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Engaging in Reflexive Acts – Sharing Experiences on Reflexivity in Empirical Qualitative Research

ABSTRACT

In this article, we present an experiential narrative of reflexivity in qualitative empirical research. Through a dialog of three researchers on their research processes we highlight the issues of reflexivity in empirical research and show the ways by which a researcher's ontological and epistemological presumptions inform decision making throughout the research process. Generalizing from research experience, we call for academic discussion on the experiential knowledge researchers have on reflexivity. Sharing the experiences researchers have on reflecting the ontological and epistemological manifestations in empirical research would shorten the gap between the theoretical discussion on reflexivity and the day to day decisions an empirical researcher faces.

1. INTRODUCTION

In this article, we reflexively explore issues of knowledge production in an empirical research process. Using our own Ph.D. research processes as examples, we explore how reflexivity unfolds as a continuous decision making process involving epistemological and ontological assumptions. In examining our own research processes, we draw on the work of Egon Guba and Yvonna Lincoln

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(1994) on different research paradigms and the issues of practical conduct of inquiry that are addressed differently depending on the underlying research paradigm. In this way, we extend work on reflexivity in business research to provide a narrative of real life experiences of reflexivity in empirical qualitative research.

Using our own research processes as examples, we discuss four metatheoretical approaches in qualitative research: social constructionism, constructivism, critical theory and scientific realism. Our examination focuses on six issues of knowledge production: purpose of the research, definition of knowledge, interaction between the researcher and the material, role of values in research and evaluation criteria for a qualitative research. We join in the discussion on reflexivity following those who argue that reflexivity addresses similar issues of knowledge production but brings forth different explanations depending on the chosen research paradigm with particular ontological and epistemological presumptions (Calás & Smirchich, 1992; Guba & Lincoln, 1994; Alvesson & Sköldberg, 2000).

In thirty years, work on reflexivity has become well developed in organisation and management research methodology. Marta Calás and Linda Smirchich (1999) date the interest in "knowing about knowing" in organisation and management research back to late 1970s and early 80s when multiple research strategies and paradigms inspired debate within the community (see e.g. Morgan, 1983). Gibson Burrell and Gareth Morgan's (1979) study on the role of metatheoretical assumptions in organizational analysis soon turned into a classic methodological textbook emphasising the importance of researchers' sensitivity towards practices of knowledge production.

Over the years reflexivity has taken on several meanings. An early contribution to clarifying the varieties of reflexivity was made by Steven Woolgar, a sociologist of scientific knowledge. He (1988a) presents a continuum where reflexivity ranges from 'benign introspection' to 'constitutive reflexivity'. 'Benign introspection' refers to the researcher's reflection on the use of qualitative methods. Such reflexivity aims at improving the quality of analysis by strengthening the connection between the empirical objects and statements made of those objects. 'Constitutive reflexivity', in turn, promotes critical self-awareness throughout the research process. Through such reflexivity, the researcher seeks to fully understand and follow the commitments of paradigmatic knowledge production in order to detect new ways of interpreting the reality.

In a recent contribution, Michael Lynch (2000), also a sociologist of scientific knowledge, lists six conceptions of reflexivity: mechanical, substantive, methodological, metatheoretical, interpretative, and ethnomethodological reflexivity. Mechanical reflexivity refers to circular processes and feedback loops. Substantive reflexivity rests on the idea that humans are inherently self-reflective. Methodological reflexivity serves as a quality control in the same vein as Woolgar's 'benign introspection'. Metatheoretical reflexivity requires a researcher to take a detached position from which to critically examine social reality. Interpretative reflexivity involves interpretation

which aims at producing non-obvious alternatives to taken-for-granted ways of thinking and acting; Woolgar's 'constitutive reflexivity' concurs with this conception.

While Woolgar distinguishes between the reflexive and the unreflexive inquiry and promotes constitutive reflexivity as true reflexivity, Lynch is after another version of reflexivity. He argues for reflexivity that does not privilege any theoretical or methodological standpoint but enhances empirical investigation into reflexive organisation of practical actions.

Of the six above mentioned conception, Lynch favours ethnomethodological reflexivity, because it "does not set itself off against an unreflexive counterpart" (ibid., 42). Instead, reflexivity comes to mean the reflexive relationship between the accounts and the accountable state of affairs, which turns investigation into how facts become accomplished in local interaction. Lynch argues that the other versions treat reflexivity either as cognitive state (mechanical and substantive reflexivity), discrete methodological act (methodological reflexivity), or self-conscious existential condition (metatheoretical and interpretative reflexivity).

In organisation and management studies, Calás and Smirchich (1992, 240) speak of "a reflexivity that constantly assesses the relationship between knowledge and ways of doing knowledge". Mats Alvesson and Kaj Sköldbberg (2000, 5) state that "reflexivity draws attention to the complex relationship between processes of knowledge production and the involvement of the knowledge producer". In the same vein, Phil Johnson and Joanne Duperley (2003) argue against a privileged version of reflexivity. They maintain that a researcher cannot step back from his or her, often tacit, metatheoretical commitments, and reflect on them because the task of reflection depends upon the very commitments.

Johnson and Duperley combine different sets of assumptions about epistemology and ontology and suggest three approaches to reflexivity: methodological, epistemic and deconstruction/hyper reflexivity. Methodological reflexivity is a tool for a researcher to evaluate and critique how accurately the chosen methodology has been deployed. Epistemic reflexivity calls a researcher to examine his or her internalized metatheoretical presumption and to allow self-knowledge envision alternative accounts of phenomena. Finally, deconstruction enables a researcher to reveal the ways by which knowledge claims are produced and to question the legitimacy of these knowledge productions by bringing in alternative accounts of reality.

Drawing on an understanding of reflexivity as a relationship between knowledge and ways of producing knowledge, we show that, to conduct a high quality research, a researcher cannot choose between reflexivity and unreflexivity. Instead, she must understand the situations of decision making in the empirical research process as acts of reflexivity. Reflexivity challenges a researcher to understand the ways by which her ontological and epistemological presumptions guide decision making and the choices she makes through the whole research process.

Our interest, therefore, is in showing how a researcher faces reflexivity in an empirical re-

search process. Our presentation makes a number of contributions. First, drawing on the classification of issues of reflexivity by Guba and Lincoln (1994) we present a dialog of three researchers to present experiences on reflexivity in empirical qualitative research. The discussion on reflexivity is often abstract and theoretical, which makes it difficult, particularly for a beginner, to understand what the issues of reflexivity mean in one's own research. Second, this approach enables us to highlight the ways by which a researcher's epistemological, ontological and methodological assumptions inform the practicalities of empirical qualitative inquiry. The dialog shows how the presumptions are woven together in the process of knowledge development, during which empirical material is constructed, interpreted and written.

