsen, Olov Olson and Inger Johanne Pettersen.

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Foreword

This scientific anthology presents different viewpoints on what it means to deal with societal expectations and traditions while conducting and publishing research. We hope this will be relevant to researchers on all levels, including PhD students and master's students writing term papers and their theses, as well as in methodological courses and discussions. Also, anyone taking an interest in research may benefit from reading this book, and gain new inspiration to improve their research skills and knowledge.

The book is meant to be interdisciplinary in its form and content. The chapters are in part theoretical and analytical, yet draw on various empirical illustrations. In doing so, the book touches on the research process, basic assumptions in research, and some possibilities as well as pitfalls that both novice researchers as well as more experienced researchers ought to be aware of.

We are thankful to the authors and publisher for their invaluable cooperation in developing this book and the patience they have shown while waiting for the entire book to be completed.

Levi Gårseth-Nesbakk and Frode Mellemvik, Editors

CHAPTER 1

Introduction to Various Assumptions Embedded in the Research Process in Organization Studies

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This book deals with expectations and traditions in research. Assumptions are an integral aspect of both research traditions and expectations and are consequently the point of departure for this book. This connection is particularly applicable when dealing with various assumptions embedded in the research process in organization studies. After all, there is a lot of knowledge, but also conventional wisdom regarding the presumed way that organizations work, equally so with research.

An assumption is defined as "a thing that is assumed to be true". Alternatively, it refers to "the action of assuming responsibility or control" (Soanes, 2002, p. 56). One objective of this book is therefore to clarify, demystify, but also problematize some of the "things" we believe to be true. The action dimension of assumptions is also relevant since a considerable amount of belief is associated with the ways in which organizations ought to be controlled and managed, and who should assume this

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responsibility. For example, considerable effort has been made to theorize and study organizational practices, such as accounting, and also more broadly other management control practices, including the ways in which organizations respond to trends and reforms. With this as a backdrop, it should not be surprising that two chapters in this book deal explicitly with research and publication (Chapters Two and Three), three chapters cover accounting and management control (Chapters Four, Six and Eight), one deals explicitly with the term "organizations" (Chapter Seven) and another is devoted to the fundamental issue of how to understand behavior and social processes and thereby also changes in organizations and society, which develop from the impact of agency versus structure.

In Chapter Two Gårseth-Nesbakk addresses the publication pressure or expectations that researchers face. He seeks to facilitate this endeavor by reviewing what the research community considers to be a good research paper – and the way to get published. Key research assumptions and skills identified in relation to Gårseth-Nesbakk's work include: thoroughness, argumentative skills/communicability, hard work, decision-making skills and as a part of that the need to be a professional. This is supposedly what is required or at least what represents beneficial ingredients in research endeavors.

Olson takes issue with the "recycling of academic texts" phenomenon in Chapter Three. Key research assumptions and issues in relation to Olson's work include: publication ethics, plagiarism and responsibility (at the individual author level, editorial level, publishing house level, research community level and societal level). Olson initiates a discussion that challenges a number of research issues, including: What represents new knowledge? How similar can one manuscript be to another manuscript and still represent (or be fairly presented as) a new publication? Unresolved questions thus include: How much can be similar in different sections of the manuscript or in the manuscript altogether? Who is to blame – individuals, reformers, research institutions, politicians or society?

In Chapter Four Carmona advocates historical research in the field of accounting. He consequently considers how historical lessons represent embedded research assumptions, which is indeed true whenever history tends to repeat itself. History may therefore help to theorize accounting. Carmona outlines a roadmap for scholars interested in historical research, by focusing on established researchers within transitional and emerging economies. Carmona also considers the institutional characteristics of the focal settings, which could also play a role in ensuring that the past is brought forward and thus may secure continuity. However, he also deals with discrepancies.

In Chapter Five Sten Jönsson "takes up the age old social science problem of whether individual agency or social structures have the upper hand in controlling our behavior and social processes". This is a fundamental research assumption and relates to the very foundation of our reasoning when explaining findings.

In Chapter Six, Inger Johanne Pettersen addresses reforms within the management control field and the associated concept of hybridization (explaining "that reform packages being introduced change on their way towards implementation, which create new organizational forms with diverse characteristics"). In this way, Pettersen challenges simplified models and describes the way they often end up becoming hybrids when the ideals of reforms (or reformers) meet practice.

In Chapter Seven, Barbara Czarniawska unpacks issues relating to the "traditional framing of the term organizations". Social science researchers frequently put forth some type of research assumption rooted in their understanding of "organizations". Czarniawska does a good job in generating new ways of understanding and discussing the often taken for granted term "organizations".

Jan Mouritsen, in Chapter Eight, is concerned with the question of how numbers are developed and made into resources for intervention, and the associated issue of how numbers as facts can quickly transform into matters of concern. This is arguably highly relevant for both management and accounting students because the idea of numbers connects the two positions. How are numbers made into facts (accounting)? And how do they turn into concerns (management)?

Consequently, all chapters in this book illuminate different *roles* in the research process in organization studies. Gårseth-Nesbakk discusses the role of the research community in framing the conditions for peers

who want to succeed in academia, Olson debates the role of researchers' incentives, Carmona discusses the role of history, Jönsson considers the role of individuals (versus society), Pettersen examines the role of models (and reform ideas), Czarniawska discusses the role of organizations and Mouritsen considers the role of numbers and facts.

References

Soanes, C. (2002). *The compact Oxford English dictionary of current English* (2nd Ed.). Oxford: Oxford University Press.

CHAPTER 2

What the Research Community Labels a Good Research Paper – and the Way to Get Published

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Abstract: This chapter reviews literature on academic writing and publishing. The following recommendations can be highlighted: prepare the study well; avoid the common mistake of submitting underdeveloped manuscripts; work on the structure, clarity and contribution of the study; and anticipate key questions frequently asked by reviewers. You also need to select an appropriate journal, as well as establish work routines and habits that facilitate your research. You must tackle and benefit from criticism. Paper production also requires good time management skills. Believing in your own work is necessary, but the use of cost-benefit considerations to balance perfectionism and meeting the minimum requirements in relation to different manuscripts, at various outlet levels, will improve research efficiency and effectiveness. This skill embodies the essence of any successful scholar, along with never resting until the work has been published.

Keywords: review, publication, academic writing

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1. Introduction

This article reviews publication advice provided by the research (publication) community, purporting to identify common mistakes and rewarding publication strategies. This is beneficial to all researchers since research journals and recommendations flourish, making it hard to keep an overview, also because of ever-intensifying publication pressure.

Publish or perish is a well-known phrase within research communities, but has become more and more important with the passage of time, as the drive to publish internationally is growing stronger and stronger (Jönsson, 2006; Tienari, 2012). "... As an academic researcher you simply must publish ... It is our duty to make our results available to the international research community and to practice" (Jönsson, 2006, p. 481). Toft and Jaeger (1998, p. S42) also stress the need for publishing your findings, "Going through the motions of research but not publishing is not research", hinting at the publication process as a key research component. To publish in highly ranked journals has increasingly become the norm (Cederström and Hoedemaekers, 2012; Tienari, 2012; Wagner, 2012). Recent calls for more research impact increase publication pressure on researchers, especially young academics (Glick, Miller and Cardinal, 2007). By publishing they discharge their accountabilities to themselves, their universities, educational systems and society at large (see, Cederström and Hoedemaekers, 2012).

Overall, research publications in academic journals are important as they disseminate knowledge, promote research careers and strengthen institutions' competence, accreditation processes, reputation, ranking and funding. But how should researchers go about getting published? After all, "scientific style must be concise, absolutely accurate, and unambiguous" (Toft and Jaeger, 1998, p. S42).

This chapter reviews literature on academic publishing, targeting the following research question: What publication and manuscript preparation advice is offered by the research community? While so doing, the focus will not only be on outlining the variety of advice, but also to search for commonalities among the sets of advice in order to sketch out core features of how to get published. The chapter is based on a review of earlier publications on academic publishing as well as advice given by

publishing houses (e.g. Elsevier), as they are also an important part of the research publication community.

The rest of the chapter is organized as follows: Section Two outlines publication advice provided by the research community; Section Three depicts key content and expectations regarding manuscript structure. The conclusions follow in Section Four.

2. Publication advice provided by the research community

The publication advice presented in this section starts in subsection 2.1 with the need to avoid common mistakes – explicating reasons as to why papers are rejected. Subsection 2.2 contains sound paper production principles. In subsection 2.3 the need to make a contribution to stand out in high-end journals is accentuated, followed, in subsection 2.4, by a discussion of the importance of journal selection and adhering to associated requirements. In subsection 2.5 a crucial final piece of advice is provided, namely: Do not give up – keep the faith.

2.1 Avoid common mistakes - suggestions as to why papers are rejected

"Inappropriate journal selection is one of the major causes for rejection" (Wagner, 2012, p. 22). Other reasons may include a lack of supporting empirical evidence, the submission of a theoretical article with no apparent application, or submission of a "pure" case study description (Wagner, 2012). Audisio et al. (2009, p. 351) argue that manuscript rejection is most likely caused by:

Poor experimental design (lack of hypothesis/aims, poor recruitment or small sample size, short follow-up, a lack of or unjustified conclusions, or when the text is simply incomprehensible), ... failure to conform to the target journal, insufficient problem statement, methods not described in detail, over-interpretation of results, inappropriate statistics, confusing presentation of tables and/or figures, conclusion not supported by data, and poor review of the literature.

Jönsson (2006) points out that 90 percent of the articles submitted to the Scandinavian Journal of Management were rejected because they were ill structured, failing to establish an appropriate beginning, main middle section and a clear end to the paper. Consequently, "when submitting, follow the instructions ... do not make it more difficult for your manuscript to get through the review process by creating unnecessary extra work for the editors" (Jönsson, 2006, p. 486).

Conceptual unfamiliarity or inconsistencies may easily lead to confusion and make the publication process more troublesome or go nowhere (Ambert, Adler, Adler and Detzner, 1995; Belgrave, Zablotsky and Guadagno, 2002). Authors are therefore better off not introducing a variety of different definitions and concepts in their manuscripts.

Additional matters to be avoided: Do not publish meaningless or previously published data (Audisio et al., 2009). The paper must make intuitive sense (Ashkanasy, 2013). Too many articles are written due to the need to publish, rather than from the viewpoint that authors have new relevant data to communicate to the public (Audisio et al., 2009). Do not make it worse by referring conspicuously to your own work (Jönsson, 2006).

2.2 Sound paper production principles

Sound paper production principles are outlined below. These are: "Ensure that enough time is invested in paper production to achieve sufficient quality"; "Consider scholarly collaboration and networking as a way of improving your work"; "Embrace cost benefit considerations to improve research efficiency and effectiveness"; and "Make academic writing a habit".

Ensure that enough time is invested in paper production to achieve sufficient quality

"Scientists should aim to publish their results when the study is complete and to strive for excellence at all stages of the research and publication process, no matter how long that takes" (Toft and Jaeger, 1998, p. S42). Adhering to this advice of dedicating oneself to excellence explains for instance why the researcher often ends up with a surprisingly large set

of drafts before the manuscript is published (Audisio et al., 2009). This also suggests that the process is more time-consuming and demanding than what is foreseeable at the outset – causing scholars to underestimate the amount of time and effort required to get published. Moreover, when you believe you are approaching the submission stage: "Do not insult reviewers by sending them half ready manuscripts!" (Jönsson, 2006, p. 483) or virgin papers (Ashkanasy, 2013).

Consider scholarly collaboration and networking as a way of improving your work

Critical comments facilitate rigorous research. This will improve a scholar's citation rate, which even young scholars should care about. A high citation rate suggests your work represents an important contribution to the field (Ashkanasy, 2013). Critical comments can be obtained from the research community, perhaps from co-authors, at a conference or during workshop presentations or by asking specific colleagues for advice. This will namely inform the research community about your work. Such networking could result in their starting to send you information because they know you are interested in certain topics. It is nevertheless advisable to prepare a couple of drafts yourself, which should undergo a self-critical review process before being submitted to a conference. It is also advisable to send the manuscript to colleagues, to get their comments. Only then does it normally make sense to submit to a journal (Jönsson, 2006). Although they support the idea of preparing and presenting conference papers as a way of progressing your work toward the quality level of many journals, Guthrie, Parker and Gray (2008) warn against entering the conference bandwagon. The challenge is that conference papers would also clearly benefit from being well prepared and may have to be submitted several months before the conference. Consequently, if you (aspire to) regularly attend conferences, it means you do not have much time to submit the conference paper to a journal before having to work on a new project. Failing to do so may result in scholars travelling with the same paper over and over again.

Scholarly collaboration is a way to build competence, get inspiration and reduce the work load associated with collecting data, analyzing findings and writing research. Thus, working with others, both PhD students and other scholars is frequently recommended (e.g. Ashkanasy, 2013). However, Endenich and Trapp (2016, p. 630) find that (international) scholarly cooperation "does not appear to be an obvious vehicle to increase research performance". They provide the following plausible explanations for their findings: Scholars may devote the time saved by cooperation to engage in other activities or they may cooperate for other reasons, including curiosity, intrinsic motivation or to enjoy social benefits. Alternatively, it may be that "cooperation reveals fewer synergies than expected because of, for example, a high coordination effort, divergences concerning modes of operating, or free riding issues" (Endenich and Trapp, 2016, p. 631).

The mixed recommendations or inferences concerning scholarly cooperation suggest that this activity is complex to manage, and that successful cooperation depends on a number of factors. Therefore, as a cautionary note, remember that every partner will expect you to do your share of the work. Thus, it is demanding to work on many different projects simultaneously, particularly if this also entails working with a variety of scholarly partners. Having too many coexisting projects that not only require your attention and devotion, but also a considerable work effort (collecting and analyzing data, and subsequently writing) is overwhelming. This will slow down most if not all projects, perhaps to the extent that they are all in jeopardy of being too late or never being completed at all. As a result, careful consideration is required regarding how many concurrent projects to embark on, and which partners to work with. A partnership may not be worthwhile if the completion of the project depends predominantly or solely on you.

Embrace cost benefit considerations to improve research efficiency and effectiveness

Authors need to believe in their ideas, projects and papers. Still, poorly written manuscripts are more likely to be rejected. Therefore, it is important to be hard working and to find some middle road between being blind to details and well-crafted work on the one hand and being a perfectionist on the other: "Given the randomness in the system, it does not pay to

spend hours and days polishing a paper, or moving it from 85 to 95 per cent perfect" (Glick et al., 2007, p. 828). Consequently, Glick et al. (2007, p. 827-828) offer the following advice to young academics, seeking to make a career by publishing articles:

Shop early and often in the marketplace for ideas. ... Generating a variety of project ideas is essential in a weak paradigm field, but aspiring scholars must focus their resources on projects that can be rapidly developed and submitted to a top journal. Along the way, individuals might ask themselves some basic questions in deciding whether to continue investing in a particular project. Does the project effectively leverage my prior investments in one of my platforms? Did my colleagues get excited by my two minute topic description in the hallway? Did I stimulate controversy with a quick sketch of the research model? ... How much more work is required to complete this project? Killing a marginal project should be framed as creating opportunities for better projects rather than a loss of prior investments. ... For each project ... a final question to be answered is this: Am I putting too much effort into the project?

Make academic writing a habit

Jönsson (2006) advocates the need to "make academic writing a habit", supported by a time schedule and established rules in terms of how to spend your time. He also suggests it is worthwhile to attend conferences and workshops and to work on several manuscripts at a time, effectively making sure you do not squander time sitting around waiting for the editor's response. On the other hand, working with several manuscripts may make it more challenging to keep up the pace when receiving feedback and calls for revision, while trying not to forget about the other paper(s). Not spreading your work over too wide areas is Jönsson's (2006) advice to avoid this becoming a big issue (since for instance different fields require the reading of different literature stances, thus making the revision more time consuming). Two key research platforms should be the limit for thematic variation (Glick et al, 2007). Still, a requirement for professorship is typically research effort and publications within two to three different areas.

"Work – finish – publish" is the habit to embrace as an academician: "Your work is not done until you have reported it [i.e. your findings] in a

journal" (Jönsson, 2006, p. 489). In this process, beyond your own hard and systematic work, the reviewers play a key role. To enhance your publication chances, you should "love your reviewers", and pay close attention to every comment they provide (Jönsson, 2006).

2.3 Persuasively articulated contributions are needed in high-end journals

Ambert et al. (1995, p. 890) suggest that authors and reviewers need to pay close attention to the following questions: "Has something new been learned by this research and what is its significance? Does it contribute to knowledge...? Will it inspire further research?" A contribution may take the form of theoretical, practical and/or methodological contributions. "Most journal editors will expect both theoretical and practical contributions from the article" (Wagner, 2012, p. 22). In their aims and scope or other journal descriptions, it is common that esteemed journals clearly explain the necessity of making a contribution in order to be considered for publication in their journals. The way to unravel theoretical contributions is through active engagement with the literature. What has been said on the topic before (identified through your literature review), and how does the theoretical knowledge stance change with the findings from your study? For example, have you found an anomalous result in the literature that you might be able to explain? (Glick et al., 2007).

Whetten (1989) argues the theoretical elements ("what") and the ways in which they interrelate ("how") as well as "why" need to be dissected and discussed in order to illuminate the contribution of the paper. The "why" refers to the underlying assumptions or theoretical glue of the model, i.e. the dynamics that justify the theory, whether it is of a psychological, economic or social kind. The way to make a theoretical contribution is by demonstrating that your findings represent a shift in the list of elements (what), the way they interrelate (how) or why it is more reasonable to analyze the theoretical assumptions and model dynamics differently. Contributing through altering "hows" is more rewarding than "whats", but not as meritorious as demonstrating new "whys" (Whetten, 1989). "Who", "where" and "when" are temporal and contextual factors

that "place limitations on the propositions generated from a theoretical model". Such boundaries of generalizability constrain the range of the theory (Whetten, 1989, p. 492). However, "it is insufficient to point out limitations in current conceptions of a theory's range of application" (Whetten, 1989, p. 493). Furthermore, "critics should share responsibility for crafting improved conceptualizations. Otherwise, it is difficult to know whether the original is indeed inferior, or simply the best we can do in a very complex world" (Whetten, 1989, p. 494).

2.4 Selecting the right journal – address the aims and scope and format requirements

If targeting the best journals the work should be "absolutely original, innovative and methodologically outstanding" (Audisio et al. (2009, p. 355). A prerequisite is of course that the study and the manuscript fit the journal in question. The way to ensure that is to read prospective journals' aims and scope and subsequently to align the manuscript carefully to the format requirements of the selected journal.

However, in certain fields the journals are heavily influenced by particular countries or schools of thought, because of where they are published and who may hold the editorial board member positions. For instance, in accounting, there is a clear USA dominance and an almost Anglo Saxon monopoly situation when adding Canada, the UK and Australia to the list (Brinn and Jones, 2008). As such, it is pivotal to consider where the manuscript is more likely to fit the journal style, the ways of thinking of those dominating the editorial board positions, etc. This has been a subject for discussion (and concern) in accounting literature (e.g., Brinn and Jones, 2008; Merchant, 2010). A characteristic of these journals (including "Accounting Review", "Journal of Accounting and Economics", "Journal of Accounting Research" and "Review of Accounting Studies") is that they are largely quantitatively oriented. For instance they publish financial accounting articles in disproportionately high numbers (Bonner, Hesford, Van der Stede and Young, 2006), thus making it harder for qualitatively oriented scholars to publish in many of these "A" journals. Yet, this is unlikely to be the case only in the accounting

field. Tienari (2012, p. 205) argues the top tier journals "forces us to reproduce their favoured theoretical and methodological dogmas. ... Critical, feminist, and post-colonialist scholars find it extremely difficult to get their work published in these journals." Ambert et al. (1995) and Belgrave et al. (2002) have written articles about how to understand and evaluate qualitative research. This was done partly due to frustration over the (seemingly) common errors made by quantitatively oriented researchers reading qualitative research studies.

A lot of time is wasted by scholars waiting for feedback from editors that reject their paper, primarily or partially because of a misfit with the aim and scope of the journal. Ironically, the waiting process when submitting to the wrong journal is often longer, when the editor does not "desk reject" the paper, because it takes more time to find appropriate or willing reviewers. If the editor succeeds in finding reviewers there is still a chance the reviewers might be critical towards the paper because it seems to be a bad fit with the journal. Moreover, the editor, having received a paper on the margin of the journal's scope and aim, is more likely not to rule in your favour when there is a dissensus between the reviewers or both are critical but nevertheless do not fully reject the paper. The author(s) might even risk waiting for months before finally being informed that the editor was unsuccessful in locating any suitable and willing reviewers! A large proportion of papers do need a goodwill spirit from the editor to make it through the review process. You are more likely to get that when submitting to an appropriate journal. The selection of journal should be made as early as possible, and the author should become familiar with the journal and try to relate their own work to earlier contributions in the journal. Nonetheless, journals vary considerably with respect to acceptable paper length, so the journal choice must also take that into consideration.

Paper length

Audisio et al. (2009, p. 352) advise researchers to be cognizant of the paper length by pointing out that shorter and more concise papers are more likely to be considered for publication. They add that most journals will not accept papers that are longer than 2500-4000 words (Audisio et al., 2009, p. 352). Yet it is clear that the acceptable norm for paper length

varies across research fields. In fields such as management, organization studies and accounting, particularly those that welcome qualitative studies, it is normal to operate with higher page limitation boundaries. Some journals do not have an explicit page limitation at all (for instance "Accounting, Organizations and Society" and "Accounting Forum"), whereas some operate with a high page limitation threshold, for instance "Critical Perspectives on Accounting", 20 000 words or "Accounting and Organizational Change" and "Organization Studies", 12 000 words. It is consequently important that authors read the instructions to authors carefully. Authors should nonetheless be wary of writing lengthy manuscripts as they not only take much more time to develop, but also to revise, quality assure, and align with format requirements. There will be a considerable difference in time spent on a short versus a long article, for formatting and technical reasons alone.

Language

Most articles are published in English, making it important to write good English (Jönsson, 2006; Tychinin and Kamnev, 2005). Actually, for non-native English speaking persons language assistance is almost a prerequisite for being accepted by a better journal. The language should be simple and plain (Audisio et al. (2009). Besides interacting with English speaking persons, Jönsson (2006) recommends writing regularly in English, getting feedback on your English and reading effective language (typically in international news magazines) as useful methods for improving your language.

Another practical option is to pay for language editing before submitting the manuscript to the journal. This is becoming a bigger and bigger industry and most of the larger publishing houses do offer such services today, as long as you pay for it. Although it may be desirable to do language editing when the paper has been accepted, to save money and your own time, it is unwise and arguably unethical to do so if your English is so bad that it causes non-trivial communication obstacles for the reviewers and the editor. Then you are wasting the reviewers' time and patience. You thereby risk that language alone becomes a reason to reject your paper, either for technical reasons, or because it indicates that the

paper generally speaking is underdeveloped. In terms of direct guidance, Elsevier (2013) offers the following advice. Use direct and short sentences. Include one idea or piece of info per sentence (avoid multiple statements in one sentence). Furthermore, use the active voice (it is shorter and better). Strive to minimize adverbs (such as however, in addition, moreover) and to eliminate redundant phrases. Finally, unfamiliar words should be double-checked. Two things are then important, spelling and the meaning of the words/phrases. Make sure the words are appropriate to the setting in which you use them.

Figures and tables

It is often useful to include figures and tables in the manuscript as they may facilitate summarizing and organizing the text. They thereby function as useful visual aids, but could also be useful in streamlining and shortening the manuscript (Fulmer, 2012). Preferably, the main concepts and ideas in the figure/table should be explained prior to the appearance of the figure/table in the text to avoid surprising and confusing the reader.

2.5 A final piece of advice: Do not give up - keep the faith

Glick et al. (2007) provide vital, albeit depressing statistics and view-points to scholars within organization science. Essentially, they point out that life within the field of organization science is difficult, due to a weak paradigm and thus a dissensus concerning what is to be regarded as good research. This materializes in a variety of ways, including high rejection rates (up to 92.5 % of original submissions for the best journals), low interrater reliability for reviewers (frequently lower than 0.3 and sometimes as low as 0.12 – even for the best journals) and modest article impact, measured on the basis of article citations. Glick et al. (2007, p. 820) therefore infer: "... the vast majority of authors in organization science are unable to predict editorial requirements as they labor on papers that are unlikely to be accepted by their target journals". With reference to rejection rates close to 90%, Moizer (2009, p. 285) declares: "Something cannot be right with a system which creates so much apparent waste". Most scholars

within the field of organization science are not located in an elite school or university. That is not necessary either, according to Glick et al. (2007), with respect to substantially improving one's publication chances in the better journals. They namely report a significant dispersion amongst top scholars' affiliations. Thus, that you – in order to achieve academic success - need a strong research community in your own institution (working with the same topics as yourself) is found to be a busted myth. Nonetheless, "... we remain concerned with the substantial role that chance plays in organization science careers. Significant numbers of deserving individuals continue to have papers rejected, promotions denied, and careers side-tracked while others benefit from good luck" (Glick et al, 2007, p. 832). Hence, it is pivotal to be persistent, thick-skinned and to hang in there (Ashkanasy, 2013). Do not become discouraged by rejections, especially not when submitting to the best-rated journals, frequently coined "A" journals. "It is true that "A" journals in many social sciences maintain a rejection rate disturbingly close to 100 per cent ... Keep revising and submitting!" (Jönsson, 2006, p. 486).

3. Manuscript structure and "recipe" - key features and content

Although scholarly publications may come in different forms the norm adhered to in most journals is to expect manuscripts to include standard sections consisting of the introduction, methods, results, discussion and conclusions (Audisio et al., 2009). Additionally, it is widely acknowledged today to also include a frame of reference section (although it might be coined differently, e.g. the theory section or the literature review section). Yet, as Fulmer (2012) points out, the title and the abstract are the only parts of your manuscript that most people will ever read. As a result it is very important to spend enough time polishing these items, not to mention ensuring they are consistent with the rest of the manuscript. They are, after all, appetizers (Fulmer, 2012). This section outlines recommendations regarding the content and features of these key sections (which also include a few recommendations when it comes to the use of references).

3.1 Title

The title "... should clearly and accurately address the content and be as eye-catching as possible" (Audisio et al., 2009, p. 355, see also Elsevier, 2013). Titles may still be very short and remain excellent (Fulmer, 2012), but they often follow a lengthier format. "An advantage of the longer style is that the author can use the 'precolonic' part of the title either to succinctly state the topic ... or to artfully begin to tell the story using some sort of image or metaphor ... while still being able to give additional clarifying information after the colon to help position the idea in the reader's mind" (Fulmer, 2012, p. 328). It is furthermore common that titles contain the main concepts or idea of the paper (Fulmer, 2012). Nevertheless, Elsevier (2013) argues against long titles and the use of rare abbreviations. Beyond being short, effective titles are characterized by identifying the main issue of the paper. Begin drafting the title by considering the subject of the paper, but also the need to be accurate, unambiguous and specific. Keep in mind that articles with short, catchy titles are often better cited (Elsevier, 2013). An example of a short and good title is found in Young's (2006) article, "Making Up Users". Only three words, but they still say a lot about the content and conclusions in the article. Essentially this means authors should spend a fair amount of time on creating an appropriate title.

