Safety in the Making
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Joel Rasmussen

Safety in the Making
Studies on the Discursive Construction of Risk and Safety in the Chemical Industry
Abstract

This compilation thesis aims to analyse how risk and safety are constructed, reproduced, and negotiated by communicative means in safety-critical workplaces. It addresses the existence of a tension between a strategy of individual responsibility and one of collective protection. This study makes a further contribution by conceptualizing these communicative moments of shaping and reshaping risk and safety as enmeshed in multiple forms of governing. That is, the management of risk exposes some of its fragility.

Further, the thesis demonstrates how employees’ risk and safety discourse is regularly supplemented by mitigating, pronominal, or entirely agentless discursive choices, and thus by an anticipatory display of awareness of egalitarian norms. It is urgent to study, since it is through them that the locus of risk may be moved from neoliberal ideas of human resources utilization.

The thesis centres on three safety-critical factories located in Sweden that handle corrosive and/or explosive chemicals. It analyses interviews with various employees as well as recorded talk at a safety committee meeting. Previous research has added to the dilemmas that emerge in the process.

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Keywords: safety, risk, occupational health and safety, organizations, chemical industry, discourse, discursive practices, discursive strategies, power, governmental, neoliberal ideas of human resources utilization.

The analysis has reflected and reproduced in some narratives, it also makes evident that a great deal of conditions of human exposure, and that parties are appointed responsible for safety and safety may not only be an employer’s responsibility delegated by the State, in a welfarist fashion, but may take different forms through a variety of institutional practices and communicative means. These defining practices seem particularly addressed the existence of a tension between a strategy of individual responsibility and one of collective protection. This study makes a further contribution by conceptualizing these communicative moments of shaping and reshaping risk and safety as enmeshed in multiple forms of governing. That is, the management of risk exposes some of its fragility.

Although the study demonstrates that a discourse of collective prevention is reproduced, and negotiated by communicative means in safety-critical workplaces. It also exposes some of its fragility.

Futhermore, the thesis demonstrates how employees’ risk and safety discourse is regularly supplemented by mitigating, pronominal, or entirely agentless discursive choices, and thus by an anticipatory display of awareness of egalitarian norms. It is urgent to study, since it is through them that the locus of risk may be moved from neoliberal ideas of human resources utilization.
Abstract


This compilation thesis aims to analyse how risk and safety are constructed, reproduced, and negotiated by communicative means in safety-critical workplaces. It conceptualizes these communicative moments of shaping and reshaping risk and safety as enmeshed in multiple forms of governing. That is, the management of risk and safety may not only be an employer’s responsibility delegated by the State, in a welfarist fashion, but may take different forms through a variety of institutional practices and communicative means. These defining practices seem particularly urgent to study, since it is through them that the locus of risk may be moved from one type of area or object to another, that attention is or is not paid to certain conditions of human exposure, and that parties are appointed responsible for safety measures.

The thesis centres on three safety-critical factories located in Sweden that handle corrosive and/or explosive chemicals. It analyses interviews with various employees as well as recorded talk at a safety committee meeting. Previous research has addressed the existence of a tension between a strategy of individual responsibility and one of collective protection. This study makes a further contribution by demonstrating how these traditions are advocated and negotiated in discourse, and the dilemmas that emerge in the process.

Although the study demonstrates that a discourse of collective prevention is reflected and reproduced in some narratives, it also makes evident that a great deal of responsibility is placed on the individual worker to avoid risk. The analysis has been able to show that this is due to the co-presence of traditional, hierarchical advice-giving and self-reproach, which amplify the importance of workers conducting themselves with greater caution, and of those newer concepts and technologies for worker involvement and responsibilization which are implemented in line with neoliberal ideas of human resources utilization.

Furthermore, the thesis demonstrates how employees’ risk and safety discourse exposes dilemmas, especially when, consciously or not, egalitarian norms are taken into account. For instance, the moralizing elements of behavioural discourse are regularly supplemented by mitigating, pronominal, or entirely agentless discursive choices, and thus by an anticipatory display of awareness of egalitarian norms. It is argued that this discoursal softening of workers’ risk responsibilities helps condition the sustained prevalence of a behavioural approach to risk and safety. It also exposes some of its fragility.

Keywords: safety, risk, occupational health and safety, organizations, chemical industry, discourse, discursive practices, discursive strategies, power, governmentality, responsibilization.

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I am grateful that you have shared with me some of your vast knowledge and also encouraged me to choose my own focus. Over the course of a few years, we have experienced several contexts which are quite unusual for social scientists – from a large press conference on mental health in Stockholm to many meetings with the engineers in partner organizations. It has been rewarding and fun to share them with you!

Throughout my thesis work, a reference group has met regularly for progress updates and mutual knowledge-sharing. I want to give many thanks also to Klas Nyberg and Alf Rosberg, who represented the funding organization, for generously giving feedback and to work together with you on one of the articles. Thanks also to Larsåke Larsson who, at an earlier stage of the thesis, provided support in the role of assistant supervisor. Furthermore, I am very thankful to my main supervisor, Birgitta Höijer. Many thanks also to KCEM’s CEO Erik Nilsson, Bodil Lundström and Thomas Gell at MSB, and to Lennart Johansson and Inge Svedung. I would also like to thank Bert Allard, who literally was a driving force at the beginning when this project started in the multidisciplinary research centre MTM. Likewise, I would like to thank my other colleagues at MTM for contributing to a pleasant work atmosphere in the years I was there.

For the professionals at the factories studied, thank you for generously making time through the interviews. There are also a number of researchers who have given advice or commented on my texts at key stages.

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INTRODUCTION
If you work in a larger organization, it is likely that you have been involved somehow in controlling risk through some health and safety measure, if only by filling out a questionnaire. To an extent that two decades ago was not nearly as internationally widespread, safety committees gather for discussion, ‘teams’ of workers talk to one another about risk and safety, and large quantities of information are produced, collected to be acted upon, and reported to external governmental and semi-governmental bodies. Organization leaders are not exempt from responsibility. It is said that risk management and preventive safety work stand and fall with leaders’ commitment. In fact, coordinating safety, health, and environmental measures is a new managerial task that hardly existed before the 1990s. Within academia, questions of risk and safety attract a great deal of interest. No one in the social sciences can have failed to note the influence of Ulrich Beck’s *Risk Society*. Since its publication in 1986, the field of risk has exploded, with a wealth of magazines, journals, and books, not to mention courses, conferences and all the materials available on the Internet. As Michael Power (2007) explains, we are conceiving of more phenomena and creating organizational arrangements, processes, occupations, and research projects under the influence of a ‘risk’ logic.

Given the increased interest in, and expansion of, the management of risk and safety, there is justification for social research to critically examine contemporary constructions of risk. Within this broad, interdisciplinary field, this compilation thesis focuses on issues related to health risks and safety measures in organizations. Empirically, it further narrows its focus to organizations in which there is reason to assume that risk and safety are considered particularly central, namely workplaces that handle explosive and corrosive chemicals. After several accidents that have attracted international attention, and because of the magnitude of risks that are difficult to insure against, the chemical industry is said to embrace risk and safety management strategies and various forms of training (Dean, 2010:220). So, with an interest in contemporary constructions of risk and safety, these organizations appear especially relevant to study, and lessons can be learned that are also useful for other areas.

With an interest in issues of power and language, the thesis raises some fundamental questions. What kinds of risks are made relevant? What do practitioners say they know can be done about them? Who is made responsible? What kinds of conceptual and communicative conditions are necessary?
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sary to bring about these definitions of risk and safety management? To gain knowledge about these issues, the aim of the thesis is to study how risk and safety are constructed, reproduced and negotiated by communicative means in safety-critical workplaces.

Given this focus, for those who work in industry this is a study that uncovers and calls for reflection on the common norms of doing and thinking which are often taken for granted. The thesis can thus challenge some ways of going about managing risk and safety, and the forms of labour relations in which they are formed, to open up a space for reflection in which it may be possible to imagine alternatives. Yet a practical dimension is always present, since the focus is on something as concrete as language use. Thus, the thesis can also help to raise critical awareness of language (cf. Fairclough, 1992) in terms of risk and safety.

Of potential interest to researchers in communications, sociology of risk, or health and safety, is that the thesis contributes to an understanding of communication as a constitutive means by which risk and safety management is shaped and negotiated. This means that the thesis helps develop complex and empirically grounded knowledge of how employees use communicative resources to actually ‘organize’ organizational attention to risk and safety. The thesis also takes into account the new situation of a more ‘systematic’ handling of risk and safety, particularly in that two out of four papers deal specifically with widespread management technologies and programs.

The thesis takes a critical approach, using Michel Foucault’s governmentality framework together with discourse analysis. Hence it focuses on partly different issues and problems than the large amount of research that seeks to develop as effective and good safety and risk communication as possible. Many important lessons can be learned from this literature, concerning, for instance, the gaps in communication that have led to accidents (e.g. Turner, 1978). However, according to the constructivist approach adopted here (cf. Dean, 1998) risk is not understood as something that actors only communicate about. Rather, it is something that is shaped and negotiated through discursive practices and through systems of representation. Through these practices and ways of seeing people link a potential harm or hazard with things, processes, and/or actors, thus making either of the latter into a risk object (Hilgartner, 1992). That does not, of course, mean that there are no physical things in reality that, by virtue of their energy or toxicity, exceed the threshold of what the human body can endure. Rather, for these phenomena to be seen and acted upon as risk objects they must be named as such, negotiated and understood as such, and assessed as relevant to deploy resources to deal with. The same discursivity
applies to the safety solutions. Additionally, if these phenomena are to be constructed as risk objects, the human body must be named, acknowledged and understood as potentially vulnerable, and be assessed as worthy to protect. This discursive approach does not mean that I am trivializing risk or in any way want to diminish anyone’s claims to having been exposed to a hazard. Instead, it is about not wanting to skip important points in the formation of what are essentially political claims in the everyday practice of risk and safety management. The thesis can thus be said to explore more fundamental workings of human communication than would be the case if it adopted a prescriptive approach to how stakeholders should best communicate about risk and safety.

As mentioned, the thesis is based in large part on historian and philosopher Michel Foucault’s writings, and his concept of governmentality. The literature in the governmentality tradition can be said to identify three trends that allegedly shape such activities as the management of risk and safety.

First, a neoliberal form of governance has gained acceptance since the 1980s, which means that organizations themselves may exercise greater control of themselves. Principally, the state sets the direction and aims of the safety work rather than bearing the costs of direct, physical inspection etc. (Frick and Wren, 2000:29). This means that companies need to communicate about risk and safety internally, and maintain documentation confirming that they are doing what they are obliged to do. Governing ‘at a distance’ thus requires communication across professional boundaries (Rose, 1999b). This form of governmentality acts in favour of a mix of mandatory standards set by governments, voluntary standards developed by state and private actors together, and those developed by business consultants (Power, 2007).

A second, related trend involves changes in responsibilities, in that workers have the responsibility to cooperate with management to prevent ill health and accidents. The Foucauldians speak of responsibilization. This means that attempts are made to change actors’ identities, so that they may come to know and see themselves in a new way (Gray, 2009; Rose, 1999b). Changes in Swedish law can serve as an example. A change in the Work Environment Act in 1991 stipulates that anyone working in a workplace is required to participate in the management of risk and safety. Another amendment in 1994 requires anyone working at a workplace to ensure that no one is exposed to health and safety risks (SFS 1977:1160, chap. 3). Responsibility for workplace health and safety is thus shared between employers and workers, which implies a change from the earlier principle that the employer clearly held this responsibility. In June 2009, a
safety representative was, for the first time in Sweden, accused of not having fulfilled the second edict mentioned above. There was no conviction because the safety representative was not considered guilty of gross negligence. However, the indictment was not dismissed completely, so similar prosecutions could be expected in the future.

As for the third trend, there is nowadays an appeal in formulating risk and safety, not as something gloomy and negative, and government-forced – in line with the concept of risk society – but as an area of opportunity, as a way of presenting one’s entrepreneurial ambition, and as a way of effectively organizing relationships and selling a trustworthy business. As a mundane sign of this new logic, it is not rare to hear a risk-management researcher or consultant introducing a presentation by recounting that risk means both danger and opportunity, thus emphasizing the added value an organization can create through appropriate risk management. A similar motto, ‘safety pays’, is well known in the specialty area of workplace safety (Dorman, 2000). Some therefore speak of a new approach to risk and safety, which means that businesses discursively reformulate the issues from being almost a necessary evil to connoting something positive. In line with Boltanski and Chiapello’s (2005) argument, worker protection, which was seen as threatened by corporatism during most of the 1900s, has been discursively displaced and incorporated into a new spirit of capitalism as an entrepreneurial, corporate opportunity.

Of course, one should not assume that such a neoliberal political rationality has completely permeated the empirical world, as if every business was dealing with health and safety risks to create an immaculate safety record to show the world. Nor does every business voluntarily seek to become certified by the ISO, or pursue the goal of being listed on the Dow Jones Sustainability Index. Theorists who analyse the political trends in the area, such as Michael Power (2007), are well aware of the generalist aspect of their claims.

It is after all interesting for the research project to enter into a period which is broadly said to be characterized by such a political, ideological shift. Such ideological trends tend to produce very research-worthy dilemmas in the everyday empirical reality (Billig et al., 1988), where the shifts between the webs of belief are not as clear as in the books, but rather mixed together in a ‘witches brew’, as Foucault (2000a:232) once put it.