Third, by understanding the ways by which the key issues of reflexivity unfold in the practice of qualitative inquiry, we are better equipped to produce high quality interpretative research in the field of management and organisation studies. An understanding of the relationship between the ontological and epistemological assumptions and the outcomes of decision making in different points of research allows for an insightful discussion on the validity, reliability and generalisability of interpretative research. Fourth, based on analysis of our own research processes we show how, in practice, reflexivity comes from awareness of one's own ontological and epistemological preunderstandings and critical self-exploration of one's own interpretation of empirical material (see Alvesson & Sköldberg, 2000).

This article is organised as follows. We first present the framework of metatheoretical approaches in research by Guba and Lincoln (1994). We then address the metatheoretical questions that we as constructionist business researchers have faced when working on empirical research. Next, we address reflexivity by discussing our own experiences of doing empirical constructionist research. This is presented as a dialogue between the three authors to describe how elusive and undetermined encounters with metatheory are in empirical qualitative research.

Each of the members of dialog talks about her Ph.D. work. Heidi Keso (1999) conducted a research on knowledge management. She studied the hegemonic discourses of knowledge construction in a case company, Valmet Aircraft Industry. Her research traces changes in the discourses that took place in a time period of 70 years. As a result, she identified how discourses enable and hinder the organisation to take new and innovative action.

Hanna Lehtimäki's (2000) research examines strategy documents and a strategy process of the City of Tampere. Her research questions the taken-for-granted presumptions of strategy making and analyses the language practices of strategy. As a result, she shows how language constructs actor-positions to those affected by strategy processes, and proposes a new multi-voiced approach to strategy making.

Tarja Pietiläinen (2002) examined female entrepreneurship in emerging ICT-industry. Through analysis of city strategy documents, interviews of female entrepreneurs, and media articles about

a female-owned new media company she shows how a gendering process of female entrepreneurship evolves. As the main contribution, her research emphasises the need to understand the ways by which gendering is produced rather than examining gender differences per se when female entrepreneurship is discussed.

2. THE ROLE OF THE RESEARCHER IN DIFFERENT METATHEORETICAL APPROACHES

2.1 Four metatheoretical approaches

Our understanding of what constitutes reflexivity in qualitative research processes with different metatheoretical commitments is illustrated by Table 1. The framework is adopted with some changes (see below) from Egon Guba and Yvonna Lincoln (1994). Through evaluating her own assumptions informing decision making the researcher can pursue that avenue of reflexivity which offers greatest support to being accountable for knowledge production.

The rows of the table present six issues which the researcher needs to decide on in a research process: purpose of the research, definition of knowledge, researcher-material interaction, role of values in research, evaluation criteria for research, and finally, the role of the researcher as knowledge producer. 'Purpose of the research' merges the categories of 'Inquiry aim' and 'Knowledge accumulation' by Guba and Lincoln (*ibid.*,112). Their category 'Nature of knowledge' we have renamed 'Definition of knowledge' to highlight that also scientific knowledge is about beliefs. 'Researcher-material interaction' is developed by us. With this category we want to emphasise the importance of reflection on the relationship between the researcher and the material in the processes of data collection and analysis. 'Role of values in research' corresponds that of 'Values' in Guba and Lincoln, as well as 'Evaluation criteria for research' that of 'Goodness or quality criteria'. Decisions concerning these issues guide the research process and call for reflection. Each topic will be further elaborated in the dialog in chapter three.

In the columns, we present four research paradigms from the point of view of the constructionist research. This categorisation organises metatheoretical assumptions underlying each paradigm. It is within this categorisation that a researcher makes decisions on her methodological choices. Every research aims at making a difference in the body of scientific business knowledge within a particular metatheoretical understanding. Each methodological approach incorporates understandings of what is an interesting and significant focus of investigation. Accordingly, each approach calls a researcher to evaluate her position as a knowledge producer and the quality of new knowledge that the research generates.

We have named researcher positions in each research paradigm according to what we see as the role of the researcher in knowledge production. The names we have given to each re-

TABLE 1. Reflexivity in Qualitative Research Process.

<i>Paradigm</i> <i>Issues for decision making</i>	<i>Social Constructionism</i>	<i>Constructivism</i>	<i>Critical Theory & Other Ideology Oriented Theories</i>	<i>Scientific Realism</i>
<i>Purpose of Research</i>	Deconstructing taken for granted, making visible relations of power/knowledge	Producing rich empirical descriptions and enriched understandings	Inducing change, giving voice to margins, emancipation	Producing generalisable knowledge, accumulation of knowledge
<i>Definition of Knowledge</i>	Situational, temporal, and legitimised accounts	Shared understandings of world	Institutionalised structures and processes of marginalisation	Facts, patterns, categorisations, models
<i>Researcher – Material Interaction</i>	Scientific discourses construct both the researcher and the material	The material enables the researcher to gain access to the actors' reality	Critique produces and maintains a distance between the researcher and the material	Methods intermediate between the researcher in scientific reality and the material in the researched reality
<i>Role of Values in Research</i>	Under constant power/knowledge negotiation	Presence of subjective values recognised, accepted and worked with	Values inseparable from the concepts used	The effects of a researcher's subjective values should be minimised
<i>Evaluation Criteria for Research</i>	Novelty of interpretations and argumentation, questioning researcher's own standpoint	Richness of interpretations, authenticity in empirical description	Accurateness of historical analysis, erosion of ignorance, proposals for empowerment of underprivileged	Internal and external validity, reliability, analytical objectivity
<i>Role of the Researcher</i>	'Empowerer'	'Enthusiastic Participant'	'Intellectual Change Agent'	'Analytical Expert'

searcher are inspired by "the voices" Guba and Lincoln (ibid.) present. We discuss the table by comparing each methodological approach to the constructionist approach to highlight the differences between each approach. First, we call *the constructionist researcher an 'empowerer'*. She explores the taken-for-granted, questions the self-evident, and examines herself as the participant in knowledge production process. The term social constructionism embraces many variations in theoretical perspective, interests, and methods. According to Hosking (2000), the common concern in constructionist research is the interest in the processes through which knowledge is constructed in everyday activities. As such, the processes of knowing are shifted from a knowing

mind to coordinated actions, and thus, knowing and doing are joined. Accordingly, 'doing science' and scientific claims to knowledge can be considered as everyday activity.

Second, we call *the constructivist researcher an 'enthusiastic participant'* (see also Guba & Lincoln, 1994) who brings forth alternative interpretations of reality, legitimises different schemas and allows for parallel understandings of reality. According to constructivists, organisations have neither nature nor essence; they are what people perceive them to be (Czarniawska, 1992). The purpose of the research is to provide rich empirical descriptions of a given event, case-company or situation. As a result, the aim is to gain a deepened understanding, more refined and enlightened understanding of the lived realities. An insider's view of the phenomenon and authentic accounts are valued in this metatheoretical approach.