3.2 Abstract

The purpose of the abstract is to introduce the reader to the essence of the work. "The abstract is what most readers will scroll through, and reviewers will base their decision primarily on this section. An interesting paper with a bad abstract may be rejected" (Audisio et al. (2009, p. 354–355). Elsevier (2013) offers the following guidance on what characterizes a good abstract: present it as a single paragraph, the advertisement of your article, interesting and easy to understand, accurate, specific and brief. Yet, there are different ways of writing the abstract. For instance, whereas some outline the paper, others start with their arguments or position (Fulmer, 2012). The best abstracts "clearly name and describe the core constructs and aims of the article ... they also steer clear of

jargon" (Fulmer, 2012, p. 328). Generally speaking, though, the abstract should contain research hypotheses (or questions), the sample set, size and type of data, as well as the main findings. Brevity without exaggeration is key (White, 2005). In addition to the aforementioned list it is also common in the abstract to list the theories relied on in the study and preferably the implications.

3.3 Introduction

A key purpose of an introduction is to serve as a roadmap for the readers, explaining what the article is about and why it is important, while being precise, capturing the reader's interest, and still remaining short (Audisio et al., 2009; White, 2005). Essentially then, the introduction should set the scene, provide key information about the research area, state the purpose, rationale, research gap (i.e. address the "so what question"), research questions, the strength of the design (White, 2005), as well as the contributions. Jönsson (2006, p. 485) elaborates on the problematizing dimension of the introduction: "Stating the problem is probably the most important part of article writing. ... Go back to the formulation of the problem many times during revisions and see if you cannot make it clearer and more aligned to your findings. The simpler the better!". Authors normally identify and define key concepts early on in the manuscript (Fulmer, 2012). The introduction is a suitable section for this. Moreover, "What we want from an article is a clear statement of what the contribution is" (Jönsson, 2006, p. 485). Many authors do this in the introduction. It normally ends by outlining the structure of the manuscript (Wagner, 2012).

3.4 Frame of reference/literature review

Some papers are founded on a particular theory, or sometimes theoretical pluralism (Jacobs, 2012), whereas others settle on outlining a literature review or potentially a combination of theory and literature review. Wagner (2012, p. 23) explains: "The purpose of the literature review is to set out relevant existing research in the topic area and ... argue for a research gap that the current paper fills. The review should be precise, focused and

critically evaluate current publications. It is not expected to include everything written about a particular topic". Hence, boundaries, explanations and a defence of the choices made are needed (Wagner, 2012, p. 23).

To articulate a more precise direction in your research it may be advisable to outline theoretical perspectives or a conceptual model on the basis of the literature review, so as to further assist your reader toward the planned contribution of the work. The perspectives or theoretical foundation of the conceptual model should build on concepts and ideas discussed in the literature review, but might contain additional elements that could be logically associated with the research theme and complement conceptualizing the study.

3.5 Method

Think of the method section as a place in the manuscript to gain the readers' trust. Conversely, if they do not trust the robustness or the logic behind your method, it does not matter that you present a strong literature review or present apparently relevant contributions to the literature. Therefore, in the method section, descriptions and explanations are the most important elements, but you should not forget to incorporate a few relevant references that substantiate the logic behind your methodology.

The method section "should state all the details of the observed population and the methodology the authors have used, but nothing more" (Audisio et al. (2009, p. 353). It appears that greater uncertainty characterizes qualitative research than quantitative methods. The latter is often based on standard design considerations and software solutions. As such, "there is no sure 'recipe' for doing qualitative research" ... Yet, "there is an overarching agreement on general standards and more particularly on the necessity for methodological and theoretical rigor and accountability of methods" (Ambert et al., 1995, p. 889). Despite varying standards and expectations, the dominant strategy when writing the method section in qualitative research is to be somewhat thorough in your description. It is better to be asked to curtail than to be rejected or accused of sloppy research or of displaying significant weaknesses in your writing.

Overall, outline the research methodology adhered to in the study and subsequently the research design. Explain its rationale and how you applied it in the research. What guided your choices? Reviewers will be looking for robust data and methodology and an explanation of why it is of general research interest and relevance to look at the empirical field in question. For instance, if you choose to include interviews, you should explain why interviews are suitable for the study as a part of the research design, but you must also be prepared to explain the four main interview dimensions.

The first dimension is an overview of the interviews conducted. This is often summarized effectively in a table, with one row per interviewee. The different columns could designate the interviewees' work position, the date of the interview(s), the duration and a unique interview code. Regarding the interview code, this represents a way of identifying and referencing the interviews. When you write up your results, use the interview codes to identify which interviewee it was that made the different statements. It could be that several interviewees made similar statements, making this a robust finding, which is easily spotted through the interview codes. The interview codes should represent natural abbreviations to make them easy to remember (e.g. manager = MAN1, MAN2 etc.; a board member = BM1, BM2, BM3 etc.).

The second (before), third (during) and fourth (after) dimensions deal, respectively, with: How did you prepare for the interview, what happened during the interview, and what actions and events took place after the interview? In relation to these dimensions, typical issues to address include the following questions. How did you go about selecting or identifying interviewees (and in that sense why was it relevant to speak with them)? Were the interviews unstructured, semi-structured or structured? Also, what themes and questions were prepared before the interview? Did you send an "interview guide" to the interviewees beforehand and did you adhere strictly to the guide during the interview? How did you record the data (via tape recorder, hand-written notes or by means of a computer)? How many researchers participated in the interview and where did the interviews take place? Importantly, how did you go about analyzing the interviews: by means of unstructured reading and rereading to identify a

pattern, by some sort of manual coding system, word count or other type of content analysis, through computer software analysis programs, etc.?

3.6 Results

Results are the driving force of the publication (Elsevier, 2013). The following recommendations are provided by Elsevier (2013). Only data that are essential to the discussion (i.e. primary data) should be included. Do not hide data in an attempt to save it for a later paper. This merely dilutes the work and ends with a loss of reinforcing data, making it more problematic to convince reviewers and readers of the robustness of the study. Tell a clear and easy-to-understand story; maintaining a common thread throughout the text is therefore important. The author should highlight data that differ from findings in previous publications and unexpected findings. For one thing, this makes it easier to substantiate the sturdiness of the paper's contribution(s). Elsevier (2013) furthermore counsels authors to avoid a duplication of results described in the text or other illustrations.

The results should be clearly presented. Tables or figures will often be a useful way of displaying the main results (Audisio et al., 2009; Elsevier, 2013). However, avoid the temptation to fill the table with too many words, and make sure to explain all indispensable concepts in the text relating to any tables or figures. Structure is essential when presenting the results, especially when reporting qualitative data where the descriptions may be quite lengthy. The use of subsections is one way to clarify the structure and logic of the paper (Elsevier, 2013).

3.7 Discussion

The discussion section is where you interpret what your results mean. It is the most important section in the paper. This is where you sell the data and articulate your contribution. It therefore follows that a paper really needs good data. A huge number of manuscripts are rejected because the discussion section is weak or merely contains a description of the results. The execution of the discussion (section) must thus be stupendous.

Necessary check points include making sure the discussion corresponds with, and complements the results, while doing more than merely repeating the results. Furthermore, relate your work to that of others, also contradictory findings. Convince the readers that your view/finding is better. Avoid statements that go beyond what the findings can support. The same is true of non-specific statements (i.e. be as accurate as possible). Furthermore, do not use or introduce new terms that have not already been introduced in your paper. This is important in order to avoid confusing the readers unnecessarily. Be careful with speculations. If included in the text, ensure that they are rooted in facts. They should preferably be presented at the end of the discussion section. Make sure your message is complete (meaning that you have what you need) before you start to write or submit the paper (Elsevier, 2013). Nonetheless, concerning length: "The discussion should be clear, sharp and direct. Length does not translate into quality" (Audisio et al. (2009, p. 354). Ensure that there is a close relationship between the (essence of the) literature review section or your theoretical lenses and your discussion section.

3.8 Conclusions

"The conclusion is the most challenging section to write and it should only be attempted once the rest of the manuscript is complete" (Audisio et al. (2009, p. 354). It is often useful to restate the purpose and/or the research questions at the beginning of the conclusion. Thereafter, outline the main findings so as to show clearly that you have answered what you set out to study. The emphasis should be on the "main" findings, referring to aggregated findings and overall inferences made from the data. Elsevier (2013) underscores this point. Do not just list the results here; trivial restatements are unacceptable. Implications should follow the main findings. Hitherto you have restated and answered the research question(s), but what does it mean? What are the implications? An important task here is thus to answer the imperative "so what" question. This relates closely to what Elsevier (2013) refers to as the need to explain how your work advances the field of study. Justifying and explaining this can be achieved by indicating uses, extensions or applications of the work.

3.9 Use of references

Use references wisely in your study to adequately, yet precisely indicate which literature you want to have a conversation with and contribute to (Jönsson, 2006). Make sure to relate to the format requirements. Some journals require specific styles, others allow more general styles for the initial submission. Nevertheless, be consistent and thorough, whether you decide to reference manually or via software like Endnote or Mendeley.

It is advisable to incorporate at least a few references in your manuscript from the journal you are targeting. This clarifies the thematic relevance of the submission to the journal and is a point of departure for relating to the literature and providing the foundation for a contribution.

References can roughly be divided into three categories: 1) core or essential references, 2) references relating to the research area but not very close to your approach, and 3) other references that essentially circumscribe other types of research. In your manuscript you are likely to end up with several category two references, which you naturally will reference only once or twice. You should have few or no category three references, while you are expected to carefully identify a few category one references. These are the references you will readdress several times in the text. They constitute the basic reference points for articulating the contribution of the study. Normally, the number of category one references is in the range of two to eight. Rather than adding many, you should engage properly with a small number of them.

3.10 Summarizing the characteristics of well written manuscripts

A common characteristic of the best articles "is the thoughtful and careful matching of manuscript form and structure to the theoretical purpose of the paper" (Fulmer, 2012, p. 330), making it easy to see through the "manuscript's window". Elsevier (2013) recommends that authors retain a key emphasis on clarity, objectivity, accuracy and brevity. Belgrave et al. (2002) largely agree, but meticulously point out the importance of providing enough details about your work. Balancing brevity and details is inherently difficult, yet important, and this challenge relates to what Whetten

(1989) called the trade off between parsimony and comprehensiveness. The former suggests that elements adding little or nothing to the text should be deleted. Comprehensiveness suggests that all necessary elements must be included. Thus, leaving out important factors without adequately and convincingly explaining why they are ignored is not a good idea.

4. Conclusion

This chapter has reviewed the literature on academic writing, seeking answers to the following research question: What publication and manuscript preparation advice is offered by the research community?

Key reasons why papers are rejected include: poor journal selection, insufficient problem statements, unbalanced (disproportionate) research design or manuscript structure, and confusing writing. Do not repeat these mistakes when drafting your manuscripts. Doing a research project and writing the subsequent manuscript is essentially about making a variety of choices. In the manuscript these choices must be described and explained well. The more surprised the reader becomes as he/she reads, the more likely it is because the manuscript is badly structured. Ambiguity and complexity are also dangers, including conceptual unfamiliarity or inconsistencies. It is therefore vital to establish a clear common thread throughout the entire manuscript.

Persuasively articulated contributions are needed in high-end journals. In this regard you must engage actively with the literature. To succeed you also need to build a strong set of arguments that will convince the readers (including the editor and the reviewers) of the merits of the manuscript. The contribution part, especially, must be dealt with meticulously. In light of high rejection rates, this will often mean the success or failure of the paper. The discussion section should therefore be used to sell the data and articulate your contribution. Effective, yet appropriate writing is important. Prominent scholars are expected to produce manuscripts with a key emphasis on clarity, objectivity, accuracy, and to master the parsimony and comprehensiveness trade off.

Paper production is not only about research details and manuscript technicalities. It also requires good time management skills. To stand a better chance of getting your work published you should develop work routines and habits that ensure that you spend your time well and strengthen your opportunities and range by cooperating with carefully selected partners. Key issues therefore include the ability to focus and prioritize – not only between research activities and other activities, but also in terms of how your research time is best spent. Cost-benefit considerations are therefore essential to any successful scholar. Additionally, you must insist on not resting until your work is published. Above all, be persistent and believe in your work. Do not get discouraged, and do not give up!

One limitation of this study is the choice of targeting published journal articles. There are several books on the subject that might also be useful. Moreover, future studies can explore what it takes to succeed in other publication outlets/forms than academic journals, including anthologies. Additionally, further work in this area can explore factors that are important elements of what it takes to succeed as a publishing scholar, but hitherto neglected by the literature on academic writing (and thus not covered by this literature review).

References

- Ambert, A.-M., Adler, P. A., Adler, P., & Detzner, D. F. (1995). Understanding and evaluating qualitative research. *Journal of Marriage and the Family*, *57* (November), 879–893.
- Ashkanasy, N. (2013). *Publishing for Impact*. Video clip of the Editor in Chief of the *Journal of Organizational Behavior*, available at: http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1099-1379
- Audisio, R. A., Stahel, R. A., Aapro, M. S., Costa, A., Pandey, M., & Pavlidis, N. (2009). Successful publishing: How to get your paper accepted. *Surgical Oncology*, *18*, 350–356.
- Belgrave, L. L., Zablotsky, D., & Guadagno, M. A. (2002). How do we talk to each other? Writing qualitative research for quantitative readers. *Qualitative Health Research*, 12(10), 1427–1439.
- Bonner, S. E., Hesford, J. W., Van der Stede, W. A., & Young, S. M. (2006). The most influential journals in academic accounting. *Accounting, Organizations and Society*, *31*, 663–685.
- Brinn, T., & Jones, M. J. (2008). The composition of editorial boards in accounting: A UK perspective. *Accounting, Auditing & Accountability Journal*, 21(1), 5–35.

- Cederström, C., & Hoedemaekers, C. (2012). On dead dogs and unwritten jokes: Life in the university today. *Scandinavian Journal of Management*, 28, 229–233.
- Elsevier (2013). *Prepare your paper for submission*. Elsevier for Authors. Accessed 7. January 2013, Retrieved from http://www.elsevier.com/journal-authors/home#prepare-your-paper
- Endenich, C., & Trapp, R. (2016). Cooperation for publication? An analysis of coauthorship patterns in leading accounting journals. *European Accounting Review*, 25(3), 613–633.
- Fulmer, I. S. (2012). Editor's comments: The craft of writing theory articles variety and similarity in AMR. *Academy of Management Review*, *37*(3), 327–331.
- Glick, W. H., Miller, C. C., & Cardinal, L. B. (2007). Making a life in the field of organization science. *Journal of Organizational Behavior*, 28, 817–835.
- Guthrie, J., Parker, L. D., & Gray, R. (2008). Requirements and understandings for publishing academic research: An insider view. In C. Humphrey & B. Lee (Eds.), *The real life guide to accounting research: A behind the scenes view of using qualitative research methods*. Oxford: CIMA Publishing.
- Jacobs, K. (2012). Making sense of social practice: Theoretical pluralism in public sector accounting research. *Financial Accountability and Management*, 28(1), 1–25.
- Jönsson, S. (2006). On academic writing. European Business Review, 18(6), 479-490.
- Merchant, K. A. (2010). Paradigms in accounting research: A view from North America. *Management Accounting Research*, 21, 116–120.
- Moizer, p. (2009). Publishing in accounting journals: A fair game? *Accounting, Organizations and Society*, 34, 285–304.
- Tienari, J. (2012). Editorial: Critical scholars in the machinery of publishing: Experiences, reflections, alternatives. *Scandinavian Journal of Management*, 28, 205–208.
- Toft, C. A., & Jaeger, R. G. (1998). Writing for scientific journals I: The manuscript. *Herpetologica*, 54 (Suppl.), S42–S54.
- Tychinin, D. N., & Kamnev, A. A. (2005). Beyond style guides: Suggestions for better scientific English. *Acta Histochemica*, 107, 157–160.
- Wagner, B. A. (2012). Publishing in international journals: De-mystifying the process, reducing risk and improving success. *European Business Review*, 24(1), 20–27.
- Whetten, D. A. (1989). What constitutes a theoretical contribution? *Academy of Management Review*, 14(4), 490–495.
- White, L. (2005). Writes of passage: Writing an empirical journal article. *Journal of Marriage and Family*, 67 (November), 791–798.
- Young J. J. (2006) Making up users. *Accounting, Organizations and Society, 31*, 579–600.

CHAPTER 3

Recycling of Published Academic Texts: An Introduction to the Issue

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Abstract: This paper is based on identification of instances where a version of a scientific paper has been recycled into a what is presented as a new paper. The process of recycling is time-consuming for both authors and readers, but recycled papers do not add new scientific knowledge. This paper discusses some anonymous cases and proposes a method for further research.

Keywords: recycling, academic texts, scientific work, academic contribution

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1. Introduction

New Public Management (NPM) has become a model for organizing and governing activities in the public sector, as well as activities operating within the frame of the public sector. A good example of the latter would be organizations responsible for higher education and research, i.e. universities. NPM has entered the global university arena and most universities utilize the model applying organizational performance control and participating in national and international benchmarking. Consequently NPM exists on different levels, the organizational and social, in the world of organizations whose legitimacy is based on the exploration and exploitation (March, 1991) of knowledge.

The public sector, in almost all countries around the globe, has since the 1980s been involved in a dramatic change, see e.g. Olson, Guthrie and Humphrey (1998) for an overview. The change has been labeled New Public Management (NPM), or New Public Financial Management (NPFM), in order to illustrate the financial dimension of the change. Two quite prominent characteristics of NPM are the focus on monitoring performance and then evaluating it. Universities and colleges are not exceptions even though some of them in some countries may be privately owned.

In a scientific context NPM has led to a strong focus on the volume of scientific publications and incentive mechanisms coupled to the publications' volume of performance. This reform has probably improved scientific competence in many universities, but it has also had some unintended consequences.

In my career as a scholar I have sometimes come across academic texts, which were very similar to earlier texts produced by the same author. I have labeled this phenomenon the recycling of academic texts. Consequently the new publication may not necessarily develop more knowledge. As I understand it, this is an unintended consequence of New Public Management (NPM) in an academic context. The phenomenon of recycling has not been explicitly discussed in the literature, and therefore the purpose of this chapter is to present the problem. The chapter is, at this stage of the research, more illustrative than deductive and analytical.

2. The basic activities of a university

The activities of a university are often structured into the following three groups:

Education

Research

Management and Administration

These activities are certainly interrelated. Management and administration are supposed to manage and support education and research. Scientific competence is often seen as an important indication of the quality of education. In an NPM context, education and research are increasingly monitored and evaluated, both by national authorities and by international organizations.

Evaluations may focus on education and research individually or together. The evaluation varies according to the organizational level, e.g. evaluating university-wide activities or an individual educational program. It may include rankings, accreditations and performance based revenues.

Evaluations focus primarily on the core activities of universities, i.e. research and education, but sometimes the management of these activities is also included. All evaluations may have direct or indirect effects on the revenues of the university, and they are therefore given a lot of attention by the management of the actual academic organization.

When ranking, academic institutions (either as a whole or choosing disaggregated activities, e.g. an educational program) are compared to each other and ranked. Rankings may therefore provide information to financers, e.g. potential donors, other financers like the government, and potential students about which universities are the best according to the criteria used in the ranking.

Accreditation is different than ranking. Accreditation is used to compare a university, or a program, to a norm decided by the accreditation organization.

All universities may be included in rankings independently of whether they are accredited or not, and there is no guarantee that an accredited university or a program will achieve a high ranking. Performance based evaluation is primary related to revenues for the education of students, e.g. the volume of graduated students, but it is also to an increasing extent used in order to finance research, e.g. the volume of published scientific articles.

Research is a vital part of all universities and therefore plays an important role in their evaluation, and consequently has a considerable impact on the revenues of a university. First, ranking and accreditation may have both a direct and an indirect impact on revenues, and second, performance based research revenues have a direct impact on revenues. Further, in some cases the salary of the individual scholar is dependent on the volume and quality of his/her publications. Consequently there are various types of pressure on the university organization to encourage scholars to publish, and this pressure is transmitted to the individual scholars.

The mantra is, "Publish or perish!" Individual scholars also struggle to reach high levels in the organizational, national or international hierarchy of the academic elite. Consequently there are incentives for both the individual scholar and the university to increase the volume of publications. This has certainly been the norm for a long time, but NPM has probably pushed the norm further. I label therefore this model as the publication-incentive model. Furthermore, research may thus be classified on various levels of quality, often measured through the ranking of journals and books. This means that some journals or publishers are viewed as better than others to publish in. A simple model of publications is presented in the next section.

3. A simple model of publications

Research activities always precede publication, and publication often generates new research, which in the next step generates new publications. In the rest of this chapter I will focus on the publication process. This process usually includes two steps: the publication of a working paper (WP), and the publication of an article or a chapter in a book (A/C).

The publication process may be viewed as a stream in which different versions of the research report are published. The WP may be regarded

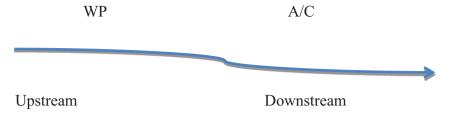


Figure 1 Illustration of publication along the stream.

as an upstream publication, while the A/C may be regarded as a down-stream publication. In this way the research is published twice, in the WP and in the A/C.

In some cases the WP may also have two or three versions, which may be somewhat similar. I view a PhD thesis in itself as an early downstream publication. It may actually contain published articles or essays and chapters, which later may become articles in scientific journals.

There is usually a difference between the upstream publication and the downstream publication, simply because the idea of presenting and publishing a WP is to get reactions to the text, and reactions from readers of the WP often generate changes in the text of the WP.

Scientific publications may, as indicated above, be divided into three main groups of publications and some sub-groups:

Working papers
First version working papers (WPF)
Working papers in university WP-series (WPU)
Working papers in conference-series (WPC)

Articles
Articles in scientific journals (SJ)
Articles in professional journals (PJ)

Scientific book, e.g. a PhD thesis
Chapters in anthologies, edited or non-edited, (EA, NEA)
Monographs (M)

Each category may be ranked in some way.

There is often a distinction made between WPF and WPU on the one hand and WPC on the other, simply because the acceptance of a WP to be presented at a scientific conference signals that the paper has some good qualities.

Scientific journals are often ranked, through either national rankings or ad hoc rankings. The British Association of Business Schools (ABS) is an example of a national association, which ranks scientific journals within the business domain, e.g. accounting, management, finance, economics, etc. The ABS group divides journals within each discipline into four grades (1–4), where 4 is the highest. The selection of journals to be graded means that some scientific journals are not included. The ABS has selected 35 accounting journals to be included and ranked, and the number of journals on the level of 4 varies, as shown below.

Grade 4: 5 journals

Grade 3: 16 journals

Grade 2: 9 journals

Grade 1: 5 journals

The individual publisher of scientific books also indicates something about the quality of the scientific text, since some publishers, e.g. Oxford University Press, are informally viewed as better than others.

The description above shows that all scientific texts are embedded in some type of evaluation system independent of the actual text.

The most respected publishers control some of the scientific journals and books. The rest of the publishing system is consequently controlled by less respected publishers.

3.1 Modern Scientific Work

Scientific work includes both the research process and the publication of research. Modern scientific work means that a scientific text is published in various versions over time, smaller or larger parts of the text are consequently recycled. A published article in a scientific journal has often been presented at a local seminar at the university, and at one or two conferences in order to improve the text.

The implicit norm in the academic system is that scholars do not have to refer to earlier versions when a later version is published. This system of recycling texts is legitimized by the international academic system, including respected publishers and journals. It seems that the system has worked fairly well and there is no obvious reason to criticize it. Academic texts may, however, also be recycled in other ways. The basic idea of this paper is to discuss the recycling of academic texts, which are published twice as downstream publications, i.e. the recycling of texts in any direction between SJ, EA and M.

4. Method

In this section I will discuss the question of recycling academic accounting texts by using some anonymous cases. The ambition here is not to present a full analysis of the issue; the purpose is to present the recycling of downstream academic texts as a problem. I have therefore chosen three illustrative examples. Each case includes a presentation of publications, the number of authors and references to other publications in the case. A short analysis of the content of the involved publication is also made.

4.1 The cases

My first recognition of this issue was when I as a new and young professor. I was a member of an evaluation committee regarding a position as full professor. Since that evaluation I have encountered the problem in other contexts. In this paper I focus on 3 cases, which demonstrate various types of recycling.

Case 1. One set of empirical data and four working papers.

The case involves one scholar who applied for a professorship. The scholar had published four working papers (WPU) based on the same empirical data. There were variations regarding hypothesis, equations and results, but the variation between the papers was small. The applicant had other

academic merits, but he was not evaluated as having the scientific competence required to become a full professor. This case illustrates only upstream recycling.

Case 2. One case and three publications.

This is a complex case. One of the scholars in this case is an internationally known scholar (Scholar A). The other is a postdoc scholar (Scholar B). Publication 1 is the dissertation of scholar B. A WP (publication 2) was presented at a large international conference. It had only the name of Scholar A on the front page. The empirical data was a large case study, which was based on data presented in publication 1, but it did not refer to that publication. The analysis was structured by theory X, and conclusions were related to this theory. Publication 3 included two names (Scholar A and Scholar B). The paper included the same case as publication 2, and consequently also as publication 1, but the framework was, however, changed to theory Y. The conclusions were also changed, primarily because of the change in frame of reference. Both publications 2 and 3 may be classified as WPC. I have no information about what happened to the publications after the conference. It is quite possible that at least one of the publications has been published in a scientific journal. As a careful reader of both papers I wonder what knowledge publication 2 added to publication 1, and what knowledge publication 3 added to publications 1 and 2.

This case illustrates how the empirical data in one study, the PhD thesis, was recycled into two working papers. To recycle parts of a PhD thesis into a WP is rather unproblematic, but an explanation of the relationship between the publications was lacking. Consequently a discussion of the eventual additional contributions was also lacking. This process may be viewed as recycling an early downstream publication into two early downstream publications.

Case 3. One case and four publications.

This case involves one PhD thesis and three articles. The PhD thesis (the thesis) consists of four essays. Two essays are written by the PhD

candidate (Scholar A) and two essays have co-authors, one essay with scholar B (an internationally known scholar) and the other with scholar C (a nationally known scholar). One article (article 1) is based on one of the essays in the thesis and is published in an ABS1 journal by scholars A and B. Two articles (articles 2 and 3) are published in what are regarded as good journals, one in an ABS3 journal (article 2) and the other in an ABS4 journal (article 3). None of the published articles refer to the PhD thesis or to each other. There are clear differences regarding the frame of reference and conclusions between article 1 on the one hand and articles 2 and 3 on the other. Article 1 is based on a clear functionalistic paradigm, while articles 2 and 3 are based on an interpretative paradigm. Articles 2 and 3 are very similar, although article 3 has a broader contextual perspective in the process studied. Consequently, it is difficult to find out what additional scientific contributions the articles present. This is especially problematic in regard to article 2 and article 3, i.e. publications in highly respected journals. This case illustrates how an early downstream publication can generate three downstream publications, among which two are articles in highly ranked ABS journals and one in a lower ranked ABS journal.

5. Short Analysis

The three cases illustrate a variation in publication practice, and that some scholars are willing to publish more than one publication based on a single research process.

It is easy to assume that recycling exists primarily in quantitative research built on data in databases or surveys, but this is wrong. Recycling also exists in case studies, like Case 2 and Case 3. Recycling of Case 2 resulted only in additionally two working papers, but recycling of Case 3 (C3) resulted in three articles in ABS-ranked journals.

The three cases demonstrate that a genuine problem may exist within the publication-incentive model. The publication-incentive model may produce a lot of publications, but not necessarily a corresponding increase in knowledge, or understanding. Further, these cases clearly illustrate that recycling of academic texts is not only an upstream phenomenon, it also exists in downstream publications, as well as in what are regarded as the best journals, e.g. ABS3 and ABS4 journals.