The next section will more carefully review and evaluate previous research in this area. Subsequently, the thesis’s aim and research questions are clarified. The next section after that deals with the theoretical framework, with key concepts such as governmentality, discourse, and identity. Then I go through methodology, including case selection, data, analytical
procedure etc. What then remains of this introductory part of the thesis is a summary of articles and the conclusions section. Finally there is the largest part of the thesis which consists of the four articles.
This research overview explores and explains social research on the communicative construction of workplace risk and safety, and identifies those aspects to which the thesis most likely can contribute. The review distinguishes between two strands of research which have slightly different foci, i.e. between: (1) research on how management’s and workers’ safety discourse(s), power relations, and cultures shape occupational risk and safety, and (2) research on the role of technologies of interaction in the shaping of occupational risk and safety. A qualification is required here, because even though this second group of studies focuses on particular institutional communicative means, it is to different degrees sensitive to the issues raised in the first group.

Before I continue to address this research, I want to emphasize that there is a great deal of research on the discursive construction of workplace risk and safety, but a lack of research overviews to indicate this fact. There is also a lack of mutual referencing among, for instance, those who have taken a Foucauldian approach to discourse and safety (e.g. Chikudate, 2009; Collinson, 1999; Gray, 2009; MacEachen, 2000; Mumby and Ashcraft, 2004, chap. 6; Packer, 2003; Zoller, 2003). These discourse-oriented empirical studies on safety appear, then, like isolated research endeavours compared to other, often quantitatively and positivistically oriented psychological and cultural approaches to safety. To begin demonstrating a comprehensive body of research will be of benefit, I believe, to the studies that will be done in the future. Syntheses of several similar studies can be done, and the value of the theoretical and methodological approaches can be argued for more forcefully.

Furthermore, this overview excludes most of the risk literature that does not concern itself primarily with risk and safety in workplace settings. Much risk research emerged and gathered momentum after major disasters and crises in the 1980s, which affected organizations, the environment, and the public. This research focuses primarily on communication and relationships between organizations and their external audiences (Renn, 1998). Research on workplace safety deals with a somewhat different research object, focusing on the relations and practices in organizations, and the parties of the employment relationship, rather than on a public audience. By that I am not saying that there are no points and issues of common interest across the research fields. There are of course common lines of development, as suggested by those who claim that the same rationalities...
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and ideas operate on a broad front across different areas of practice (e.g. O’Malley, 1996; Power, 2007).

Moreover, before going into more detail on previous research, it should be clarified that there are, simply put, two historical traditions that emerge as more or less explicit subject matters of social research on risk and safety. For readers who have no background in the risk and occupational health and safety fields, these two traditions should be clarified.

Since the First World War psychologists have been engaged in solving the problems of business management (Nichols, 1997). Research and consultancy on risk and safety are therefore closely related to industrial psychology and have evolved along with it. In line with psychology’s interest in differences between people, there was and still is a concern with whether human differences have an effect on the occurrence of accidents, and if so what can be done about it. ‘Accident proneness’ and the first era of human factors research constructed the worker as a risk object to be tested and approved, or moved. However, if accident-proneness and human factors have been widely questioned and stagnant themes in the industrial psychology literature on occupational safety (Nichols, 1997:64) more recent research and consultancy tend to focus on perception, cognition, and behaviour. To some extent renouncing their main rival tradition, safety psychologists have since at least the 1930s claimed that the physical working environment has improved so much that it is now time to improve the people working there instead (e.g. see Heinrich, 1931) and some still do so (e.g. Krause, 1997).

The rival strategy can be termed environmental health and design. Based on occupational medicine and engineering it typically identifies and addresses the chemical, mechanical, and ergonomic hazards in the workplace. Actually, this tradition goes back longer than the psychological approaches. For example, in Sweden, where authorities and medical experts in the mid 1800s began to measure and understand the difference in mortality between urban workers and farmers, commissions were appointed and began preparing legislation that would regulate the physical working environment. Although medical experts identified several chemical hazards, including all kinds of metals across the periodic table, at first it was mechanical hazards that workers were protected against, for example with machine guards. The first Swedish Work Act, Yrkesfarelagen, was adopted in 1889 and work injury insurance was later introduced in 1901 (Sundin and Willner, 2007). Typical for this approach from the 1800s to now, is that it seeks to protect a collective, ideally independently of its members’ individual differences.
Safety discourse(s), power relations, and cultures

A fairly large collection of studies addresses the role of language and systems of representation in the shaping of risk and safety, but they do so at different levels and with different degrees of detail. This section begins by taking issue with studies that use a broad, Foucauldian approach to discourse, and that investigate the formation of risk and safety as conditioned in power relations (e.g. Gray, 2006, 2009; MacEachen, 2000, Zoller, 2003). All seem to point to an individualization of risk responsibility.

In a study of a car factory, Zoller (2003) finds a discrepancy between the many health problems that shop-floor employees speak about, and the absence of requirements that the company provide a better working environment. This suggests an ongoing discursive manufacturing of acceptance of difficult working conditions. She relates this to the struggle concerning the classification of industrial injuries on a global scale, where the tendency is to conceal causality. For instance, in much official language, repetitive strain injury (RSI) has been redesignated musculoskeletal disorder (MSD). While the former name exposes causality, the latter does not. Zoller also finds an ongoing individualization of incident and accident causes both within ‘teams’ of workers and in superior-subordinate communication. These various obfuscations of victimization feed into processes forming an identity that celebrates strength and toughness; an identity that becomes a source of respect and enjoyment among those who may be able to cope with the physical circumstances, but at the same time puts pressure on everyone, and especially on those who become victims of hazards.

Also drawing on ethnographic work from an automotive factory, Gray (2006) discusses how employees are becoming more responsible for occupational health and safety in two ways: first, by becoming legally liable for their unsafe acts, and second, by being obliged to bring to their employer’s attention any deficiencies relating to safety. Gray argues that a regulatory shift from welfarist to neoliberal rationalities is transpiring, and that it is calling on employees to pursue a shift of self-identity. ‘In essence, workers are being transformed from a victim to a health and safety offender’ (Gray, 2006:875). Both of these responsibilization processes, i.e. concerning unsafe acts and the obligation to refuse dangerous work, are seen as inadequate, not least because the ability to act safely or refuse dangerous work does not hinge on a single person, but on several contextual factors. In order to substantiate such a claim, Gray refers to the many unsafe conditions that he witnessed during his five-month ethnographic study and how he was discursively persuaded to accept dangerous work. Among other things, he would work on a production line with non-encapsulated ma-
chine parts in full motion. He points to the role of the production leaders who, when they did not want to interrupt the job because of the tight delivery times of a valuable order, used discourse strategies such as an ‘appeal to higher loyalties’ and a ‘defence of necessity’. While also minimizing the possible adverse effects of exposing oneself to rotating machine parts, they pursued the discourse strategy of ‘denying injury’ (Gray, 2006:881). Like Zoller, Gray (2006) puts these practices into an organizational context, with reward systems and a Just-in-Time management system, which increases the pressure on production departments and their personnel.

Similar reasoning and results concerning employee responsibility for dealing with occupational risks are presented by MacEachen (2000). She examines interviews conducted at five newspaper organizations and concludes that managers align with an individualizing, neoliberal discourse in accounts of employees as responsible for having caused their own RSI problems. Allegedly, newspaper staff fail to adequately maintain correct bodily positioning and sufficiently take ‘care of the self’.

Mumby and Ashcraft (2004, chap. 6) add a feminist perspective to these studies that relate discourse, power, and identity to risk and safety. They demonstrate how two historical safety discourses in aviation served as a means to allay public concerns about risk, one of which greatly changed the internal division of labour. Two conflicting discourses emerged in the 1920s and 30s. The ‘lady-flier’ discourse minimized the physical effort that flying required and the complexity and difficulty of flying. The female pilot was constructed as though she had an easy job. In the images invoked by the industry, the popular ‘ladybirds’ could fly with a cigarette in one hand while thinking about the gala premiere which would be attended upon landing. Although this identity construction reduced the fear that female pilots were exposed to danger while flying small planes, it did not do what the industry had hoped it would concerning the problem of public fear of aviation transport. Mumby and Ashcraft (2004) describe that this discourse did not instil confidence in the pilot, as the later and commercially successful ‘professional pilot’ discourse would do. Unlike the previous feminized discourse, the professional pilot discourse emphasized the competence, ability, and reliability of pilots. It drew upon protective ‘manly’ symbolism by initiating the use of military-style uniforms. It re-inscribed a system of differences by way of a gendered division of labour, separating male pilots from female flight attendants. It drew upon well-established gendered categories: ‘the authoritative professional who soothes our worries with fatherly protection, the charming wife devoted to our every need in the air’ (Mumby and Ashcraft, 2004:167). The study therefore shows how gendered safety discourse links identity to opposite poles and certainly
sets limits on human opportunities (see also Skillen, 1996; Breslin et al., 2007).

I will now turn to research that conceptualizes different organizational cultures as constructing different forms of risk and safety management. In this stream of research, professional groups are often associated with different cultures, such as site managers and construction engineers (Gherardi et al., 1998), process operators and crane operators (Nævestad, 2008), management, workers, and an inquiry board (Gephart et al., 1990) or, as in Richter and Koch (2004), a larger mix of professions. For example, Richter and Koch (2004) describe a division between the cultures called ‘welfare’, ‘master’, and ‘production’, of which the first advocates collective insurance and protection against risk, while the last advocates the most individualistic and behavioural approach. Focusing on an inquiry after a fatal gas accident, Gephart et al. (1990) identify three cultural rationalities, the ‘hierarchical’, the ‘market’ oriented, and the ‘sectarian’. The first is embodied by public authorities who seek to impose rules upon the involved parties; the second is embodied by company representatives who seek to defend against the force of the regulating actor; and the third is represented by workers, who were marginalized during the inquiry, but who embody their culture’s situational and complex knowledge of production and safety which is lacking in the other two cultures.

Also adopting a cultural approach in a case study, Nævestad (2008) provides an explanation of the common rationality of the erring worker. He addresses that (a) the company in question had implemented a behaviour-based safety program, whose logic had been communicated intensively by management, and permeated the whole company’s ‘safety ideology’; (b) the operators’ emphasis on their own importance could create a positive self-image, in the sense that when everything is working fine it is thanks to their ability and expertise; (c) the operators speak about causes that they have a mandate to control, their own behaviours, whereas the planning of work and material solutions require assessments and decisions beyond their jurisdiction. Indeed, these seem to be plausible explanations. Overall in these studies, parties using different definitions of risk and safety management are seen to be struggling against each other, albeit under structurally different conditions and degrees of influence.

So far, I have addressed research that approaches and analyses the statements and constructions of risk mainly by synthesizing them into fairly broad ‘discourses’ or ‘cultures’. This next stream of research looks at how risk and safety are constructed in talk through interaction, an area which focuses on the communicative management of risk in health care
settings (e.g. Linell et al., 2002; Sarangi et al., 2003; Sarangi and Candlin, 2003) and also in aviation (e.g. Neve, 2001).

The research is, with the conversation analytic expertise that these researchers possess, very advanced when it comes to identifying and analysing the discursive strategies that practitioners use when they seek to solve the everyday problems involved in communicating about risk. For example, Sarangi et al. (2003) show different relativizing discourse strategies used in the interaction between caregiver and patient in the shaping of risk information. They study the practice-oriented problem of both giving reasonable information based on professionally calculated risks, and at the same time not causing unnecessary worry. Linell et al. (2002) show how health care professionals adjust their approach to risk depending on the situation, and fashion the risk discourse to be very implicit and hidden in some situations, and quite explicit, including unwanted scenarios, in others. They hypothesize that certain contextual factors determine whether the risk discourse becomes explicit and clear in terms of scenarios and agents, such as if there is 'plenty of time available' for the consultation, and if the patient is ‘known to be at high risk’ (Linell et al., 2002:214).

These explanations suggest no relation, however, between institutional practices and human, historical, ethical, and political norms and ideas. Sarangi and Candlin (2003) address the lack of a more explanatory ambition as a weakness of discourse analytic research on risk and safety. However, this purported weakness of discourse analysis reflects the absence of cross citation between the research tradition that analyses discursive practices at the micro level and the tradition that analyses discourses with an interest in issues of power, because the latter has always had an explanatory ambition. A few studies, though, have provided both general and specific observations, and both a ‘close’ and ‘long-range’ analysis of discourse. In their study of how the concept of the human factor is used by accident investigators, Korolija and Lundberg (2010) describe the discursive choices in detail as well as locate and analyse the concept of the human factor historically. Moreover, discourse analyst Rick Iedema might have gone furthest in terms of carrying out thorough discourse analysis that includes locating risk and safety discourses in a changing, social and political context (see Iedema et al., 2006a).

Summary and conclusions. A clear result of the previous research is that although some practitioners construct the material conditions as important in terms of risk and safety (Richter and Koch, 2004) there are many who attribute blame to front-line workers (e.g. MacEachen, 2000) as does the group itself (Zoller, 2003). To explain this, these studies highlight a hierarchically differentiated right to initiate preventive measures that are substan-
tive, which appears to generate a behavioural focus and self blame (e.g. Gray, 2006; Nævestad, 2008, Zoller, 2003). Overall, studies that focus on the political rationalities or discourses mainly use Foucault to conceptualize and interpret empirical data, while the absence of a theory on power in the cultural-oriented research can be seen as a weakness. It becomes, so to speak, hard to understand why and under what conditions the cultures are emerging, although Nævestad (2008) does propose an interesting explanation. The linguistically informed field of discourse analysis highlights another dimension, as it shows how actors tend to strategically use various discourse devices, such as relativizing risk when needed, or distancing strategies when the topic of conversation and the situation are delicate.