To a constructionist researcher, a challenge in constructivist research is how to avoid down-playing the questions of power intertwined with different individual interpretations. In the constructionist research, the power tends not to be articulated as closely connected to actor positions. Consequently, different interpretations of reality are treated as equal, but having different areas of validity. A constructionist researcher would argue that interpretations are more often competing versions of reality than 'pieces of the same puzzle'.

Third, we call *the researcher following the critical theory an 'intellectual change agent'* (see also Guba & Lincoln, 1994), who is an active speaker for the marginalized. Proponents of critical theory and other ideology oriented theories aim at change through critique, giving voice to margins, and emancipation (Alvesson & Willmot, 1995). The purpose of research based on critical theory is similar to constructionist research in that research aims at empowerment and emancipation.

From the constructionist perspective the question arises, however, whose empowerment and emancipation is in question. That is whose reality is taken as an interesting research topic. Both critical theory and constructionist researchers often choose the perspective of the under-privileged or those in non-power positions. In organisational research this could, for instance, be the employees.

The difference between these two metatheoretical approaches is that the critical theory researchers assume that, due to experiences of marginality and suppression, the under-privileged have knowledge that is less affected by power. To a critical theory researcher, it is this knowledge that has the greatest potential to improve theorising. A constructionist researcher, in turn, argues that power and knowledge are inseparable, and therefore, both the powerful and the under-privileged use and abuse power. Consequently, the results of using knowledge-power are different, because 'being in power' or 'being suppressed' are different discursive actor positions with their differing rights, obligations and expectations on how to think and act. An interesting point to a constructionist research would be to examine the knowledge-power relations that construct the

positions of those in power and those suppressed and how people themselves participate in producing the positions.

Finally, we propose that a *scientific realist researcher could be called an 'analytical expert'* (see also Guba & Lincoln, 1994), who describes and explains how things factually are, and produces a wholesome research based view of a phenomenon. In business studies perhaps the most used qualitative research approach is case study. Often, case study methodology builds on the premises of scientific realism. The role of the researcher is to generate better understanding of the phenomenon and to add new explanations to the existing pool of knowledge (Marshall & Rosmann, 1989).

The most significant difference between realist research and constructionist research is in the ways by which they treat the relationship between the researcher and empirical reality. Realist researchers value distance to empirical phenomenon under investigation because they maintain that the patterns of behaviour or thinking will arise from the data. This is assured by minimizing the affects of the researcher and maximizing the rigour in following the chosen method. A constructionist research would argue that facts are not found but constructed through interpretation. To a constructionist researcher a position of objective knowing does not exist.

2.2 Experiences on metatheoretical approaches

Hanna: What I find challenging in the constructionist approach is that it calls for questioning much of the currently taken-for-granted. This easily leads to a feeling that we are promoting revolution or bringing forth revolutionary ideas. I prefer to empower with my research, i.e. provide alternative vistas to see how things might be without telling how things factually are. Besides deconstruction I also wish to provide alternative solutions to current constructions. The aim in my research on strategy language was to recognise the discursive power relations and to act as a provider of arguments to understand meaning making processes in strategy making practices.

Heidi: I am inclined to think like the constructivists that enriched understandings, i.e. bringing forward different possible interpretations of a given situation, enlarge our possibilities to act in ways unfamiliar before. I want the world to understand what are all the places where innovative ideas can come from, ideas for developing their activities. In my Ph.D. work I, however, took a constructionist turn. I wanted to join the argument that bringing forth innovative ideas requires that defining what is valuable knowledge, or considered as knowledge, has to be understood in a new way – with a new way I mean that knowledge is discursive.

Tarja: My research on female entrepreneurship combined passions from both the critical theory perspective and the constructionist research approach. Critical theory is present in my research through the idea of feminist emancipation. I believe that the knowledge I produce has impacts on women entrepreneurs' space of action. This means that I aim changing business prac-

tices in ways that enhance women entrepreneurs' and business women's possibilities to enact their business desires in ways they find suitable or attractive for themselves. This is really important to me. I want to make female entrepreneurs' business practices as valued as male entrepreneurs' practices. I argue that currently, female entrepreneurship is naturally considered as a hobby like an activity, not as a business activity to be taken seriously. I want to contribute to an understanding that female entrepreneurs' businesses are real businesses without a connotation of less valued, not so important. I want to change the world so that female entrepreneurs do not have to defend their business choices.

Heidi: Sometimes it seems that doing research as a scientific realist researcher would be really straightforward and the easiest way of doing research. It seems that as a realist researcher I would not have to constantly reflect my metatheoretical assumptions and choices or continuously question my position as an analytical knowledge producer. Instead, I could rely on the well-established qualitative research methods and, as long as I took care to follow them meticulously and analytically, I could be an expert in describing and explaining how things factually are. As a scientific realist researcher, I would take care in presenting the research results as facts – I mean, even though I would report the limits of the study I would not question the premises of my knowledge production. I would not rock my own boat, so to speak, and avoid inviting others to discuss my premises. As a constructionist research, in turn, I feel, that inviting others to discuss the ontological and epistemological premises is exactly what I am expected to do.

3. METATHEORETICAL ISSUES IN QUALITATIVE RESEARCH

3.1 Purpose of research evolves with data

Heidi: When I think of how we as business researchers produce business knowledge, I first pay attention to the ongoing choices the researcher makes during the research process. One of the choices to be made in a very early stage, when doing qualitative research, concerns the data. The researcher is often encouraged to start the research process by collecting data in order to get the dialog going between the researcher's theoretical assumptions and her observations of the business world. I think it is often difficult to decide where to start from or what data would be interesting, when the process of defining the purpose of the study is still going on. Also, based on my experience, it is not unusual that the purpose of the study changes as the data collection proceeds and when the researcher becomes more and more deeply involved with her research material.

Hanna: That is definitely true at least in our research processes – we all have kept refining the purpose of the research all along our research processes. I started my research project by data collection. I was interested in how does a new business field or community become formed in a

local setting. I had previously done research on social networks in an international organisation (Lehtimäki, 1996), and from the network perspective the formation of the local ICT-business community in my hometown seemed very interesting. With this fairly vague interest in mind I started data collection. The purpose was to collect and analyse rich empirical material from different local actors within the field to better understand how each actor interprets the development of the field and their own position within the field. My aim was to provide a thick empirical description of the phenomena through presenting the perspectives of various actors. I also wanted to get an enriched understanding of how these actors actually perceive themselves and the business field (Eriksson, Fowler, Whipp, & Räsänen, 1996).