Recycling has both pros and cons. The evident advantage for the author is that he/she publishes more with recycling than without it, and consequently the author and his/her institution may receive higher rewards, e.g. a more substantial CV, higher salary or higher revenues. Recycling also has disadvantages. One is that readers may have confusing responses to similar phenomena, and as a consequence may not be able to understand the author's conclusions, etc. Another perspective is that recycling academic texts is very anti-green, because it generates extra printing of publications.

I think it is important that recycling academic texts should be minimized at each level of the research stream. The editors have a special responsibility for downstream publications, while the authors have a special responsibility for upstream research. At both levels recycling may be minimized if the author always explains the current state of knowledge, both theoretical and empirical, including knowledge presented in one's own earlier publications, and how the actual paper is related to this knowledge.

6. Ideas for further research

I believe that the downstream recycling of academic texts may generate a problem related to the trustworthiness of the academic community. If this is true the problem must be solved, and a first step towards a solution is a discussion based on an improved analysis of the problem.

Some issues seem to be relevant in researching recycling:

- 1. Finding more cases to study. This can be improved by asking colleagues if they know any cases and then following up this information.
- 2. Conducting a qualitative analysis of the selected publications regarding references to one's own earlier publications and conclusions.
- Comparing the selected publications by using counterfeit programs. This kind of program is used in analyzing papers written by students.

- 4. Analyzing the references other publications have to the selected publications.
- 5. Quantitatively analyzing the comparisons.

References

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, 2(1).

Olson, O., Guthrie, J., & Humphrey, C. (1998). Global warning: Debating international developments. *New Public Financial Management*. Oslo: Cappelen Akademisk Forlag.

CHAPTER 4

Whither Historical Research in Accounting?

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Abstract: In this chapter, I make a case for historical research in accounting. As shown in the narrative, accounting history may contribute to the theorization of accounting, and so historical investigations have the potential of being published in premier accounting outlets. In turn, publishing in highly visible venues enhances author visibility within the increasingly competitive markets that characterize institutions of higher learning. In this chapter, I provide a roadmap for scholars interested in historical research by focusing on established researchers within transitional and emerging economies. The roadmap consists of the institutional characteristics of the focal settings, understanding the meaning of accounting, examining the consequences of accounting systems, an emphasis on discontinuities, and further research on the "history of the present".

Keywords: accounting research, history, theorization, academic markets

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Prologue

By the end of the 1980s, Spain had already concluded its transition from an extreme, right-wing military dictatorship to a full-fledged democracy. However, the research infrastructure of the country was still under construction (e.g., in the social sciences, accounting, and business administration). In April 1989, a group of Swedish scholars led by Sten Jönsson visited the University of Seville (UofS) to participate in a workshop and hold meetings with its accounting faculty. In these meetings, the Spanish scholars and the Swedish delegation discussed several ongoing and future research projects. In the particular case of management accounting, the research agenda of the late 1980s was greatly influenced by the notion of 'relevance lost' and the impact of manufacturing and management technologies on cost accounting and management control systems. In his meeting with Sten Jönsson, Fernando Gutiérrez told Sten that he had been able to obtain access to a hightech firm, and mentioned in passing that the archives of the former Royal Tobacco Factory of Seville (RTF) were well organized and seemed suitable for research. The settings differed remarkably: a cutting-edge firm versus an old-fashioned manufactory and, just as importantly, a "hot" topic versus a "who knows what" archive. In a stunning statement, which constitutes a milestone for the Department of Accounting at the UofS, Sten suggested that Fernando proceed to the archive and conduct historical research on the underpinnings of control systems at the RTF.

Introduction

A review of articles published in top-tier North American accounting journals (e.g., *The Accounting Review, Contemporary Accounting Research, Journal of Accounting and Economics, Journal of Accounting Research*, and *Review of Accounting Studies*) between 2000 and 2010 shows that not a single item of historical research was published during the period. Given the unquestionable impact of these journals on accounting academia, why might accounting scholars then continue to conduct historical research?¹

The chapter title and this question echo the late Anthony Hopwood's presidential research lecture to the American Accounting Association (AAA) Congress in 2006 (see Hopwood, 2007). As noted by some commentators (e.g., Napier, 2006), Accounting, Organizations and Society, with Anthony Hopwood as its editor-in-chief, has been instrumental in the development of the "new accounting history".

The disciplinary importance of these leading journals cannot be ignored. However, these particular journals do not represent all accounting research traditions. In this respect, other equally top-tier journals (e.g., *Accounting, Organizations and Society*) provide a wider research perspective and publish historical research in accounting. Importantly, historical papers are highly influential and widely cited. For example, Brown (1996) found that historical studies, such as those by Hoskin and Macve (1986, 1988), Loft (1986), and Hopwood (1987), rank among the most influential accounting research reports of all time. In fact, in his listing of highly cited influential accounting articles, Brown (1996) classified these as "classic" studies.

In this chapter, I argue that historical research and antiquarianism are not synonymous, and that accounting history studies can make a solid contribution to the theorization of accounting. Therefore, investigating archival data provides an excellent opportunity to address sound theoretical problems and contribute to prior research in auditing as well as financial and management accounting. This way of conducting historical research then provides good opportunities for researchers to publish in generalist outlets with a tolerant understanding of research methodologies and paradigms (e.g., Abacus, Accounting and Business Research, Accounting, Organizations, and Society, European Accounting Review). Furthermore, I argue that there is a dearth of historical research examining accounting in contexts that diverge from those overwhelmingly considered by articles published in most international (e.g., Anglophone) journals. This finding does not engender claims for different contexts for out-of-sample archival data, far from it. I contend that reliance on the institutional conditions of settings different from those published in international journals in the English language hold promise for augmenting prior accounting research. As noted by Scott (1995: 146), "It is difficult, if not impossible, to discern the effects of institutions on social structures and behaviors if all our cases are embedded in the same or very similar contexts."

This chapter targets emerging scholars about to commence their research career, either in the form of a doctoral thesis or as part of a broader longer-term research agenda. In particular, I focus on research

opportunities for scholars established in emerging or transitional economies. In the following section, I discuss why emerging scholars may wish to engage in ambitious research projects. I then comment on the extent to which accounting history research has concentrated on relatively few settings and quite narrowly defined periods of observation, and hence, how fruitful research opportunities may arise from the investigation of other settings and periods. This is followed by a discussion of some factors that can be useful in guiding historical research in accounting. The chapter concludes with some specific suggestions for accounting history research in emerging or transitional economies.

Why Should I Engage in Competitive Research?

The number of accounting and business administration programs has increased significantly over the past three decades (Iñiguez and Carmona, 2007), resulting in a growing number of universities and business schools. In the European market, 23 Spanish universities offered degrees in business administration in 1989, and this had risen to 46 institutions by 2005. Similar rates of growth are reported in most southern (e.g., Italy) and northern European countries (e.g., Sweden). More specifically, German-speaking countries witnessed increases in the number of university chairs in "Controlling" from 17 in 1989 to 72 chairs in 2005 (Schäffer and Binder, 2006).

The consequences of this steady growth in the market for both accounting and business administration programs, as well as institutions of higher learning, cannot be neglected. The European market comprises nearly 2,000 universities but is highly fragmented, with 27 countries having divergent research and educational traditions. Although the North American market is of similar size, using English as a common language generally makes it more concentrated than its European counterpart. Furthermore, the North American market features a clear-cut distinction between teaching and research universities (Lambert, 2006).

The processes of tenure, promotion, and the compensation of faculty are central to institutions of higher learning (Wulff and Austin, 2004). However, the US and European higher education markets differ markedly

in regard to these important processes. According to Frey and Eichenberger (1993), there are two kinds of markets for higher learning: regulated markets, which they refer to as R-markets, and competitive markets, which they denote as C-markets. In general terms, Frey and Eichenberger (1993) equate the C-market to the North American market, whereas the European market constitutes a good example of an R-market.

According to Frey and Eichenberger (1993), C-markets are large, uniform and competitive. Consequently, there is high academic mobility. In such markets, promotion and compensation are linked to objective, impersonal measures of performance (e.g., evaluations performed by peers). Conversely, R-markets are highly interventionist. In the case of the European market for institutions of higher learning, the national language constitutes a barrier that prevents the perfect mobility of resources across countries. Furthermore, the market is relatively thin and incomplete. For instance, faculty evaluation is often not based on objective measures of performance and sometimes takes into consideration non-performance factors, such as service and the membership of academics in a particular "school of thought." Finally, compensation is typically noncompetitive.

In developed countries, there is a process of convergence towards C-markets. This trend, led by the UK, has enforced objective processes in the assessment of research performance and established tuition fees that close the gap between prices and actual costs. Furthermore, the UK publicizes official rankings of university departments across all areas of knowledge in order to make the market more transparent to students and stakeholders. Some other European countries have followed suit (e.g., the Netherlands). This process of convergence towards C-markets and truly global universities and business schools has received greater impetus with the implementation of the Bologna Accord, which enforces a real market for higher education in Europe.

In C-markets, which are now becoming the dominant trend, how is research evaluated? Providing an answer to this question requires reference to Cole's (1983) notion of a research frontier. Cole regards the research frontier as any publicly available knowledge: "...all the work currently being done by all active researchers in a given discipline ... [the

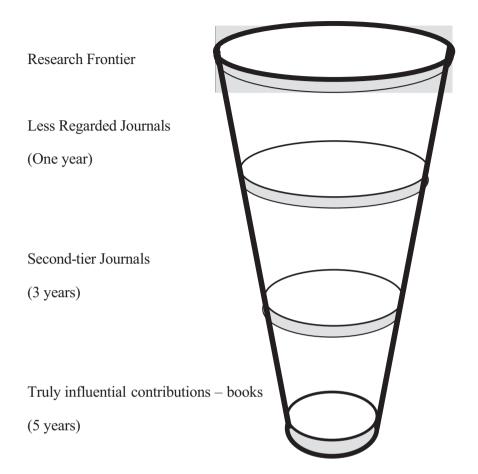


Figure 1 The Filter Effect (Cole, 1972).

research frontier] is where all new knowledge is produced" (1983: 14, see Fig. 1). Furthermore, Cole (1983) contends that work on the research frontier must be subjected to a different filter in order to gain credibility and visibility – in short, the review process in refereed journals. Ultimately, outstanding research would become more widely accepted and thereby constitute the "core knowledge" of a discipline.

In this context, what is the profile of historical research in accounting in terms of the geographic distribution of authors and settings? Carnegie and Potter (2000: 190) found that 105 (70.64%) of all published studies investigated events in Anglo-Saxon settings (i.e., the UK, the US, Australia, Canada, or New Zealand). My own research provides support for

these findings. To address this issue, Carmona (2004) expanded the database to papers published in both generalist journals as well as specialist outlets.² In this respect, he found that an overwhelming majority (90.75%) of authorships consisted of scholars affiliated with institutions in Anglophone countries. Furthermore, one could only conclude that accounting history research published in international journals focuses primarily on Anglophone countries. Carmona (2004) also found that 71.76% of papers included in his database address events that took place between 1850 and 1945, thereby demonstrating a profound neglect of other periods of study. Carmona's (2004) overview of accounting history research published during the 1990s in English-language journals, for the most part, reveals that non-Anglophone scholars, settings, and periods of study other than 1850-1945 were largely neglected in the international arena. By concentrating on such a minute time-space intersection (Parker, 1993; Carmona and Zan, 2002), such publications omit the research endeavor of the majority of scholars, settings, and periods, thereby neglecting historiographies that represent considerable archival research into settings and times.

Framing Historical Research

What counts as accounting

Accounting historians are inevitably faced with a crucial question at the outset of their research inquiries: What counts as accounting? (see Carmona, Ezzamel and Gutiérrez, 2004 for further analysis). Practices within any profession, such as accounting, change over time. An accounting historian has to decide at the beginning of an investigation whether a contemporary notion of accounting practices will be adopted, or whether a concept more suited to the historical context under investigation is to

The specialist journals included were Accounting, Business and Financial History, Accounting Historians Journal, and Accounting History. The general accounting journals consisted of Abacus, Accounting, Auditing and Accountability Journal, Accounting and Business Research, Accounting, Organizations and Society, The Accounting Review, Contemporary Accounting Research, Critical Perspectives on Accounting, European Accounting Review, Journal of Management Accounting Research, and Management Accounting Research. Since 2010, Accounting, Business and Financial History (now Accounting History Review) has changed its editorial policy under new editorship.

be considered (see Previts and Bricker, 1994). Put differently, the legitimacy of deploying concepts of the present to describe and analyze past accounting practices is debatable. This is a challenging enough problem for researchers concerned with charting accounting history over the last few centuries (for example, Garner, 1954; Solomons, 1968; Johnson, 1981; Hoskin and Macve, 1986; Hopper and Armstrong, 1991; Carmona *et. al.*, 1997; 1998), and the difficulty is compounded several times over for those concerned with accounting history in ancient times (e.g., Ezzamel, 1994; 1997; Mattessich, 1989; 1998; Carmona and Ezzamel, 2007, 2008).

The influential book *Accounting Evolution to 1900* by A.C. Littleton (1933/1981: f.n., p. 23) provides a useful starting point for discussion. Littleton devotes much time to developing views on accounting which, for him, is double-entry bookkeeping as "complete, systematic, coordinated account-keeping." Littleton identifies three main attributes and four antecedents of double-entry. The attributes are: firstly, duality (of books, of account form, and especially of entry); secondly, the equilibrium/balance of results (for example, as reflected in the balance-sheet); and thirdly, proprietorship (ownership of goods handled and claims upon emerging income). Together, these three attributes constitute the form and substance of double-entry:

The form of complete bookkeeping is the duality and equilibrium which derive from early record-keeping precedents, the substance consists of proprietary calculations of the gains (or losses) from ventured capital. (Ibid., p. 27)

The antecedents, according to Littleton, are capital, money, credit and commerce:

If either property or capital were not present, there would be nothing for records to record. Without money, trade would be barter; without credit, each transaction would be closed at the time; without commerce, the need for financial records would not extend beyond governmental taxes. (Ibid., p. 12)

Littleton's notion of the attributes and antecedents of accounting focuses on the domain and nature of what counts as accounting. While these attributes/antecedents can be found in many important accounting practices throughout past centuries, such a concept may also be regarded

by some researchers as too restrictive in the present context. For example, the insistence by Littleton on double-entry as the pure (indeed the only) form of accounting acts only to privilege *one* form of accounting not simply over others but, more crucially, to the *exclusion* of others (for similarly restrictive views see Weber, 1978; Sombart, 1979). Moreover, insistence on monetarization excludes entries using non-monetary units to represent transactions or exchanges.

To provide some concrete examples of the concerns raised above, consider the attitude to alternative forms of accounting taken by Stevelinck. In examining evidence of accounting transactions from ancient Egypt and Mesopotamia, Stevelinck (1985) dismisses the relevance of such accounting practices for contemporary accounting historians. Stevelinck raises two concerns. First, that, "These accounts appear far too distant from us. They may be admissible but what can we learn from them that will be of use to us professionally? Surely, we should attempt to discourage students from learning techniques that are out of date." (p. 3). The second concern is: "Accounting has been kept since time immemorial, but double-entry bookkeeping goes back less than 1,000 years. In the last analysis, it is this system that really interests us, because it is still in use, and because it would be instructive to examine its origins, to follow its evolution step by step, to identify progress, the path it took, the tentative innovations of our predecessors, the solutions they arrived at." (p. 3). These concerns underpin traditional research and demonstrate most clearly its emphasis on origins, evolution, progress, and the privileging of double-entry, over all other admissible forms, as the only interesting form of accounting practice.

In spite of these and other restrictive assumptions, Littleton's prominent view of what is the essence of accounting, continues until today to underpin virtually all the research conducted according to a traditional understanding of what counts as accounting. This is not only true in the English speaking world; Italy and Spain, for instance, are countries where a traditional understanding of accounting underpins the mainstream of accounting history research. Rafael Donoso-Anes (1996), for example, examined the accounting procedures implemented in the *Casa de Contratación* in Spain in the early 16th century to monitor the receipt

of silver and gold shipped from America, as well as the subsequent minting and selling in public auctions of these precious metals to merchants. He argued that the double-entry bookkeeping method was deployed to account for transactions related to the minting process. Donoso-Anes (1994) concluded that such evidence represented the earliest documentation of the utilization of the double-entry method in a Spanish public organization. Alberto Donoso-Anes (1997) studied the reasons for the introduction of double-entry bookkeeping in the Cajas Reales de Indias (1784–1787) in present Peru as well as the causes that motivated its demise. He found that a number of political and social reasons underpinned the public accounting reform. Such findings thus challenge the prevailing notion that attributed the failure of the reform to the lack of double-entry bookkeeping expertise among civil servants. As a more recent example of research focusing on double-entry bookkeeping, Bisaschi (2003) investigated the implementation of the system in the Santa Maria de la Salute Hospital, in Parma (Italy). There are, however, some notable exceptions where traditional research does not exclusively focus on double-entry bookkeeping and monetarization (see Fleischman and Tyson, 1998 for a recent example of enquiries not limited to double-entry systems). In non-Anglo-Saxon contexts, Carmona and Donoso (2004) also provide a good example of theorization in a non-double-entry bookkeeping context in their examination of costing practices for price-setting in a regulated environment, in 1525 Seville.

Accounting and double-entry bookkeeping.

Investigation of double-entry bookkeeping by researchers having the traditional point of view is not restricted to implementation issues; it also extends to topics such as the examination of the individuals who played significant roles in setting up the foundations of the system (e.g., Hernández-Esteve, 1994), its dissemination into practice (e.g., Craig and Jenkins, 1996), and its diffusion into the domain of accounting thought (e.g., Donoso-Anes, 1992; González-Ferrando, 1992; Nikitin, 1996).

By emphasizing double-entry bookkeeping and related monetarization, however, traditional understanding of what counts as accounting marginalizes other equally, if not more important, accounting and control practices. For example, the Royal Tobacco Factory of Seville (RTF), a state-owned monopoly of tobacco that secured significant income for the Spanish Crown, developed a sophisticated system for monitoring tobacco movements within the different production stages of snuff tobacco: drying, milling, sieving, second milling, fermentation and distribution. In contrast to the traditional view of accounting shown above, this system was based on the charge and discharge method and measured the flow of tobacco in quantitative, non-financial terms. To cope with increasing market demand for tobacco, the RTF moved its factory location from the Old San Pedro Factory to a new, purpose-built building, known as the New Factories, in 1758. As a result of this change in premises, the accounting system in the RTF became considerably more sophisicated, illustrated by innovations implemented in the distribution stage (see AFTS, Legajo 2.10.1; see also Carmona, Ezzamel and Gutiérrez, 1998).

Many examples illustrate that historical research is not restricted to double-entry bookkeeping. Carmona and Donoso (2004) examined the case of the Royal Soap Factory (RAS) of Seville during the period 1525-1692. This factory operated under monopolistic conditions, but the price of a pound of soap was set by the regulator, the local government. In order to draw attention to the production cost, the parties organized a test that reproduced the soap production process. The test was run by soap experts that were brought from outside the city limits. In January, 1525, having observed that the price of soap was too high, the local government took the initiative to develop a test (ADMSA. Legajos 51-4, 53-27; AMS. Section 1, Litigios, Folder 116, Number 57). Over the years there was a running argument between the RAS and the local government as to whether the tests should be run using raw materials from the RAS inventories or if they should use new materials purchased specifically for the purpose of testing. In 1525, the wishes of local government officials prevailed, and new materials were purchased (see ADMSA. Legajo 51-4).

The reported price of olive oil was the outcome of a weighted average of all olive oil acquisitions made during the preceding week: "Those prices

Table 1	The 1525	Test:	Cost of	f Raw	Materials.
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Materials	Consumption	Unit cost	Total cost
Olive oil	3 arrobas³	140.5 maravedíes ⁴	421.5 maravedíes
Ashes	6 fanegas⁵	50 maravedíes	300 maravedíes
Lime	2 ½ fanegas	39 maravedíes	97,5 maravedíes
Wood	1 carga	68 maravedíes	61 maravedíes
Lye	6 cuartillos	2,5 maravedíes	15 maravedíes
Total cost			895 maravedíes

Sources: ADMSA. Legajos 51-4, 53-27. AMS. Section 1, Litigios, Folder 116, Number 57.

were used and distributed and each *arroba* cost 140.5 *maravedíes*, once the five *maravedíes* of *alcabala* (a sale tax) were taken into consideration" (ADMSA. *Legajo* 53–27). The cost of a *fanega* of ashes was 40 *maravedíes* and 10 more *maravedíes* were added for transportation and sundry costs. A *carga* (load) of wood cost 2 *reales*, (68 *maravedíes*). One tenth of the *carga* was not used in the test, however, so the final cost was decreased by 7 *maravedíes*. Finally, the soap experts who ran the test decided on the consumption of lye and its concomitant cost.

The soap produced for the test weighed 7 arrobas and 11 pounds (186 pounds); thus one arroba of olive oil produced 62 pounds of soap, rather than the usual 50–51 pounds, and this was regarded as a "high performance of olive oil" (alto rendimiento del aceite). It was therefore concluded that "this test has been more successful than any of the preceding ones" (ADMSA. Legajo 51–4). Although materials used in the production of a pound of soap cost 4.818 maravedíes, difficulties in handling decimals at the time required the experts to price it at "4 ½ maravedíes and one nueva", or 4.75 maravedíes per pound (see Table 1).

The manager of the RAS complained that soap production also involved other activities, and that their accompanying costs must be added to the cost of raw materials. The RAS manager's complaints are listed in the memorandum summarized in Table 2, which contains the expected annual cost of the support activities. By dividing the estimate of support costs by the expected annual production of soap, the parties

¹1 *quintal* = 4 *arrobas* = 100 pounds = 128 *cuartillos*.

²1 ducado = 11 Reales = 375 maravedíes = 748 blancas = 1,496 nuevas.

 $^{^{3}1}$ fanega = approximately 55.5 liters. 1 carga = 1 carretada = 8 fanegas = 9 6 almudes.

Table 2 The 1525 Test: Estimation of Annual Costs.

Items	Proposal made by the Administrator of the RAS	Decision made by the local government of Seville
Repair and maintenance of cauldrons	12,000	8,000
Purchase of ropes and related items		
Preparation of cauldrons for the test	6,000	4,000
Fabrication of sundry materials	10,000	6,000
Taxes for ashes	7,500	7,275
Rent that would be obtained if the building hosting the RAS were leased	16,000	10,000
Wages and food for the woman in charge of the office of weights	6,000	6,000
Food and wages for the six operators of the shop floor	57,000	40,000
Yearly taxes for soap turnover	120,000	40,000
Returns on investment for materials and machinery	300,000	20,000
Salary of the administrator	40,000	30,000
Total		171,275

Sources: ADMSA. Legajos 51-4, 53-27. AMS. Section 1, Litigios, Folder 116, Number 57.

obtained the cost of support activities per pound of soap, which management believed should be incorporated into the final cost of each pound. Column 1 depicts the claims of the RAS management concerning items and prices to be considered for cost purposes; whereas Column 2 reports the final decision of local government representatives.

Following is the rationale employed by RAS management and some of the counterarguments posed by local government:

- i. If leased, the building that hosted the soap factory would yield an annual rent of 16,000 *maravedies*, and this opportunity cost should be considered in the overall cost.
- ii. The wages of the six shop floor operators should be considered. Representatives of the local government verified, however, that five out of the six shop floor employees were slaves. Therefore, they agreed to budget their living costs, but removed their suggested wages of 17,000 *maravedíes*/year.

iii. Investments made by the RAS in inventory and machinery would, in the opinion of the RAS management, produce a 10% annual return, which would amount to 300,000 *maravedies*. As shown in Table 2, this figure was rejected by the local government, which incorporated 20,000 *maravedies* into the cost of soap.

Accepted claims amounted to 171,175 *maravedies*, which were allocated to the expected annual production of 417,000 pounds of soap. Non-production costs increased the cost per pound by 0.41 *maravedies*. The problems surrounding the handling of decimals, however, brought about the following consideration: "... it seems that each pound costs one *nueva*, which is one fourth of a *maravedi* as well as half a *nueva*, which is one-eighth of a *maravedi* ...". The resulting figure was rounded down to 0.25 + 0.125 = 0.375 rather than 0.41, which in absolute terms, meant a difference of 14,900 *maravedies* (171,275 – 156,275). The final report of the test stated: "... the remaining 14,900 *maravedies* are for the people [of Seville] because there is no way to allocate this amount to the pounds [of soap], and ultimately, this amount is consumed and are consumed [sic] by the people of Seville ...". Accordingly, the cost of a pound of soap was the result of the aggregation of raw material costs of 4.75 *maravedies* (Table 1) and support costs of 0.375 (Table 2).

The experts who carried out the test admitted, however, that the result demonstrated an outstanding performance of olive oil. Under normal conditions, one *arroba* of olive oil would have produced 50 to 51 pounds of soap, and if that result had occurred in this test, the cost of a pound of soap would have been 6 *maravedies* rather than the 4.75 *maravedies* calculated from the test of January, 1525. Consequently, they proposed to set the price of the soap at 6 *maravedies* and pointed out that "the test was beneficial for the people of Seville and worth being taken as a reference for the future" (ADMSA. *Legajo* 53–27).

In short, the accounting series of the Royal Soap Factory of Seville provided an extensive list of raw materials, general expenses and transactions that had to be used to set the price of a pound of soap. Both the documents and the accounting series, however, were based on the charge/discharge method and consisted of information of a financial (e.g., cost of

raw materials) and non-financial nature (e.g., standards for performance of olive oil, capacity of the RAS), in contrast to a traditional emphasis upon double-entry and monetarization.

The causes of accounting and researching its consequences.

Littleton, additionally, was more concerned about the investigation of the "causes" of accounting than in researching its "consequences" (Carnegie and Napier, 1996, p.11). This focus on causes, in turn, neglects some interesting possibilities for accounting history research (e.g., the organizational effects of changes in the charge and discharge accounting method). For example, the RTF witnessed a power struggle between the General Superintendent, Mr. Vicente Carrasco, and the General Inspector, Mr. Francisco de Portocarrero, during the 1770s. The General Superintendent had full authority on RTF activities. However, the steering agency of the tobacco monopoly observed that the RTF was not as efficient as expected in dealing with the installed production capacity of the New Factories. Accordingly, the post of General Inspector was launched to tackle manufacturing problems, and it had some noteworthy characteristics. First, the salary of the General Inspector was higher than that of the General Superintendent. Second, the General Inspector had no accountability to the General Superintendent, but reported directly to the steering agency. Lastly, Mr. Portocarrero, a knowledgeable expert on the tobacco business, was appointed to the post. The conflict between the two senior managers formally concerned technical issues (e.g., procedures to triple the annual production volume of the RTF), but it actually had a strong political component that spread throughout the entire organization. The Accounting Office, for example, played an instrumental role in the devising and developing of accounting procedures to cast light on operational activities. In particular, the Accounting Office was supportive of the initiatives of Mr. Portocarrero to triple production volume (e.g., Carmona Ezzamel and Gutiérrez., 1997; 2002) and, thus, dismissed some of Mr. Carrasco's actions aimed at similar goals. On 23rd December 1776, Mr. Carrasco issued a memorandum to improve the reporting system of

the Supplies Warehouse (e.g., AFTS, Legajo 607) by enforcing monthly reporting instead of annual reporting, as well as stipulating more stringent procedures for internal control. The Accountant (Contador, as then known) of the RTF complained about the consequences that such changes would have on the workload of his office (e.g., AFTS, Legajo 515). In short, the Accountant concluded that "physical inventories cannot be undertaken on a monthly basis". In order to strengthen his position, the Accountant contended that "officers and clerks of the Accounting Office (Contaduría) are already busy during their working hours and have no time for any additional tasks". Interestingly, however, the Accounting Office was responsive to the demands of Mr. Portocarrero to account for endless experiments to improve manufacturing costs (e.g., Carmona, Ezzamel and Gutiérrez, 1997). This episode reveals a situation of considerable interest for researchers who have problems with adhering to traditional views of accounting. From this perspective, the deployment of accounting innovations is not solely motivated by efficiency or technical reasons, but it also plays an instrumental role in the development of organizational activities.