Now I would like to raise a few critical points, beginning with the studies dealing with discourses. By focussing on discourses as systems of representation, but generally avoiding the more linguistically informed analysis of discursive practices, this research maintains a traditional boundary between two main discourse analytical traditions. Such a division has repeatedly been deemed unnecessary since both the ideational and interactional levels can be addressed, and because they are mutually dependent (Fairclough, 1989; Wetherell, 1998).

One consequence of this division may be that little attention is paid to variation and dilemmas in discourse. For example, MacEachen (2000) argues that in a gradual shift from welfarist to neoliberal governance of occupational risk and safety, there appear ‘pockets of ambiguity’ in discourse. However, no interview statement quoted is analysed as having dilemmatic qualities. In the analysis, all managers construct employees’ responsibility for RSI problems in much the same way. The same can be said of studies that synthesize human speech and behaviour into different safety cultures, in which a professional group is most often seen as homogeneous. This tendency manifests a kind of classical, scientific penchant for patterns and similarities, rather than contradictions, gaps, ruptures, distractions, and dilemmas (cf. Foucault, 1972).

This problem does not exist to the same extent in the discourse analytical research from hospital environments, because it actually is sensitive to what happens in the moment-to-moment interaction. It could be argued that a more explanatory approach could provide further understanding of what is studied. However, this is not a new observation with regard to the ethnomethodological strand of discourse analysis (e.g. see the debate between Schegloff, 1998 and Wetherell, 1998).

A final comment concerns cultural research. One minor problem is that some categories used by Gephart et al. (1990) and Richter and Koch (2004) do not seem entirely convincing, especially when it comes to work-
ers’ cultures. In Gephart’s case, the way he categorizes workers’ culture as ‘sectarian’ does not say much about the contents of the culture, and it may come across to readers as somewhat pejorative. Richter and Koch’s (2004) category of ‘production’ is pointing out a section of a company, but says little about its intended content, which can be compared with the culture they refer to as ‘welfare’ which is given an ideational dimension. There seems to be some potential for development of the knowledge in this regard.

**Technologies of interaction**

This section addresses *technologies of interaction* (Iedema, 2003), which may appear an odd heading for the research on incident reporting systems and meetings that will be discussed. However, what I mean by technologies is that they are used to do things, to direct, control, and organize human action, and that they are underpinned by particular objectives and beliefs about human beings (cf. Rose, 1998:26). This appears to be an appropriate basis for understanding meetings and information systems that are introduced and used for the sake of human health and safety improvement.

Starting with the former, incident reporting is a technology for interaction that has come to be regarded as an important part of organizations’ risk and safety management. This communication technology has spread from aviation and the nuclear power industry to the chemical industry and, in the last 20 years, to health care (Iedema et al., 2006a). It is also the object of fairly extensive research. The largest amount of research has been conducted on barriers to employees’ use, and on system optimization, and I would say rather few have used theories outside a functionalist paradigm.

Two definitions of incident reporting, which have been made in research on safety in healthcare institutions, are telling with regard to the discursive construction of risk and safety. In a relatively early study in the health sector, Puetz (1988:245) defines this phenomenon as follows: ‘Incident reports document occurrences that are not consistent with routine hospital procedures or routine patient care.’ An entirely different definition, made in health-services research, includes a constructivist, discursive understanding of incident reporting:

> Essentially a device that asks clinicians to narrativize about how the clinical work unfolds, CIR [critical incident reporting] is at once an organizational change device and a form of narrative representation through which people
express their ‘desire for a kind of order and fullness’. (Iedema et al., 2006a: 135)

These two definitions of incident reporting lay bare quite interesting conflicts between managerial control and professional autonomy. The second definition indeed offers a critical perspective on the first. However, most researchers take the position that their research ought to help to facilitate the development and spread of incident reporting as much as possible. Macrae (2008) examines how organizational management could change and control the safety culture of an enterprise through incident reporting. Johnson (2002) examines how conventional software for incident reporting can be improved through the use of additional software. Rooksby and Gerry (2004) investigate what form of incident reporting that allows for the richest information and storytelling. Several researchers identify barriers to incident reporting, such as a ‘blaming culture’. The underlying presupposition for a focus on barriers is that employees do not, but should, report as many incidents as possible (cf. Travaglia et al. 2009; van der Schaaf and Kanse, 2004; Weiner et al., 2008).

Although these studies are valuable in their context and constitute the ‘orthodox’ research orientation in this area, I will build on research that has taken a different direction. Some researchers have examined incident reporting as a technology that prompts power struggles and negotiation of professional identity (Collinson, 1999; Iedema et al., 2006a; Sanne, 2008; Waring, 2009). For instance, Waring (2009) manages to examine three stages of incident narratives, beginning at the stage where colleagues informally discuss an incident, followed by the narrative of an incident report, and finally to the stage where a manager formulates measures. In this process, the initial, complex and rich discussions are narratively reconstructed into pre-defined categories that can be quantified. As Waring points out, an impoverishment of experience and knowledge takes place from the first stage to the last. In this crude re-construction of risk, he explains that ‘knowledge is constructed in ways that blends the local experiences of clinicians with the assumptions and priorities of management’ (p. 1729). A kind of shift in power occurs, because the medical staff’s ‘resources’ of knowledge and experience are made visible to managers, making them amendable to control, exploitation, and training, etc. With this loss of the exclusivity of their knowledge and experience, which clinicians enjoyed in the past, they risk losing professional discretion. Such a change ‘transfers authority over knowledge from clinicians to managers and facilitates managerial authority over clinical practice’ (p. 1730). Similarly, Col-
linson (1999) addressed, some ten years earlier, the issue of surveillance, and argued that performance-monitoring produces various performances. For example, employees on an oil rig could over-report in order to impress the bosses and get rewards, or avoid reporting to protect themselves from reprisals. Incident reporting came to be the locus of a complex play of power and resistance, of managerial control and professional autonomy, of performance monitoring and impression management. One could therefore say that this research opens up new ground for a tradition in the social sciences that has studied written forms and computer monitoring as technologies of human control and power (e.g. see Attewell, 1987; Ball and Wilson, 2000; Deetz, 1992:280–285, Fairclough, 1989:180–184; Sless, 1988).

Moving on to the topic of meetings, these interactional events may be conducted in a variety of more or less formalized ways. Meetings are addressed here because, as ‘technologies’, they are used to do things, to direct and control human action, to implement ideas and projects, all justified on the basis of particular presumptions and rationalities. It is mainly studies within a framework of industrial relations that focus on issues related to workplace safety while also maintaining an interest in employee meetings. They differ methodologically and theoretically from discourse research, but are still relevant as they address the communicative conditions under which risk and safety are formed, or at least the conditions that employees report. Principally, these studies take a normative approach to employee participation, thus helping to make safety meetings a more democratic technology. The studies measure the degree of worker participation and influence at various sites and analyse the conditions for the most effective participation of safety representatives (cf. Dundon, 2003; Dundon et al., 2006; Walters et al., 2005; Walters and Nichols, 2006).

A first conclusion concerns that many workers in workplaces in Europe do not define themselves as particularly involved in occupational health and safety work. They are often excluded at least from the formal communicative shaping of risk and safety management. In survey results representative of workplaces in 10 European countries, only 14 percent reported a high degree of employee participation, and employee participation was less common in workplaces with blue-collar occupations (Dundon, 2003; Eurofound, 2009). A team of Irish academics concluded in a series of case studies that only 2 of 32 organizations had strong forums for employee representation (Dundon et al., 2006). Another large European survey has shown that one determinant of participation and employer-employee dialogue is occupational status (Eurofound, 2009:4). A second conclusion concerns a positive correlation between the arrangement of employee par-
ticipation and consultation and positive health effects, evidencing that companies that lack such an infrastructure for cooperation and negotiation face more and worse risks and have more accidents (Jordan et al., 2003; Walters and Nichols, 2006; Walters et al., 2005). Worker participation at meetings appears especially advantageous when they are supported by informal communication (Dundon et al., 2006). Walters et al. (2005) comment on the safety committee activities in a factory as follows:

it functioned as a forum for a discussion of a wide range of issues including many every day ones. Many of these were the sort of issues that /.../ would have been better dealt with through other procedures, leaving the committee to play a more strategic role. (Walters et al., 2005:76)

Walters et al. (2005) stress that the safety committee should have a ‘strategic’ role. To address common weaknesses, they also recommend that the safety representatives be allocated sufficient time for their task; that management be committed to occupational health and safety issues (OHS); that the safety representatives have planned contacts with those they represent; and that OHS training courses be held in conjunction with other safety representatives in the region. This research gives, however, little information about what is going on communicatively in, for example, safety committee meetings.

Moving on to research that does perform such analyses of meetings, Gephart (1992) examines an accident inquiry that involves state investigators, management representatives and workers and their relatives. Drawing on Jürgen Habermas’s writings on legitimation crisis, Gephart argues that the system with industrial production for profit in itself produces disorder in the form of accidents and human loss, and that a government inquiry serves to restore the appearance that the system actually is in order and that key institutions are trust-worthy. The state inquiry thus tries to re-establish its legitimacy as an institution that meets the requirements of both economic production and human well-being. To do that, it uses a top-down logic that says that the cause of the accident is not of systemic nature, but that it consists of workers and supervisors not following the prescribed ‘steps and procedures’ in production. The workers, who use a situational logic, argue in the meeting that the work must be continuously adapted as the rules of the manuals are not applicable in every situation. However, investigators de-legitimize the situational logic, using speech acts that interrupt and makes the situational logic seem less comprehensible and coherent than would otherwise be the case. Gephart also uses Habermas’s
criteria of the ‘ideal speech situation’ as a yardstick, and notes that all of those criteria are breached. The inquiry does not seek to fulfil, or enable others to fulfil, symmetrical opportunity to speak, comprehensibility, sincerity, factual accuracy, etc.

In another study, Iedema (2003) analyses four meetings in health care settings, including themes such as the rebuilding of a hospital, which also touch on safety issues. Like Gephart, he concludes that none of the meetings are geared towards maintaining a moral-ethical interactional order in line with Habermas’s speech ideals. Instead, they are used to make work more transparent and workers visible, to ensure that they conceive of work and self in accordance with new meta-discourses guiding the organization. Meetings are thus used to make workers become, and verify that they actually are, owners of new practices, information and thinking. Iedema also compares two meetings, one that was successful in creating (at least seemingly) shared views and action orientations, and one that was not. To have a meeting ‘work’ in accordance with a strategic purpose was very much about balancing and neutralizing one’s self presentation and the wills and voices of the participants. The successful senior planner who chaired the meeting adopted self-positionings ranging from (acceptably) authoritarian to responsive and listening, and could change from the authoritarian to non-authoritarian positioning in a very subtle way. He did not provide too much information that could stir up controversy, he reduced negotiability by not naming the present parties – talking instead of ‘stakeholders’ – and he obfuscated conflict by ‘defusing and neutralizing contradicting and incommensurable views’ (Iedema, 2003:136). Iedema relates these interactions to the increased demands at work for cross-professional communication. In what he calls the textualization of work it is becoming increasingly important to succeed in performative, group communication. In other studies, Iedema et al. (2006b, 2006c) also confirm the problem complexes addressed by Gephart (1992) as they similarly perceive practitioners’ sense of a disjunction between formal rules and the situational and complex social reality of working.

Summary and conclusion. There is research that indicates that incident reporting helps organizations to prevent accidents. Similarly, there is already much research on why workers sometimes do not want to report incidents, for instance, due to a ‘blaming culture’. Few studies, however, have investigated incident reporting from a more critical-interpretive approach. Perhaps it is the objective of improving human health and safety, and sometimes actually proven beneficial effects, that have prevented incident reporting from being studied more in terms of control, or as involving a play of power and resistance. The lack of studies involving managers
may be an indication that workers’ responsibility in this area is taken for
granted, and that incident reporting in itself is considered a matter of
course.

However, a few studies do bring focal attention to critical issues. For
example, Waring (2009) makes clear that workers who report incidents do
communicate some knowledge and experience which become visible to
managers in a new way, thus making these ‘data’ and their originators
objects of greater managerial authority and control. At the same time, Ie-
dema et al. (2006a) emphasize that incident reporting is an instrument for
reflection and change, and by using it employees may express aspirations
for change. As such, they imagine that it can work in opposition to a bu-
reaucratic, hierarchical system.

Moving on to the topic of meetings, in research on risk and safety at
work this topic has mostly been studied using quantitative studies that
provide knowledge of how employees are represented, whether procedures
for communication and dialogue are implemented, how the workers them-
selves evaluate their involvement, and so on. As one of the few people who
have studied the meetings, Gephart (1992) presents a study about how risk
and safety are formed in discourse. Many valuable observations are made
with respect to how those in privileged positions use discursive power
strategies during meetings, and work, consciously or not, to preserve a
system that systematically undervalues workers’ and lower managers’ defi-
nitions of reality. The same applies to Iedema and colleagues’ different
meeting studies (Iedema, 2003; Iedema et al., 2006b, 2006c). Very much
like how Waring described how incident reporting works as a technology,
Iedema (2003) argues that meetings make workers visible to managers and
that they are mainly used to monitor and verify that employees do what
they should do under new organizational meta-narratives. With this overall
observation, he mixes detailed analysis of discursive strategies and devices
in a convincing manner.