Tarja: I also got interested in the local ICT-business field, but from a somewhat different angle. There was a lot of private and public action going on around the development of the Finnish information society, and I wanted to find out how female entrepreneurship was doing among all this motion. I was afraid that the course of action would repeat the well-known pattern where women entrepreneurs will be marginalised early on and thus, will not benefit from the intensive investments on the development of a significant new business field. Following ideas from industrial district research, which considers a municipality a significant actor within the local business environment (e.g. Sengenberger & Pyke, 1992), I started data collection from the city. This idea was supported by the Nordic gender equality thinking according to which public institutions should actively enhance women's issues, including matters important to women entrepreneurs (e.g. Nilsson, 1997; Alh, 2002). Thus, it was natural to me to collect data on the city Information society policy.

Hanna: The early steps in our research processes have been very similar. Also I started reading city strategies, following the idea that as a large institutional actor, a city has a significant impact on forming the field. However, at that time, I became familiar with constructionist thinking. From that perspective the strategy documents seemed interesting, not so much what the content of the documents tells about the city and its decision makers, but how the ICT-field became constructed in the documents. As a result, I re-focused the purpose of my research, and ended up studying how does strategy discourse construct a city through production of actor positions, norms of action and desired future visions (cf. Dachler & Hosking, 1995; Knights & Morgan, 1991). The new purpose of my research was to deconstruct an understanding or a story that a strategy discourse tells as natural or self-evident about the city. I approached the current strategy making practices as an ontological narrative or a discourse in which the city and its actors become what they are understood to be (cf. Barry & Elmes, 1997; Boje, 1999). Besides deconstructing, I also wanted to provide ideas on how the current practices of strategy making could be altered, so that new practices could be adapted to generate new understandings of the city. Now, when looking back, you could say that I started my research on constructivist premises, and later on followed a social constructionist understanding of the world.

Tarja: Indeed, reflecting one's research experiences brings out premises you were not aware of before. One of the most important tacit assumptions I had was intertwined with my idea of emancipation. When I analysed female entrepreneurship in city strategies it was not visible to me that I was actually ascribing to Marxist feminist thinking: I was deeply engaged in finding out in what ways women entrepreneurs are disadvantaged. My concern was to give voice to the underprivileged and bring out more 'correct' knowledge (Calás & Smircich, 1992). After a while, I realised that presupposing dominance and discrimination inhibited me from analysing, how gendering practices are situationally constructed and how, in effect, space for female entrepreneurship emerges. I became interested in the dynamics of gender, and its effects on female entrepreneurship. Deconstructing meaning making of gender in the data and constructing discourses of female entrepreneurship made me understand, that instead of aiming at 'freeing' women entrepreneurs my research could make a difference by contributing to an ideational space where the Underprivileged Woman Entrepreneur would give away to multifaceted experiences of being a woman and an entrepreneur.

Heidi: It seems that in both of your research processes the purpose of the study has been refocused according to the methodological shift you have made. I mean you revised your understandings on the object of study. At the same time a change in epistemological position occurred. I also share this experience. When I started my research project on knowledge management, the purpose was to write a processual case study (cf. Pettigrew 1990). The aim was to describe and explain, what is organisational knowledge based on and how has it developed and changed over time (Eisenhardt, 1989). In retrospect, I would say that on the premises of scientific realism, I believed to get a universal picture of what is organisational knowledge-base. By presenting a profound empirical qualitative analysis of one case, I hoped to be able to apply the findings to other similar settings (Marshall & Rossman, 1989).

3.2 Definition of knowledge makes a difference

Tarja: It is often so that, when you look back to your research process, you can see the changes that you have gone through during the learning process. In retrospect, it is also easy to analyse how you have produced knowledge and what observations do you base your knowledge production upon. Sometimes the changes can be very radical. Along the learning process, it becomes important to question what, in fact, becomes constructed as knowledge in a research process.

Hanna: After my constructionist turn, I started to understand that various metatheoretical approaches produce different views on how to define knowledge. To a scientific realist researcher a pressing question is what kind of material can be considered as factual while a critical theorist researcher would ponder what the ideology behind the facts is in the research material. A constructivist researcher, in turn, would prefer naturally occurring material that would bring her close

to the reality of actors. And finally, a social constructionist researcher would seek to find material where to study social processes of meaning making.

Tarja: And all this has an impact on what a researcher considers as interesting and worth of studying in a particular company.

Heidi: Yes, that is true. I will tell you one example. The company I studied, Valmet Aircraft, has a 70-year history in designing and constructing aircrafts, and it has been an important player in the Finnish industrial history. First, the company was part of Finnish military industry, but since the 50s it became a profit-based business. The company did not, however, succeed to make profit and considerable public funding was needed over the years to keep the company running. Despite of this, the managers of the company spoke enthusiastically about technologically advanced knowledge base and unique core competences of Valmet Aircraft. The company was also famous for its progressive management training programs, where the latest managerial isms were introduced. When I spoke to the managers of the company in 1994, I found it amazing how it is possible that a company that claims to excel in high-technology and innovative thinking can continuously be unprofitable. As a business researcher, I was puzzled by this. And to solve the puzzle, I started to examine what becomes defined as capability within the organisation and through what kind of processes.

Hanna: What kind of data did you collect to study capabilities of a company?

Heidi: I started to collect data scrupulously following the rules of triangulation. I worked on the realist premises where triangulation of data is considered important to ensure a holistic and factual picture of the phenomenon instead of relying on the researchers individual interpretations (cf. Yin, 1989; Stake, 1995). I wanted to gather as much information as possible of the company. So, I collected company histories, annual reports from 1975 – 1995, personnel magazines dating back to 70's. Also, I interviewed the managers several times and transcribed these two-hour interviews. All together the data consisted of 1121 pages, and a lot of background material.

Tarja: So, you tried to be 'good' realist doing a case study comprising different kinds of data?

Heidi: Yes, it was important to make sure to collect both primary and secondary material. The documents I collected occurred naturally without any interference by the researcher. They were, of course, more valuable, than the secondary data, meaning interviews, because I had participated in producing them. My aim was to produce a fine-grained description of the facts of the components of capabilities in the company, and thereby, to gain a holistic view of the competence. I believed that I could draw a picture of the true nature of the capabilities from the facts in my data. The questions I posed to the data were what the core competence consisted of in the company, and how it had changed over time. As you can see, I started my research from the premises of the scientific realism. I wanted to define what competence is and what it should be

in other similar companies. I also wanted to show how the existing capabilities contribute to the success of a company.

Tarja: Your reflections on studying a company over such a long period, 70 years, illuminate well how the metatheoretical approach a researcher follows incorporate ideas and rules on how to define knowledge and what counts as accurate research material. We have now been talking about a realist approach to knowledge. What are your experiences in defining knowledge from a constructionist viewpoint? You had already collected extensive data, how did your relation to the data change after taking a constructionist turn?