The limitations of Littleton's (and other similar) view(s) of accounting have prompted some other researchers (for example Miller and Napier, 1993, p. 632) to assume, albeit implicitly, that the term 'accounting' automatically leads to the emergence of what they call "traditional histories of accounting" which they identify (correctly from our point of view) as restrictive. Consequently, feeling compelled to seek a way out of the problem, these researchers have proposed replacing accounting history with "genealogies of calculation" (Miller and Napier, 1993, p. 632) or "economic calculation" (Miller et. al., 1991, p. 400) as a means of broadening the scope of inquiry into accounting's past. This proposal, they argue, would make it possible to shift the focus of analysis from seeking to trace the origins of the present to trying to understand the outcomes of the past. It is also claimed that this would promote an emphasis upon "the historicity of the various techniques and rationales that have constituted accounting at different times, and in different places" (Miller and Napier, 1993, p. 632). The use of the term 'calculation' instead of 'accounting' is an attempt to avoid "an a priori limiting of the field of study of accounting as it currently exists, or to a particular accounting technique such a double-entry bookkeeping", and it is thought to help "construct and support particular relations of power and influence" (Miller *et al.*, 1991, p. 400).

Presumably out of concern for the implications of their suggestion to replace 'accounting' with 'calculation', Miller *et al.*, (1991, p. 401) hastened to add that: "This is not to say that there is no such thing as the history of accounting. But it is to suggest that there is no single character, no immutable entity or practice that will provide an enduring reference point with which to fix the identity of accounting history." Although it does make sense that the "identity of accounting history" should not be fixed by an "enduring reference point", an important question arises: Is it necessary to supplant 'accounting' with 'economic calculation' to achieve this end? Probably not, it is entirely possible to work within accounting in a manner that seeks to open up the terms of reference and debate concerning the nature and focus of accounting practices.

Another example of a concern with the limitations of conventional views of accounting is found in the work of Tinker (1985, p. 86), who prefers to focus directly upon accounting practices as a means of providing a valuation of alternatives, of facilitating exchange through the determination of reciprocity, and of adjudicating economic claims (and social relations more generally):

Accounting practice is a means of resolving social conflict, a device for appraising the terms of exchange between social constituencies, and an institutional mechanism for arbitrating, evaluating, and adjudicating.

Although Tinker does not begin his analysis by identifying what may be termed, within Littleton's framework, basic attributes and antecedents of accounting, he aspires to promote a broad definition of accounting. Tinker (p. 85 and pp. 95–97), lists a number of examples, as taken from Mandel, (1962; 1968), of entries recording equivalence in labor time dating back to the early and late medieval period in Japan and Europe. For Tinker (1985, p. 86), in these entries, even though not monetarized nor in the form of double-entry, "accounting information helps parties to social and economic transactions assess the adequacy of the value of their returns or entitlements." Tinker goes further in articulating his views of accounting

by noting that it operates on two levels. First, accounting examines alternatives from the perspective of each individual party to an exchange as buyers, sellers, and producers. Second, on the social level, accounting practices seek to establish a "rationale for appraising exchange possibilities for the collective parties to an exchange" (Tinker, 1985, p. 86). Furthermore, Tinker carefully avoids the temptation to equate accounting practices with any specific ideology: "There is nothing inherently and irrevocably conservative, reformist, or radical about accounting practice" (Tinker, 1985, p. 82). Tinker's notion of accounting does not insist on monetarization, commerce, profit making, or double-entry. Rather, his emphasis is upon the ability of accounting practices to construct, in quantitative terms, human activities and economic exchanges, and in so doing establish modes of reciprocity and adjudicate economic and social claims.

Tinker's work enables a broadening of the scope of accounting practices by alluding to the myriad of possibilities which may be invoked by social actors, either individually or collectively. However, there are limitations to his analysis. In particular, his apparent insistence that accounting valuation is "only relevant to those social systems in which integration and cooperation have developed enough to enable social members to devote part of their efforts to producing, not for personal consumption, but for a market exchange (i.e. commodity production)" (ibid., p. 84), excludes those accounting practices which exclusively focus upon redistribution within a centrally administered economy, or on documenting lists of personal wealth, as occurred frequently in ancient economies (Janssen, 1975).

As noted by Ezzamel and Hoskin (2002) a baseline definition of accounting is possible, whereby such a definition could apply equally across time and space. They argue that, first, accounting is the practice of entering, in a visible format, a written record (an account) of items and activities. Second, any account involves particular kinds of signs which both name and/or count those items and activities recorded. Third, the practice of producing an account is a form of constructing financial values and/or quantifying non-financial activities and managerial actions: (i) extrinsically as a means of capturing and representing values derived from outside for external purposes, defined as valuable by some other

agent; and (ii) intrinsically in so far as this practice of naming, counting and recording in visible format constructs the possibility of precise valuation or quantification. Accounting is therefore a primary technology of valuation and quantification; indeed, accounting is a constructor of value and this is true both in the presence and *absence* of market exchange, the profit motive, and indeed currency, as long as there is some common denominator that operates as a 'money of account' (Ezzamel, 1997). Under this broad notion of accounting, researchers adopting this wide view may involve themselves in investigations of experiments such as those reported in the RTF on 21st February 1777 (see AFTS, Legajo 194), whose aim was to determine the ideal size and quality of tobacco tins. RTF administrators considered that consumers' perception of tobacco quality was informed by the size of tins. In this experiment, they found that smaller tins gave a false impression of low quality tobacco, in spite of the "correct milling and sieving of the materials."

Concluding Remarks

The above discussion illustrates some key features of historical research in accounting. In particular, the sense of the analysis and its supporting evidence shows that accounting history research holds promise as a contribution to extant accounting research in a number of areas. In so doing, such research might be published in top-tier generalist accounting journals, and through this obtain increased visibility. As discussed above, publication in prestigious outlets with good visibility is the *conditio sine qua non* for success in the increasingly dominant competitive markets that feature institutions of higher learning around the world. In this section, I also suggest a roadmap for scholars established in emerging and transitional economies.

Current historical research in accounting has focused on a very limited number of settings (e.g., Anglophone countries). Therefore, conducting historical research in emerging (e.g., Latin America) or transitional (e.g., Eastern Europe) countries holds promise for adding to the existing research in accounting. In a similar vein, historical research published in international journals has largely focused on a rather narrow period of

study (e.g., 1850–1940). Therefore, examination of historical aspects outside these settings and observation period may also add to extant knowledge in our discipline. Taken together, research examining observation periods and time settings that differ from those overwhelmingly studied in investigations published in the English language may benefit the ongoing theorization of accounting.

In conducting this research, scholars might wish to consider several factors. First, and although I may recognize my own bias in this, I would suggest that scholars venture beyond a mere description of their evidence, no matter how rich. Conversely, scholars conducting historical research should attempt to theoretically embed their evidence in order to contribute to accounting theorization, and hence, enhance the likelihood of their studies being published in international generalist and specialist accounting outlets. Ultimately, this would enable these scholars to succeed in the increasingly dominant C-market for institutions of higher learning.

Second, in order to identify the subject matter under investigation, scholars may not wish to focus simply on accounting issues related to double-entry bookkeeping practices. In many settings, accounting practices different from double-entry bookkeeping are being used, and such environments are equally valuable for conducting first-tier research. For example, as noted by some commentators (Bailey, 1988), doubleentry bookkeeping was uncommon in former socialist countries. Importantly, the subject matter may focus on the wider aspects of accounting changes (Napier, 2006). Third, selection of the period of study does not necessarily have to be restricted to very old periods in medieval or ancient times. In this respect, there is a considerable lack of knowledge about the "history of the present" (Carmona and Zan, 2002), and especially, the period 1940-90. In settings such as former communist countries in Eastern Europe, or emerging economies in North Africa or Latin America, an investigation of the functioning of state-owned enterprises under the rule of communist parties may indeed add to prior accounting research. Furthermore, such a history of the present could refer to the implementation of international accounting and auditing standards in emerging and transitional economies (Menniccken, 2008; Ezzamel and Xiao, 2007; Ezzamel, Xiao and Pang, 2007). Fourth, and according to the evidence in this chapter, these investigations may focus on the "consequences" of accounting techniques rather than on their "causes." In this manner, scholars conducting historical research may broaden the scope of their investigations and examine the organizational and social implications of accounting practices, and hence contribute to the theorization of accounting, as was shown by bibliographical research (e.g., Brown, 1996; Napier, 2006). Finally, the choice of the subject matter under investigation should be guided by the identification of discontinuities or shifts rather than a search for the "early" implementation of certain accounting practices. Ultimately, another study will find an earlier implementation of an accounting technique, and will thus make our study obsolete. Focusing on discontinuities or shifts provides more ground for a theoretical discussion of these changes.

In this chapter, I make a case for historical research in accounting. As shown, historical research holds promise for enhancing the theorization of accounting, and hence such studies have the potential of being published in top-tier premier outlets, thereby promoting their authors within the increasingly dominant C-markets. Furthermore, scholars willing to engage in historical research may wish to consider the roadmap provided in this chapter, which covers factors such as: settings; focus on consequences, shifts, and discontinuities; reliance on the institutional characteristics of the settings rather than focusing on the mere description of archival data; and consideration of the "history of the present" as a valid area of historical research for both transitional and emerging economies.

REFERENCES

Archival sources cited in the chapter

Archivo de la Casa de Medinaceli. Sección Alcalá (ADMSA) ADMSA. Legajo 51–4 ADMSA. Legajo 53–27 Archivo Municipal de Sevilla AMS. Section 1, Litigios, Folder 116, Number 57 Archivo de la Fabrica de Tabacos de Sevilla AFTS, Legajo 2.10.1 AFTS, Legajo 194

AFTS, Legajo 515

Other sources cited in the chapter

- Bailey, D. (1988). Accounting in socialist countries. London: Routledge.
- Bisaschi, A. (2003). The accounting system of the Venerable Society of the Living and the Dead of Parma in medieval times. *Accounting History*, *8*(1), 89–111.
- Brown, L. D. (1996). Influential accounting articles, individuals, Ph.D. granting institutions and faculties: A citational analysis. *Accounting, Organizations and Society, 21*(7–8), 723–754.
- Carmona, S., & Donoso, R. (2004). Cost accounting in early regulated markets. *Journal of Accounting and Public Policy*, 23(2), 129–157.
- Carmona, S., & Ezzamel, M. (2007). Accounting and accountability in ancient civilizations. *Accounting, Auditing and Accountability Journal*, 20(2), 177–209.
- Carmona, S., & Ezzamel, M. (2008). Ancient accounting. In R. Edwards & S.P. Walker (Eds.), *The Routledge companion book of accounting history.* (pp. 73–94).
- Carmona, S., Ezzamel, M., & Gutiérrez, F. (2004). Accounting history research: Traditional and new accounting perspectives. *De Computis*, 1(1), 24–53.
- Carmona, S., Ezzamel, M., & Gutiérrez, F. (2002). Accounting and factory space. *Accounting, Organizations and Society*, 27(3), 239–274.
- Carmona, S., Ezzamel, M., & Gutiérrez, F. (1998). Towards an institutional analysis of accounting change in the Royal Tobacco Factory of Seville. *Accounting Historians Journal*, 25(1) (June), 115–147.
- Carmona, S., Ezzamel, M., & Gutiérrez, F. (1997). Control and cost accounting in the Spanish Royal Tobacco Factory. *Accounting, Organizations and Society*, 22(5), 411–446.
- Carnegie, G. D., & Napier, C. J. (1996). Critical and interpretive histories: Insights into accounting's present and future through its past. *Accounting, Auditing and Accountability Journal*, 9(3), 7–39.
- Craig, R., & Jenkins, S. (1996). Conjectures on colonial accounting history in Australia. *Abacus*, 32(2), 92–119.
- Donoso Anes, A. (1997). Estudio histórico para un intento de reforma en la contabilidad pública: La aplicación del método de la partida doble en las cajas reales de Indias (1784–1787), *Revista Española de Financiación y Contabilidad*, *XXVI*, 1045–1089.
- Donoso-Anes, R. (1992). "Bartolomé Salvador de Solórzano, primer autor de un libro de contabilidad por partida doble o cuatrocientos años de reconocimiento teórico de la contabilidad por partida doble en España", *Cuadernos de Investigación Contable*, 4(1–2), 1–42.
- Donoso Anes, R. (1996). Una contribución a la historia de la contabilidad: Análisis de las prácticas contables desarrolladas por la tesorería de la casa de contratación de las Indias de Sevilla (1503–1717). Sevilla: Universidad de Sevilla.

- Ezzamel, M. (1994). From problem solving to problematization: Relevance revisited. *Critical Perspectives on Accounting*, 5, 269–280.
- Ezzamel, M. (1997). Accounting, control and accountability: Preliminary evidence from ancient Egypt. *Critical Perspectives on Accounting*, 8, 563–601.
- Ezzamel, M., & Hoskin, K. (2002). Retheorizing accounting, writing and money with evidence from Mesopotamia and ancient Egypt. *Critical Perspectives on Accounting*, 13(3), 333–367.
- Ezzamel, M., & Xiao, J. Z. (2007). Regulating accounting in foreign invested firms in China: From Mao to Deng. Edinburgh, UK: The Institute of Chartered Accountants of Scotland.
- Ezzamel, M., Xiao, J. Z., & Pang, A. (2007). Political ideology and accounting regulation in China. *Accounting, Organizations and Society*, 32, 669–700.
- Fleischman, R. K., & Tyson, T. N. (1997). Archival researchers: An endangered species? *The Accounting Historians Journal*, 24(2), 91–109.
- Frey, B. S., & Eichenberger, R. (1993). American and European economics and economists. *Journal of Economic Perspectives*, 7(4), 185–193.
- Garner, S. P. (1954). *Evolution of cost accounting*. Tuscaloosa, AL: University of Alabama Press.
- González-Ferrando, J. M. (1992). El Sevillano Luis de Luque y Leyva, 'Reintroductor' de la partida doble en la bibliografía Española. *Cuadernos de Investigación Contable*, 4(1–2), 43–68.
- Hopper, T., & Armstrong, P. (1991). Cost accounting, controlling labour and the rise of conglomerates. *Accounting, Organizations and Society*, 16(5–6), 405–438.
- Hopwood, A. G. (2007). Whither accounting research? *The Accounting Review, 82*(5), 1365–1374.
- Hopwood, A. G. (1987). The archaeology of accounting systems. *Accounting, Organizations and Society*, 12(2), 207–234
- Hoskin, K. W., & Macve, R. H. (1986). Accounting and the examination: A genealogy of disciplinary power. *Accounting, Organizations and Society*, 11(2), 105–136.
- Hoskin, K. W., & Macve, R. H. (1988). The genesis of accountability: The West Point connections. *Accounting, Organizations and Society*, 13(1), 37–73.
- Iñiguez de Onzoño, S. & Carmona, S. (2007). The changing business model of b-schools. *Journal of Management and Development*, 26(1), 22–32.
- Janssen, J. J. (1975). Commodity prices from the Ramessid period. Leiden: E. J. Brill.
- Lambert, R. (2006, June 5). Six steps to revitalise Europe's higher education. *Financial Times*.
- Littleton, A. C. (1981, first published in 1933). *Accounting evolution to 1900*. Alabama: The University of Alabama Press.
- Loft, A. (1986). Towards a critical understanding of cost accounting in the UK, 1914–1925. *Accounting, Organizations and Society*, 11(2), 137–169.
- Mandel, E. (1962). Treatise on Marxist economics. London: Merlin Press.

- Mandel, E. (1968). Marxist economic theory. New York: Monthly Review Press.
- Mattessich, R. (1989). Accounting and the input-output principle in the prehistoric and ancient world. *Abacus*, 25(2), 78–84.
- Mattessisch, R. (1998). Recent insights into Mesopotamian accounting of the 3rd millennium B. C.: Successor to token accounting. *The Accounting Historians Journal*, 25(1), 1–27.
- Mennicken, A. (2008). Connecting worlds: The translation of international auditing standards into post-Soviet audit practice. *Accounting, Organizations and Society*, 33, 384–414.
- Miller, P., Hopper, T., & Laughlin, R. (1991). The new history: An introduction. *Accounting, Organizations and Society*, 16(5–6), 395–403.
- Miller, P. & Napier, C. (1993). Genealogies of calculation. *Accounting, Organizations* and *Society*, 18(7–8), 631–647.
- Napier, C. (2006). Accounts of change: 30 years of historical accounting research. *Accounting, Organizations and Society*, 31(4–5), 445–507.
- Nikitin, M. (1996). The birth of industrial accounting in France: The role of Pierre Antoine Godard-Desmarest as strategist, industrialist and accountant at the Baccarat Crystalworks. *Accounting, Business and Financial History*, 6(1), 93–110.
- Parker, R. H. (1993). The scope of accounting history: A note. *Abacus*, 29(1), 106–110.
- Schäffer, U., & Binder, C. (2008). 'Controlling' as an academic discipline: The development of management accounting and management control in Germanspeaking countries between 1970 and 2003. *Accounting History 13*(1), 33–74.
- Solomons, D. (1968). The historical development of costing. In D. Solomons (Ed.), *Studies in Cost Analysis* (pp. 3–49). London: Sweet & Maxwell.
- Sombart, W. (1979). "Sombart on accounting history", translated by K. S. Most. *Academy of Accounting Historians Working Paper No. 35*.
- Stevelinck, E. (1985). Accounting in ancient times. *The Accounting Historians Journal*, *12*(1), 1–16.
- Tinker, T. (1985). Paper prophets: A social critique of accounting. New York: Praeger.
- Tyson, T. (1995). An archivist responds to accounting history: The case of the US men's clothing industry. *Accounting, Business and Financial History*, 5(1), 17–37.
- Weber, M. (1978). *Economy and society: An outline of interpretive sociology.* G. Roth & C. Wittich (Eds.). Berkeley: University of California Press.
- Wulff, D. H., & Austin, A. E. (2004). Paths to professoriate: Strategies for enriching the preparation of future faculty. San Francisco: Jossey-Bass.

CHAPTER 5

Agency vs. Structure: A Problem in Search of a Solution

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Abstract: Our assumptions about the nature of individuals will have great influence on our choice of method to study them. And the choice of method will lead to confirmation of the assumptions! Are we agents creating our own future or are we prisoners in a web of rules and regulations? I propose a study of communication in meetings to understand how agency and structure work.

Keywords: agency theory, regulation, communication, meaning in context

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Introduction

This chapter takes up the age old social science problem of whether individual agency or social structures have the upper hand in controlling our behavior and social processes. This is not a trivial question; one could not dismiss it by saying that both are at play all the time. Which perspective one applies will determine our choice of theory as well as method of data capture. Also we must avoid contradiction in our explanations – the death knoll of scientific endeavors.

I will begin by illustrating the issue through an imaginary debate on the virtues of regulation – a hot topic in these post-crisis times. Regulation is an example of structure asserting its controlling influence. I go on to point out that organizations are controlling structures and show how our ontological assumptions control our choice of method, which, in turn, tends to generate confirmation of our ontology.

I then introduce the notion of communication – 'doing things with words' – and try to illustrate how communication may build structure as well as identity. Feeling unable to solve all problems of agency or structure in this text, I end by pointing out some studies that might help us towards finding solutions.

Regulation as seen from a perspective of agency or structure

This is a time when regulation is being debated in most countries. Some believe that less regulation will save us, others that we need more regulation to control those who would otherwise deviate from ethical and professional behaviour. "Look," say the latter, "the de-regulation of the financial sector brought us the financial crisis with thousands and thousands of lost jobs throughout the world!" "You have misunderstood how markets work," say the former, "It is the regulations that provide opportunities for arbitrage (seeing that an asset is given a higher price in one place than in another and finding ways to transfer assets at a profit)." "Show me one efficient market in the real world," say the believers in regulation, "and we will believe you! The most "efficient" market in the world

in your rhetoric is probably the New York Stock Exchange! Look, it is the most regulated market you can imagine, every detail is regulated, only a few traders have access, there are hordes of certified middlemen. Regulation through and through!" "Well," say the believers in free markets, "it is the global market that counts now. It should be free to trade and take advantage of the differences in prices and eliminate waste in the process. Free markets have made the poor of the world much better off during the last 150 years." True that capitalism has made people in general better off says Deirdre McCloskey (2010), but it is because of innovation, the dignity and liberty to pursue ideas and to talk to each other about the possibility of improvement. Most innovations have been financed by credit rather than investor infusion of equity. So it is fair to say that there has not been any period in the world with such progress for the citizens of the world as under capitalism. But is capitalism a "system" or is it because of individual agency that those gigantic steps forward, called the Industrial Revolution, have been taken?

The core of that system is non-regulation and freeing the initiative of the individual to pursue a better life. Granted that some will fail, and some will suffer, but we have the resources to compensate for that and provide an opportunity for a new start. "Nonsense," say the believers in regulation, "There is no such thing as equal opportunity. Most people play against a stacked deck of cards. We need regulation to provide something like an equal opportunity!" Still, some people make it against the odds! Some people can change the world by their initiative, resilience and charisma (Weber's term for leaders who have the ability to break with structures).

Or, take another area where most of us feel concerned. The environment is deteriorating and pollution is causing a decline in climate that will continue for a long time even if we manage to reverse the trend. Everybody can and needs to contribute to cleaning up this mess, but nations seem unable to reach agreement on the necessary measures. The lobby for economic growth is stronger than the lobby for the survival of the world as we know it. Could individuals achieve what nations and structures cannot?

There is a choice

There are many areas where the individual is struggling against the control asserted by structure. Our own area of study is implicated. We study organizations, which by definition oblige members to behave according to the rules of the organization. When you are a member of an organization you are bound by the formal and informal bonds that constitute it and membership in it. You are employed to work for the good of the organization rather than for your own benefit (even if a nice salary does not hurt). Organizations are structures that limit and harness the agency of individuals. But structures can be designed and re-designed to better support the common efforts of members. How should we deal with these issues when planning our studies? Should we start with assumptions about the nature of the individual (like, e.g., agency theory does); that the individual is selfish and irresponsible and therefore can only be controlled by rewards and punishment? Or should we assume that individuals are social creatures who enjoy doing things together; that they can be trusted and relied upon to solve emerging problems? No, individuals are different! If that is the case, what does that mean in terms of selecting the right person for the job (who will stay there for ever)? Or can people change by learning, and do they learn not only when things go well but also from adversity? So, the problem is to design a learning organization, then! With learning individuals in it! Pantha rei! (Everything flows). No fixed point to start from. This discussion is about ontology (what we think/understand the phenomenon we study consists of).

Examples of how ontological assumptions determine what we should do

The most common assumption in organization studies is that the individual is a rational decision maker. This assumption includes, implicitly, that decisions are carried out as intended by the decision maker. (We all know that things almost never turn out as intended.) The criteria for rational decision making is that one must have:

- One goal (usually some profit measure), several contradictory goals is a sign of irrationality.
- Full information of the future consequences of the chosen decision (which we know is never fulfilled – and expectations are not full information)

Then the decision is a matter of calculation. One should choose the alternative with the best consequences according to the goal. If we choose such an ontology (that individuals are rational decision makers) then science becomes a matter of building models and justifying them by calculation (deductive logic).

Another assumption is that individuals, and therefore also organizations, are rule-followers. Here it is taken for granted that a regulatory structure, sometimes called the Principal, determines what we must do. A problem here is that the Principal is assumed to be risk neutral, not profit seeking, etc. Any alert citizen will notice that there is lobbying from all kinds of interested parties. They all try to influence the rule makers for the good of the environment or economic growth or the children or the poor or something else that is not properly cared for. And those lobby groups are also organizations. In the financial sector everybody is preoccupied with the new rules for banks negotiated by the Basel Committee (the new rules are talked about as Basel III, which implies that there have been earlier sets of rules (I and II) that did not work). It is, of course, necessary to assume that rules are going to be followed to justify efforts to make new, better rules. However, one should not be too optimistic, considering that the recent global financial crisis happened under a fairly new set of rules called Basel II, designed to avoid a global financial crisis. Will banks behave differently now, after having gone through the crisis - because of the rules or because incompetent managers have been replaced?

What we do see is a widespread use of 'proper procedure'. You follow the rules to the letter and protect yourself from being blamed for the consequences of an action. Doctors follow "evidence based medicine" and are safe from being blamed for the consequences to the patient. Auditors have great times scrutinizing accounts following established procedures on, e.g., sampling, and cannot be sued successfully by angry shareholders whatever the consequences. But they earn their money from consulting fees anyway. No audit firm calls itself 'audit firm' anymore. We live in an Audit Society (Power, 1997) and audits are not an exclusive product. Universities are evaluated for all kinds of certification nowadays. Now it is more important to update your homepage and register your publications in the right database than to do good research. Perhaps we are more rule followers than rational decision makers after all. Or are we professionals applying general knowledge to unique cases on the basis of professional judgment?

The choice of method is influenced by your ontology

The famous student of democracy in action, Robert Dahl (1961), created problems for classical political scientists by working from the ontological assumption that different people have different influence on different issues. Then it is only natural to study how political issues were resolved by case studies. You study the controversy about the new highway around the city and you find that different people were active in different phases of the process (environmentalists, shop keepers, financiers etc.). By choosing the case study method you can be sure to find things that confirm your ontology, and you may even find that certain individuals had a considerable influence on the design of the project.

Traditional political scientists, on the other hand, with their structural view, will assume that class membership or economic power will carry influence. It is only natural for them to design a questionnaire with questions like, "Who has influence in this town?" The answers will confirm that class and economic power carry influence. And the results are statistically significant. They will criticize studies of Dahl's type because it is not possible to generalize from one case, or even three or five. Dahl's response is that this is a carefully studied case consisting of facts from the real world, and it shows at least one instance where your structural assumptions were wrong. In accordance with your own beliefs about scientific inquiry this one case is enough to prove that your general statement about class and structure is flawed. And the methodological quarrel goes on.

Role theory is another case in question. Here two ways of understanding roles have been feuding for decades (Turner, 1985, claims that there is a promising rapprochement at present). One view of roles understands them as developing in the interaction between individuals. It is 'obvious' then that one has to study roles by observing the process of interaction between people. It also follows that role making is a focal concept. In a structuralist view of roles, on the other hand, it is the 'incoming' expectations that determine the role. What people expect of me, whether it be the boss or my children, is what my role is. If I have difficulties living up to those expectations I will experience "role conflict" and will not feel very well. With this view of roles it is quite natural to use surveys and questionnaires as the research method. In both cases, process studies or surveys, the researcher will tend to find confirmation of his/her ontological assumptions in the data. The ontological assumptions determine what questions you ask, and the questions you ask influence the answers you get.

Doing things with words!

If I were to stand in front of you up on the podium and say, "Stand Up!" you would probably stand up. And when I say, "Sit down!" you would feel relief as you were a little embarrassed to have obeyed my first command. Then if I shouted, "Raise your right arm!" you would probably start to wonder what was going on. The interesting thing here is that I could get a large number of people to stand up by using the words, "Stand up!" I could do something with words! But, I am sorry to say, some of the audience would not obey my command. This is because it is the hearer that determines the meaning of what is said. I can intend to make you all stand up, but it is really you who decide what will be the meaning of my words, and act accordingly. I can also bind myself to future action by giving promises. "Let's meet outside the cinema at 7 o'clock" generates a mutual promise to arrange a time so that we can meet up at the agreed place. By keeping promises we help others trust us. We build an identity as a reliable partner. Communication has organizing effects. Organizations develop their own particular ways of communication (Wittgenstein

would call it "language games") with their own vocabulary and meanings. To become and continue to be a member I need to do membership work. I need (1) to attend to my identity as a competent person (who can deliver on promises), and (2) my contributions need to be aligned with the organization's mission.