If there is anything to object to – and this mainly concerns Gephart’s
study – it is the approach that rational and intelligible argumentation
would somehow liberate people from relations of power. Particularly, one
can argue that the ideal communication emphasized (factual, composed,
logical, assessable speech) may privilege dominant interests, rather than
counterbalance them, because some groups will be more educated in per-
forming such ‘enlightened’ speech and, in addition, have more opportuni-
ties to adapt to this type of speech culture as they more frequently enter
into similar formal interactions and meetings (Young, 2003).
PURPOSE AND RESEARCH QUESTIONS

As the research review has shown, this thesis positions itself in an interdisciplinary field which demonstrates that occupational risk, and its proposed remedies in the form of safety measures, is subject to the ordering and negotiating powers of human communication. I mainly see an opportunity to try to bridge the more detailed ‘close-range’ discourse analytical research that has been made in healthcare environments, with the research that identifies and examines ‘long-range’ webs of meanings, or discourse, among various employees. This involves a willingness to apply novel, or at least scarcely applied, theoretical frameworks to new empirical data, in order to offer new insights on how to understand various social, communicative interactions within, and in relation to, occupational risk and safety management.

Based on a constructivist and discourse analytical approach, certain risks become objects of control and safety measures. I choose the word ‘become’, because risks are not understood here as if existing objectively prior to human sense-making (Power, 2007). ‘Risk’, rather, ‘is a way of representing events in a certain form so they might be made governable in particular ways, with particular techniques and for particular goals’ (Dean, 2010:196).

The closely related concept of safety is commonly identified as the condition in which one is protected from risk, thus being in a state of freedom from the events or particular characteristics which are represented as physically, mentally, socially, or economically harmful. This ordinary dictionary definition gives the impression of a state attained once and for all, a level of completeness and finality. It is not very fruitful in a constructivist or sociological research context. I would rather see safety, then, as interactions and practices in the making; ‘a collective construction process, a “doing”, which involves people, technologies, and textual and symbolic forms assembled within a system of social relations’ (Gherardi and Nicolini, 2002:192).

Based on this background and these conceptual definitions, the aim of the thesis is to study how risk and safety are constructed, reproduced and negotiated by communicative means in safety-critical workplaces. The organizations are broadly located within the chemical industry, and constitute environments where safety work is important, not only for the employees, but for the plants and their output, as well as for the industry and
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society as a whole. More specifically, three research questions are formulated to address the overall aim.

- How do various employees manage issues of risk responsibility and safety protection using discursive conventions and strategies, how are these linguistic devices used, and what do they do?
- What long-range discourses operate to make possible certain constructions of risk and safety and not others?
- Which identity positions are constructed and negotiated by the organizations’ members in discourse, and what are their implications in terms of power and resistance?

The thesis is structured as four separate but inter-related studies, which together make it possible to examine the above research questions across different relevant practices and themes.

The first study applies a situational focus (Alvesson and Deetz, 2000:201) to one of the organizations and examines a safety committee meeting. The study focuses on the introduction of a new and widely-used behavioural safety program, and examines the discourses and strategies that are mobilized in the specific meeting context. It appears particularly fitting to address a safety committee meeting, in that the employer is obliged by law to consult workers or their representatives in, for instance, the EU (Council Directive 89/391/EC), and such consultations and dialogues are fraught with many expectations (cf. Eurofound, 2009). Safety committees, specifically, are also a legislated requirement in many countries, such as in Sweden. Likewise, the safety-management program is a global phenomenon. The leading consulting firm has helped with implementation and training at 2,300 sites in more than 50 countries (BST Solutions, 2010). In April 2010, a search on the program on Google yields half a million hits.

A second study applies a thematic focus to incident reporting, and examines the discourses that are reflected and produced in various employee interview statements about this technology of interaction. It also analyses the identity positions that are constructed in the talk and what they mean in terms of responsibility, power, and resistance in the organizations. This is also a technology, and a collective practice, which is very typical of risk and safety work in larger, safety-critical organizations today (Power, 2007). Management standards (OHSAS 18001, ISPS, ISO 14001, etc.) and regulations (e.g. Council Directive 96/82/EC, also known as Seveso II) require that information about accidents, near-misses, and deviations are processed ‘systematically’.

The third study examines how professionals in the three selected organizations construct causes of incidents and near misses by way of naming, reproducing, and negotiating particular risks and forms of protection. At the centre are dilemmas that emerge in the talk, both regarding strategies that focus on the development of the physical environment of the workplace and in civic and psychological strategies centring on employee behaviour. This focus on dilemmas is partly due to there being almost no previous empirical research in the field that addresses the theme.

Finally, the fourth study argues for a discourse analytic approach to issues relating to how risk and safety are managed by staff in workplaces where one would expect claims and questions concerning risks to be under negotiation. It focuses specifically on constructions of ‘us’ and ‘them’, a theme that has been addressed in a variety of studies, although using other theoretical approaches than that applied here. More specifically, a case study based on interviews is used to illustrate how we can understand this phenomenon with a discourse analytic approach inspired by Linell’s (1998) theory of dialogue. Thus, two of the studies are comprehensive in that they cover and analyse empirical material from all the three companies studied. The other two of the studies are so-called ‘single-case’ studies (Yin, 1984) using a situational and a thematic focus on one particular organization each.
The third study examines how professionals in the three selected organizations construct causes of incidents and near misses by way of naming, reproducing, and negotiating particular risks and forms of protection. At the centre are dilemmas that emerge in the talk, both regarding strategies that focus on the development of the physical environment of the workplace and in civic and psychological strategies centring on employee behaviour. This focus on dilemmas is partly due to there being almost no previous empirical research in the field that addresses the theme.

Finally, the fourth study argues for a discourse analytic approach to issues relating to how risk and safety are managed by staff in workplaces where one would expect claims and questions concerning risks to be under negotiation. It focuses specifically on constructions of ‘us’ and ‘them’, a theme that has been addressed in a variety of studies, although using other theoretical approaches than that applied here. More specifically, a case study based on interviews is used to illustrate how we can understand this phenomenon with a discourse analytical approach inspired by Linell’s (1998) theory of dialogue. Thus, two of the studies are comprehensive in that they cover and analyse empirical material from all the three companies studied. The other two of the studies are so-called ‘single-case’ studies (Yin, 1984) using a situational and a thematic focus on one particular organization each.
As mentioned earlier, this project uses a discourse analytical approach to organizations and raises questions concerning language and power. Thus, from this theoretical position, risk and safety do not compose a once and for all defined area, but their meaning is instead reproduced, negotiated, and changed by communicative means in society and in organizations. Risk and safety can, in discourse theoretical terms, be said to be floating signifiers (Laclau and Mouffe, 2001) to be negotiated, sustained and changed through discourse, i.e. meaningful practices and ways of seeing that are embedded in language.

In the following sections on the thesis’s theoretical framework, I will define and elaborate in particular on the concepts of power and governmentality, and discourse and identity.

Power and governmentality

The concept of power is contested and difficult to grasp (Lukes, 2005; Dyrberg, 1997). Yet it has been considered important to employ to a much greater extent in the risk and safety area (Perrow, 1999; Gephart, 2004). The purpose, at this point, is therefore to clarify the understanding of power that is utilized in the present study, but with an emphasis on the closely related concept of governmentality.

Foucault is generally known for having rejected many previously taken-for-granted presuppositions. Authorities, rights, structures, etcetera, are considered terminal points and formations in ongoing power struggles, rather than given points of departure for analyses of power. The taken-for-grantedness of these phenomena is, according to Foucault, a retroactive effect of power, and should be seen as such. Foucault’s ‘power analytics’ is therefore marked by an attempt to bridge over an inaccurate differentiation between structure and agency, and an attempt to counterbalance any overemphasis on either level of explanation. There is, consequently, an intention to come to terms with both stability and contingency in human organizing and history (see Foucault, 1990:81–102, 1980:88–92). Foucault used several related definitions of power during his career, one of which reads as follows:
THEORETICAL FRAMEWORK

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what defines a relationship of power is that it is a mode of action that does not act directly and immediately on others. Instead it acts upon their actions: an action upon an action, on possible or actual future or present actions. (Foucault, 2000b:340)

Governmentality, then, is a form of power that particularly concerns the emerging relationship between the state and the national population, and how the population becomes an object of state government. However, over a long period of time and with changes in government tactics, the government of population disseminates throughout society (Foucault, 2008). The theory of governmentally can be said to be Foucault’s last contribution to his overall project on power, a theory which earlier, in the early and mid 1970s, was more focused on disciplinary forms of power and various institutional technologies of power, but not necessarily on the state or the population. Since the academic community has not had so much to read about governmentality written by Foucault himself, one can now expect something of a revival in the field, in that two whole series of lectures on governmentality, which he held at the Collège de France between 1977 and 1979, have been published for the first time in English in 2007 and 2008.

Before continuing with questions about changes in governmentality, there are a couple of different understandings that should first be clarified concerning the concept. In a first conceptualization of governmentality, one splits the word and sees it as comprising various possible ‘mentalities of government’. In responding to a problem, there are thus different and more or less systematized ways of calculating, rationalizing, and drawing on particular knowledge and sources of authority (Dean, 2010:24). By different means, the mentalities of government ‘act upon the actions of others’ to fulfil certain ambitions and objectives (Foucault, 2000c). It does not seem to matter here what the particular form of governing consists of; if there is a fairly well thought out and coherent strategy it qualifies as one of several mentalities of government.

In a second definition of governmentality, to which I will devote more attention, it is seen as a specific type of exercise of power that has had a major impact over a certain period, particularly from the latter half of the 1900s until today. Governmentality is here associated with neoliberal governance. This form of power can coexist with elements of sovereign and disciplinary power, but of course is the opposite of welfarist governance (Foucault 2000c:219; Dean, 2010:28). It rejects the collective and protective strategies, and direct rule of ‘big government’, and looks instead to invent ways to educate and ‘coach’ people so that they take sufficient care of themselves. Neoliberal governmentality operates by making people
aware of themselves vis-à-vis preferred norms and ends (Rose, 1999a). This
governmentality has had an impact, partly as a consequence of the criti-
cism aimed at the welfare state’s comprehensive and direct exercise of au-
thority, which is deemed inefficient and too burdensome for public financ-
es.

For Foucault (2008), the neoliberal governmentality emerges with new
economic savoir or knowledge, and the spread of an economic matrix into
new spheres not previously thought of in economic terms. In particular, it
is labour that begins to be analysed in terms of economic theory. In conse-
quence, this implies a new approach to the groups of labour, and indeed,
to the population in general.

Particularly among neoliberal economists affiliated with the Chicago
school, such as Gary Becker and Theodore Schultz, Foucault (2008) finds
an interesting critique of the earlier economic analysis of the category of
labour. According to these critics, the economic analyses of the likes of
Adam Smith, Karl Marx, and John Keynes raise issues of land and produc-
tive resources, capital, and labour, and all these categories are analysed
with care and detail except for the last one: labour. In classical economic
analysis, the variables the capitalist has to consider in terms of the labour
force are the number of workers employed and the time they devote to
work. There is thus a gross reductionism of what work is, as no qualitative
variables are taken into account. F.W. Taylor’s (1998) contribution was
really no exception, as it was about the selection of manpower, time stud-
ies, and correction based on one best way to work and tireless dedication
to this single best way.

Moreover, in classical economics, the workforce is seen as a ‘productive
factor’, but its motives seem entirely instrumental and driven by outside
factors. The workers sell ‘labour power’, but the analysis does not say
what it is, really, they sell in qualitative and subjective terms (Foucault,
2008:221). The productive factor, or labour power for that matter, remain
very abstract terms.

So, on the basis of their criticisms of classical economists, during the
postwar period from the 1950s and onwards, neoliberal economists of the
Chicago School re-introduce the category of labour and make it the object
of further economic analysis. Contrary to Marx, for these theorists capital-
ism itself is not to blame for the reductionism of labour, the alienation of
the worker, because in these economists’ view, capitalism is a construction
that is ‘open’ to their thinking and to various prospects of rearranging it.
The problem for them is a lack of analysis, which, if done better, could
affect the productive relations and arrangements in a somewhat different
direction.
As Foucault describes it, economists are starting to see work more from the perspective of the worker, for whom work is a skill, a competence, and continuous livelihood (rather than ‘a wage’ earned when labour is ‘sold’). They also perceive that this knowledge and skill cannot be distinguished from the individual. Here, one should not underestimate the impact of psychology on these economists and management theorists’ view of the worker (cf. Rose, 1999a). So, the worker, who in classical economics has more or less been a passive object of the mechanisms of an exchange system, is redefined as an active, knowing subject. Economists thus steer their analysis toward questions about how this new human capital is best developed:

What does it mean to form human capital, and so to form these kinds of abilities-machines which will produce income, which will be remunerated by income? It means of course, making what are called educational investments. (Foucault, 2008:229)

The economists begin to think in terms of investing in human capital with employee education, involvement, and increased freedom and responsibility. Overall, it becomes important to involve people in the community in various training courses and skill building. Not only in school, but on the job there must be opportunities to educate oneself, in a life-long learning so to speak.

Moreover, as in classical economics, the worker is seen as an economic man, homo econconomicus, though not as one who passively participates in an exchange system. Now the labourer is ‘an entrepreneur of himself’, that is, ‘being for himself his own capital, being for himself his own producer, being for himself the source of [his] earnings’ (Foucault, 2008:226). The labourer – who now is seen as always having an aptitude for improvement – ideally works constantly to improve him or herself.