Hanna: How did you treat your research material?

Heidi: My original purpose was to do content analysis and I did experiments with the analysis software called NUDIST. There are also other analytical coding programs such as ATLAS/ti and The Ethnograph but I did not use any of these programs in my final analysis. The analysis software paved the way to studying discourses and meaning making; after the first experiments with the analysis software, I started to pay attention to words that people spoke, and to the descriptions different people used when explaining what is competence and what is not. At that point, I realised that different people seemed to have very different views of the same phenomena, which in my study were capability and core competence. At the end, I was left wondering how to combine these different views to put together a holistic view of the company's capabilities.

Hanna: It almost sounds as if you were struggling with the premises of constructivism. In constructivist viewpoint, an individual actor does not find the facts of reality, but instead, joins in constructing them (Czarniawska-Joerges, 1992; Boyce, 1995). Accordingly, in the interviews you were interested in how each manager talked about the company and its core competence. You were aiming at discovering the knowledge creation processes shared by the individuals at the company, i.e. their experiences and perceptions of reality.

Heidi: Yes that is correct. It was only later in the research process when I realised that the whole data represented managers' insights of the company. It never occurred to me to collect material on the perceptions of other actors involved with the company, for instance, the employees. On the other hand, by the time I realised this, I was happy to work with any kinds of research material in my quest to interpret meaning making processes. The distinction between primary and secondary data implies a hierarchy of knowledge with some knowledge being more authentic than other, and as a constructionist researcher I could not tell any more whose voice is more or less authentic.

Tarja: From a critical theory perspective your study could be criticised for promoting dominating managerial ideology also because you do not problematise the hierarchical power structure. As such, it could be argued that your study acts for the elite.

Heidi: It could be argued that the conclusions of my study are biased. Certainly, I studied the personnel magazines or company histories, but even they carry the official voice of the company. This is the very basis on which the critical theory builds its arguments against the prevailing business research literature. The critical theorists could criticise my research for ignoring the marginalised voices of the company (Kunda, 1992). I have presented the views of those in power as factual truths and not paid any attention to the views of the people with less formal authority. Of course, in an old company like Valmet Aircraft, many well established procedures, day-to-day practices and ways of thinking support certain versions of capabilities. However, they require constant recycling across time and place by the actors to maintain their unquestionable position. What becomes defined as knowledge involves always both power and context. As social constructionist researcher, in turn, I did not think that interviewing only the managers and analysing publicly available documents about the company would bias research findings, and thereby, enhance the interest of the dominating groups. Instead, within the social constructionism, the assumption is that both managers and employees are actor positions, which are constructed by continuous power/knowledge negotiations (Knights, 1992).

3.3 Interaction between researcher and material produces research results

Hanna: Compared to the vast amount of data that Heidi collected, the material I collected for my doctorate research sounds very small in size. I was interested in how the strategy discourse constructs the City of Tampere. The material comprises the written strategy document of the Tampere region 'Tampere Region Success Strategy 2000+ (1996) and the strategy document of the City of Tampere 'Information is the Key to the Future – Guidelines of City Policies for Year 2000 and Beyond' (1997). That totals to 16 pages of text. Also, 11 interviews of city officials, who had been involved in strategy making, were analysed as a part of the study.

Tarja: Interestingly, the small amount of empirical material in your work has raised questions repeatedly. People have been puzzled by whether it is at all possible to make a rich description of a strategy process with such a small data. I think the questions show how, at least in the Finnish business research context, we are primarily used to case studies with large data. Certainly, 100 pages of data would not easily make a solid ground for a rich description if triangulation were an important guideline for data collection.

Hanna: That is absolutely so. But when analysing discourses, the question asked is how meanings are produced in the data (Burr, 1995). For such an analysis small data can be argued to be even more adequate than large data, because detailed analysis is very time consuming. That is because, when studying meaning making practices, a researcher does a close reading of the material and questions every sentence, choice of words and deconstructs the taken-for-granted

meanings of the text. From this perspective, even a small amount of data presents itself as loaded with meanings.

Similar to the above discussion on rules for suitable data within the realist world there is debate going on within the constructionist school on what data should be used. Some discourse analysts have come to prefer naturally occurring data (e.g. official documents, media texts) as the most suitable data for studying meaning making (Jokinen, Juhila, & Suoninen, 1999). Also, it has been suggested that observational data is preferable for studying subtleties of fragmented everyday meaning making in organisations (cf. Czarniawska, 1999). These views point out how different ontologies and epistemologies are used to develop methodological argumentation in constructionist research.

Heidi: Had you followed a scientific realist approach you should have gathered other research material also. That would include, for instance, by observation, collecting organisational documentations of the strategy process and perhaps even longitudinal interview data. As Steve Woolgar (1988b, 72) says, in 'true' triangulation, it is important not only to use a variety of reporting and recording strategies but also to bring forth a variety of representations. It is important that the researcher makes effort to gather material, which reflects the reality as completely as possible to enable her to make a truthful description of the researched phenomenon.

Tarja: Yes, that is because within scientific realism, the researcher is asked to carefully distance oneself from the data. I, in turn, have found it difficult to distance myself from this image of impartial knower. It is so attempting. The principals of triangulation give the researcher concrete instructions on how she can interact with the data in an impartial, objective manner. Consequently, the researcher should be cautious to detect any indications, which point, for instance, to lying, sectional interests or strong emotional commitments. For her own part, the researcher is expected not present her own subjective opinions and attitudes in order to prevent partial judgements.

Hanna: The interaction between the researcher and the material is quite a different question to a constructionist researcher compared to a scientific realist researcher. The focus shifts from the quantitative criteria of empirical material to the dialogue between the researcher and the researched. When I studied strategy making I focused my attention not only on the meaning making practices in the documents and the interviews but also on how I, as a business strategy researcher and a member of the Finnish society, factualised my interpretations of the data. What I mean is that as a researcher I was aware that as I was analysing the phenomenon in the material I simultaneously produced knowledge claims of it. When doing research, a researcher brings theory and empirical material into a dialogue between each other. In this dialogue, a researcher uses empirical data to question her theoretical assumptions, on the one hand, and she uses her theoretical understandings to interpret her data, on the other. Thus, one could say that a constructionist researcher builds the road while walking it.

Heidi: That shows the difference between the constructivist and constructionist approaches. Similarly to a constructionist researcher, a constructivist researcher considers empirical material as not presenting the reality but as containing the reality. However, in your research on city strategies, a constructivist researcher would have been interested in the accounts of the managers who have participated in the strategy process. Any data providing personal narratives of the strategy process and/or participation in it would be interesting to a constructivist researcher. In the interaction between the researcher and the data, the data is given a high status as accounts where actors' versions of reality are represented.