Literature exists on how to do things with words that in a way started with Austin (1962), who discussed what is required to formulate a promise (correct grammar), and the different ways of doing things with words (declaring a couple man and wife, giving a command etc.). Soon there was criticism. We have heard about the deconstructivism of Derrida who showed that a correctly formed sentence can be 'undecidable' as to meaning on the basis of the text itself. This led Cooren (2000) to discuss how the organizing effects of communication emerge from the hearer's interpretation. The hearer puts our utterance into context by constructing a narrative that makes sense of it (like you, the reader, put this text into the context of your own project to see if it makes any sense). The typical form of a narrative is:

- 1. What animated the story (somebody <u>wanted</u> to do or <u>had to</u> do something)
- 2. What competence was required to do this (know what/ know how)
- 3. Doing (carrying out the task)
- 4. What sanctions applied (rewards and punishments)

When we put a statement into a narrative context we are satisfied when it makes sense (even if my understanding of what you say is completely different from what you intended).

In a later book Cooren (2010) focuses our attention on the first part of the narrative form: What animates us into action? Well, it is passion. Possibly not a great passion such as that seen in Othello, who killed Desdemona out of jealousy in Shakespeare's play. Othello let himself be led by one passion. That made his action irrational – Iago's misinformation notwithstanding. Rather it is smaller passions that tend to generate identity. If I am seen by others as a philatelist, my doing whatever it takes to get hold of that rare stamp makes sense, because I am a philatelist and

that is the way philatelists behave. Identity prompts us to do things (want to or have to in p.1 above). Passion is the animator of action in our narratives (perhaps there are others). We may also call upon a passion for duty in our statements. We let other things speak for us. For instance, when we say, "Due to company policy I cannot give you this information," it is not I who refuses to give out information but company policy, and since I am a loyal member of the organization, company policy speaks for me. I could even seem sorry for the client who did not get the information, while saying no. Cooren (2010) calls the activity of letting other things speak for me "ventriloquism". This phenomenon can be experienced very often in organizational conversation. The third interesting phenomenon in communication is "incarnation", which could be seen as putting "flesh and blood" onto an abstract principle. We argue, for example, that in this particular case fairness means that X and Y should be done. The principle is articulated in its application to this particular case. Incarnated principles are, in due time, translated into practices. Practices can be seen as a form of structure.

From agency to structure via communication

We can summarize the discussion through the claim that communication is the key to organization and, possibly, the solution to the age old problem of agency vs structure in social sciences. Cooren (2010) argues that it is misleading to think of communication as something that takes place in organizations. Better to realize that communication constitutes organization. It is through the commitments, promises, commands, etc. we produce by communicating that organizations are created. Three friends who agree to meet outside the cinema at 7 o'clock to see a movie, by way of coordinating their activities during the day to be able to meet up at the agreed time, constitute an organization albeit 'loosely coupled'. To a large extent it is verbal communication that holds organizations together. One might object that it is rather a matter of contract. I beg to disagree. What contract makes me write this text? I am participating in this seminar since my friend Frode and his friends here in Kiev invited me, and I represent a research institute in Gothenburg even if I am formally retired. It

is a matter of communication. The interesting part of this is that communication can be studied – especially when we realize that it is the hearers who determine the meaning of what is said. We do not have to investigate the minds and intentions of speakers. Instead we can register what is said and elicit the help of hearers for interpretation. If I record what is said in a meeting, and play that recording back to the participants asking, "What is going on here?" their comments will reveal the structures at play in that meeting. It will also reveal that people in meetings misunderstand each other all the time, but that is another matter.

The revelation of structure will appear in the "things/figures" that are mobilized in communication. The references to structure may be, to take an example, "Due to company policy we must make this information public." By making that statement, an employee of the organization lets the structure (company policy) speak for her, but she also marks her loyalty to the organization and its policies. Another example may be that a person says, "In the name of justice I have to report this to the authorities." That person refers to a virtue (justice), which is incarnated in this particular situation. The report to the authorities embodies the virtue even if the reporting may turn out to be against the interests of the organization. The person speaks for the virtue by whistleblowing. In both cases agency refers to structure in the form of "figures" (company policy and justice) that constitute a structure that is maintained and reinforced by the very act of reference. Yet another illustration: By arguing that "in order to keep within budget limits we have to cut costs," a speaker signals the subordination of costs to budget goals. By nodding agreement, the other members in the meeting will confirm this structure (and act accordingly).

But there will be polyphony in any meeting. Many "figures" may be mobilized by different people. Many voices will be heard at the same time, as well as many interpretations of the same statement. Two ways of dealing with polyphony may be suggested. (1) The first is to see which interpretation (and therefore configuration of "figures") is confirmed in consequent action. Members of the organization will "act out" what has been agreed in verbal communication. Action will reveal which structure was implied when it was mobilized in communication. (2) The other is

to use theory to sort out and decide what are the most relevant figures. A contingency theory of strategic action may propose that some parts of the organization's 'structure' may determine what strategic decisions are taken. A recorded discussion in a meeting can thus be coded on the basis of hypotheses concerning such a strategy theory, and the theory could be tested by the frequency and emphasis of references to those factors.

There is a problem with the recording of communication in organizations that relates to the fact that each organization will develop a vocabulary and even a grammar that may be difficult for outsiders to understand. The language itself may get in the way of proper understanding. This can only be remedied by spending enough time in the organization to learn. This is what anthropologists have been doing for a long time.

Another problem is to get access to important meetings. True, but there are meetings that are open to the public, like city council debates. That is a start. My own experience is that once you have been allowed to record meetings in an organization, members realize how valuable it is to understand, and discuss how misunderstandings can be avoided (Jönsson, 2004).

Finally there is the problem of ethics. Personal integrity and business secrets must not be compromised. The very fact that most communities have codes of conduct concerning ethics in research creates a problem, because they usually require that the participants in a meeting to be recorded must be informed of their right to withdraw at any time and of the commitment of the researcher to keep within the rules set by ethical research. When this is put into writing to be signed by the participants they will start thinking about possible mishaps, and they will draw the conclusion that it is best to avoid such risks by denying access. I would probably agree – unless the researcher is trusted – aha, agency or structure again!

What kind of studies can take us further?

Market making is an interesting phenomenon. It used to mean that some actors in financial markets were focused on keeping a market liquid so that investors could turn assets to cash when needed and get a price on their assets for financial reporting purposes. Now we can see, from the

hearings in the US Congress after the recent crisis, that market making also means that it is acceptable to mislead clients (sell them sub-prime based instruments that you short at the same time, on the belief that they will default). This kind of double morality must be the result of holding two sets of principles alive at the same time while acting. Shadowing such actors to register how they adapt their rhetoric to the situation may generate insights into the agent's relation to structures.

Learning from experience is usually taken to mean that we act upon a problem and observe the results in order to do better next time in a similar situation. We may even have two kinds of learning: single loop (doing the same thing better), and double loop (learning to do things in another way). But how do we learn from the experience of others? The only way to communicate the experience of others would be through narratives. Cooren (2000, 2010) has made us pay attention to the structure of narratives, and it seems obvious that the beginning (have to do) and the end (sanction) of a narrative will teach us what values are related to the initiation and approval of action in this organization. Narratives that survive are likely to describe exemplary action, and thus can teach us something. A study, which captures narratives and analyzes both beginning and end, will show agents (initiators in narratives) and structures (sanctions in narratives) at work.

References

Austin, J. (1962). *How to do things with words*. Cambridge, MA: Harvard University Press.

Cooren, F. (2000). *The organizing property of communication*. Amsterdam: Benjamins.

Cooren, F. (2010). Action and agency in dialogue. Amsterdam: Benjamins.

Dahl, R. A. (1961). Who governs? New Haven: Yale University Press.

Jönsson, S. (2004). Product development: Work for premium values. Malmö: Liber.

McCloskey, D. (2010). *Bourgeois dignity: Why economics can't explain the modern world.* Chicago: Chicago University Press.

Power, M. (1997). *The Audit Society: Rituals of verification*. Oxford: Oxford University Press.

Turner, R. H. (1985). Unanswered questions in the convergence between structuralist and interactionist role theories. In H. J. Hell & S. N. Eisenstadt (Eds.), *Microsociological theory*. Beverly Hills, CA: Sage.

CHAPTER 6

Reforms in Management Control and the Concept of Hybridization: The Diversity in Changes of Functions and Systems

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Abstract: The chapter analyses how the concept of hybridization is used to develop an understanding of how management control reforms are designed, implemented, used and redesigned. Two longitudinal studies in reforming Norwegian hospitals are briefly presented to illuminate how functions and systems change over time, and how models are incrementally constructed and reconstructed. These cases show that the initiatives for steps both forward and backward in reforming processes, tend to take place on the borders between the organizations and the important stakeholders. These stakeholders are the Ministry and politicians, as they are key decision makers.

Keywords: reforms, management control, hospitals, stakeholders

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Introduction

This chapter describes some aspects of the great diversity in recent changes within public sector management control practices. It discusses one change process and one system in practice, by offering empirical data based on longitudinal studies. More precisely, the chapter discusses how models within the management control frame change from idea to practice in the public hospital sector. During the past decade several states including the Nordic countries - initiated extensive reforms in their state administration and state institutions. These reforms include their structure, their systems of control, and the way they account for their activities. The reform initiatives have been put under one umbrella called the New Public Management reforms. However, the reforms reveal a variety regarding aim, scope and process (Hood, 1998), and research has pointed out a decoupling of reforms from effects (Nyland and Pettersen, 2004). In order to go deeper into the variety of changes and beyond the phenomenon of decoupling, the question of how management control systems are designed, implemented, used and redesigned is an issue that warrants attention.

Vital reform movements have swept swiftly across the international stage. Following these reform initiatives, it is striking that many of them have been driven by general ideas rather than by practical experience and evaluation. The "wrapping" of ideas has been based on the same rhetoric, often recognized as the necessary modernization of the public sector (Pettersen et al., 2009). And here is my point: Because these prescriptions were expressed as general recipes, such as those described by Hood (1995), the reform processes' ideal prescriptions were met by change agents through diverse pathways, characterized by steps forward and backward, slow and speedy reforms (Olsen, 1996; Mellemvik and Pettersen, 1998), and counterreforms which mixed different organizational structures, control mechanisms, incentives and accountability relationships (Modell, et al, 2007).

Reformers have tried to increase rationality by introducing clear objectives, management by objectives, advanced management accounting systems for evaluation, clear lines of authority and incentive systems. But what have we got?

Hybridization has appeared as a concept useful for analyzing the processes and states of the reform elements. It embraces the perspective that the reform packages being introduced change on their way towards implementation, thus creating new organizational forms with diverse characteristics. This chapter first discusses the concept of hybridization. Thereafter, two empirical studies are presented to illuminate the theoretical arguments. Finally, some concluding reflections are offered to join theory and practice.

Hybridization

The term hybridization suggests a deep and fundamental change, such as the offspring of two animals, plants or species. Hybrids can take the form of organizational arrangements that do not readily fit ideal/traditional models of hierarchies or markets. They can also take the form of hybrid processes, practices and/or expertise: new phenomena produced out of two or more elements normally found separately. Here I will first describe the nature of hybrid management control practices, and thereafter present a brief discussion of perspectives explaining why hybrids develop.

Hybrid management control practices

The concept of hybrid organizations was used by Williamson (1991) to cover organizing in relation to hierarchies and markets. His work was basically theoretical, so the more practical view of hybrids was not very clear. In fact, all organizations can be said to have some hybrid aspects, since we find conflicting interests among participants and stakeholders. There are departments within organizations that have different cultures and competing logic and goals, and professional workers with different norms and values. However, this view of hybridization as an organizational form does not capture the practises and processes which create hybrid organizations (Miller et al., 2008).

In this chapter hybridization is based on Miller et al. (2008) who point out that hybridization takes the form of processes, practices or expertise, constituting new phenomena produced out of two or more elements normally found separately (Miller et al, 2008:943). Consequently, actors, entities, objects and institutions can all be seen as hybrids. The literature on hybridization offers a variety of approaches. One examines hybrid management practices in expert organizations such as hospitals, focusing especially on the role of doctors as managers (Ferlie et al, 1996; Doolin, 2001; Llewellyn, 2001). In this material, hybrid management is seen as a role on the border between clinical work and management work, a kind of boundary-spanning role. In her study Kurunmäki (2004) claims that accounting has been incorporated into the competency of being a doctor in Finland, and she uses the term hybridization. Jacobs (2005) extends that view of hybridization, as he introduces the notion of polarization in order to emphasize that the phenomenon of including accounting in their professional role only applies to sub-groups of doctors who have financial and administrative responsibilities. A recent Australian study supports the hybridized configurations of leadership among healthcare professionals, also emphasizing the diversity within forms of leadership (Fulop, 2012).

Instead of defining the hybridization of roles, we can also look at the functions of managers as hybrids. Llewellyn (2001) uses the term "two-way windows" as a metaphor to illuminate the idea that doctors as managers can act in two worlds, the clinical and the managerial. We notice here that Llewellyn's (2001) focus differs from the views of the hybridization of roles. This implies that hybridization can take multiple forms and definitions. Further, the hybridization of processes can be associated with the term accountingization (Hood, 1998; Power and Laughlin, 1992). Accountingization features the growth in the power and influence of accounting practices in the management of public organizations. Accounting measures and controls have now been accepted as central to the production aspects of public services, such as hospitals and higher education (Modell, 2001; Nyland and Pettersen, 2006). However, few studies have shown how this transformation takes place and how management control practices hybridize. This paper aims at contributing to fill this knowledge gap as to how practices and systems hybridize.

In their article Miller et al. (2008) show that hybridization as a process takes variable forms. Once formed, a hybrid can revert, or the recently formed hybrid can stabilize for a while and then be termed an

"institution" or organizational form. Once a hybrid is formed, it can take new forms as it is affected by contextual elements. Because of the interrelation between organizations/hybrids and their contexts, hybrids often emerge on organizational borders – they develop due to the interrelations between organizations and institutions. Here management control practices may evolve, since accounting systems and accounting information (more or less) are devices by which transparency can be developed across organizational entities. Thus, accounting practices take the form of hybrids in the processes of organizational change – as a part of reforms. Accounting is constantly present in dual hybridization processes, seeking to make visible and calculable the hybrids that it encounters, while at the same time hybridizing itself through encounters with a range of other practices (Miller et al., 2008:945).

In particular, hybrids may be most prevalent at the intersection of calculative practices and the experts producing services and knowledge such as curing, caring and education. Here, one might say that calculating is a hybrid, as management tools change and evolve. As earlier noted by Hopwood (1996) budgeting, planning and performance evaluation have traditionally been conducted in vertical terms, and accounting practices have continued to focus on hierarchical relationships and vertical information flows. Lateral information flows have been neglected, and thus, the lateral processing of information had to be considered as networking, and inter-organizational cooperation developed as an organizational form.

Thus, the strategic aspects of management control became focused since conventional accounting information had not given managers relevant information in decision situations (Kurunmäki, 2004; Kurunmäki and Miller, 2006). Accounting extended the boundaries of organizations, and management control recipes, such as balanced scorecards and performance measurements, were introduced and implemented – and became hybrids of practice and calculation (Pettersen and Nyland, 2012). Gradually, management practices changed to include the integration of actions within networks of organizations – and hybrid practices emerged. In these interactions of calculative practices and diverse professional expertise, professions may also hybridize under certain conditions.

Hybrids and the construction of organizations

Several theoretical perspectives have tried to explain why hybrids develop. One branch of literature focuses on the relationship between management and professions and hybrid organization identities (Brandsen, et al., 2005; Llewellyn, 2001; Kragh Jespersen, 2005). The other main theoretical frame is new-institutional theory, which considers the hybrids as a means to balance differing institutional logic, and to balance the diverse interests and goals in the interaction between the organizations and their contexts. Doolin (2001) considers hospitals as loosely coupled systems, and some authors connect hybridization with actor network theory (Miller et al., 2008). Latour (1993) points out that the contexts of organizations consist of hybrids in constant change in relation to culture and nature combining into new forms. In an overview article on hybridity in the management of hospitals, Nordstrand Berg et al. (2010) conclude that there exists no clear definition as to what constitutes a hybrid management form. They also argue that different areas of expertise mix together and interpret reality in order to constitute diverse patterns of competence in the process of producing healthcare in hospitals.

An important question is then under what conditions hybrids arise and develop. Some authors show that hybridization has to be developed by the actors who define the main functions, roles and practices (Nordstrand Berg et al., 2010). In expert organizations these are the professional workers who have to adapt to a kind of collective understanding and acceptance of the changes (implicitly or explicitly). According to this view, professionals in these organizations are the main actors who have to translate and adapt to the new requirements, as most impulses to change come from outside. Organizations have to respond to these changes, and the adaptation and/or implementation due to external pressures are the impulses leading to hybrids. These hybrids may enable organizations to construct diversity and ambiguity in order to cope with diverse expectations from society. In other words, the complexity of contextual demands can be met by complexity in the implementation processes (Kraatz and Block, 2008).

Hybridization is very close to the concept of constructing organizations, as researchers have argued that reforms in the public sector can be interpreted as attempts to construct and change social systems like organizations (Brunsson and Sahlin-Andersson, 2000). Reforms can thus be described as a way of turning public services into organizations. An organization can be defined by its conceptual boundaries, and the ability to coordinate action is often viewed as the main function of organizations (Mintzberg, 1979). Coordination takes place in hierarchies, and managing hierarchies also presupposes control. This implies that changes in boundaries affect coordination – and changes in coordination affect the means of controlling activities. And here is the main function of accounting, namely to give relevant information to managers in managing organizations. This is why accounting plays a vital role in hybridizing organizations.

Constructing organizations implies introducing the factors of identity, hierarchy and rationality to create an organization. If some of these factors are lacking, one can question whether it can be called a full-fledged organization. Thus, organizations may not exhibit all aspects of being organizations. And reforms in the public sector have often aimed at making more complete organizations by creating rational units and bodies. Here various systems of management by objectives have been implemented, introducing accounting systems to permit evaluation and transparency. Furthermore, performance measurement and management systems have been introduced, and units and subunits have been constructed to be managed through contracts (Nyland and Pettersen, 2006). The main point here is that hybrids develop since the organizations in the public sector being constructed, most often do not have the most common/ideal characteristics of organizations, such as clear autonomous structures and clear boundaries to the environment (Brunsson and Sahlin Andersson, 2000, among others). In other words, ambiguity fosters hybridization.

State subunits, especially, have been transformed into formal independent organizations, such as state enterprises like hospitals in Norway, self-governing universities and other state institutions. But still, they remain incomplete organizations, since these state units/bodies do not have a high degree of autonomy, but act within a network of state owned subsidiaries and have to adjust to ministries' and politicians' shifting views and agendas. Further, public agencies such as hospitals

have multiple objectives and stakeholders, which blur the concept of a complete organization.

Because of this incompleteness in the construction of these organizations, there arises a discrepancy between the idea of the reforms and the practices following the changes (Brunsson and Sahlin Andersson 2000). The construction and reconstruction of public organizations take different pathways, and hybridization characterises these processes. Organizational reforms attempt to re-construct organizations by making new governing models, new accounting systems, new lines of reporting and ownership, by merging organizational units and dividing organizations into new sub units with new lines of responsibility.

Functions and Systems as Hybrids

In this part of the chapter the case studies are described, and some perspectives on research methods are briefly presented.

The case studies

Hybrids may take the form of management functions and systems, and hybridization should be studied through longitudinal empirical research, allowing for the changes to emerge, be implemented and be reconstructed. The empirical data presented in this chapter meets these requirements, as it is based on two different cases, based on the Norwegian enterprise reform launched in 2001. I will illustrate my points in relation to reforms and counter reforms generating hybrids through two distinct cases found in the Norwegian Hospital Enterprise Reform: These cases are:

a. The boards of hospital enterprises were established according to formal functions based on rational organizational models. However, these boards operate in political environments, which create ambiguous environments for the hospitals. Detailed milestones over the course of several years showed that the functions of the boards gradually changed towards seeking legitimacy more than acting as strategic decision-making bodies. In other words, a functional model of boards based on the notion of rational organizations was gradually changing in order to adjust to the political context. By analyzing this case, one can observe the hybridization of functions.

b. The accrual accounting system was introduced into the hospital sector according to a normative and rational model. The implementation process itself became hybridized over the years, and the accounting system itself changed and became a hybrid.

Consequently, the accrual accounting system (radical model) which was introduced into the organizations according to a quite simple model changed through external pressures and the resulting practices were different from the ideas that motivated the reform.

Research into longitudinal changes - some methodological remarks

The research is based on both quantitative and qualitative methods (Ryan et al., 2003; Tengblad et al., 2005) in order to understand changes taking place during the course of several years. Before the empirical data was gathered, studies were made of relevant documents from the government, the Ministry of Health and from hospital enterprises during 2001–2010. White papers from the government and reports from the regional and local hospital enterprises were studied in order to develop a broad understanding of the research context.

Survey studies were developed in order to analyze the first case concerning hospital boards. The surveys were based on knowledge gathered from the document studies. Descriptive statistics were used to analyze data from the surveys. The results from the descriptive statistics and patterns found in the surveys were developed into interview guides, and followed up later by interviews conducted with key decision makers. The intention was also to include the opinion and viewpoints of the members of the hospital boards. Therefore the survey included a national sample of members of hospital boards (2008). In this survey 130 board members replied (50% response rate). A somewhat similar survey was undertaken in 2003 in the same population. A comparison between 2003 and 2008

indicated changes over time. The survey included questions on the following themes:

- The boards' functions, responsibilities and roles
- Information on main topics and the budgetary processes
- The key actors' influence and contracts
- The relationship between the local health enterprise and the regional hospital enterprise

Interviews were also conducted with board leaders and hospital managers (CEOs) in different health regions. A follow-up study was done with key respondents in one university hospital (2009).

The second case study was mainly based on thorough document studies, as an investigation was done based on documentary sources to evaluate the formal layers of the financial management reform in the public hospital sector (Pettersen and Nyland, 2011). The formal layers of the accounting practices are seen as conceptual instruments found either in the documents or as technical instruments developed by procedures and key actors' practices. Accordingly, the research focus was on the formal documents and the corresponding practices as these emerged in accounting and other relevant reports. Through the investigation, the researchers were able to clarify the milestones of the accounting system changes, please see table 2 below.

The boards of the local hospital enterprises

The enterprise organization is built upon a clearly defined role as to ownership control, which has to be implemented through legal contracts, through budget decisions or through decisions made in the enterprise meeting (the general assembly). ... [T]he hospital enterprises must have real responsibility in their operating activities. (Minister of Health, Speech, 1 August 2000)

Over the last three decades the governance of Norwegian hospitals has been changed several times. In the middle of the 1970s the state transferred hospital ownership to the county councils. From that time and until the Hospital Enterprise Act (2001) there were large recurring challenges including long waiting lists and increasing costs in the hospital sector. This situation motivated the parliament to change the governance structure and to transfer hospital ownership directly to the state by the Hospital Enterprise Act (2001). A main part of this act was the introduction of regional hospital enterprises as autonomous purchasers, and local hospital enterprises as providers of health services, as stated in the government document:

It is not the introduction of state ownership as such, but the implementation of hospitals as autonomous enterprises which is supposed to enhance more efficient hospital management. (The Ministry of Health, White Paper 2001: State ownership of hospitals)

The Hospital Enterprise Reform is heavily based on the functions of the hospital enterprises' boards, and the politicians no longer had any direct role in strategic decisions on the hospital level. The Hospital Enterprise Act prescribed the main criteria for the composition of the hospital boards and the responsibilities given to these boards:

The board's mission is to manage the hospitals on behalf of the state as owner. ... this is to say the state through the Ministry in relation to the boards of regional health enterprises, and the state through the regional health enterprises in relation to the boards of local health enterprises. (White paper 2001, Ot.prp.nr.66 (2000–2001), pp. 106)

These regulations implied that the boards had an overall responsibility to ensure that the hospital enterprises fulfill the goals set by the Ministry and that the hospital enterprises "on all levels are managed adequately, and that the activity is kept within the economic frames and other frames that have been set." (White Paper 2001, Ot.Prp.66 (2000–2001), pp. 106). Implicitly, this includes making budgets and plans, and creating long term plans. The minister at the time the Hospital Enterprise Reform was implemented, argued that professional and autonomous boards with only a limited number of participants were necessary to carry out the functions of the boards. At that time, board members with experience from the private business sector were preferred by the Ministry, and according

to the law, only 1/3 of the members should be employed in the health enterprises. After a few years, the government wanted to regain some political dominance on the boards, and in 2006 it decided that politicians should also be nominated to these boards. The motive was to include a broader stakeholder representation on the boards.

When considering the hospital boards as the highest decision making body, the board is expected to be the owner's (the state's) main strategic instrument: setting goals and supervising the activities and performance of the hospital enterprise. Consequently, the strategic role of the board should be overruling the control functions and taking care of stakeholders' interests. This is to say that the Hospital Enterprise Act (2001) painted a picture of the hospital enterprises' boards as *top management boards*, deciding strategies and making sure that strategies and budgets are linked together.

The introduction of the Hospital Enterprise Reform in 2002 underlines the strategic role of the "enterprise meeting" between the Ministry and the board leader as the main strategic device, where contract requirements are formulated. This meeting has the same formal function as the general assembly. Further, the Ministry developed an annual strategic document including the detailed number of performance indicators and main objectives for the next budgetary year – the steering documents, where the economic and organizational performance measures are formulated. Together with laws and regulations these tools aim to establish vertical governance structures with clear lines of authority and hierarchical responsibility patterns all through the hospital enterprises from the top and down to the clinical departments.

To summarize, these routines and procedures were regarded by the Ministry as establishing the boards according to certain rules of good hospital governance. In line with Scandinavian tradition, the boards also included employees' representatives (1/3). By including politicians (a majority) on the boards from 2006, the role of the hospital boards was changing more towards the stakeholder perspective of the functions of the boards.

The board is the formal link between the owner (the Ministry) and the management of the hospitals. According to normative perspectives, the boards have the strategic function of these enterprises.

The implementation of the Norwegian Hospital Enterprise Reform can be mapped and analyzed in light of the decision space left to the hospital boards. The decision space characterizes the relationship between the center (the Ministry of Health) and the local level through the hospital boards. The decision space is defined for the various functions in which the boards have the power of real choice. Functions may be disaggregated into the areas where the boards have a real range of discretion, instead of treating decentralization as one block in the line of authority. The main functions empirically derived are according to Bossert (1998:1518–1519).

Based on the reform initiatives in the Norwegian hospital sector and changes during 2002–2008, the decision space has been reduced (Nyland, Pettersen and Østergren, 2010). *The legitimating function of the boards* has increased, as politicians have now been introduced into the boards. The following functions are described by empirical indicators:

Table 1 Map of decision space (applied from Bossert, 1998). (Nyland, Pettersen and Østergren, 2010).