Not surprisingly, health emerges as increasingly crucial in the economic theory of human capital, since good health will co-determine performance and how long the employee can stay productive (Foucault, 2008). But according to the general principle of neoliberal governance, the worker is also in this respect his or her own entrepreneur. Health and risk management according to this logic becomes a moral obligation for all, a ‘duty to the self’. Illness and vulnerability to risk are conceived of as a kind of incompetence to be dealt with through educational investment, training, and self-improvement (O’Malley, 1996).
One significant departure from classical liberalism is that this neoliberal governance does not operate in regulating the market, as if state and market were separate and opposing spheres, but the market’s economic principles and matrix instead become the very foundation of the affairs of the neoliberal state. State laws are not by definition negative, but they are conceived as capable of enabling and underpinning an enterprising society. Another significant way it differs from classical liberalism is that it does not place itself in opposition to the sovereign exercise of power in order to liberate mankind as if there was a natural state of freedom, and as if we had an autonomous capacity to be free and act out of self interest. Basic rights, such as voting, freedom of trade, freedom of expression, and the freedom of the press, are not sufficient, but new forms of enabling control and appraisal are implemented to ‘produce’ a people who become increasingly self-organizing and self-actualizing in the pursuit of goals shared with the state, such as managing risks, health, economic growth, etcetera (Foucault, 2008).

It is against this historical background that I want to examine and understand how risk and safety are constructed by communicative means, now that we find ourselves in an age when issues of occupational risk and safety, to a much larger extent than previously, are (supposed to be) driven by employers and workers together, and indeed through management-controlled systems and programs. In this situation, the labour movement and its demands, which pushed the development of occupational health and safety in an earlier era lasting until the 1970s, is said to have been neutralized and weakened as the new economic approach to human capital makes the claim that its issues are a way to promote workers’ welfare and health (Boltanski and Chiapello, 2005).

At the same time, it is a bit paradoxical that while many theorists, who base their critique of work, risk, and safety on the theory of governmentality, are very concerned with the responsibilization of the labour force, large studies in Europe show that workers do not feel involved in issues related to occupational health and safety, and communications arrangements created in support of the management of occupational risk and safety – that are mandatory – are virtually absent from some workplaces, or are inadequate (Walters and Nichols, 2006). What further complicates the picture is that there is no claim that welfarism in the Western world is gone, but, instead it remains in a ‘tattered state’ inscribed in laws and practices that serve to protect and insure people collectively (MacEachen, 2000).
Discourse and identity

This thesis uses discourse analytical theory, in line with its aim to analyse how risk and safety are constructed, sustained, and negotiated in safety-critical organizations. Although work-related injuries have been around as long as people have worked, it is a phenomenon that can be represented, understood, and negotiated in a variety of ways, as not least is shown in the various disciplines concerned with risk and safety. As I showed in the previous section, a neoliberal discourse on risk will form other objects for a management process to act upon, which can be contrasted with the arrangements and effects that a welfarist discourse would produce. It is an area that affects very many actors within and outside organizations, which means that agreement, consent, as well as tension and disagreement may arise. I hereby follow Power’s (2007:8) view that risks are not phenomena provided in advance of human sense-making, but are constructed and negotiated in discourse:

we are concerned with how specific uncertainties become objects, risk objects, for a management process and this demands an analysis of the manner in which they are represented and constructed within organizational and managerial fields. (Power, 2007:8)

In negotiating and forming these risk objects and safety measures, people use established ways to understand, manage, and categorize them. Traditions of knowledge play a large role in discerning the ‘truth’, and they become entwined in relations of power (Foucault, 1980:93). This negotiation and formation of risk and safety, one could imagine, takes place in a variety of contexts in organizations: in the conversation between electricians in a substation; or in radio talk between an operator in a control room and a maintenance worker outside; or, alternatively, in a cross-professional dialogue in a meeting room. Each context implies certain interactional conditions and rules. Moreover, a person may conduct an inner dialogue about risk and safety, which is linguistic as well, and by which the person engages in self supervision. In any case, these people draw upon discourses to explain, justify, or question what the risk is or what an appropriate safety measure should look like.

Discourse, as it is understood here, is ‘an ensemble of ideas, concepts and categories through which meaning is given to phenomena, and which is produced and reproduced through an identifiable set of practices’ (Hajer 2005:303). In using this definition of discourse, I am interested in meaning as fairly ‘long-range’ (Alvesson and Kärreman, 2000) webs of ideas, cate-
gories, and practices. According to this definition, practically anything can be discursive as long as it is made meaningful. For example, if you see two men in the city centre, each one holding a hammer in his hand, but one is wearing a suit while the other is wearing overalls and a tool belt, they will probably evoke quite different thoughts and reactions, despite the tool being the same: just a simple object of steel and plastic. Continuity or breaks in the chain of signifiers may give the hammer two completely different meanings. The hammer becomes an element in discourses that are drawn upon, maybe of criminality and violence, perhaps insanity, or, alternatively, of carpentry, repairs, honest work, or pricey contractors. Thus, this is a fairly expansive discourse concept, and one that can be recognized from Laclau and Mouffe (2001) and other discourse theorists.

The thesis also uses the concept of discursive practices, and with that I want to emphasize in particular how people use language to construct objects, to solve various dilemmas, make a claim, or defend themselves. Discursive practices have been defined as the ‘performative and practical aspects of speaking, writing and communicating’ (Howarth, 2000:82). While the concept implies a focus on ‘close-range’ communication, it is still closely intertwined with the discourses because, as I perceive it, moment-to-moment communication builds upon, reproduces, complicates, and challenges our more ‘long-range’ webs of meaning. With these two concepts of discourse, I contend that both patterns and variation can be identified and analysed, as has been emphasized as important in the theory of discourse (Foucault, 1972:149; Potter and Wetherell, 1987). The combined short- and long-range focus makes it possible to see people as both passive and active in relation to the discourses. They are not entirely determined by a particular discourse, passive ‘dupes’ so to speak, but instead are active in the sense that they exercise some choice, although they are never independent in relation to discourse. As Foucault describes it:

There are not on the one hand inert discourses, which are already more than half dead, and on the other hand an all-powerful subject which manipulates them, overturns them, renews them. (Foucault, 1991:58)

Furthermore, discourses and discourse practices are productive; they construct particular versions of reality that include some elements and exclude others, and they construct risk objects, establish causality in a span of time, and constitute safety solutions. In line with the theory and the approach that I have outlined, discourse is also constitutive of identity.
Discourses and discourse practices shape not just objects and organizational priorities, but also identity. Identity is therefore not studied as hidden deep within man, as in traditional psychology. Instead, identity is seen as the positions that people are placed in, and place themselves in, according to the discourses and discursive practices with which they are involved. In line with Foucault, discourses establish a system of differentiations, and therefore people’s positions are in some respects similar, but in others different. Some have the right to act in a certain way and others not, some have privileges that others do not have, one person is an expert while another is considered less skilled, some may according to the rules lead the meeting while others are, at least initially, meant to be listeners. Thus, discourse establishes identity as ‘a location for persons within the structure of rights’ (Davies and Harré, 2001:262).

The concept of identity also implies that there is a subject capable of identification. Identification, then, may yield a sense of meaning, enjoyment, and fullness or, if not, identification may be refused. This meaning and fullness is precarious, however, because no single identity can encompass or capture what the person is, universally speaking. Moreover, the identity becomes something not only through what it encompasses but also what it excludes, i.e. in the face of other possibilities. Both these circumstances make identity inconclusive, because the various possibilities that an identity position distinguishes itself from, may eventually thrust themselves upon its defining boundaries. This also implies that any changes in the discursive field, in the systems of differentiation, involve new identification processes. And if one identity changes, others change too, since they are relationally connected and defined (Laclau, 1996; see also Dyrberg, 1997). On this basis one can understand Foucault’s assertion that power never fully and completely dominates without there being some resistance and possibilities of change. If this were not the case, identities would be solidly cast, no competing discourses would generate the possibility of organizing other identity positions, and there would be no subject capable of identifying with such discourses, and with a heterogeneous ‘outside’ vis-à-vis the present condition. Thus, even within organizations, although institutional identities are considered to be quite rigid (Linell, 1998), one can expect attempts at closure, resistance and flux.

METHODOLOGY

In order to study how risk and safety are constructed, reproduced, and negotiated by communicative means in safety-critical workplaces, a number of cases were selected for empirical study. In this section, I will also address and describe the interview method used, the data that has been analysed, and the discourse analytical procedure. Finally, questions are raised about the quality of the research and generalization.

Case selection

Before each case was selected, I was privileged to be able to gather a reference group including professionals with many decades of experience of the chemical and explosives industry, both from the business side and from the state inspection authority’s side. Through these people I could get some information on various possible case organizations and also ease the process of accessing some of the factories.

Early in the research project it became clear that I would conduct several case studies, not just one. One reason that I choose a few different cases was to create some variation and dynamism as regards the organizational, situational conditions, not least in terms of risk and safety management. If one case would turn out very unusual, an ‘extreme case’ (Flyvbjerg, 2001) then another case could prove interesting because it would be more easily recognizable, and hopefully the overall collection of cases would attract more researchers and people from the industry who can identify with some of the problems and issues that arise and which the study builds on. Another motive is, obviously, that some comparisons can be made and discussed.

A key reason why the chemical industry was selected was that, during my first two years as a postgraduate student, the research was funded by a professional body, KCEM, whose representatives of course wanted to ensure that knowledge could be drawn from their own field. This gave some direction to the entire project. The chemical industry also appeared interesting and research-worthy because they have a very safety-critical production, and also a long tradition of risk and safety work. Of course, the 1980s Union Carbide accidents caused the entire industry to pay extra attention to risk and safety issues, with for instance the program ‘Responsible Care’ which was launched in the U.S. and has spread over the world,
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also to Sweden. Nowadays, it is an industry known for having implemented risk and safety practices and policies (Walters and Nichols, 2006). The choice of the industry does, however, exclude people with precarious jobs, because in principle everyone in this industry in Sweden has a permanent job. In the two process industries, I suppose that this is partly due to the fact that the learning period for operators lasts a couple of years, so each new employee is a big investment. The labour force in the chemical industry in Sweden is also almost exclusively Union affiliated.

For organizational researchers, it can be quite difficult to gain access to organizations and staff time, especially when pursuing a critically oriented, discourse analytical project (Mumby and Clair, 1997:185). I was able to access factories broadly based in the chemical industry, one of which was a pyrotechnical, explosives company, pseudonymously called PyroTech, and two of which were large-scale process industries, pseudonymously called West Plant and Chemco. Various cases in the chemical industry were discussed in the reference group meetings, and typically, there was more discussion about those companies with which the members had any experience or contact. In two of the cases that were selected, I was helped by members of the reference group to establish contact and then get access. A third company, West Plant, called me up after receiving a letter describing the research project.

A fourth company was in prospect, but the amount of empirical material seemed to swell as more interviews were conducted, and when it became increasingly clear that a discourse analytic approach would be used, requiring much detailed attention to the research data, it was not appropriate to make the empirical material even larger and more complex. It should also be mentioned that the study of the safety committee meeting at West Plant was not planned from the beginning. Instead when I had started doing interviews there, and learned about this interesting program, an opportunity arose for me to attend and record the meeting. Because this type of ethnographic material was not originally planned, and the interviews that were planned were quite numerous and very content-rich, the thesis contains no more material from other ‘natural’ or less researcher-driven interactional situations. This addition of new empirical material also meant that incorporating another case was out of the question.

There are many ways of thinking about case studies and maintaining a strategic approach to the research process, such as to strive for maximum variety between them, or to focus on an extreme case, or a particularly critical case (Flyvbjerg, 2001). Yet it is not always possible to make a completely rational design in advance because it is difficult to get a hold of material that is relevant for qualitative studies without actually carrying...
out the studies. Most likely, interesting aspects and differences between the various cases arise in qualitative studies, i.e. ‘discoveries’ that are made in the process of conducting the field work and analysing the material (cf. Glynos and Howarth, 2007).

In principle, there were three main differences that I thought could be important in advance. First, the companies were selected partly because they work with different products and have different working methods: one is a pyrotechnical factory with much manual assembly work, and the other two are chemical process industries. This could lead to very different risks being represented in employees’ talk. Second, they seemed to varying degrees ‘progressive’ with respect to risk and safety management. One of the companies, West Plant, had gained recognition as being in the forefront with regard to sustainability. Third, one of the cases, PyroTech, had had a fatal accident six years before my studies began, whereas the other cases had not had any fatal accident for several decades. This, I thought in advance, could mean a higher degree of politicization of employee relations and of issues of risk and safety.

Ultimately, then, the analysis of discourses in different contexts can explore ‘whether the concepts and assumptions “travel” ’ (Glynos and Howarth, 2007:203) and also generate a discussion about why this does or does not occur. Taking a discourse analytical approach, it is also important to emphasize that the case is not understood as speaking for itself, but the studies always involve applying a theoretical understanding to the case.

Methods

When researchers are interested in how meaning is ascribed to a phenomenon, interviews are often used (Alvesson and Deetz, 2000). This research project is no exception. Since the thesis sets out to investigate questions about how risk and safety are constructed, negotiated, and sustained, it is important to give various employees the opportunity to give accounts and share stories that contain such material. The interviews were semi-structured in the sense that an interview guide was available and used so that the same themes recurred in every interview, but the guide could be set aside in order to establish a better rapport and conversation with interviewees. For example, the interviewee could on some occasions lead the conversation to a new question which the interviewer could not have foreseen.

Interview studies are sometimes criticized because they claim to investigate what they cannot access. Interactional phenomena that are highlighted
as problematic are cultural scripts for how to talk about an issue with recurring phrases and concepts, impression management, positive storytelling, etc. (Alvesson and Deetz, 2000; Silverman, 2001). However, this is mostly a problem if the researcher is looking to dig deep for the truth behind, or beyond language, and try to access people’s ‘deeper’ emotions or events as they ‘really’ took place. From a discourse analytical point of view, reality as people perceive it is constructed by discursive means, so the rules, norms, linguistic self-presentation, regular concepts, expressions, and so on, are keys to understanding the studied phenomenon, rather than obstacles to achieving understanding (Potter and Wetherell, 1987). Therefore, this thesis uses and examines interviews as a primary material, rather than as a secondary material. Moreover, I did not experience the issue of ‘positive storytelling’ as a problem, in that quite good rapport and trust were achieved in most interviews. Besides, if positive storytelling proves very important in an interview, then it is an interesting result, and it would be strange if this positive appearance would be essential to establish only in the interview context and not anywhere else (Lamont, 1992). Moreover, the quality of the interviews is of course something that the readers can assess themselves when looking at excerpts from the interviews.