Tarja: I see parallel concerns between social constructionism and critical theory, because they both advocate an ongoing reflection of research process and demand avoiding the reproduction of dominant ideas (Alvesson & Skoldberg, 2000; Hosking, Dachler, & Gergen, 1995). When I studied how strategy discourse genders entrepreneurship, I was concerned on how the dominant ideas or ideologies, i.e. competitive masculinities, were embedded in the empirical material. My aim was to create interpretations that make such power relations visible that exclude female entrepreneurship from the future of ICT business. The approach I adopted, when analysing the city strategy documents, enabled me to relate myself to the material as an independent critical researcher, who is able to see behind the ideologies working in the 'surface' of the material. I learned that it is actually the idea of critique, which I have to reflect on continuously. Critique allows the researcher to challenge and question the legitimacy of the dominant, taken-for-granted ideas, but at the same time it easily positions the researcher outside her empirical material. Paying attention to how we work with the empirical material reveals that the interaction with the data tells as much about the researcher as it does about the researched phenomena.

3.4 Metatheoretical approaches offer different roles to values

Heidi: One important thing that calls our attention is how the powerful position of the knower is easily available to the researcher in scientific inquiry. According to Foucault (1989), one should not neglect the insight that scientific discourse in itself constructs a researcher as a knower and the phenomenon as a research object, the known. In the four different approaches we examine in this paper, the role of values is argued differently in knowledge production. When we argue for paying attention to a dialogue between the researcher and the material we should also stay alert of the actor positions the interaction calls us to take. I think that Tarja's research process would help us to elaborate on this issue.

Tarja: In my research on gender and entrepreneurship in the ICT sector, one of the big challenges I faced was connected to my commitment to feminism. I found myself conducting research, which aimed at striking a balance between furthering women's issues and producing scientific knowledge. I ascribe to the 'true' spirit of Nordic equality discourse according to which women

and men should have equal opportunities to venturing. I felt good about finding a digital services company owned by two women to study. This company was special: it operated in a trendy industry, it was one of very few owned women, the company had innovative service development, and the entrepreneurs had ambition to grow the company. Surely, it was one of the firms the Finnish media named exceptional (cf. Niskanen, 2000). Nevertheless, I did feel sometimes a bit insecure among other entrepreneurship researchers, because many thought that a woman and a feminist must be biased to study female entrepreneurship.

Hanna: It seems obvious that your emancipatory interests affect your research setting and your conclusions. A constructionist researcher would not consider it problematic, but definitely an issue to be brought up as a part of reporting the research process. The question of bias is relevant particularly from the scientific realist point of view. The concept of ‘bias’ in itself calls us to understand that the difference between non-biased and, thus, right knowledge, and biased, and thus, wrong or non-adequate knowledge can be universally defined. In the scientific realist approach, the production of objective knowledge should be separate from subjective values, or at least, effort should be taken to minimize their effects.

Tarja: Sure I find it natural that my commitments are incorporated in what I consider worth studying, what theoretical tradition I draw on, or what aspects I emphasise. This belief led me to study female entrepreneurship in Information Society context, which proved to be a business environment rich with masculinities. But still, I almost had identity crises when I realised that I needed to analyse also masculinities to get a fuller picture of the femininities intertwined with entrepreneurship in ICTs (Pietiläinen, 1999). First, I felt that I was not loyal to feminist agenda. I sympathise with the idea of empowerment, which is a particularly well developed agenda in critical feminist studies (Campioni & Grosz, 1991; Calás & Smicich, 1996). I thought that bringing in analysis of masculinities would mean a step towards making the already hidden masculinities of entrepreneurship even stronger. As feminist I felt biased – was I promoting the analysis of masculinities, because this line of inquiry would make me a more competent and trendy gender researcher?

Heidi: The question of bias is interesting. Critical theorists argue that marginalized views are hidden by the dominant discourses, and therefore, the researcher needs to search for theoretical insights that allow her to uncover the dynamics of domination (Alvesson & Skjöldberg, 2000). To critical theorists your concern about on whose side you are acting, is a relevant one. As such, commitment to feminist ideology is not a problem, because it is the very key to analysing subjective values embedded in all knowledge. Critical theory research aims at revealing how subjective values are inherent in the ‘objective’ concepts and theories used. Your commitments should keep you on the side of the underprivileged, because it is they who need empowerment.

Tarja: My experience tells that it is not at all clear, how gender works in research. Gender is

a lived, ontological category; it is such a hegemonic and invisible process that there is no doubt that it pervades scientific action. My solution was to analyse femininities and masculinities in the data and then consider how they construct entrepreneurship. However, I was not successful in reflecting practices of gender in my own knowledge production.

Hanna: A constructivist researcher would share your desire to be sensitive to different viewpoints and argumentations that construct the multiplicity of female entrepreneurship. From a constructivist position one could argue that we have common lifeworlds, which are constructed in social interaction and thereby, shared. A constructivist researcher would follow this idea by holding that there is always a myriad of individual rationalities, which become shared in the interactions between individuals (Czarniawska, 1992).

Tarja: Yes, and a constructionist focuses attention to the commonly circulated discourses, which construct gender in contextually rational ways. In my research this meant that I was interested in how discourses of entrepreneurship call upon bodied women entrepreneurs to act according to discourse specific responsibilities and rights of an entrepreneur.

Heidi: In our research team we are all female and that, I believe, is present in the ways we do research. I think that one way of doing gender is to pay attention to processes promoting gender-neutrality. For example, reference practices construct the position of knower. Whom do we want to grant this position? Historically, women's knowledges have had difficulties in surviving over generations (Spender, 1982). What can we do about it?

3.5 Evaluation criteria for qualitative research depend on the metatheoretical approach

Hanna: There is one more point that I would like us to discuss, and that is the evaluation criteria for qualitative research. Evaluating what counts as scientific knowledge is not very straightforward, and depending on the metatheoretical orientation, criteria for evaluating the research vary somewhat.

Heidi: I think this topic is important, as the field of qualitative inquiry is getting wider. We see more and more research, which is not reported in a familiar or conventional way. We encounter novel research settings, new research questions, unconventional methods and unexpected results. The concrete research reports have dispositions, which do not resemble other reports. What I find interesting is that due to these changes the well-established criteria for evaluating qualitative research on scientific realist premises do not apply well anymore. The criteria seem not to grasp the depth of the novel research practices, and consequently, do not seem to provide proficient tools for evaluation.

Tarja: The format of the research report in itself is one way of validating the research. By that I mean that when presenting the findings and the process of the research in conventional established ways, research becomes scientific knowledge. In constructionist research, the format be-

comes ever more important as it is deeply understood that the research report in itself reproduces research discourse. It has been discussed for several years in business studies that even the case research following the realist premises does not fit well with the traditional research reporting format. The issue becomes even more pressing when talking about new interpretative methods.