Function	Indicator	Range of Choice
Finance		Narrow
Sources of revenue	Mainly from the state	
Contracts	40% activity based	
Operation maintainance	Strict regulation of investment levels, regulated supply of loans	
Service Organization		Narrow
Hospital autonomy	Formal autonomy	
Governance structures	Strictly regulated	
Payment mechanisms	Regulated in detail	
Service distribution	Regulated by patient rights and norms for waiting time.	
Human Resources		Narrow
Salaries	Central negotiations	
Contracts	Standardized	
Civil service	National	
Governance Rules	Detailed regulations	

The aim of the Hospital Enterprise Reform (2001) was to establish a governance model with professional and autonomous boards, which could secure the state's efficient management of hospitals. The expected main function of hospital boards was to act on behalf of the state. Our findings indicate that according to a principal agency (PA) approach, the reform has not been implemented according to its original aims. Our data indicate that the role of the hospital boards has changed from the idea of a top management board, through a stakeholder perspective on the boards' functions. Eventually, after 6 years the boards' functions were found to be similar to legitimating bodies, as the boards are composed according to principles of political representation. Further, the decision space for the boards has been narrowed, which illustrates the reduced strategic functions of the boards.

Accounting system changes

One of the most important aims of the Hospital Enterprise Reform is to enable better maintenance of the values that are tied up in invested capital, and also to ensure better resource management by giving the hospital enterprises the overall responsibility for both running costs and maintaining the values of invested capital resources. (The Ministry of Health and Social Affairs, 2000–2001, pp. 57)

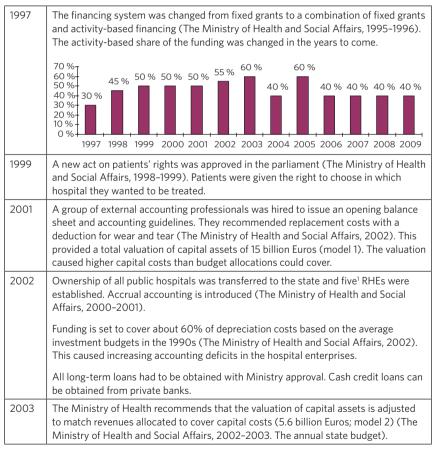
Accounting practices are central to issues of implementation in purchaser–provider organizations in the Norwegian public hospital sector, because accounting is involved in the process of making the organizations visible and calculable (Miller *et al.*, 2008). To make hospital activity visible, attempts to calculate medical and clinical activity have formed a part of international managerial reforms since the early 1980s. Encounters between clinicians and the New Public Management (NPM) reforms (Hood, 1995) have been observed in a variety of financing systems and accounting regulations (Nyland and Pettersen, 2006; Nyland et al., 2009).

When hospitals are transformed into self-governing enterprises whose role is provider, and the state assumes the role of purchaser, the contracts between these bodies are changed into inter-firm transactional relationships. One main element in the Hospital Enterprise Reform in Norway

was the introduction of this logic of the purchaser–provider split, based on the contractual principles from the economic theory of PA relationships. Through that reform, the Norwegian government established autonomous entities that had to be governed differently from the former public agency organization of the hospitals. These principals are expected to define the professional activities of the agents, and these contractual expectations were translated into accounting-type output measures linked to input resources.

In order to analyze these changes between 1997–2009, the following milestones were developed:

Table 2 Milestones and key events in the change process (Source: Pettersen and Nyland, 2011).



(Continued)

In 2007, two of the RHEs merged into one.

Table 2 (Continued)

	Model 1 is still being used, and the Ministry introduces a separate income measure including corrections to compensate for a proportion of the depreciation costs (and later also increases in pension costs) that are not covered by the state (The Ministry of Finance, 2003–2004).	
2004	The Ministry recommends a compromise whereby capital assets are valued to three- quarters of replacement cost (model 3) up to 10.6 billion Euros (The Ministry of Health and Social Affairs, 2003–2004. The annual state budget).	
	Model 1 is still being used. Two separate income measurements are used.	
2005	A new compromise is suggested; now two-thirds of the original valuation (model 4) (The Ministry of Health and Social Affairs, 2004–2005 c). This demands a change in the Hospital Enterprise Act. A suggested change is put forward and sent on a consulting round to different accounting organizations in Norway. All comments from the accounting professionals are negative ² , and the act is not passed (The Ministry of Health and Social Affairs, 2004–2005 b).	
2006	A new model for calculating pension costs is introduced, causing increasing pension costs that are not covered by the state. Corrections to compensate for the proportion of the depreciation costs are made in a separate income measure.	
2007	Revenues to cover depreciation costs are increased by 125 million Euros (The Ministry of Health and Social Affairs, 2006–2007. The annual state budget).	
2008	Revenues to cover depreciation costs are increased by 210 million Euros. Increased grants are tied to pension costs (The Ministry of Health and Social Affairs, 2007–2008. The annual state budget). Depreciation costs are now fully covered, but not the full pension costs.	
	Still two separate income measurements are used.	
2009	Increased grants to cover full pension costs (The Ministry of Health and Social Affairs, 2008–2009.The annual state budget)	
	Instruction from the Ministry to use liquidity surplus from the pension grants to pay off cash credits.	
	The heath enterprises can no longer obtain cash credit loans from private banks. All loans have to be obtained from the state from now on.	

At the end of the 1990s the Ministry considered the cash accounting system not to be an effective information system, and accrual accounting was introduced to make "capital costs in the hospital enterprises' annual reports" more visible. In the political debate on these matters, it was claimed to be a problem that within the budgetary system presented above, the hospitals had no incentive to use their capital resources efficiently.

The hospital organizations have no incentive to balance the use of capital with the use of other input resources. (The Ministry of Health and Social Affairs, 2000-2001, pp. 43)

² http://www.regjeringen.no/nb/dep/hod/dok/hoeringer/hoeringsdok/2004/horing-ut-kast-til-endring-i-helseforetak.html?id=96337

By providing information on an ex ante basis, which includes both current operating costs and capital costs, the government hoped that the accounting reports would indicate what kind of liabilities were being transferred to future generations. There was a widespread expectation among parliament politicians that the new system would produce more relevant information as to long term resource consumption and the financial situation:

As the regional health authorities' reports on economic performance are based on the accrual system.... the Ministry is supposed to have the necessary control in the evaluation of the hospitals' performance indicators and the hospitals' ability to comply with main health policy goals. (The Ministry of Health and Social Affairs, 2000-2001, pp. 45)

But the government did not explicitly state which consequences the agents (the hospitals) had to expect if they did not behave according to the principles behind the accounting system changes. On the contrary, the principal's (the Ministry's) specifications were ambiguous, and they were incrementally changed.

Further, the most important challenge in the implementation process from 2002 onwards was the valuation of capital assets and the setting of depreciation time. Due to the arguments from accountants, the Ministry decided to use a full replacement cost model for calculating depreciation rates in the funding of the hospitals from 2006–2008. Four different valuation models were developed between 2001 and 2006, please see Table 2.

The accrual accounting information indicated to the government the consequences of capital decisions and investments. But these ex ante reported consequences did not fit into the frames of the state budgets since they were decided in parliament. In order to match the information in the accrual accounting numbers on long term consequences with the one-year short term conditions in the state budgets, the Ministry of Health introduced different performance measurements, and it changed the contract specifications with the hospital enterprises.

As the Ministry excluded parts of the capital and pension costs from the performance measurements in the contracts with the hospital enterprises, the agents could keep on acting according to a cash accounting logic. Cash accounting logic was even strengthened as the state (2009)

increased cash management control. The aim of the reform was to create lateral relationships between the state and the hospitals, but the state regained even more hierarchical control by also centralizing asset management. Although the accounting system was changed, the accountability bases were still built upon cash accounting logic.

Concluding Discussion

In this chapter hybridization is used as a concept to develop a deeper understanding of how management control reforms are designed, implemented, used and redesigned. Two longitudinal studies in reforming Norwegian hospitals have been briefly presented. The studies have especially illuminated how functions and systems change over time, and how models are incrementally constructed and reconstructed. These cases show that the initiatives for steps both forward and backward tend to take place on the borders between the organizations and the important stakeholders, such as the Ministry and politicians as key decision makers.

Changes of functions

The boards of the hospital enterprises were established according to formal functions based on rational organizational models, and in the course of a few years were transformed into legitimating bodies. Through a longitudinal study it was possible to describe how this reform was adjusted and changed due to external and contextual pressures. Most importantly, a new government and a new Ministry of Health signaled new claims and changes in the laws which regulate the composition and functions of the hospital enterprises' boards. As a consequence, the hospital enterprises' boards were changed towards more legitimating functions and roles as stakeholder boards, a change which was not according to the initial reform initiatives.

Changes of system

The accrual accounting system was introduced into the hospital sector according to a normative model. The implementation process turned it into a modified system, which had other qualities and effects than one would expect from the textbooks. By studying the implementation processes over eight years, the challenges became visible. In particular, problems arose as the accrual accounting model was introduced to calculate hospital costs, whereas income was still to be measured according to the cash based system with a one year time horizon. In this way, the accrual accounting system developed into a hybrid system.

Due to the need for balancing budgets and the risk of escalating future capital costs, the decision space left to the hospital enterprises was reduced and the government increased its cash management control. This was not the motive for introducing changes in the accounting system. As noted by Miller et al. (2008), accounting takes part in dual hybridization processes, as it aims to make calculable the hybrid it encounters. In this case this hybrid was the value of hospitals' equity. As the valuation models changed, the accounting system itself transformed and hybridized.

The diversity of hybrids

Longitudinal studies are necessary to understand how hybrids develop and revert, and to understand the outcomes of hybridization. By studying these processes one can watch how hybrids change in relation to the needs expressed by external actors, political processes and legitimation considerations.

Table 3 Changes in system and functions as hybrids.

Case	Hybrid	Caused by
Accrual accounting	System	Funding gap
Hospital Enterprise Boards	Functions	Need for legitimation

Although the hybridization processes are different, we can point out some common driving forces behind these processes, such as the time dimension, unexpected consequences and external changes.

Implementation takes more time

The studies have lasted for 6-8 years and we have observed how the reforms have been changing along the way. The decision makers planned for a much shorter timespan; as an example the case with accrual accounting

was planned to take half a year to implement. Years of changes drive hybridization.

Unexpected consequences

All the processes described here turned out to have immediate consequences, which were not predicted. The valuation of the hospitals' assets turned out to be higher than planned by the Ministry. These challenges arose from the way capital was funded, which in turn increased the hospitals' total budget deficits.

As for the introduction of professional hospital boards, this construction separated the hospitals from political influence, which in turn increased conflict within the geographical areas where the hospitals were located, and in turn reduced their legitimate standing. The hospital boards' decision space had also been reduced, which meant that the professional boards could not operate according to their normative role.

Contextual changes

In both cases it was observed that implementation processes take time, and we notice that initial models adjust to important changes in the hospital enterprises' contextual conditions. One such main change was the new government which came into power in 2006. It introduced a new law to regulate the composition of the hospital boards. Furthermore, the large budget deficits which characterized the hospital enterprises during the years after 2002 also weakened the position of the hospital boards, and their roles changed. Hybrids then emerged to balance changes in political conditions which affected the objectives of the reforms.

Hospital deficits exposed the gap between costs and income, and the procedure of using capital to finance hospital buildings was not adequately funded. The accrual accounting model was moderated and several performance measurements were calculated. These various models blurred the transparency which had motivated a move towards the new accounting models. These challenges which turned into budget deficits for the hospital enterprises motivated the hospital owner (the state) to centralize decisions on investments, which signaled a step back in relation to the accrual accounting models.

Implications

This study shows that contextual changes and the complexity surrounding public organizations drive hybridization (Latour, 1993; Kraatz and Block, 2008), and it also shows how hybrids emerge and incrementally change over time (Miller, 2008). The hybridization concept is used here to illuminate the diversity in processes of change. The concept also indicates that hybrids are the rule, and that normative models are the exceptions. These empirical studies also show that longitudinal studies, including many contextual elements, are necessary to understand how and why hybrid forms emerge.

Studies of reform processes should therefore not only include comparisons of the situation at the beginning with a defined end some years later. If evaluations are based on comparing a beginning with an end, conclusions may lead to a decoupling or a loose coupling of reform intentions and effects. Our study has revealed a diversity in reform processes, and that hybrids and not decoupling are the answer to many changes. Such adaptation to contextual changes is most often the situation when there are multiple objectives and stakeholders, constructing ambiguous social systems in incomplete organizations (Brunsson and Sahlin-Andersson, 2000).

Hybrids indicate that these mixtures of models can be even stronger than the idealistic aims of changes, as hybrids have profound effects on the organizations where they are observed. A lesson to be learned is that when ideal models are introduced into a landscape governed by political actors, the outcome might easily turn out to become – hybrids.

References

Bossert, T. (1998). Analyzing the decentralization of health systems in developing countries: Decision space, innovation and performance. *Social Science and Medicine*, 47(10), 1513–1527.

Brandsen, T., van de Donk, W., & Putters, K. (2005). Griffins or cameleons? Hybridity as a permanent and inevitable charasteristic of the third sector. *International Journal of Public Administration*, 28, 749–765.

Broadbent, J., & Laughlin, R. (2009). Performance management systems: A conceptual model. *Management Accounting Research*.

- Brunsson, N., & Sahlin-Andersson, K. (2000). Constructing organizations: The example of public sector reform. *Organization Studies*, *21*(4), 721–746.
- Doolin, B. (2001). Doctors as managers: New Public Management in a New Zealand hospital. *Public Management Review*, *3*(2), 231–254.
- Ferlie, E., Ashburner, L., Fitzgerald, L., & Pettigrew, A. (1996). *The New Public Management in action*. Oxford: Oxford University Press.
- Hood, C. (1995). The New Public Management in the 1980's: Variation on a theme. *Accounting, Organization and Society, 20*(2–3), 93–100.
- Hood, C. (1998). *The art of the state: Culture, rhetoric, and public management.* Oxford: Clarendon Press.
- Hopwood, A. (1996). Looking across rather than up and down: On the need to explore the lateral processing of information. *Accounting, Organizations and Society*, 21, 589–590.
- Jacobs, K. (2005). Hybridisation or polarisation: Doctors and accounting in the UK, Germany and Italy. *Financial Accountability & Management*, 21(2), 135–162.
- Kraatz, M. S., & Block, E. S. (2008). Organizational implications of institutional pluralism. In R. Suddaby, R. Greenwood & K. Sahlin (Eds.), *Handbook of organizational institutionalism*. New York: Sage.
- Kragh Jespersen, P. (2005). *Mellom profession og management*. København: Handelshøyskolens forlag.
- Kurunmäki, L. (2004). A hybrid profession: The acquisition of management accounting expertise by medical professionals. *Accounting, Organizations and Society,* 29(3–4), 327–347.
- Latour, B. (1993). We have never been modern. Cambridge, MA: Harvard Business Press.
- Llewellyn, S. (2001). Two-way windows: Clinicians as medical managers. *Organization Studies*, 22, 593–623.
- Mellemvik, F., & Pettersen, I. J. (1998). Norway: A hesitant reformer? In O. Olson, J. Guthrie & C. Humphrey (Eds.) (1998). *Global warning: Debating international developments in New Public Financial Management*, (pp. 185–218). Oslo: Cappelen Akademisk Forlag.
- Miller, P., Kurunmäki, L., & O'Leary, T. (2008). Accounting, hybrids and the management of risk. *Accounting, Organizations and Society*, 33(7–8), 942–967.
- Mintzberg, H. (1979). *The structure of organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Nordstrand Berg, L., Byrkjeflot, H., & Kvåle, G. (2010). Hybridledelse i sykehus: En gjennomgang av litteraturen. *Nordiske Organisasjonsstudier*, 12(3), 30–49.
- Nyland, K., & Pettersen, I. J. (2004). The control gap: The role of budgets, accounting information and (non-)decisions in hospital settings. *Financial Accountability & Management*, 20(1), 77–102.

- Nyland, K., & Pettersen, I. J. (2006). Management and control of public hospitals: The use of performance measures in Norwegian hospitals. *The International Journal of Health Planning and Management*, 21(1), 1–17.
- Nyland, K., Pettersen, I. J., & Ôstergren, K. (2009). Same reform: Different practices? How regional health enterprises adjust to management control reforms. *Journal of Accounting & Organizational Change*, 5(1), 35–61.
- Olsen, J. P. (1996). Norway: Slow learner or another triumph of the tortoise? In J. P. Olsen & B. G. Peters (1996). *Lessons from experience: Experiential learning in administrative reforms in eight democracies*. (pp. 180–213). Oslo: Scandinavian University Press.
- Pettersen, I. J., Nyland, K., & Kaarbøe, K. (2012). Corporate governance and hospital governance: Dilemmas in the implementation of the governance reforms. An empirical study of the boards of Norwegian Hospital Enterprises. *Health Policy*, 107, 269–275.
- Pettersen, I. J., & Nyland, K. (2012). Reforms and accounting system changes. *Journal of Accounting and Organizational Changes*.
- Ryan, B., Scapens, R. W., & Theobald, M. (2003). Research method & methodology in finance & accounting. (2nd ed.). London: Thompson Learning.
- The Ministry of Health and Social Affairs. (2000–2001). Lov om helseforetak m.m. Ot.prp. nr. 66, 2000–01. Oslo. (Act concerning state owned hospital enterprises).
- The Ministry of Health and Social Affairs. (2001). The Norwegian hospital reform: Central government assumes responsibility for hospitals. A study on the implementation of accrual accounting in Norwegian hospitals. Retrieved from http://odin.dep.no/shd/sykehusreformen Tengblad, S., Solli, R., & Czarniawska, B. (Eds). (2005). *The art of science*. Copenhagen: Liber & Copenhagen Business School Press.
- Williamson, O. E. (1991). Comparative economic organization: The analysis of discrete structural alternatives. *Administrative Science Quarterly*, 36, 269–296.

CHAPTER 7

On Meshworks and Other Complications of Portraying Contemporary Organizing

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Abstract: This chapter begins with a brief summary of problems resulting from the traditional framing of the term "organizations". It ignores organizing without organizations, organizing between organizations, and the fact that organizations can be obstacles to organizing. The text continues with an analysis of the newly fashionable term "meshwork" as a possible new way of framing organizing.

Keywords: legal persons, networks, actor-network, action nets, meshworks

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Introduction

Organizations as entities were legal fictions – in reality they were sets of actions embedded in larger sets of actions. (Czarniawska-Joerges, 1992: 110, summarizing research results of Melville Dalton, 1959)

After a long period of anthropomorphizing organizations into some kind of Super Persons (more on this topic in Czarniawska, 1997), various pivots in the social sciences reversed this way of looking at these entities. A narrative turn brought with it Actor-Network Theory and the realization that organizations, far from always being macro-actors, can best be seen as actants – units that, according to narratologists, simply do something or have something done to them. As to what these actants do, the practice turn suggested that they can be seen both as arrays of activities (Schatzki, 2001; Gherardi and Strati, 2012) and as assemblages of actions (action nets, Czarniawska, 1997). Additionally, the narrative approach freed actions from the cage of intentionality. After all, as Kenneth Burke (1945/1969) had already noted, "motives" are but rhetorical expressions, and intentions can be ascribed to anything – humans and computers alike. Some conceptualizations of the role of information technology can be useful in depicting the hybrid character that organizational actants acquire. Organizations can be seen as "meshworks" (De Landa, 1995a), but they can also turn into "notworks", hindering organizing. Nowadays, a great deal of organizing happens outside organizations, from hooligan fights through Occupy Wall Street to Arab Spring (Shirky, 2008). Thus, as organizing flows beyond the "legal person" frames, new concepts are needed to grasp such new phenomena. As suggested by Boltanski and Thévenot (1991/2006: 18), what is needed is "... a new and systematic approach to organizations, construed not as unified entities characterized in terms of spheres of activity, systems of actors, or fields, but as composite assemblages that include arrangements deriving from different worlds".

[&]quot;A network, when it is acting flaky or is down. Compare nyetwork. Said at IBM to have originally referred to a particular period of flakiness on IBM's VNET corporate network ca. 1988; but there are independent reports of the term from elsewhere". (http://www.catb.org/jargon/html/N/notwork.html, accessed 2013-09-28)

I begin by briefly summarizing problems resulting from the traditional framing of the term "organizations" (see also Czarniawska, 2010a; 2013), then inspect the newly fashionable term "meshwork" to see if it is helpful in dealing with those problems. As I see it, there are at least three reasons for not studying "organizations" as units separate from their "environment", which can obscure crucial instances of organizing: organizing without organizations; organizing between organizations; and organizing in spite of organizations.

Three reasons why obsession with formal organizations is stultifying

Organizing without organizations

Clay Shirky's Here Comes Everybody: The Power of Organizing Without Organizations (2008) has been dismissed by many readers as internet hype. After all, he believes, like many others, that the internet will revolutionize our lives - the standard prediction accompanying any new technology². Shirky does not claim, however, that everything enabled by the internet must necessarily be good - only that certain organizing attempts, once impossible without the support of a formal organization, are suddenly possible. His examples can be divided into three groups. The first group concerns the exchange of information and opinions, made possible by tweeting and blogging. The second describes the collaborative creation of knowledge, of which Wikipedia is the best example (a detailed description of the phenomenon is to be found in Jemielniak, 2014). Finally, he presents examples of organizing mass actions, such as political protests. The number of such cases of organizing is growing exponentially, and they vary from such small events as friends' meetings, through battles of football hooligans, Missing People groups, to Occupy Wall Street and the Arab Spring.

It must be emphasized that there is no a priori moral valuation in Shirky's presentation of the examples. After all, blogging may be contributing to a growing number of heart attacks (apparently bloggers do

² For a biting critique, see e.g. Morozov, 2013.

not get enough sleep), and it certainly contributes to information overload. Wikipedia contains a great deal of incorrect information, but so do most encyclopedias³ – only the latter do not admit it, but hide behind the authority of formal organizations. Football hooligans use the internet to organize their fights with hooligan fans from the opposing team. Even murder can be organized this way, as Günter Grass demonstrated in *Crabwalk* (2003). Thus, the point is not the moral superiority of organizing without organizations, and certainly not for individualism and against collectivism. The point is that, as Jacobsson said after Robert Michels (1949: 390) that "so often, from a means, organization becomes an end" (Jacobsson, 1994: 83). So why not eliminate this danger and dispense with formal organizations altogether?

This is because it is not certain that those spontaneous movements, organized with the help of the internet, can achieve anything concrete without becoming formal organizations. In his keynote speech at the LAEMOS conference in Buenos Aires, Giorgio Alberti (2010) argued that the instability of governments in Latin American countries can be related to the fact that the participants in social movements continue to act in the same way when in power, without understanding that the state is a formal organization that works according to a different set of rules. One is reminded of the 1979 hesitation of Petra Kelly, one of the founders of *Die Grünen*, the German Green Party. Firmly opposed to the formal power system, the German Greens nevertheless concluded that they would not be able to achieve any progress without joining it, although they were well aware of the necessary compromises. Thus Kelly served as a member of the Bundestag (German Parliament) between 1983 and 1990, and the Greens are now a regular party. Similarly, there were voices suggesting that if Occupy Wall Street did not formalize itself into a "proper" organization, with leaders, strategies, and hierarchies, it would simply vanish as it did. It could be that organizing without organizations is ephemeral, and that it is necessary to be transformed into a formal organization in order to achieve results (Ahrne and Brunsson, 2010, would certainly be

³ Historian Norman Davies came to this conclusion on the basis of a systematic comparison (Davies, 2011).

of that opinion), but this does not free us from the obligation to study organizing in its informal phase.

Organizing between organizations

Much organizing happens between and among organizations, in the form of alliances and similar cooperative efforts (see e.g., Smith Ring and Van De Ven, 1992), networks (see e.g., Håkansson and Johansson, 2001), or mergers and acquisitions (see e.g., DePamphilis, 2008). This ubiquitous inter-organizing has contributed to the legitimacy of meta-organizations, which help in organizing (Ahrne and Brunsson, 2008). Indeed, this form of organizing is perhaps studied within mainstream organization studies. But probably the most common and least noted is the cooperation among various parts of different formal organizations - the joint action. Such cooperation is often dictated by necessity, rather than the will to collaborate. Thus an urban recovery project in Rome in the rundown district of Magliana along the River Tiber required the removal of 43 companies, and included plans for 32 new interventions, 22 of public and 10 of private organizations (Czarniawska, 2010b). The problems and obstacles related to the actualization of this project were partly related to the fact that it was almost impossible to ascertain if the number 43 was correct and to contact all involved parties; and partly related to the city's problem of maintaining the will to cooperate among the 32 parties, especially as their planned interventions had to wait until the formalities were resolved.

Not all projects are necessarily this complex, but there is no doubt that organizations are constantly cooperating; that their cooperation is not always easy, precisely because of the formalities involved; and that the issue tends to be ignored in conventional organization studies, keen as the authors are on remaining "within" an organization.

Organizations can be obstacles to organizing

As I suggested before (Czarniawska, 2010a; 2013), I find the conceptualization of organizations as tools for collective action (Perrow, 1986) to be particularly useful. It permits one to conceptualize organizations as virtual artifacts. From that perspective, an organization can be seen as combining

the functions of dispatcher (Latour, 1998) and translator in a machine that has been given a legal personality (Lamoreaux, 2004). An organized collective action means that the right objects and the right persons must be in the right places at the right times, doing the right things. To be able to send objects and people to the right places at the right time, the dispatcher must know how to contact them and how to explain what to do. Thus the dispatcher depends on translator services. The translator is needed because there is a movement of people and objects; had they stayed at the same place, there would be no need for translation (Czarniawska and Sevón, 1996, 2005).

Humans are not "cogs" in this machine, any more than they are chips in their computers. They constructed this machine – this tool – with the help of other co-constructors (thus "social construction"), but once constructed, the machine continues to construct them. From such a perspective, organizations are literally instrumental: either they work, or they do not. If they do not, they should be repaired or exchanged (and eventually dropped, as Karl Weick, 1996, has suggested). What is more, they can be designed better or worse, but they cannot be designed perfectly. Elaine Scarry's (1985) theory explains convincingly why that is so.

According to her, an artifact's "reciprocation" (the ways in which it can be used) always exceeds the designer's projection (the intentions of the designer projected into the object). As much as they may wish to, designers cannot control the use of their artifacts because they design more than they know (the institutional order speaks through them), and they cannot foresee all the contexts in which they could be used (Czarniawska, 2009).

Organizations, like computers and other tools, can be used for various purposes. Refusing to account for the functionality of an organization or accounting only for its formally stated purposes can overshadow the many unexpected uses of organizations – such as the obstruction of organizing. James C. Scott (2009; 2012) is of the firm opinion that the formal organization of the state has been detrimental to spontaneous and superior forms of organizing:

Forms of informal cooperation, coordination, and action that embody mutuality without hierarchy are the quotidian experience of most people (...) Most villages and neighborhoods function precisely because of the informal, transient networks of coordination that do not require formal organization, let

alone hierarchy. [The question is whether] the existence, power and reach of the state over the past several centuries have sapped the *independent*, *self-organizing* power of individuals and small communities. (...) The state, arguably, destroys the natural initiative and responsibility that arise from voluntary cooperation. (2012: xxi-xxii, italics in original)

Scott did not limit his criticism to the state: "...existing state institutions are both sclerotic and at the service of dominant interests, as are a vast majority of formal organizations that represent established interests." (2012: xvii). So, although not everyone may be ready to cheer for anarchism, the stultifying impact of formal organizations on informal organizing needs to be better documented.

Of course, there is no need to abandon studies of formal organizations, so dominant in contemporary life. But it would be good to return to the definition of organizing that extends organizing in formal organizations, as Karl Weick suggested long ago. In his definition, organizing is the process of assembling "ongoing interdependent actions into sensible sequences that generate sensible outcomes" (Weick, 1979: 3). The result of organizing is interlocked cycles, which can be represented as causal loops rather than as a linear chain of causes and effects. But, and above all, organizing is an ongoing encounter with ambiguity, ambivalence, and equivocality, part of a larger attempt to make sense of life and the world.