A complementary method was used in the analysis of the recorded talk of a safety committee meeting. It can be seen as a ‘partial’ participant observation, based on a relatively small empirical content and an intensive analysis (Alvesson and Deetz, 2000). I chose to do this study because the event under study concerned a theme that is of major interest to the research questions, and because the event involves highly relevant interaction in regard to risk and safety. With such a situational focus, the study also highlights a ‘core phenomenon’ in an organization (Alvesson and Deetz, 2000). Meetings take place again and again, and safety committee meetings are held regularly and around the world. It is also an event that takes place without any major influence on my part. In this sense it complements the interview method, because the interview is ultimately the construction of researcher and interviewee. Based on the thesis’s focus on discourse and power, I regarded it as crucial that at least one of the studies should examine such linguistic practices regarding risk and safety taking place in an organization’s both permissive and restrictive social environment. The interviews represent another interactional type and cannot do that.
Data collection and analysis

When I got in touch with the industries, I first phoned or e-mailed one of the managers, either the CEO (PyroTech), or safety manager (Chemco, West Plant). In two cases this was done, as was mentioned earlier, after a member of the reference group had made a first contact. This was done with the first company, PyroTech, in spring 2006, and with the two other in mid-2007. I could refer to members of the reference group whom the managers knew about, and also the professional body, KCEM, that had an interest in the research, which helped to establish an interest on the part of industries. The managers that I contacted were sent a letter describing the purpose of the project and roughly how many interviews that I wanted to do and with what professions. This letter was passed on by these managers to employees who could voluntarily sign up for an interview. I specifically mentioned that I wanted some safety representatives to participate and overall, if possible, both men and women. In my handling of the interviews, the respondents were promised confidentiality, in line with ethical guidelines (Kvale, 1996).

PyroTech and West Plant have a little over one hundred employees each, while Chemco has around 500. A total of 46 interviews were carried out, 19 at PyroTech, 15 at West Plant, and 12 at Chemco. In the case of Chemco, in order to reduce some of the effects of the quantitative gap between the sample of 12 and the site population of 500, I did not spread out the interviews over various production sections, but instead conducted all but one interview with employees working in the same section, which had about 50 employees. Overall, this means that providing some kind of comprehensive description and analysis of a ‘culture’ is impossible in both the statistical and anthropological sense. This is not a requirement for discourse analysis, though, since the emphasis lies on applying a theoretical framework to the material and carrying out careful analysis of discourse, rather than making inductive inferences from the chosen respondents (cf. Antaki et al., 2002).

At PyroTech, interviews were conducted with the CEO, marketing manager, production manager, HESS-manager (health, environment, safety, and security), 9 operators, 2 planners, 2 designers, and 2 production leaders. Four of the operators were women, the rest of the respondents male. All middle and upper managers concerned with production at the plant were men.

At West Plant, I interviewed the site manager, production manager, TQM-coordinator, 2 engineers, a planner, 2 technicians, a storage man, and 4 operators, one of whom was principal safety rep and one a safety
rep. At this factory the site manager and TQM coordinator were female. One operator was also female, and the rest of the respondents male.

At Chemco, I did 12 interviews with respondents including the CEO, the plant manager, safety manager, a foreman, 2 operators, a technician, a supervisor in the service department, and 4 other employees in the service section. The service section was now under contract, but all worked at the same factory and had been employed by the main company long before the outsourcing of the service section. Here, all respondents were men except the plant manager. It was a very male-dominated workplace.

It is important to take into account that all the factories are parts of the business divisions of international companies. This means that the top manager at the factory is hierarchically subordinate to managers at general offices in Sweden or another country. It would of course have been interesting to explore risk and safety discourse even at this level, but one must draw the line somewhere on how much empirical material is to be treated. I decided to limit the sample to those within the firm in the same geographical location. I also avoided including the respondents’ age, since it would be unfair to promise confidentiality and then reveal information that allows management or workers to trace statements to their exact authors.

The interviews were conducted privately in a small coffee room (West Plant), and in plain conference rooms (PyroTech, Chemco). The interviews lasted between 40 and 120 minutes. All interviews were digitally recorded in their entirety.

The interviews and conversations were transcribed word-by-word, but without noting overlapping speech or using detailed notation for pauses and intonation. Passages that are unimportant to the analysis have been removed and marked with brackets. Imitative expressions are placed within quotation marks, and pauses or hesitations are marked by three dots. In paper one, words that are pronounced with emphasis are marked by italics. Laughter is marked in brackets (paper one) or written how it sounds (paper three). Overall, the transcription uses full stops and commas much like in normal writing, though of course with tolerance for sentence fragments and run-ons.

Before each interview began, I further informed the respondent about the project, repeating things that stood in the letter that they had received. Each interview began with the respondent being asked about how long s/he had worked within the company and what the job was about. The interviews then took up questions about the perceived work environment, possible ‘near-miss’ events, incidents, and accidents. It covered questions such as whether the person had been involved in any incident or accident, and how it was that incidents and accidents occurred. Questions were raised
about work practices and preventive health and safety work, and about meetings and cross-professional communication and communication in the respondent’s own work group. Incident reporting was also an important theme. Descriptive questions, questions about examples, and sometimes contrasting questions were asked. Sometimes a leading question was asked, especially when I felt I was being too passive and the interviewee seemed to seeking more guidance. A mix of types of questions were asked, and awareness was maintained that the interviewer’s role is not to intervene too much but to get the interviewee to talk and feel listened to (cf. Spradley, 1979). In all the plants, I was given a guided tour, either by a safety manager or a production manager, so that I could get to see the different working areas.

Moving on to the actual analysis, typical for three of the four studies is that they have been based on a Foucauldian approach, and especially aspects of governmentality. Thus, I have imposed meaningful issues onto the cases and empirical material (Flyvbjerg, 2001), such as questions about possibly increasing risk and safety responsibility, so-called responsibilization (Rose, 1999b), strategies in the construction of communities that facilitate, or temporarily impede, the possibility of making political claims, the naming of incident causes, and construction of risk objects. However, I wanted to carry out a form of discourse analysis which is sensitive to the variety and complexity of the interviews and meeting material, and I did not understand the Foucauldian tradition as the best for just that – since this tradition’s researchers very often use official, archival material rather than conversational material, and keep the analytical focus firmly on long-range developments. The Foucauldian input to the project is, therefore, mainly theoretical, as I have been drawing on different discourse analysts who still, basically, share the Foucauldian theoretical premises, in order to develop discourse analyses of verbal statements and conversations (e.g. Davies and Harré, 2001; Fairclough 1989; Potter and Wetherell, 1987; Wetherell, 1998). There are also others who have taken a similar approach, and explicitly sought to combine Foucault with a more detailed, close-range discourse analysis (e.g. see Brownlie, 2004; Fogde, 2009; Miller and Fox, 2004).

The first step in any of the analyses was to code statements and passages into themes that emerged after much reading and re-reading of the interview and meeting transcripts. I then identified the overall lines of argument and understandings. After choosing some illustrative and critical passages for more intensive examination, that is chunks of roughly coded lines of argument and understandings, the analysis identified patterns, refined the analysis of discourses, and examined discourse practices/strategies and
inconsistencies in the form of ‘points of diffraction’ (Foucault 1972:65, 149) or in more conventional wording, ‘dilemmas’ (Billig et al., 1988). One of the studies focused particularly on the micro-political significance of pronominal and modal choices, which shape collectives and afford speakers different degrees of determination and claims to truth, and affect their identity positioning in terms of power/knowledge (cf. Fairclough, 1989). Moreover, in the intensive analysis, the studies could also examine other strategies used by respondents, such as to legitimize or contest circumstances and relationships using a vocabulary of genuine and non-genuine motives (Alvesson and Willmott 2002, see also Potter and Wetherell, 1987) or using minimizing and de-personalizing strategies (Potter and Wetherell, 1987) and disclaimers (Overstreet and Yule, 2001).

In addition, a fourth study was based on Per Linell’s (1998) theory of dialogue, and made use of his methodological apparatus, including communicative projects, contextual resources, and discursive strategies.

It is important in analyses of interviews and other conversational material to take note of the interviewer’s and interviewee’s orientations to each other (Linell, 1998). For example, at one point a CEO asked me if my question was directed to him as an individual or to him in his role of CEO. He wanted me to clarify my orientation to him, i.e. what ‘self’ it was that I was speaking to. This was a precautionary measure performed in order to be able to separate an ‘official’ version from an ‘in-official’ one. This confirmed that it typically is managers who feel they must maintain a respectable and good appearance (Alvesson and Deetz, 2000), however, in this case the CEO made an unexpected statement about it. Moreover, at the factory where they were working with explosives, two male interviewees oriented themselves towards me with the question whether I had served in the military. My answer that I had done civilian service made me a novice, and it was followed by the interviewees giving a much more pedagogical description of what we talked about. Such an orientation and competence-check can be seen as revealing in terms of knowledge and power in this organization, not least in terms of gender since many women worked in production but none were in a managerial position in production.

**Questions of quality and generality**

The quality of the case studies and discourse analysis has been repeatedly tested by being read and challenged by a variety of people, and then corrected and developed. Discourse analysis is particularly appropriate for such tests because it is a transparent method. What I primarily have ana-
lysed is in the excerpts, and the analyses usually follow below the excerpt; the result can be viewed, read, criticized, or judged as reliable or as inadequate (Potter and Wetherell, 1987:172). The study can furthermore be assessed using criteria such as if it reliably handles the complexity of the social reality being studied; if analyses are consistent, without loose ends that are not dealt with; if respondents’ orientations and talk are analysed in a reasonable way, given what is actually said; if the analyses can be of some worth in a democratic sense, positing new problems and questions; and finally if the study makes ‘sense of new kinds of discourse’ and if it manages to ‘generate novel explanations’ (Potter and Wetherell, 1987:171). I have asked myself such questions, and others have made critical comments based on similar issues, which has led to re-interpretations and improvements. Again, the method is quite transparent, so these criteria can be evaluated.

One drawback of the interview method in this research project is that there may be much unspoken meaning in terms of risk and safety that is based on tacit knowledge, which is used in a flow of events and manoeuvres on the job. It is probably very difficult to do justice, in an interview, to this knowledge and these skills that an employee embodies while active in his or her professional environment. This study cannot claim to say much about such tacit knowledge. Other studies highlight these aspects in a positive way (e.g. Gherardi and Nicolini, 2002). Another shortcoming is that I, the researcher, am not professionally trained in engineering, industrial psychology, or any relevant medical discipline. Solid competence in any of those areas would have been good to have in order to make even more relevant interviews and to enrich the study overall.

Generalization is most often understood in the sense of drawing conclusions from a representative sample to a population, that is, through statistical inference (Ruddin, 2006). In the present study, representativeness is simply impossible in the sense of extrapolating from a sample to a population, whether along the lines of occupational groups, sex, age, or anything else. This can be understood as a weakness of the thesis. However, instead, this study takes the approach of making a large number of observations on a smaller empirical material, which can make the case study into a strong method. Then it is well geared to render valid claims because it takes variation and complexity into account, and it can render interpretations, falsifications, re-interpretations, and, in the process, theory building (Flyvbjerg, 2001).

Moreover, whereas generalization by statistical inference is not at issue here, theoretical generalization is all the more appropriate. In theoretical generalization one applies theoretical assumptions to the empirical material.
and finds logical explanations and necessary connections. Theoretical generalization is not based on numbers but on logic. It is the logicality of the theoretical reasoning that determines whether valid knowledge is produced. Moreover, to study three different cases increases the possibility of generalizing, because common or differentiated characteristics can be identified and explained using theoretical reasoning (Seale, 1999:109). A particularly critical case also increases the possibility of generalizing, which can be said to be valid concerning the case where a fatal accident had occurred. Very serious accidents are expected to lead to a politicization of risk and safety issues (Gray, 2006). Consequently, if politicization does not occur in the critical case, then one cannot expect that politicization occurs in so many other contexts either; i.e. ‘if it is not valid for this case, then it is not valid for any (or only few) cases’ (Flyvbjerg, 2001:78). To this should be added that it is difficult for social science research to define the variables that can affect an empirical case.
SUMMARY OF ARTICLES

In this section each article is summarized in terms of purpose, results, and the theoretical discussion it raises. Two of the articles are wide-ranging in that they analyse interview material from all three case-study workplaces: West Plant, Chemco, and PyroTech. Another two are single-case studies (Yin, 1984), one examining a safety committee meeting held at West Plant, and the other centring on constructions of risk and safety measures in the interview material from PyroTech. Permission has been obtained from the publishers for the papers already accepted for publication to be included in the printed version of this thesis.

Article I: Enabling selves to conduct themselves safely: Safety-committee discourse as governmentality in practice

This article provides a detailed analysis of talk in a safety-committee meeting where factory management seeks to mobilize participants around the idea and practice of employee responsibility for safety. The article examines how the implementation of a behavioural safety program is advocated and negotiated by meeting attendees as they invoke, and position themselves with respect to, the following discourses: partnership, hierarchy, and competitiveness. Connecting to Foucault’s governmentality thesis, the article argues that this combination of discourses constitutes a pervasive tactic of ‘acting upon possible actions’. That is, the discourse of equal partnership mitigates the hierarchical characteristics of the talk, making the differentiated right to direct, define, and decide more acceptable. Furthermore, the hierarchical discourse gives a strong sense of urgency to the competitive talk that aims to drive the implementation. The discourses therefore coincide in an attempt to create employees who are willing to implement a management program in which workers govern themselves through peer observation and by adopting conditions of self-control.