Hanna: In my research on strategy discourse, I followed the guidelines according to which writing convincing research and providing a sound argumentation require using the 'right' referring practices, formal language with plenty of theoretical concepts and writing practices that efficiently factualise the findings. Following these guidelines, and wanting to convince everyone that I am competent in using theoretical concepts, I ended up producing a very single voiced report. Funny enough, the key point in my research was to deconstruct the single voiced practices in strategy making and to argue for multivoice strategy practices. In the future, I would like to enhance work on providing guidelines and ideas on novel ways of scientific writing and unconventional ways of reporting research findings.

Heidi: One way I tried to tackle this issue in my Ph.d. thesis was to start my research report with a personal story which talked about my own experiences on knowledge production. In the story I tell how I have dealt with feelings of being incompetent when building a play-house with my brother when I was young. I ponder why I was not claimed to be the knower. With this story I set the stage for thinking what is defined as the right way of knowing and how it is decided, who has the right knowledge. However, not all fellow researchers accepted this as an essential part of a scientific work.

Tarja: My solution was to position the study carefully among the traditions of female entrepreneurship research as well as entrepreneurship research. I also described quite a bit my research process. I tried to make arguments which make sense within the constructionist realm of feminist research. Particularly I paid attention not to engage in what I call border war argumentation when making space for my study. This means I avoided arguments which build on paradigmatic differences. Well, I am quite happy with the line of argumentation. The down side of it is that readers who are not so familiar with constructionist or feminist theoretical argumentation have trouble following my work. I remember a comment of a good colleague: "Don't you know how to use subheadings. Give me common words. I need some air!" Qualitative, and constructive business research in particular, would benefit from making power/knowledge claims visible in more intelligible ways.

4. CONCLUSIONS

The above dialog on our own experiences in conducting empirical research shows that during the process of qualitative inquiry, it is often overwhelming to pay close attention to the terms of

knowledge production and reflect one's own metatheoretical commitments inherent in one's daily research decisions. This leads us to consider four important issues in academic discussion on reflexivity.

First, in practice, reflexivity manifests itself in a continuous debate that the researcher carries out with herself. In that debate, the conventions, rules and practices common to different metatheoretical approaches, are strongly present. A process of reflexivity calls a researcher to question and re-question her choices over and over again. Such a process is filled with feelings of frustration and anxiety, and also, with feelings of clarity and inspiration. The theoretical discussion on reflexivity would benefit from researchers sharing their own experiences on the encounter with fuzziness of methodological decisions in empirical qualitative research.

Second, reflection guides a researcher to understanding the ways by which metatheory informs the practicalities of empirical qualitative inquiry. The practical decisions always incorporate metatheoretical decisions. A researcher makes epistemological and ontological decisions when defining the purpose of research, choosing and collecting empirical material, analysing the material, making conclusions and evaluating the research. Typically, a beginner researcher starts the research process by seeking to define his or her own metatheoretical approach. Writings on metatheoretical approaches do not, however, provide guidelines for collecting and analysing research material and reporting the research results. A researcher feels very much alone in the interaction with the research material where she tries to construct 'no-nonsense' accounts of the world and the phenomenon under study. Therefore, it is important to guide those learning to become researchers to reflexivity, because it is through reflexivity that a researcher can understand the ways by which the practicalities of empirical inquiry are informed by metatheory.

Third, reflexivity is necessary in producing high quality results in qualitative research. Reflexivity leads a researcher to produce legitimate and significant research results. Reflexivity is observable in the coherence of line of argumentation. Identifying the paradigmatic discourses present in the day-to-day research decisions empowers a researcher to generate a competent argumentation for her choices and decisions. Research results that have been produced through reflexivity provide a strong contribution for future research and also allow for identifying solid practical implications.

Theoretical discussion on reflexivity has established its importance in organisation and management research. Next, we call for presentations on researchers' experiences of reflexivity in qualitative research. Particularly, we welcome ideas on how to bring forth the researchers' learning processes. Ours has been very much a collegial one. Cynthia Hardy, Nelson Phillips and Stewart Clegg's (2001) as well as Dick Pels's (2000) idea of reflexivity which involves other researchers and the community in large corresponds to our experiences on learning through reflection. There are limits to an individual researcher's ability to identify her own blind spots. Others

with other interests are often better equipped to point out critical connections, and thus, collegial processes create a valuable resource for reflexivity. ■

REFERENCES

- AHL, HELENE J.** 2002. *The Making of the Female Entrepreneur. A Discourse Analysis of Research Text on Women's Entrepreneurship*. JIBS Dissertation Series No. 015. Jönköping: Jönköping International Business School.
- ALVESSON, MATS & SKJÖLDBERG, KAJ** 2000. *Reflexive Methodology. New Vistas for Qualitative Research*. London: Sage.
- ALVESSON, MATS & WILLMOT, HUGH** 1995. Strategic Management as Domination and Emancipation. From Planning Process to Communication and Praxis. *Advances in Strategic Management*, Vol. 12A, pp. 85 – 112.
- BARRY, DAVID & ELMES, MICHAEL** 1997. Strategy Retold: Toward a Narrative View of Strategic Discourse. *Academy of Management Review*, 22 (2), pp. 429 – 481.
- BOJE, DAVID** 1999. Hegemonic Stories and Encounters between Storytelling Organisations. *Journal of Management Inquiry*, 8 (4), p. 20, printed from EBSCO data base, 12.4.2000.
- BOYCE, MARY E.** 1995. Collective Centring and Collective Sense-making in the Stories and Storytelling of One Organization. *Organization Studies*, 16(1), pp. 107–137.
- BURR, VIVIEN** 1995. *An Introduction to Social Constructionism*. London and New York: Routledge.
- BURRELL, GIBSON & MORGAN, GARETH** 1979. *Sociological Paradigms and Organizational Analysis*. London: Heinemann.
- CALÁS, MARTA B. & SMIRCICH, LINDA** 1992. Re-writing Gender into Organizational Theorising: Directions from Feminist Perspectives. In Michael Reed and Michael Hughes (eds.) *Rethinking Organization. New Directions in Organization Theory and Analysis*. London: Sage.
- CALÁS, MARTA B. & SMIRCICH, LINDA** 1996. From the 'Woman's' Point of View: Feminist Approaches to Organization Studies. In Stewart Clegg, Cynthia Hardy and Walther R. Nord (eds.) *Handbook of Organization Studies*. London: Sage.
- CALÁS, MARTA B. & SMIRCICH, LINDA** 1999. Past Postmodernism? Reflections and Tentative Directions. *Academy and Management Review*, 24(4), pp. 649–671.
- CAMPIONI, MIA & GROSZ, ELIZABETH** 1991. Love's Labours Lost: Marxism and Feminism. In Sneja Gunew (ed.) *A Reader in Feminist Knowledge*. London: Routledge.
- CZARNIAWSKA-JOERGES, BARBARA** 1992. *Exploring Complex Organisations. A Cultural Perspective*. Newbury Park: Sage.
- CZARNIAWSKA, BARBARA** 1999. *Writing Management. Organization Theory as a Literary Genre*. Oxford: Oxford University Press.
- DACHLER, H. PETER & HOSKING, DIAN-MARIE** 1995. The Primacy of Relations in Socially Constructing Organizational Realities. In Dian-Marie Hosking, Peter H. Dachler and Kenneth Gergen (eds.) *Management and Organisation: Relational Alternatives to Individualism*. Aldershot: Ashgate.
- EISENHARDT, KATHLEEN** 1989. Building Theories from Case Study Research. *Academy of Management Review*, 14(4), pp. 534 – 550.
- ERIKSSON, PÄIVI & FOWLER, CAROLYN & WHIPP, RICHARD & RÄSÄNEN, KEIJO** 1996. Business Communities: Cooperation and Conflict in the European Confectionery Sector. Helsinki School of Economics and Business Administration, Working papers W-149, Helsinki.
- FOUCAULT, MICHAEL** 1989. *The Archaeology of Knowledge*. London: Routledge.
- GERGEN, KENNETH** 1994. *Realities and Relationships. Soundings in Social Construction*. Cambridge: Harvard University Press.
- GUBA, EGON G. & LINCOLN, YVONNA S.** 1994. Competing Paradigms in Qualitative Research. In Norman K. Denzin and Yvonna S. Lincoln (eds.). *Handbook of Qualitative Research*, 105– 117. Thousand Oaks, Sage.
- HARDY, CYNTHIA & PHILLIPS, NELSON & CLEGG, STEWART** 2001. Reflexivity in Organization and Management Theory: A Study of the Production of the Research 'Subject'. *Human Relations* 54(5), pp. 531–560.