Some newer frames: Networks, actor networks and action nets

Networks

The idea of networks was supposed to change the traditional way of portraying organizations as specialized offices (bureaus) arranged in a hierarchical manner and the traditional way of seeing markets as "free" – that is, not organized (see e.g. Håkansson and Snehota, 1995).

The idea of networks has become extremely popular when supported by the emergence of the internet, not least in the military context. Network Centric Warfare, or NCW, an invention of the Pentagon (see e.g. Alberts et al., 1999), has quickly reached other western military forces, including Canada, Singapore, Australia (Network Enabled Warfare), Holland (Network Centric Operations), the UK (Network Enabled Capability), Norway and Sweden (Network Based Defence). NCW has been hailed as "an impressive change in institutional culture", and its guru, John Garstka, an associate director of the Pentagon's Office of Force Transformation has said "that the benefits of flattening the military command structure and increasing its networking capabilities will ultimately prove irresistible" (Salkever, 2003).

The assumptions behind NCW seem sensible and convincing. The term conveys a double meaning: "network centered" in the sense that it is based entirely on ICT, on the Web – in its various internet and intranet forms. The second meaning refers to networking – flexible cooperation and capacity of ad hoc collaboration among previously highly bureaucratized army forces. The former – shared information and communication technology – is seen as a necessary and sufficient condition for the latter.

According to Alex Salkever, technology editor of Business Week, NCW was no more no less than a hope "to remake a hierarchical, hidebound organization so that it can function with a flat management structure, ad hoc collaboration and on-the-fly decision making" (Salkever, 2003). But, he added, it could also strengthen the traditional tendencies of "Pentagon mandarins" to "micromanage" - to make even local decisions. Commanders sitting far from the field miss key pieces of local information that did not make it, or could not make it, to the Web. Salkever quoted both the criticism and the response to it: "You have to be able to create graceful failure modes. If everything goes through some central network without which I'm helpless, then what happens if some key node fails?"; "We're developing the information grid so that every platform will have the same information, and if one or two platforms fail, their functions are automatically taken over by other platforms. Every platform will be able to be the command center". But what if every platform tries to be a command center, as allegedly happened with tanks, when each crew member had a GPS map of the terrain (Mark Davis, personal information)?

I have no intention of dramatizing the perils of a network, but I would like to suggest another way of looking at it. A network, in the traditional meaning of the word, is but a flattened hierarchy in which the top becomes the center and the bottom the periphery. This means that

the nodes exist prior to connections: no nodes, no connections. Can the nodes exist without the previous hierarchy? If so, how are they created? Thus although there is no doubt that networks exist and multiply, there is also a need for other ways of conceptualizing organizing.

Actor-Network Theory

As the reader is probably well aware, Actor-Network Theory (ANT) originated in studies of science and technology, as the result of a fortunate crossover between narratology (in the version of Lithuanian-French semiotician Algirdas Greimas, see e.g. Greimas, 1990) and studies of successful inventions (see e.g. Latour, 1988).

It can be said that ANT is narratology at the service of understanding how the social is assembled (Latour, 2005), based on a fruitful analogy between a fictitious narrative and the production of a research report. In a fictitious narrative, it is not known at the outset who is the hero and who is the villain (unless it is a sequel). Initially unprepossessing figures conquer kingdoms after having successfully accomplished their narrative trajectory, whereas various tokens of power and authority (formal titles, golden treasures) may change owners and remake some characters while dismembering others. Here comes a lesson for studying organizing: If it is known at the outset who has power, who is the hero and who is the villain, research is a waste of time. A study that truly purports to provide information that did not exist before begins with the identification of actants (those that act and are acted upon) in a given case (that is, an occurrence of a phenomenon), follows a narrative trajectory (a series of programs and anti-programs), and shows how actants that established associations and stabilized them became actors, or even macro-actors. After all, macro-actors are but large networks that are hiding their network character by presenting themselves through the single voice of a representative speaker.

Although ANT can be of great use in organization theory (see e.g. Czarniawska and Hernes, 2005), it does not cover all cases of organizing. ANT was constructed for a different purpose: it focuses on macro-actors in order to show how they were assembled. It does not focus on organizing that does not lead to the construction of actors or on the macro-actors that disassemble.

Action nets

For some years now, I have been suggesting an extension of the actor-network approach to studying connections among actions (Czarniawska, 1997; 2004; 2008). The idea is to study organizing as the connection, re-connection, and disconnection of various collective actions to each other, either according to patterns dictated by a given institutional order or in an innovative way. Such collective actions need not be performed within the bounds of a formal organization. An action net can involve actions performed by several formal organizations or by assemblies of human and non-human actants. The actions can be connected loosely or temporarily, but the connections may stabilize in time.

I also added to actor-network theory an insight provided by new institutionalism. In a given institutional order, certain collective actions seem obvious or even necessary candidates for being connected to others (producing to selling, for example), whereas other connections may seem alien or innovative (open source, for example).

A standard organizational analysis begins with "actors" or "organizations", whereas an action net approach sees them as *products* rather than sources of the organizing – taking place within, enabled by, and constitutive of, an action net. Actors are produced by and in an action net, not vice versa. Organizations, in themselves products of organizing, become actors due to a repeated type of action legitimized by a "legal person" certificate.

Another product, or effect, of organizing, may be a network. But the concept of network assumes the previous existence of actors who make contact, whereas action nets assume that connections between actions produce actors. A network that is not part of an active action net is like the robot Hal in 2001. A Space Odyssey: A system and a network, but isolated and absurd.

Such action nets usually transcend any given organization (Czarniawska, 2002). Public marketing of a company requires connections to such organizations as advertising agencies, city administration, and publicity regulation. Such connections can assume a variety of forms: formal contracts and hierarchical subordination, but also friendship. As actions thus connected are different, they require translation at the connecting points. A given unit, with its own internal actors and artifacts, may be

considered an entity unto itself in a legal sense; but many other actors and artifacts, including whole networks, are usually involved in an action net. Observing entire action nets rather than mere interorganizational contacts unveils a more comprehensive picture of the way organizations are formed, stabilized, dissolved, or relocated. It also improves the ability to see how actants try to stabilize "their" segments of a net in order to form powerful actor networks (Callon, 1986).

Different approaches and ways of conceptualizing organizing have their advantages and shortcomings, but the fact is that formal organizations, networks of actors and actor networks, action nets and spontaneous organizing coexist – at the same time and in the same territory. Nowhere can this be seen as clearly as in big cities and their management (Czarniawska, 2002). Although there is always a large formal organization called "city administration," it is a multi-faceted hybrid, with parts ranging from the purely political to the purely productive, and everything in between. But the city is also an arena for a great many other formal organizations, from companies to voluntary citizens' associations, and for social movements and spontaneous demonstrations and ad hoc groups. No wonder urban scholars have been searching for a metaphor that will encompass it all.

Would meshworks fit the bill?

Urban studies

Mexican-US philosopher Manuel De Landa (1995a) is usually seen as the author who imported the notion of meshworks from behavioral AI to social sciences. Although he later continued to use the term in relation to computer sciences (De Landa, 1998)⁴, he used the metaphor first in relation to homes:

If our minds are thus hybrids of two or more computer types, then we should expect our homes to be also complex mixtures of self-organized and planned

⁴ There is also a term "mesh networking" to describe digital connections outside the internet (Dibbell, 2012).

components, or to use technical terms, of hierarchies and meshworks. Hierarchies are structures in which components have been sorted out into homogenous groups, then articulated together. Meshworks, on the other hand, articulate heterogeneous components as such, without homogenizing. (...) Our homes can then be seen as mixtures of self-organized and planned components (...). (De Landa, 1995a: 3)

I return to some peculiarities of this definition. For now I add only that De Landa explained in another paper (De Landa, 1995b) that those "hierarchies and meshworks" are translations, first, of Herbert Simon's "hierarchies and markets", and second, of Gilles Deleuze and Felix Guattari's "strata and aggregates". "Aggregates" are now usually translated as assemblages (even De Landa uses this word in later texts), so the connection to Actor-Network theory is obvious (Latour has been also influenced by Deleuze; see e.g., Latour, 1993).

The meshwork metaphor has been enthusiastically adopted by Marilyn Hamilton, urban scholar, city activist, and city management consultant. She actually consulted neurological literature and established that the term "meshwork" depicts

... the emergence of patterns in the brain, resulting from the neuro-chemical connections of synapses that produce a hairnet-like mesh of axons (...), characterized by major primary connective pathways that produce and intersect secondary, tertiary and many further levels of connectedness. It appears that the meshwork self-organizes connections and when a certain density and/or repeated use of pathways arises, a hierarchy of complexity emerges that enables the brain to replicate the patterns (...) allowing retention of learning and efficiencies of energy use. This cycle of self-organizing and hierarchical patterning continues throughout a lifetime, allowing the brain to build up a repertoire of learned behaviors while continuing its capacity for self-organizing adaptiveness to dynamic environments and never-ending stimuli. (Hamilton, 2012: 2–3)

In other words, when connections within action nets become repetitive and stabilized, a formal organization may emerge. And, like brains, organizations can also become sclerotic, as Scott has rightly noted.

Still within the territorial frame of reference, one can find another use of the term "meshworks", this time by the social anthropologist Tim Ingold. He borrowed the term from another French philosopher, greatly interested in the issues of space, Henri Lefebvre (Ingold, 2007: 80). To Ingold, a network is a set of lines that joins the dots (or, in my vocabulary, a set of connections between the actions). A meshwork is

interwoven trails rather than a network of intersection routes. The lines of the meshwork are the trails *along* which the life is lived. And (...) it is in the entanglement of lines, not in the connecting of points, that the mesh is constituted. (Ingold, 2007: 80-81)

The picture on the next page (82) is similar to those I drew when trying to illustrate the concept of action nets (apart from the fact that Ingold is famous for drawing beautifully, and I am not).

In a later work, Ingold engaged in a debate with Latour, suggesting that ANT departed from Deleuzian insights; whereas his definition of meshworks – as different from networks – develops them further.

ANT claims that events are the effects of an agency that is distributed around a far-flung network of actants comparable to the spider's web. But the web, as SPIDER explains, is not really a network in this sense. Its lines do not connect; rather, they are the lines along which it perceives and acts. For SPIDER, they are indeed lines of life. Thus whereas ANT conceives of the world as an assemblage of heterogeneous bits and pieces, SPIDER's world is a tangle of threads and pathways; not a network but a meshwork. Action, then, emerges from the interplay of forces conducted along the lines of the meshwork. (...) Where ANT, then, stands for actor-network theory, SPIDER – the epitome of my own position – stands for the proposition that skilled practice involves developmentally embodied responsiveness. (Ingold, 2011: 84-85)

I am not sure that ANT people wouldn't agree with the last statement, but indeed, even in action nets actions are connected and translated, and, unlike a spider's web, often heterogeneous. But didn't De Landa claim that the meshworks are knitted from heterogeneous elements, unlike hierarchies? What does the meshwork metaphor stand for, then? Perhaps it is necessary to consult its non-metaphorical use.

Meshworks in technology and in organization studies

According to a non-metaphorical meaning of the term "meshwork", all the authors I have quoted are wrong. Meshwork is "an open fabric of string or rope or wire woven together at regular intervals" (http://www.thefreedictionary.com), in medicine a vascular network (http://www.merriam-webster.com): in other words, a tightly knit net. The threads are homogeneous; at most they can have different colors, but the material must be the same, because otherwise it would be difficult to obtain mesh, which "consists of a semi-permeable barrier made of connected strands of metal, fiber, or other flexible/ductile material. Mesh is similar to web or net in that it has many attached or woven strands. (http://en.wikipedia.org/wiki/). Yet even the very high hi-techs speak of their "wireless mesh network" (Dibbell, 2012); an oxymoron if ever there was one.

Although Deleuze and Guattari rightly differentiated between strata and assemblages, the assemblages they meant were definitely made of heterogeneous elements. Why not use the term "assemblage" rather than "meshwork" then? Because assemblages do not produce this association of density, which is important, and suggest straighter lines, albeit of different length and directions, than the wavy trails mentioned by Ingold. Indeed, Simon's contrasting hierarchies with markets would be good, if in the meantime we did not learn that markets are assemblages (Callon, 1998) rather than self-organizing, spontaneous sets of actions.

The neurological definition quoted by Marilyn Hamilton rightly speaks of "hairnet-like mesh of axons", but it does not contrast hierarchies with meshworks. On the contrary, and this renders it fascinating, it says that a meshwork first connects itself spontaneously, and only later develops a hierarchy within itself – producing strata. This usage would be almost perfect, but it still assumes the homogeneity of axons (nerve fibers). It is the connections that produce a variety of behaviors; the meshwork itself is homogeneous.

Tim Ingold's use of meshwork, indeed as the opposite of hierarchy or anything that is planned, departs completely from the literal meaning of meshwork. But metaphors are *by definition wrong*. In technical terms, metaphor is "a new semantic coupling" (Eco, 1979/1983: 69), its meaning

in Greek being "move". As Umberto Eco noted, however, the common theory of metaphor confuses it with metonymy in assuming that it consists of the substitution of one element of language for another "by virtue of a resemblance of their referents" (ibid: 79, italics in original). But it is actually not the resemblance (important for both simile and metonymy) that makes a successful metaphor; it is the "short circuit" of associations that it is able (or not) to produce. True, metaphors owe their life to metonymies. Such short circuits are possible because of the existence of the "multidimensional network of metonymies, each of which is explained by a cultural invention rather than by an original resemblance" (ibid: 78). Eco also explained the difference between acceptable metaphors (where the resemblance is indeed visible almost at once) and the misleading ones (where the circuit is long, and when accomplished, does not produce much knowledge or aesthetic satisfaction). The truly rewarding metaphors are those that produce "the tension, the ambiguity, and the difficulty which are characteristic of the aesthetic message" (Eco, 1979/1983: 82).

I find the metaphor of "meshwork" attractive because it provokes associations to various aspects of organizing, but also because it creates a tension with its literal meaning. I would like to use the term in a sense that permits me to pack in all kinds of organizing at once. Therefore the density of the mesh is an appropriate association. On a given territory, let's say, a city, there is self-organizing and planned organizing, formal organizations and informal networks; action nets are connected and disconnected, stabilized and destabilized; actants busy themselves trying to become actors; and trajectories of people and things crisscross. The type of activity may differ from place to place, but then, in time, another type may replace it.

The meshwork metaphor deftly captures the processes of organizing – of the news and of news production – which I have studied in news agencies (Czarniawska, 2012). News agencies provide an excellent example of organizing that takes place outside, inside, and between formal organizations; where networks, action nets, and actor networks are meshed together, and hierarchy and anarchy cohabit; and where no single worker can (or needs to) understand the working of the whole system.

A critic can say that I am mixing metaphors: I called news agencies "cyberfactories". So, are news agencies factories or meshworks? They

can be both, depending on which aspect of their functioning is in focus. Unlike philosophers, organization scholars are not supposed to create ontologies, but to study ontologies (and cosmologies) of other people. So news agencies are also neither factories nor meshworks, but can be considered to be both. As suggested before, the very "wrongness" of the metaphors opens routes for exploring organizing in practice.

References

- Ahrne, Göran, & Brunsson, Nils (2008). *Meta-organizations*. Cheltenham: Edward Elgar.
- Ahrne, Göran, & Brunsson, Nils (2010). Organization outside organizations: The significance of partial organization. *Organization*, 18(1), 83–104.
- Alberti, Giorgio (2010). *Politics as movement: A weapon against states, institutions and markets.* LAEMOS, Buenos Aires, 7–10 April.
- Alberts, David S., Garstka, John J., & Stein, Fredrick P. (1999). *Network-Centric Warfare: Developing and leveraging information superiority*. Washington, D. C.: C4ISR Cooperative Research Program.
- Boltanski, Laurent, & Thevénot, Laurent (2006). *On justification: The economies of worth.* Princeton, NJ: Princeton University Press.
- Burke, Kenneth (1945/1969). *A grammar of motives*. Berkeley, CA: University of California Press.
- Callon, Michel (1986). Some elements of a sociology of translation: Domestication of the scallops and the fishermen of St. Brieuc's bay. In John Law (Ed.), *Power, action and belief* (pp. 196–229). London: Routledge & Kegan Paul.
- Callon, Michel (1998). Introduction: The embeddedness of economic markets in economics. In Michel Callon (Ed.), *The laws of the markets* (pp. 1–57). Oxford: Blackwell.
- Czarniawska-Joerges, Barbara (1992). *Exploring complex organizations: A cultural perspective*. Newbury Park, CA: SAGE.
- Czarniawska, Barbara (1997). Narrating organizations: Dramas of institutional identity. Chicago: University of Chicago Press.
- Czarniawska, Barbara (2002). *A tale of three cities: or the glocalization of city management*. Oxford: Oxford University Press.
- Czarniawska, Barbara (2004). On time, space and action nets. *Organization*, *6*(1), 777–795.
- Czarniawska, Barbara (2008). A theory of organizing. Cheltenham: Edward Elgar.
- Czarniawska, Barbara (2009). How institutions are inscribed in technical objects and what it may mean in the case of the internet. In Francesco Contini &

- GiovanFrancesco Lanzara (Eds.), *ICT and innovation in the public sector: European studies in the making of e-government* (pp. 49–87). Basingstoke, UK: Palgrave Macmillan.
- Czarniawska, Barbara (2010a). Going back to go forward: On studying organizing in action nets. In Tor Hernes & Sally Maitlis (Eds.), *Process, sensemaking & organizing* (pp. 140−160). Oxford: Oxford University Press.
- Czarniawska, Barbara (2010b). Translation impossible? Accounting for a city project. *Accounting, Auditing and Accountability Journal*, 23(3), 420–437.
- Czarniawska, Barbara (2012). *Cyberfactories: How news agencies produce news.* Cheltenham: Edward Elgar.
- Czarniawska, Barbara (2013). Organizations as obstacles to organizing. In D. Robichaud & F. Cooren (Eds.), *Organizations and organizing: Materiality, agency, and discourse* (pp. 3–22). New York: Routledge.
- Czarniawska, Barbara, & Hernes, Tor (Eds.) (2005). *Actor-network theory and organizing*. Malmö: Liber.
- Czarniawska, Barbara, & Sevón, Guje (Eds.) (1996). *Translating organizational change*. Berlin: de Gruyter.
- Czarniawska, Barbara, & Sevón, Guje (Eds.) (2005). *Global ideas: How ideas, objects and practices travel in the global economy*. Malmö: Liber.
- Dalton, Melville (1959). Men who manage. New York: John Wiley & Sons.
- Davies, Norman (2011). *Vanished kingdoms: The rise and fall of states and nations.* New York: Viking.
- Davis, Mark (2002). Personal Communication, June 22.
- De Landa, Manuel (1995a). Homes: Meshwork or hierarchy? Retrieved from http://www.mediamatic.net/5914/en/homes-meshwork-or-hierarchy (accessed 2013-09-28).
- De Landa, Manuel (1995b). The geology of morals: a neomaterialist interpretation. Retrieved from http://future-nonstop.org/c/818d3d85eca43d66ffoebd1dfedda6e3 (accessed 2013-09-28).
- De Landa, Manuel (1998). Meshworks, hierarchies and interfaces. In John Beckman (Ed.), *The virtual dimension: Architecture, representation and crash culture*. (pp. 274–285). Princeton, NJ: Princeton Architectural Press.
- DePamphilis, Donald (2008). *Mergers, acquisitions, and other restructuring activities*. New York: Elsevier.
- Dibbel, Julian (2012). Internet freedom fighters build a shadow web. *Scientific American*, 16 February.
- Eco, Umberto (1979/1983). *The role of the reader: Explorations in the semiotics of texts.* London: Hutchinson.
- Gherardi, Silvia, & Strati, Antonio (2012). *Learning and knowing in practice-based studies*. Cheltenhamn: Edward Elgar.

- Grass, Gunther (2003). *Crabwalk*. Orlando, FL: Houghton Mifflin Harcourt. Greimas, Algirdas J. (1990). *The social sciences: A semiotic view*. Minneapolis, MN: The University of Minnesota Press.
- Hamilton, Marilyn (2012). Meshworking integral intelligences for resilient environments: Enabling order and creativity in the human hive. Retrieved from http://www.integralcity.com/discovery-zone/Research%20Docs/Meshworking%2oIntelligence%20itc%20article.pdf (accessed 2013-09-29).
- Håkansson, Håkan, & Snehota, Ivan (Eds.) (1995). *Developing relationships in business networks*. London: Routledge.
- Ingold, Tim (2007). Lines: A brief history. London: Routledge.
- Ingold, Tim (2011). Being alive: Essays on movement, knowledge and description. London: Routledge.
- Jacobsson, Bengt (1994). On evil organizations and illusory reforms. In Barbara Czarniawska & Pierre Guillet de Monthoux (Eds.), Good novels, better management: Reading organizational realities in fiction (pp. 65–92). Reading, UK: Harwood Academic Publishers.
- Jemielniak, Dariusz (2014). *Common knowledge? An ethnography of Wikipedia.* Stanford: Stanford University Press.
- Lamoreaux, Naomi R. (2004). Partnerships, corporations, and the limits on contractual freedom in U. S. history: An essay in economics, law and culture. In Kenneth Lipartito & David B. Sicilia (Eds.), *Constructing corporate America: History, politics, culture* (pp. 29–65). New York: Oxford University Press.
- Latour, Bruno (1988). The politics of explanation: An alternative. In Steve Woolgar (Ed.), *Knowledge and reflexivity: New frontiers in the sociology of knowledge* (pp. 155–176). London: Sage.
- Latour, Bruno (1993). *We have never been modern*. Cambridge, MA: Harvard University Press.
- Latour, Bruno (1998). Artefaktens återkomst. Stockholm: Nerenius & Santérus.
- Latour, Bruno (2005). *Reassembling the social: An introduction to actor-network theory*. Oxford, UK: Oxford University Press.
- Michels, Robert (1911/1949). *Political parties: A sociological study of the oligarchical tendencies of modern democracy*. New York: Free Press.
- Morozov, Evgeny (2013). *To save everything, click here: The folly of technological solutionism.* New York: PublicAffairs.
- Perrow, Charles (1986). Complex organizations. New York: Random House.
- Salkever, Alex (2003). The network is the battlefield. *Business Week*, January 7.
- Scarry, Elaine (1985). *The body in pain: The making and unmaking of the world.* New York: Oxford University Press.
- Shirky, Clay (2008). *Here comes everybody: The power of organizing without organizations.* London: Allen Lane.

- Smith Ring, Peter, & Van De Ven, Andrew (1992). Structuring cooperative relationships between organizations. *Strategic Management Journal*, 13(7), 483–98.
- Scott, James C. (2009). *The art of not being governed: An anarchist history of Upland Southeast Asia.* New Haven, CT: Yale University Press.
- Scott, James C. (2012). *Two cheers for anarchism*. Princeton, NJ: Princeton University Press.
- Weick, Karl E. (1979). *The social psychology of organizing*. New York: Addison-Wesley.
- Weick, Karl E. (1996). Drop your tools: An allegory for organization studies. *Administrative Science Quarterly*, 41(2), 301–313.

CHAPTER 8

From Numbers to Interventions and Back: How Do Accounting Facts and Management Concerns Interact?

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Abstract: This essay offers an account of how numbers are produced and consumed in organisations. It is noteworthy, that the 'world' has only a little relation to this process because the transformation of numbers through calculation produces the visibility and transparency that cannot be seen by any other means. Then the essay traces the process from numbers into more numbers and back to the world, where the process has transformed the world in a forward moving move but which remains a hope because it is only a decision which later has to be made a solution by the help of many other hands.

Keywords: quantification, calculation, circulating reference, 2-dimensional representations, accounting, strategy

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Introduction

It is a widely held belief that numbers do not lie. If they are audited competently, they reflect the truth of a matter: the number of cakes in a box, the weight of 100 apples, the fraction of students with a grade point average exceeding 7.0, and the worth of the equity (wealth) of firms in a given industry. Such numbers describe phenomena in the world and are matters of fact. They are precisely calculated, and they can be re-calculated or re-counted if in doubt (Mouck, 2004).

However, numbers are not only matters of fact; they quickly become matters of concern. They are concerns because the procedure of making them count acts on the documentation of the number more than on the circumstances that make them interesting and relevant. There is more to the number than the number itself, because when it is made into an argument to do something, then it is not a description anymore. It is a part of an argument and thus a force for change. Will the number of cakes in the box reveal a loss of cakes? Is the weight of apples enough for the production of apple pies? Is the fraction of students adequate to fill up the student places that require a certain grade point average? Is the worth of the equity a prediction of the price of the firm? Such questions go beyond the number and make it a concern. The concern arises, as the famous philosopher Bruno Latour (2008 p. 39) tells us, when the world is added to the fact:

A matter of concern is what happens to a matter of fact when you add to it its whole scenography, much like you would do by shifting your attention from the stage to the whole machinery of a theatre. [...] Instead of simply being there, matters of fact begin to look different, to render a different sound, they start to move in all directions, they overflow their boundaries, they include a complete set of new actors, they reveal the fragile envelopes in which they are housed. Instead of "being there whether you like it or not" they still have to be there, yes (this is one of the huge differences), they have to be liked, appreciated, tasted, experimented upon, mounted, prepared, put to the test.

The fact is too lonely; it needs company to be interesting.

This point, that facts need company to be interesting, is important for management studies generally and accounting research specifically. Accounting research is interested in the relationship between the world and numbers. At the end of the day, the adage goes, numbers explain failures and successes. Daily, news media report on relationships between financial earnings and movements in the stock markets; they tell us that bonus contracts are tied to corporate profits; and they tell us that not adhering to the budget is a bad thing. They tell us that the numbers are good windows into the world of complex matters (Mattessich, 2003).

However, much research tells us that numbers are also deceptive (Berenson, 2003). The facts are uninteresting when they are certain, Bruno Latour would say. When they are interesting, they move more and become entangled with matters of concern. When they are parts of a wider scenography of things their fate is more uncertain. They become contested and it is difficult to imagine how they will settle a controversy or disagreement.

Therefore, this chapter is concerned with the question of how numbers are developed and made into resources for intervention. This is highly relevant for management and accounting students because the number connects the two positions. How are numbers made into facts (accounting)? And how do they turn into concerns (management)? Let us take these questions in turn.

Accounting facts - creating references

Accounting calculates; when accounting calculates it produces a link between at least two categories (e.g. costs and revenues) that if followed far enough has a relation to slips of paper – to receipts. Therefore, an accounting calculation starts from a series of receipts that are the effects of certain actions: a revenue slip comes from a sales transaction; a payment slip requires a cash transfer. A cost requires a series of slips: a purchasing slip covering materials; a production slip suggesting how much material has been used; a salary payment slip covering labor spending; a time register documenting how much labor time goes into production. When these slips are collected on a grand scale, it is possible to calculate total revenues, total materials costs and materials in inventory, labor costs in production and indirect labor costs. Then the calculation goes on to develop a measurement of profit: sales minus materials costs minus direct labor costs

minus indirect labor costs. In addition, there is an asset in the form of the materials inventory. Then the calculation may proceed to calculate the profit/assets ratio to arrive at profitability.