Article II: Discourses and identity positionings in chemical plant employees’ accounts of incident reporting

Incident reporting is one of the emerging risk-management technologies. Engaging employees at different levels, it enables communication and
strategizing about risk and safety issues across management and other departments. Drawing on 46 interviews conducted at three chemical plants, this article analyses how employees establish and negotiate the meaning of incident reporting by elaborating three significant discourses. According to a discourse of administrative objectivity, incident reporting is virtually a scientific instrument that produces systematic data and statistical truths about incident causality. A discourse of employee examination enables supervision and evaluation of the frequency and quality of workers’ incident reporting, or seeks to do so. A discourse of employee discretion enables individual freedom and ability to assess when incident reporting is required and to weigh the necessity of different tasks. It is through these discourses that employees negotiate incident reporting and come to know themselves as empowered selves, marginalized selves, or as righteous selves resisting the pressure to report. In its social context, incident reporting is thus seen as a governing technology through which workers are given, and themselves assume, new risk responsibilities, while at the same time the heterogeneity of discourses enables negotiation and resistance.

**Article III: Governing the workplace or the worker? Evolving dilemmas in chemical professionals’ naming conventions and in the negotiation of occupational health and safety**

No strategy of government to control risk and safety is free from dilemmas. This theme is studied by means of discourse analysis of 46 interviews conducted with employees of chemical plants. The study identifies naming conventions that represent different traditions in risk and safety management, and analyses the discursive moves and devices used to manage claims regarding either of those traditions. First, the article demonstrates the dilemma that arises when a behavioural discourse is invoked with regard to others’ behaviour. Second, it analyses the dilemmas that arise when a behavioural discourse is invoked by workers with regard to themselves. Third, the study shows how an environmental health and design discourse creates dilemmas in the meeting with behavioural and hierarchical discourse. Overall, the study indicates that egalitarian beliefs are excluded in the risk and safety strategies and in their hierarchical institutionalization. This is evidenced by interviewees who excuse themselves or use irony and mitigating strategies because their discourse excludes or constructs workers pejoratively. Furthermore, the article shows that multiple historical layers of behavioural explanations strengthen a new behaviour-oriented model of
explanation. Yet the dilemmas expose that the governing of risk and safety does not reach closure of meaning, but is in flux and can be challenged.

Article IV: Understanding ‘communication gaps’ among personnel in high-risk workplaces from a dialogical perspective

Co-authored with Åsa Kroon Lundell

This article is concerned with a question that is often addressed in psychological and cultural safety research, namely differences in safety understandings between various occupational groups. These differences are often attributed to intrinsic attitudes that are quite stable but yet amenable to change through management efforts. However, this article argues for a discourse analytic approach instead. Using Linell’s (1998) dialogue theory, the article demonstrates how employees work to position themselves in relation to the risk and safety topics under discussion. In these positionings narrators are shown to draw on various discursive strategies and contextual situation descriptions. Ultimately, the article demonstrates that differences between groups’ and individuals’ orientations to risk and safety are conditioned socially and discursively, and in context-specific ways. The study argues, then, that different orientations to risk and safety ought to be understood as having their own meaning-laden motives and explanations. Consequently, in light of their social and discursive underpinnings, it does not seem ethically justifiable for either researchers or management to argue for a cohesive culture and attempt to narrow the gaps between parties with standardized information.
This thesis has analysed a number of distinct characteristics of practices which construct what is and is not considered a risk, what it is that actors ought to do about risk, and restructurings of actors' responsibilities in the domain. This final chapter will revisit the questions and themes raised in the introductory sections of the thesis. It will also point to the study's most significant contributions to social research on risk and safety. The chapter is organized in such a way that conclusions are drawn in conjunction with the three research questions (although questions one and two have been reversed for presentation purposes). It centres therefore on (1) how discourses condition constructions of risk and safety; (2) how employees manage risk and safety through discursive practices and identity positionings, whether by conducting the conduct of others, collaborating, compromising, or resisting; and (3) how a variety of forms of power condition constructions of risk and safety. Finally, the chapter suggests some areas for further research.

The aim of the thesis has been to study how risk and safety are constructed, reproduced, and negotiated by communicative means in safety-critical organizations. This purpose indicates a constructionist approach, which principally means that I have chosen not to answer questions about the veracity of statements, and instead focus fully on the discursive practices, devices, and categories, the assumptions and knowledge complexes, by which chemicals employees discern what things are health and safety risks and through which they may know what to do about them. The term 'constructing' risk means that a link is discursively defined between, on the one hand, an uncertain, potential harm or hazard and, on the other hand, things, processes, and/or people (Hilgartner, 1992). Either of the latter can be objectified, depending on the 'truth' regimen drawn upon, as the problem bearer that needs to be dealt with. Having defined risk, I have approached safety as the positivity which comprises people's 'doings' designed to manage risk objects, and which, as Gherardi and Nicolini say (2002:192), also relies on discoursal systems and practices.

There is indeed much at stake for the parties affected, whether employers, unions and workers, or government agencies, as 'changes in the definition of risk objects can redistribute responsibility for risks, change the locus of decision making, and determine who has the right – and who has the obligation – to "do something" about hazards' (Hilgartner, 1992:47).
CONCLUSIONS

This thesis has analysed a number of distinct characteristics of practices which construct what is and is not considered a risk, what it is that actors ought to do about risk, and restructurings of actors’ responsibilities in the domain. This final chapter will revisit the questions and themes raised in the introductory sections of the thesis. It will also point to the study’s most significant contributions to social research on risk and safety. The chapter is organized in such a way that conclusions are drawn in conjunction with the three research questions (although questions one and two have been reversed for presentation purposes). It centres therefore on (1) how discourses condition constructions of risk and safety; (2) how employees manage risk and safety through discursive practices and identity positionings, whether by conducting the conduct of others, collaborating, compromising, or resisting; and (3) how a variety of forms of power condition constructions of risk and safety. Finally, the chapter suggests some areas for further research.

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There is indeed much at stake for the parties affected, whether employers, unions and workers, or government agencies, as ‘changes in the definition of risk objects can redistribute responsibility for risks, change the locus of decision making, and determine who has the right – and who has the obligation – to “do something” about hazards’ (Hilgartner, 1992:47).
Various streams of research have studied risk and safety, two of which the thesis is informed by and can contribute to. First, there is research that takes a wide-ranging and politically sensitive approach to organizations, risk, and safety, and analyses language and other practices as embodying discourses that have strong ethical and political significance (e.g., Gray, 2009; MacEachen, 2000; Zoller, 2003). In particular this research has demonstrated that norms and ideas are inscribed that effectively validate highly individualizing approaches to risk and safety, in which a great deal of responsibility is placed on workers, while often also ensuring workers’ tolerance of these conditions. These results are demonstrated in research on such diverse institutions as a British oil rig (Collinson, 1999), newspaper companies in Canada (MacEachen, 2000), automotive factories in the US (Zoller, 2003) and Canada (Gray, 2006), and a train company in Japan (Chikudate, 2009). The short-term economism and focus on individual responsibility and self-control, as opposed to the promotion of more costly, collective protection, are understood as effects and manifestations of neoliberal government and discourse (Gray, 2006; MacEachen, 2000), and of increasing monitoring, disciplining, and managerial visions of risk control (see, e.g., Chikudate, 2009; Collinson, 1999).

Second, I have highlighted research that has analysed and demonstrated the discursive strategies, devices, and moves that various employees rely on when negotiating and dealing with risk and safety (Iedema et al., 2006a, 2006b, 2006c) as well as related issues of responsibility and identity (Linell et al., 2002; Nevile, 2001; Sarangi et al., 2003; Sarangi and Candlin, 2003). While this stream of research focuses less on issues of power, it provides knowledge of how meaning is created through the details of interaction and discursive agency. Indeed, it seems vital to draw on some of these insights in order to better understand the complexity of people’s positionings in relation to the ‘bigger’ meaning complexes that perhaps strike most social researchers as more politically significant. Moreover, to focus on practices seems particularly helpful for avoiding drawing hasty conclusions about the coherence and impact of discourses, and enabling the identification of dilemmas that emerge in the narratives of employees and in interaction.

This thesis constitutes an attempt to draw on both these research foci and constructivisms, to make possible an investigation that allows people to act as discursive agents while yet being subjected to particular forms of power and knowledge that are represented and sanctioned through discourse.
Discourses that condition constructions of risk and safety

The studies have analysed a variety of discursive practices and demonstrated how they reproduce and align with wider discourses, concisely defined as ensembles of ‘ideas, concepts and categories through which meaning is given to phenomena’ (Hajer, 2005:303). These discourses are reproduced in interaction, but have a bearing on human relations that extend beyond the individual interactional situation, and are thus considered to be quite durable and ‘long-range’ (Alvesson and Kärreman, 2000). These meaning complexes are reproduced and transferred over space and time, and as people align with them in talk, they enable and set limits for constructions of risk objects and safety.

The present study has been able to analyse how interactional safety technologies and definitions of risk become anchored to familiar discourses. This is critical because, as Power (2007:188) argues, the influence of definitions of risk, as well as safety management technologies, depends on the degree to which the alignment with already existing discourses succeeds.

One of the studies analysed employees’ statements regarding a growing risk management technology, namely incident reporting. This interactional technology for risk prevention became linked to a discourse of administrative objectivity, meaning that it was attached to established ideals of scientificity, precision, systematics, and quantifiability. Incident reporting was thus discursively aligned with ideas already held in high esteem, and which in Western culture and in organization and business management stand for credibility and professionalism (Jacques, 1996). This linking of management strategies to scientific aspirations and ideas is apparent in pioneering works that go back a long way in the history of organization and business management (e.g., see Heinrich, 1931; Taylor, 1998, originally published in 1911). As Foucault explains, a discourse that makes, or seems to make, scientific claims functions in a particularly objectifying fashion; it may be a ‘truth’ through which people act upon themselves and others (Foucault, 2000b). However, at the factory where ideas and aspirations of administrative objectivity had had the greatest impact, all the ‘facts’ about incident causality were based on incident reporters’ self-completed web forms, and in most cases ‘negligence’ was reported as the main cause. Rather than being an exact science about incident causality at the plant, this may rather reflect the level and direction of training in occupational health and safety. A discourse of administrative objectivity also normalizes the discursive practices that shape conclusions regarding risk objects and how they should be addressed, restricting how employees ought to communicate.
about risk and safety. The study thus supports others’ assessment (e.g. Gephart, 1992; Power, 2007) that this type of administrative objectivity suppresses everyday experiences and dilemmas, and enables those who manage and monitor the systems to make confident statements that appear scientific and incontrovertible.

It was also noted that the relatively new safety management program, behaviour-based safety, which was being implemented at the same case-study workplace, was aligned by employees with a discourse of administrative objectivity. The program could be authorized with seemingly quantitative precision, as a high percentage of all incidents were identified as being caused by unsafe behaviours. ‘Behaviour’ appeared to be a new and creative concept aiding explanation, since it was only used at the plant where behaviour-based safety was implemented and never mentioned at the other two plants. This commercial program, with its concepts and routines, enables a renewed definition of employees’ behaviour as a risk; indeed it attempts to transform the employee into a risk object.

Moreover, the study has indicated that the behavioural discourse is quite broad and has a long tradition (cf. Nichols, 1997). So, when a new concept of ‘behaviour’ is introduced it may receive wider support due to the presence of older generations of naming conventions centring on workers’ conduct, whether drawn from scientific discourse, as with ‘the human factor’ or ‘human error’, or from casual expressions such as ‘sloppy’, ‘clumsy’, ‘careless’ or ‘stupid’. Examples of the latter category of discourse, and even the first category albeit in popularized form, have been called ‘folk models’ (Dekker and Hollnagel, 2004) as well as ‘civic epistemologies’ (Jasanoff, 2005). While the new concept of ‘behaviour’ was only used at West Plant, these other concepts and ‘folk models’ also appeared in the other case-study workplaces, Chemco and PyroTech. However, what struck me was that all these concepts centre on performance as the most important thing. It is by being action-oriented and capable of handling various processes and manoeuvres that the employee proves his or her worth, and if not s/he ‘fails’ and is considered incompetent or a risk. Collinson (1992:180) captures this well with his description of meritocracy, which emphasizes that one’s merit and value are indeed based on performance, not on background, rank, or an inviolable human worth. Meritocracy furthermore emerges because of a lack of access to more collective protection strategies, and is also the condition and result of hierarchical relationships (p. 181). It seems that this explanatory reasoning with meritocratic discourse in focus can add to the knowledge of previous studies that have synthesized workers’ constructions of risk and safety in terms of a ‘production culture’
The most significant competing discourse which was discerned vis-à-vis the behavioural and meritocratic discourses, and which also formed risk objects, was that of environmental health and design. While appearing to be less common among the three cases, the present study has shown how this doctrine is drawn upon in phrases such as ‘to build out’ a risk or ‘design it out’, and in comments about the bad air or high noise level. This discourse thus enables the discursive representation of material risk objects, and makes it possible to improve the working environment rather than the worker. However, several researchers have expressed concerns that this type of risk and safety approach is becoming secondary to behaviour-oriented solutions (e.g. Gray, 2009; Rollenhagen, 2010). The present study suggests that there may be grounds for such concern. Although this discourse relies on knowledge from medicine and labour law in its assessments of health, illnesses, and the work environment, it does not seem to easily align with many civic concepts or understandings, but rather cuts across juridical and scientific discourses. It allows for assessments of what it is in the workplace that adversely affects people, whether working hours, poor ventilation, or missing machine guards, but seems less known throughout the ‘line organizations’. Also, as it draws on chemical and mechanical engineering expertise to discern whether it is possible to remove the risk object, or design so that risks are shielded and reduced, a disadvantage appeared to be that the strategy is hampered by unsatisfactory hierarchical relations.