- HOSKING, DIAN-MARIE** 2000. *The Processes of Social Construction: Some Implications for Research and Development*, 9 pages. Printed from <http://staff.abs.aston.ac.uk/dmh/dmhcat.html>, 28.6.2000.
- HOSKING, DIAN-MARIE & DACHLER, H. PETER & GERGEN, KENNETH** (eds.) 1995. *Management and Organisation: Relational Alternatives to Individualism*. Aldershot: Avebury Ashgate Publishing Ltd.
- JOHNSON, PHIL & DUBERLEY, JOANNE** 2003. Reflexivity in Management Research. *Journal of Management Studies*, 40(5), pp. 1279–1303.
- JOKINEN, ARJA & JUHILA, KIRSI & SUONINEN, EERO** 1999. *Diskurssianalyysi liikkeessä*. Tampere: Vastapaino.
- KESO, HEIDI** 1999. Suomalaisen lentokoneeteollisuuden sankarit ja konkarit. Osaamisen diskursiivinen rakentuminen. *Acta Electronica Universitatis Tamperensis* 9. Tampere: Tampere University Press. Also available at <http://acta.uta.fi>.
- KNIGHTS, DAVID** 1992. Changing Spaces: The Disruptive Impact of a New Epistemological Location for the Study of Management. *Academy of Management Review*, 17 (3), pp. 514 – 536.
- KNIGHTS, DAVID & MORGAN, GARETH** 1991. Corporate Strategy, Organizations and Subjectivity: A Critique. *Organisation Studies*, 12 (2), 251 – 273.
- KUNDA, GIDEON** 1992. *Engineering Culture: Control and Commitment in a High-Tech Corporation*. Philadelphia: Temple University Press.
- LEHTIMÄKI, HANNA** 1996. Coordination through Social Networks. *School of Business Administration, Series A1, Studies* 43. University of Tampere: Tampere.
- LEHTIMÄKI, HANNA** 2000. Strategiatarina kaupungista ja sen toimijoista. *Acta Universitatis Tamperensis* 746. Tampere: Tampere University Press. Also available at <http://acta.uta.fi>.
- LYNCH, MICHAEL** 2000. Against Reflexivity as an Academic Virtue and Source of Privileged Knowledge. *Theory, Culture & Society*, 17(3), pp. 26–54.
- MARSHALL, CATHERINE & ROSSMAN, GRETCHEN** 1989. *Designing Qualitative Research*. Newbury Park: Sage.
- NILSSON, PERNILLA** 1997. Business Counselling Services Directed towards Female Entrepreneurs – Some Legitimacy Dilemmas. *Entrepreneurship and Regional Development*, Vol. 9, pp. 239–258.
- NISKANEN, A.** 2000. Nuoret tekniikkanerot, *Kotiliesi*, No 6, 24.4.2000.
- PELS, DICK** 2000. Reflexivity. *One Step Up. Theory, Culture & Society*, 17(3), pp. 1–25.
- PETTIGREW, ANDREW** 1990. Longitudinal Field Research on Change: Theory and Practice. *Organization Science*, 1 (3), August, pp. 267–292.
- PIETILÄINEN, TARJA** 1999. Tietoteollisuus kaupunkistrategioissa – mahdollisuus naisten yrittämiselle? In Päivi Eriksson & Marja Vehviläinen (eds.). *Tietoyhteiskunta seisakkeella. Teknologia, strategiat ja paikalliset tulkinnat*, 74–98. Jyväskylä: Sophi.
- PIETILÄINEN, TARJA** 2002. Moninainen yrittäminen. Sukupuoli ja yrittäjänäisten toimintatila tietoteollisuudessa. *Acta Universitatis Oeconomicae Helsingiensis A-207*. Helsinki: Helsinki School of Economics.
- SENGENBERGER, WERNER & PYKE, FRANK** 1992. *Industrial Districts and Local Economic Regeneration: Research and Policy Issues*. In: Frank Pyke & Walter Sengenberger (eds.) *Industrial Districts and Local Economic Regeneration*, 3–29. Geneva: International Institute for Labour Studies.
- SPENDER, DALE** 1982. *Women of Ideas and What Men Have Done to Them*. From Aphra Behn to Adrienne Rich. London: Routledge & Kegan Paul.
- STAKE, ROBERT E.** 1995. *The Art of Case Study Research*. Thousand Oaks: Sage.
- WOOLGAR, STEVEN** 1988a. Reflexivity Is the Ethnographer of Text. In Steven Woolgar (Ed.) *Knowledge and Reflexivity: New Frontiers in the Sociology of Knowledge*, 14–36. London: Sage.
- WOOLGAR, STEVE** 1988b. *Science the Very Idea*. Chichester: Ellis Horwood.
- YIN, ROBERT K.** 1989. *Case Study Research. Design and Methods*. Applied Social Research Methods Series, Vol. 5. Newbury Park: Sage.