Here profit and profitability are wholly effects of calculative practices, of procedures of calculation. Tracing the profit back shows that only in very small glimpses is there a clear world to which the calculation may correspond. The profit is in no particular place; it is dispersed into numerous, and typically detached, actions in sales, production and purchasing. Their connections are not clear until some form of calculation has been made. The world to which the fact of products and profitability could correspond is hard to find. It ends in very small activities compared to the force that a single profit number engenders. A profit number can be talked about in the boardroom, in the management offices, in the press, among investors, and in governments. The individual activities in production and sales cannot be communicated as efficiently. The number not only travels speedily, it is potentially a dramatic actor which can unsettle even the strongest people, such as managers, boards of firms, and investment firms, if it presents matters as unfulfilled concerns.

This process of creating references between numbers and the world arises from tools and techniques of noting and summarizing (Chua, 1995, Miller, 2001, Miller and Rose, 1990, Robson, 1992). They gradually transform a myriad of activities into a simple number – the number is the end of a long process of calculation that gradually loses the specificity of all the actions but also gains stability, mobility and combinability. That is, numbers lose many aspects of the world, but become stable because they are calculations that can be performed by a computer; they become mobile so that they can be sent to any office or table where they can be discussed; and they can be combined with other calculations to make an even more general statement (Latour, 1986, 1999). The number is the result of a process that transforms a three-dimensional world into to a two-dimensional inscription; this makes the world less confusing, as Latour (1986, p.15) notes:

If scientists were looking at nature, at economies, at stars, at organs, they would not *see* anything ... Scientists start seeing something once they stop looking at nature and look exclusively and obsessively at prints and flat inscriptions.

In debates about perception, what is always forgotten is this simple drift from watching confusing three-dimensional objects, to inspecting two-dimensional images which have been *made less confusing*.

When presented in a two-dimensional form, the world has an air of visibility as it has *eliminated* things that just confuse matters. The gradual production of the number is therefore a process of reducing the number of aspects of the world.

Latour (1999) describes this process as a circulating reference. The important point is that the production of numbers is a process, which only refers to its own internal consistency and claims only in a very limited sense that it has captured the world. The first step is to note the activities of selling, purchasing and using time for production purposes, which are really the only strong hooks on the world. After this, the rest of the calculation acts on the slips or receipts that these activities left behind by bookkeepers or clerks. Therefore, to arrive at labor costs, the total labor bill has to be divided into production labor and indirect labor. This is done by combining the register of employment with the register of labor costs. Then the materials usage is calculated by the opening materials inventory plus the purchases of the period from which the end inventory is subtracted. Then the decision is made as to whether the result will be a contribution accounting profit which simply subtracts direct labor and materials costs from sales; or whether it will be a simple full cost calculation or a more complex activity-based calculation which would subtract indirect costs from the contribution number in different ways. The observation is that the number here is dependent on a procedure of calculation more than on representational qualities. The world does not care because it is already lost at the start of the calculation. What is left is a calculation that is true, because its procedure has been followed (McKernan, 2007, Mouck, 2004, Porter, 1994, 1995).

This process develops a consecutive set of references each of which is transformed into a different one. For example, the individuality of each sales transaction will show how the sales person has to treat the individual customer differently, but the minute that this transaction is translated to an entry in the cash register what is left is the amount of money for the sale and the date of the sale. There is no account of the sales person's

strategy to persuade the customer, and there is no account of the particular customer's idiosyncratic behavior and preferences. Therefore, the individuality of the sales episode is lost, and a more general account of the sales process has been established. At the end of the day, even the individual transactions of the cash register may lose their separate identities and be accounted for as the day's sales, which again become the week's sales, etc. This process of arriving at a number for sales will reduce our insight into the episodes of sales transactions. The consecutive set of references here is not a misrepresentation of the sales transaction, but neither is it an expression of what selling is about. In a sense, the resulting number for sales is not true because it is not about the sales transactions, but neither is it false because it aggregates slips consisting of sales transactions. In this process, sales transactions lose specificity and gain generality.

The production of the costs number for the situation is more complicated. The activity consists of some people operating some machines and using materials to produce a product. To calculate this, an accountant faces a series of choices.

- 1. One possibility is to (a) count the materials at the beginning of the period under consideration, add purchases during this period and subtract the amount of materials at the end. This produces the materials usage, which is then multiplied by either (i) the price of the last item of materials, (ii) the price of the first item of materials, or (iii) the average materials price. At least three prices can be calculated. Then (b) direct time is tallied from timesheets reporting the attendance of employees, and the hourly wage for each employee (possibly including coverage for vacation, health and certain employment taxes) is then multiplied. Adding all employee costs, this produces a number for all direct costs. If then (c) materials and direct labor are subtracted from sales, the accountant will arrive at a *contribution profit*.
- Another possibility is to say that in addition to the contribution profit, the calculation also has to take into account the amount of indirect costs. Then from the contribution profit a fraction of indirect labor, proportional to the use of the capacity of the various

products, is subtracted. Therefore, if the firm sells two products, indirect labor costs (the wages, etc. of the indirect labor working, e.g. in production planning, logistics, and information technology, and which support the capacity of the production system) have to be allocated to these products, e.g. by volume. Therefore, from contribution profit, the accountant subtracts indirect costs to arrive at *full cost profitability*.

3. A third possibility is that the accountant employs the principle of activity-based costing and suddenly the complexity of the production space is even higher as a separate cost is allocated to the three different drivers of indirect costs – production planning, logistics, and information technology – and the proportion of usage for the two product lines is used for all three. The accountant subtracts another set of indirect costs from the contribution profit and arrives at activity-based profit.

These three methods of calculation are all acceptable in practice, and any accounting textbook will explain at great length how these calculations work. For example, the calculations may look as follows:

Method of calculation	Contribution profit.		Full cost profit.		Activity based profit.	
	Product 1	Product 2	Product 1	Product 2	Product 1	Product 2
Sales	3500	8000	3500	8000	3500	8000
Costs	700	4000	1740	8460	3630	6570
Profit	2800	4000	1760	-460	-130	1430

Table 1 Three methods of calculation based on the same system of transactions/receipts/slips.

The table illustrates that these different calculations produce different profit numbers for the firm's two product lines. Are these numbers true? Can they lie? They are not truths simply because they are different manifestations of 'the same thing.' They are not matters of fact in the sense that they reflect something innate, independent of time and space. However, are they lies? No, they are not lies either, because each of them follows a meticulous and auditable procedure. They are all true, in the sense that they are the effects of a systematic accounting relentlessly adhering to the principles

that the calculations propose. Therefore, if a contribution accounting proposition is favoured, the accounting procedure honours its principles, and thus one acts similarly concerning the full costing and the activity-based costing propositions. With Latour (1999) this can be called relative truths, or relative objectivity. The addition of 'relative' suggests that the number is more than a matter of fact; it is more involved in matters of concern.

So, what may be the matters of concern that the calculation is involved in? This is another way of asking how companies choose calculations. The starting point here is that firms may be uncertain about which axes of value are interesting and relevant. The idea of ambidextrous organizations suggests that there are always dilemmas between the short and the long run, between exploitation and exploration (Nadler and Tushman, 1999, O'Reilly III and Tushman, 2008, Probst, Raisch and Tushman, 2011, Smith, Binns and Tushman, 2010). Likewise, the idea of heterarchy implies that there is always more than one value in a firm and they will often compete (Stark, 2009). Mouritsen et al. (2009) provide an illustration of how accounting calculations compete and this competition has, in their study, consequences for choices in relation to innovation, and subsequent consequences for firm capabilities and the inter-organizational division of labor. They suggest that accounting calculations compete to illustrate the different implications of choices relating to technology, organization and environment.

In one of their examples, they suggest that through the competition between a contribution calculation and a calculation of indirect costs two different versions of matters of concern emerged. The contribution argument favoured innovation based on advanced technology, which though experimentation would be able to increase revenues. This made outsourcing a difficult thing and, in a sense, development work was a black box because fixed costs were one undivided whole, but survived because of revenue increases. Alternative calculations of indirect costs focused on this black box and suggested that opening it (dividing it up somehow) would make it possible to be less experimental and more focused in making innovation choices, which again would make it possible and desirable to outsource a lot more of the production and innovation work. Generally Mouritsen et al. suggest that it is difficult for a manager to make a general

statement without the help of a calculation. If someone wishes to criticize an accounting calculation, it is not sufficient to express disagreement; it is necessary to develop another calculation that can show something else. Dissenters are small and insignificant persons when only shouting disagreement; dissenters are much stronger when they mobilize a different calculation.

Therefore, the calculation is more than a matter of fact; it is also a matter of concern relating to strategy and context. Yet, rather than suggesting that the calculations are effects of strategy and environment, it may be more rewarding to suggest that calculations help develop the strategies and environments that make up the controversies. They help to develop the propositions around which dissenters rally.

Numbers are therefore not reality. Instead, they take the place of reality. That is to say, the transaction of selling is quickly forgotten when it is counted in the cash register and becomes one among many entries, and later loaded onto the ledger where, combined with other sales transactions, it forms one single number for the day's sales. Its specificity is lost in the turbulence of the cash register, which records all the individual transactions, and the ledger, which summarizes these as an addition of transactions. Instead of the transactions, there is a sales figure per day. Likewise, the busy activities on the shop floor and in the planning offices are quickly lost in timesheets and wage calculations, and further in product cost calculations. Therefore, instead of busy people there is a cost calculation. Then, on top of this, the separated spaces of selling, producing and administrating are drawn together in the profit number, which relates sales to costs. Sales people, production workers and administrative clerks who are separated in time and space are now suddenly put together in the profit calculation. It draws together spaces that otherwise are distributed, and creates another space - a centre of calculation - which acts as one. The gradual development of the centre of calculation follows the sequence of calculative practices: from transactions, into slips and receipts, summaries of slips and receipts into revenues and costs, subtractions of summaries into profits, and division of profits and summaries of assets into profitability. Each operation loses the particularity of the transaction but gains generalization; each operation also reduces dimensions and ends in a clear amplification (the final number such as the profits) that is said to stand for all things and connect every place (Chua, 1995, Mennicken and Miller, 2012, Miller, 1991, Robson, 1992, Vollmer, Mennicken and Preda, 2009).

Profit as a mechanism to assemble diverse places makes them one thing. It creates a unity out of separation. This is what calculation does. It creates entities that may not have existed before, and that may not exist as such without the calculation. Profits can be judged only by the principles of calculation – there is no 'where' where it would be possible to test it except through the competition from other calculations. Profit creates a new entity that draws things together, but there is no particular object that would correspond to it.

Management concerns - acting at a distance

The profit number thus constructed as a centre of calculation stands atop many dispersed spaces and has clear vision. Clarity of vision is rendered possible because the ambiguities and the multi-dimensionality of practices have been eliminated. It is, as Latour (1986) is cited for above, a less confusing world because it has been rendered two-dimensional, i.e. it can be seen on a piece of paper or on a computer screen. Management has a clearer view from the two-dimensional report than from looking out of its windows from the top of a skyscraper. This two-dimensional report asks management to do something. There may be differences between the profitability of product groups as shown in Table 1. Because of this discrepancy management is urged to do something to resolve it. Management is urged to attempt to intervene, and the report is an engine for this. The two-dimensional report makes it possible for management to ask other subordinate managers to do something, and make claims about the preferred profitability. The report allows management to act at a distance on the remote settings. The report is a resource that makes management strong; it can change matters that are located far away. Yet, it is also an obligation; the differences – the simple subtractions – between what is and what could be is a source of concern that will be difficult for the manager to overlook. Management has to do something.

This poses a problem because this visibility created by profit figures is not primarily a matter of fact; as suggested above the fact of the number is in its production process rather than in its correspondence with reality. Therefore, it becomes a matter of concern in the sense that the number is too smooth to help management all the way. Management instead has to face many of the traits that were removed to make the world less confusing. In a sense, management is charged to manage a three-dimensional world, while the number is two-dimensional. Management therefore has to prepare the journey back to the sales person, to the operations person, and to the clerk, all of whom exist in three-dimensional spaces (Frandsen, 2009, Preston, 2006).

How will management be able to travel back? This could be a problem as they then would have to become sales persons, machine operators or bookkeepers. They cannot assume such roles so there must be a trick. The trick is that they do not go quite all the way back to the three-dimensional space, but stay in a different type of two-dimensional space than the accounting calculation's two-dimensional space. The accounting calculation, as described above, works hierarchically from many small entities into a consolidated amplification, such as profit, which takes 'everything' into account so that all traces (receipts and slips) are accounted for. There is, however, a different type of two-dimensional space, which is lateral more than hierarchical. This is the space of planning devices such as budgets, strategic plans, project scopes, and other devices that help to imagine the future (Gireaudeau, 2008, Puyou et al., 2012). This space is lateral in the sense that it combines various types of calculations and representations to form new images of future states of the firm before they are yet realized. By such mechanisms, management postpones interaction with the sales persons, machine operators, and clerks, and works to develop new scenarios from the safe harbour of their offices. As Czarniawska and Mouritsen (2009) suggest, management prefers the world to be still when inspecting it from their offices.

Management substitutes the three-dimensional world with a new cascade of two-dimensional representations found in budgets, forecasts and plans. Even if much management literature points out that execution rather than planning is the key feature of management practice, most

managers will often wonder about budgets and plans, and hope, typically in vain, that they will reflect the future with a great deal of confidence and authority.

It is doubtlessly a good idea to think about the future, but since the future is certain by less than 100%, there is reason to be concerned with how propositions about the future are made. This is a process which involves not only having made the plan and the analytical structure within which it fits (Malmi and Brown, 2008, Ferreira and Otley, 2009) but also, and primarily, making the plan, the budget, or the strategy. The work of making these plans, budgets or strategies is a process of tinkering with planning documents (Gireaudeau, 2008, Kaplan, 2011, Spee and Jarzabkowski, 2009). Here, the important question is how matters of concern are related to plans and budgets, and how they are attributed to effects such as performance.

The philosopher Ian Hacking (1986 pp. 130-149) provides a compelling fable about the emergence of visualization, or representation as he calls it. Fundamentally, he says, mankind represents (rather than thinks or talks); it is representation in a particular way, though, because it is concerned more with likeness than with correspondence – something looks like a thing rather than being a thing. Hacking speculates, for example, that thousands of years ago when cavemen pictured bison, mammoths etc. on cave walls they were concerned not only with describing these animals but also and more importantly with challenging each other to draw better. Each painter would paint by adding features and characteristics to paintings that were produced by other cavemen. They would articulate disagreement about the proper form and function of the painting. One painter might disagree with another about the characteristics of a mammoth, and paint it in a new way. These disagreements would not, Hacking suggests, be concerned with all attributes of the animal, but only those that would make the painting work in a particular way, and additions to paintings would continue to happen as long as there was still enough energy to disagree.

Disagreement would continue, Hacking conjectures, until painters stopped their attention to differences; not because they closed the distance between painting and the world but because they got tired of fighting about difference. Even if there is a likeness between the painting and the animal, the point is not its correspondence to the world, but rather the concerns that stop other painters from adding to or subtracting from the painting. Paintings are proposed and re-proposed; each painting responds to other paintings and cultivates a new detail that changes the painting.

The struggle between painters is a struggle about the elements that compose the painting. This is parallel to struggles about the format of budgets and plans. What should the plan include? The budget probably, and then? A diagram that breaks down the market into segments? A comparison of the firm's capabilities with those of competitors? A consideration of the well-being of the workforce? A statement on customer demographics? An integrated business model, such as the balanced scorecard, the service profit chain, the performance pyramid, or an intellectual capital statement? A prediction of interest rates and currency fluctuations? In principle, there is no end to what a plan could contain. There are always possible new additions that could colour the message of the plan. These additions can be superimposed on planning documents, and by adding new elements, the message of the whole plan can change character. Some psychological research has shown, for example, that the presentation format - such as the difference between graphical and tabular information - of economic information has consequences for the performance of managers depending on their accounting skills. Thus, some managers perform better when using graphical representations, while others perform better using tabular information (Cardinaels, 2008). When firms use multiple types of information, when it is organized in a structure such as balanced scorecards, they are more involved in dialogues (Cardinaels and van Veen-Dirks, 2010). There is reason to believe that the composition of the planning device is of material importance.

The problem of composition can be illustrated in principle by the famous accounting researcher Robert Kaplan's and co-author consultant David Norton's work on balanced scorecards. For example, their book on strategy maps proposes a series of templates about all four perspectives of the scorecard (Norton and Kaplan, 2004). These offer the opportunity to engage a wide range of issues that planning could be concerned with.

The book develops a series of templates for the possible structure of each of the perspectives, and a series of examples from which it is possible to compose a particular balanced scorecard. In addition to the visualizations produced to link the perspectives, the book also offers guidelines for strategic thinking, including what it could (but not necessarily should) be about. This shows that the balanced scorecard is also understood as a series of checklists of the best practices possible for managers to choose. Therefore strategy making and implementation become processes of tinkering with checklists relating to what the particular foci of the particular company could be. The series of checklists and templates makes planning a question of the composition of the planning instrument. Or using Ian Hacking's idea, it is a matter of painting and repainting the landscape of planning tools.

More specifically Qu and Cooper (2011) illustrate empirically that tinkering with the structure of the balanced scorecard is conditioned more on politics and interests than on detached analysis. The eventual balanced scorecard is constituted by a range of media used to make the balanced scorecard a real entity, and the different methods to produce, capture, secure and refute claims about the objects of which the world consists. It may not be a surprise that complex planning devices such as balanced scorecards must be taken seriously only in the space for which they are designed. Otherwise the opponents become too strong and they will fail. Busco et al. (2009) suggest that decoupling local and global scorecards may be necessary because the elements that are tinkered with in different spaces are different. So, rather than insisting on integration and tight coupling, which would require compromising on the elements of planning, decoupling or loose coupling of the elements to be planned for may be constructive. Or in other words, there is a different composition of the elements across space and time even within a firm.

Likewise, in his study of the use of Renault's planning documents, Gireaudeau (2008) shows that planning is not merely the programming of predefined strategies. More importantly it is a mechanism that positively opens eyes to things beyond the set strategy. Thanks to their visual and textual representation of contexts and strategies, these plans enhance strategic imagination more than they support the implementation of

strategies. His point is that many planning documents are constructed not for making a plan, but for creating interaction among managers who experiment with propositions. Not all plans have to be implemented. Plans are to be tinkered with, and it is not clear from the outset which plan will stick. It is, as Ian Hacking says, the task of composing the picture; analogously, it is the task of composing the planning document, while the question of which part of the firm and which calculative devices will gain power is open. The task is to find this out.

It is noteworthy that all these examples show that when managers take concerns into account and wish to make a statement that will influence the world (e.g. a budget, a plan, a strategic position) they still operate in the two-dimensional format. It is not about practices of selling, operating machines and organizing bookkeeping. It is about manoeuvring diagrams, models, calculations and surveys in relation to each other. It is the work of imagining what the world could be rather than what it is; it is about making the firm a virtual object that can be investigated through representations thereof (Puyou et al., 2012). The firm is a proposition that can be made visible, but probably not in practice (Ewenstein and Whyte, 2007, Whyte et al., 2008); it remains clearer in images than in practice, and this clarity is conditioned less on the world than on the instruments that make it visible. Even in situations when managers have to act on the world using the images that have been crafted and drafted though planning, they do not reach the world; they draw on images of it.

Where do the sales person, the machine operator, and the clerk have a role in this? They are not there except possibly as small rhetorical parts of the narrative of achievement and success that planning produces. Their precise tasks are treated not in their totality, but as functions and generalizations. This means that there is a limit to the realism of the planning activity. Like the first step of accounting facts the world is immediately lost. It is noteworthy that the road back towards practice is paved only part of the way (Frandsen, 2009, Preston, 2006). The plan is not a copy of the state of affairs of sales persons, operators and clerks. Therefore, as Professor Sten Jönsson has stated many times (e.g.1996), the last step from the plan to the operators has to be a leap of faith, hoping

that practical foremen and supervisors can make the big translation back to practice happen. When managers act on the world, they can make a huge impact through images, but they require help to go the final distance from paper to sales transaction, to spending time in the operation, and to concerns about making the financial database a solid one. When manages wish to act from a distance they influence the distant place mainly via mediators such as middle managers, foremen and supervisors.

Conclusion

Numbers are calculations; and plans are compositions of the elements to be taken into account. They are both visualizations but they are not alike. Calculative practices create numbers based on a procedure, which gradually reduces confusion by eliminating the traits of the transactions. This elimination happens because calculations are built not on the world per se but on receipts, slips and documents. These make calculations easy; they would be impossible to perform directly on the world. Numbers are the effects of calculations and are not true in the sense of corresponding to a world; they are not copies of the world. Yet, they may be true in the sense of following procedure. When calculations gradually become more and more singular, as in the measurement of profit, they form a centre of calculation gathering together many different spaces, which are removed from each other in reality. Calculations define a new vantage point from which other spaces can be acted upon.

Acting upon other spaces is not easy, however. Managers may not like to be practical. Instead, they play planning games in which they attempt to imagine a future world, which is different from the present one. This involves models, diagrams, calculations and other visualizations, the composition of which is an unknown or at least a variable. In principle, the two-dimensional world can accommodate any representation, but different types of representation do not tell the same story. Therefore, the struggle to create things during planning processes is important. This develops a virtual organization, which may or may not be distant from the practices it attempts to influence. Managers are still far away from the three-dimensional world, so they need the skills of foremen and

supervisors to make the last leap from paper to action; from two-dimensional representations to three-dimensional action.

Does this make management a trivial activity? On the contrary, management is a complex endeavour of imagination and persuasion. It shows that management is never a formula even if it requires lots of formulae (or calculations) to be made aware of their world. Unfortunately, for managers, it is not possible to provide them with one correct answer to questions of economic calculation. This is not a surprise to managers, however, and their task is to manoeuvre in such an ambiguous space. Even if numbers create clarity, they never erase uncertainty, ambiguity and complexity.

References

- Berenson, A. (2003). *The number: Why companies lied and the stock market crashed.*London: Simon & Schuster.
- Busco, C., Quattrone, P., & Riccaboni, A. (2009.) Management accounting: Issues in interpreting its nature and change. *Management Accounting Research*, *18*, 125–149.
- Cardinaels, E. (2008). The interplay between cost accounting knowledge and presentation formats in cost-based decision-making. *Accounting, Organizations and Society*, 33(6), 582–602.
- Cardinaels, E., & van Veen-Dirks, P. M. G. (2010). Financial versus non-financial information: The impact of information organization and presentation in a balanced scorecard. *Accounting, Organizations and Society, 35*(6), 565–578.
- Chua, W. F. (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*(2–3), 111–145.
- Czarniawska, B., & Mouritsen, J. (2009). What is the object of management? How management technologies help to create manageable objects. In C. S. Chapman, D. J. Cooper & P. Miller, (Eds.), *Accounting, organizations and institutions*. Oxford: Elsevier Ltd.
- Ewenstein, B., & Whyte, J. (2007). Beyond words: Aesthetic knowledge and knowing in organizations. *Organization Studies*, 28(5), 689–710.
- Ferreira, A., & Otley, D. (2009). The design and use of performance management systems: An extended framework for analysis. *Management Accounting Research*, 20(4), 263–282.
- Frandsen, A. (2009). From psoriasis to a number and back. *Information and Organization*, 19, 103–128.

- Gireaudeau, M. (2008). The drafts of strategy: Opening up plans and their uses. *Long Range Planning*, 41(3), 291–308.
- Hacking, I. (1986). *Representing and intervening: Introductory topics in the philosophy of natural science.* Cambridge: Cambridge University Press.
- Jönsson, S. (1996). Accounting for improvement. Oxford: Pergamon.
- Kaplan, S. (2011). Strategy and PowerPoint: An inquiry into the epistemic culture and machinery of strategy making. *Organization Science*, 22(2), 320–346.
- Latour, B. (2008). What is the style of matters of concern? Amsterdam: Van Gorcum.
- Latour, B. (1999). Circulating reference: Sampling the soil in the Amazon forest. In B. Latour (Ed.), *Pandorra's hope: Essays on the reality of science studies*. (pp. 24–79) Boston: Harvard University Press.
- Latour, B. (1986). Visualisation and cognition: Drawing things together. *Knowledge* and Society: Studies in the Sociology of Culture and Present, 6, 1–40.
- Malmi, T., & Brown, D. A. (2008). Management control systems as a package: Opportunities, challenges and research directions. *Management Accounting Research*, 19(4), 287–300.
- 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), 443–470.
- McKernan, J. F. (2007). Objectivity in accounting. *Accounting, Organizations and Society*, 32(1–2), 155–180.
- Mennicken, A., & Miller, P. (2012). Accounting, territorialization and power. *Foucault Studies*, 13(May), 4–24.
- Miller, P. (2001). Governing by numbers: Why calculative practices matter. *Social Research*, 68(2), 379–396.
- Miller, P. (1991). Accounting and objectivity: The invention of calculating selves and calculable spaces. *Annals of Scholarship*, 9, 61–85.
- Miller, P., & Rose, N. (1990). Governing economic life. *Economy and Society*, 19(1), 1–31.
- Mouck, T. (2004). Institutional reality, financial reporting and the rules of the game. *Accounting, Organizations and Society*, 29(5–6), 525–541.
- Mouritsen, J., Hansen, A., & Hansen, C. Ø. (2009). Short and long translations: Management accounting calculations and innovation management. *Accounting, Organizations and Society,* 34(6–7), 738–754.
- Nadler, D. A., & Tushman, M. L. (1999). The organization of the future: Strategic imperatives and core competencies for the 21st century. *Organizational Dynamics*, 28(1), 45–60.
- Norton, D. P., & Kaplan, R. S. (2004). *Strategy maps: Converting intangible assets into tangible outcomes.* Boston: Harvard Business School Publishing.

- O'Reilly III, C. A., & Tushman, M. L. (2008). Ambidexterity as a dynamic capability: Resolving the innovator's dilemma. *Research in Organizational Behavior*, 28, 185–206.
- Porter, T. (1994). Making things quantitative. In M. Power (Ed.), *Accounting and science*. Cambridge: Cambridge University Press.
- Porter, T. M. (1995). *Trust in numbers: The pursuit of objectivity in science and public life.* Princeton, NJ: Princeton University Press.
- Preston, A. M. (2006). Enabling, enacting and maintaining action at a distance: An historical case study of the role of accounts in the reduction of the Navajo herds. *Accounting, Organizations and Society, 31*(6), 559–578.
- Probst, G., Raisch, S., & Tushman, M. L. (2011). Ambidextrous leadership: Emerging challenges for business and HR leaders. *Organizational Dynamics*, 40(4), 326–334.
- Puyou, F., Quattrone, P., McLean, C., & Thrift, N. (Eds) (2012). *Imagining organizations: Performative imagery in business and beyond.* New York, NY: Routledge.
- Qu, S. Q., & Cooper, D. J. (2011). The role of inscriptions in producing a balanced scorecard. *Accounting, Organizations and Society*, 36(6), 344–362.
- Robson, K. (1992). Accounting numbers as 'inscription': Action at a distance and the development of accounting. *Accounting, Organizations and Society, 17*(7), 685–708.
- Smith, W. K., Binns, A., & Tushman, M. L. (2010). Complex business models: Managing strategic paradoxes simultaneously. *Long Range Planning*, 43(2–3), 448–461.
- Spee, A. P., & Jarzabkowski, P. (2009). Strategy tools as boundary objects. *Strategic Organization*, 7(2), 223–232.
- Stark, D. (2009). The sense of dissonance. Princeton, NJ: Princeton University Press.
- Vollmer, H., Mennicken, A., & Preda, A. (2009). Tracking the numbers: Across accounting and finance, organizations and markets. *Accounting, Organizations and Society*, 34, 619–637.
- Whyte, J., Ewenstein, B., Hales, M., & Tidd, J. (2008). Visualizing knowledge in project-based work. *Long Range Planning*, 41(1), 74–92.

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