Hierarchical discourse is indeed significant in terms of both of the major risk and safety traditions that condition the construction of risk objects. Before I go further into that, it should be made clear that hierarchical organizing in business organizations owes much to F.W. Taylor and his era’s preoccupation with differences between people, with testing abilities, and with making predictions concerning efficiency. People were assigned to different tasks, on the grounds that this provided the highest efficiency, job satisfaction, and income for all (cf. Taylor, 1998). Moreover, the value of different employees and tasks were, and still are, differentiated socially and economically. Hence, although everyone is not equal in a hierarchy, equality is transformed to mean that everyone can rise as far in the hierarchy as their capacity for performing tasks permits them. This process of upward movement, however, has not proven to be fair either, especially not for women and minorities. Thus, inequality is not an open violation of the social order, but is built into it, and often naturalized and taken for granted (Jacques, 1996).
All the papers that the thesis brings together discern and analyse hierarchizing practices. In terms of the behavioural discourse, hierarchical organizing divides its field in the sense that it is mainly those who are positioned lower in the hierarchy whose behaviour, or lack of incident reporting for that matter, are made into concerns as risk objects. Neither do leading behavioural safety consultants, such as Krause (1997), require managers or general offices to be monitored for unsafe behaviours. In behavioural discourse, managerial responsibilities such as staffing and resource allocation are made peripheral, if they are seen as possible risk objects at all. What the studies did demonstrate was that it was primarily between operators and risk that a discursive link was constructed. Moreover, unsafe human behaviour, or conduct which at all conflicts with a norm, are easily seen as immoral (O’Malley, 1996) and therefore particularly susceptible to a play of high and low status and thus also of differential positions in a hierarchy.

As for environmental health and design, hierarchizing discourse reflected and produced a division of labour in which planning, design, and execution were two entirely separate endeavours that belonged to different levels of employees. Moreover, it was noted how incident reporting in one of the cases enabled hierarchical practices including observation, normalizing judgement, and their combination in the examination (cf. Foucault, 1995). Although the instruments were implemented in varying degrees, the norm of monitoring and assessing workers’ reporting behaviour was reinforced among upper managers. A hierarchical discourse was also apparent in meetings, as shown in paper 1, and employees’ accounts of meetings, as shown in paper 4.

However, this does not mean that there were no dilemmas associated with discourses of behaviour, hierarchy, or environmental health and design, or no resistance on the part of workers. It is well known that the psychological and social-psychological understanding of the employee, along with demands for a more egalitarian and democratic workplace, have increased and diversified the demands placed on managers and that they now are expected to engage in two-way communication, respect employees’ opinions, and act to promote shared responsibility instead of a strict planning-execution divide (Jacques, 1996, Rose, 1999a). In addition to the democratic incentive, the underlying neoliberal logic claims that if more of the employee’s subjective needs and capacities are discovered and used, then the goals of the enterprise and of the employee may coincide and produce highly motivated and self-actualizing individuals, which in turn implies a better use of human resources and therefore good business practice (Foucault, 2008:226; Rose, 1999a:81). These discourses were implicated in
the talk, in that various employees tried to produce discourse that was not too unfair or offensive, or in that they protested against acts that they perceived to be an infringement. The former type of communicative task in particular required a different kind of (discursive) caution in behaviour than the (bodily) caution which was mainly required of workers in production. In line with this, the studies have shown how dilemmas emerge in the encounter between behavioural and hierarchical discourses on the one hand, and discourses drawing on notions of equality and personal discretion on the other.

Managing risk and safety through discursive practices and identity positionings

Since the wider discourses that have been raised so far do not reveal in detail how risk and safety are constructed and negotiated, I shall now take a closer look at employees’ identity positionings and the various discursive practices they rely on. Various employees use a number of discursive strategies to take on responsibility, renounce responsibility, criticize others’ actions, or further, advocate one particular safety strategy and undermine the practicality of another. These superficially minor linguistic manoeuvres serve to accomplish these communicative tasks in a way that harmonizes with what the speaker perceives as valid norms and rules. These discursive practices also designate identity positions (Davies and Harré, 2001). In this regard, one can see that everyone works at accomplishing a narrative that provides ‘the truth’ about risk and safety, while also achieving a sense of self, and doing so in an agreeable way.

To begin with, the thesis was able to draw attention to recurring naming conventions (Foucault, 2002) that align with the two main traditions of knowledge in the risk and safety field that were raised in the previous section, namely a behavioural discourse and one of environmental health and design. While others have certainly addressed the existence of a tension between these governing tactics (e.g. Gray, 2009; MacEachen, 2000; Rollenhagen, 2010; Zoller, 2003) this study makes a further contribution by demonstrating how these traditions are advocated and the dilemmas that emerge in the process. As mentioned earlier, dilemmas particularly emerge in the encounter between behavioural and hierarchical discourses on the one hand, and discourses drawing on notions of equality and personal discretion on the other.

For instance, the study has been able to demonstrate how dilemmas associated with each of these discourses are dealt with through pragmatic
discursive practices, such as through the use of disclaimers (Overstreet and Yule, 2001) and vague pronominal choices (Fairclough, 1989) to prospectively deal with possible negative and moralizing aspects of one’s behavioural discourse. Moreover, the study has demonstrated how minimization of injury and harm (Potter and Wetherell, 1987) was used to particularly reduce the identity trouble associated with being positioned as a ‘careless’ and ‘risky’ worker. It was also shown how defences and rebuttals of safety tactics, whether these were behaviour or design oriented, took shape through dramatization and thus by diminishing the logicality of the opposed tactic and making an implicit validity claim for the one preferred. The studies have also shown how hierarchical discourse, with its distinctive declaratives and directives, is supplemented by the frequent use of inclusive ‘we’ references and thus by a prospective display of awareness of egalitarian norms. We see, therefore, a variety of discursive practices which position the speaker and other actors, and which while aligning with risk and safety traditions, also designate what a risk is, what should be done about it, and sometimes shift the locus of risk from one area to another.

In order to describe in more detail one of the strategies, it should be noted that the thesis demonstrates how pronominal choices (e.g. we, you, one, them, etc.) do significant things for speakers as they discursively construct risk and safety measures, and as they position themselves and others relationally. Pursuing a partly similar interest, Nevile (2001) shows the central role of pronominal choices in pilots’ communication with each other and with the rest of the crew as they manage a flight. He shows how and why pilots’ choices of pronouns are so important for safety, including the clarification of responsibilities, but also that some discretion regarding pronominal choices (beyond the prescribed communication manual) – such as using ‘we’ instead of ‘I’ – can create a sense of team spirit and common purpose for the entire flight crew.

Although pursuing a different empirical focus, the present study contributes by showing that the ownership of behaviours associated with risk is often not openly attributed to any particular actor or group. As shown in paper I, which analysed a safety committee meeting, during a thirty minutes long sequence on allegedly unsafe, on-site, physical behaviours, and the improvement of these, it was never clear whose behaviour was problematic or unsafe and who found this a problem. The behavioural program that was to be implemented focuses on workers’ behaviour, engaging them in ‘peer-to-peer’ observation (Krause, 1997), but the site manager who led the meeting consistently used ‘we’ references or agentless nominalizations as regards the behaviours. Additionally, in paper III, analyses of interviews showed examples of employees using pronoun-switching
yses of interviews showed examples of employees using pronoun-switching, engaging them in 'peer-to-peer' observation (Krause, 1997), but the site may be problematic or unsafe and who found this a problem. The behavioural and the improvement of these, it was never clear whose behaviour was.

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As shown in

There are several conclusions I can draw from this.

First, the normative expectations shown in speakers’ cautious discursive handling of behaviours associated with risk indicates – and in a sense reproduces – the low status of being objectified as the source of risk. The low status is somewhat softened when vague pronominal choices are used, and some of the asymmetry is alleviated. Through this discursive device, employees attempt to place blame while also acting in solidarity with work colleagues, and to mitigate the potentially provocative differences in risk responsibility that are established between white-collar staff and blue-collar workers.

Second, it seems that a behavioural discourse, reflected and produced through a variety of naming conventions (e.g. sloppy, clumsy, careless, behaviour), could hardly be widespread without these mitigating, pronominal, or entirely agentless discursive choices. Indeed, I may go so far as to say that the discoursal softening of workers’ risk responsibilities helps condition the sustained existence of a behavioural approach to risk and safety. In this sense, pronominal choices may really have some political significance (cf. Mulhausler and Harré, 1990; Pyykkö, 2002).

Third, and especially concerning the safety committee meeting, I want to make the same observation as Nevile (2001), namely that the many ‘we’ references help produce a sense of partnership and reciprocity, though in this case one that might not benefit all, because the union representatives, included in a ‘we’ together with the employer representatives, may find it more difficult to realize themselves, or come to know themselves, as political agents acting on behalf of the workers.

Pronominal choices and responsibility for risk and safety are thus linked to each other in a complex yet politically significant way. The studies thus reinforce the view that pronominal choices have great everyday political significance (Fairclough, 1989; Mulhausler and Harré, 1990; Pyykkö, 2002) by showing how they contribute to the discursive negotiation of risk and safety.

However, before we leave the issue of the softening of employee risk responsibility, I would argue that this discursive practice is relative to the degree to which employees are organized and understood on the basis of a strict system of differences. That is, hierarchical and behavioural discourses feed into each other (cf. Collinson, 1992:181). Thus, the more rigid the
system of differences established, the less its interlocutors seem to broadly acknowledge a moral problem in openly admitting that front-line workers, who are exposed to risk, themselves are responsible for avoiding risk. The present study demonstrates that the employees at the factory where the most traditionally hierarchical relationships were reproduced, PyroTech, engaged in more ‘unblushing’ behavioural discourse. Moreover, as shown in paper II, the restriction imposed on operators to report incidents and get information about incidents via the ‘line organization’, i.e. in their case through their two production leaders, offered a limited identity position, and one that led to identification with relations in which operators were allowed to have more discretion. In line with Dyrberg’s (1997:143–144) reasoning, hierarchizing practices may thus become a threat to the self-image of those subjected to them, and lead to greater politicization of employee relations. As shown in paper IV, managers and workers at PyroTech positioned themselves rather antagonistically, and frequently in terms of ‘us’ versus ‘them’.

The studies have also been able to demonstrate how identity work and resistance are mobilized in response to the more recent management techniques which require workers to become more involved with management systems, to communicate across professional boundaries, and really become vehicles of their own and of the plant’s improvement. For instance, in the case study with most developed routines for incident reporting and other extra assignments, a great deal of responsibility was put on employees to see to it that they became flexible individuals who readily move from a supervisory or physical job in production to sitting at a computer and writing a report in a web form, and also writing it well. It was also noted how incident reporting in this case enabled disciplining practices including observation, normalizing judgement, and their combination in the examination (Foucault, 1995), although using contemporary partnering rhetoric with ‘coaches’ and positive reinforcement. However, when management-driven demands for employee responsibilities increase, more features of the employee are assessed, while more demands on the employee may also be resisted (Rose, 1999a), as was demonstrated as well. A few examples were analyzed to show how some employees could draw on a discourse of discretion to manage incident reporting as a role requirement, to set limits on when it was appropriate to report, and also mobilize resistance. In the latter case an identity was defended that was integrated with physical work, with production, and with performing maintenance in the factory, and which negated such activities as writing and other tasks that could be related to office work. This type of ‘doer’ and, indeed meritocratic, identity did not reconcile with reporting which meant that the measures were post-
poned, and which meant that others would probably be responsible for them.

**The variation of power tactics**

The thesis has asserted that the discursive construction of risk and safety relies on forms of governing and power, as has been shown in analyses of various practices. Following Foucault (2000b:340), this means that various actors have been understood to bring into play particular knowledges and strategies, ‘modes of action’ used upon ‘others’ action’, which imply and reproduce certain constructions and negotiations of risk and safety. As might already have been noticed, the present study does not profess that a single form of governing and power explains, or makes much sense of the heterogeneous empirical material that has been analysed. Instead, as Foucault (2000c:219) himself admitted, it is a combination of manifestations of power – including neoliberal governmentality, disciplinary and at times sovereign power – that is understood to shape and be sanctioned by various practices. In the present case, regarding risk and safety, it is equally obvious that a welfarist rationality still has an impact, in that the binding commitments imposed by the state on employers concern prevention strategies that protect a collective body of people (cf. Walters and Frick, 2000), and which has been represented by what I have called an environmental health and design discourse. The study has thus demonstrated that there are strategies that focus on collective safety and others that focus on individual safety. Even if these co-exist, in a context impregnated by relational power and a struggle for resources there is competition between them, and in some cases an increasing burden of responsibility is placed on the individual worker to avoid risk. Perhaps more than previous research, this study has been able to demonstrate that this is due to both traditional meritocratic norms for individual performance and hierarchical relationships, as well as innovations and employee responsibilization enabled by neoliberal human resources utilization. Major differences between the cases are identified in this regard, with the case that has been called West Plant clearly embracing new forms of technologies for responsibilization, while the other two, Chemco and PyroTech, in descending order are not doing so.

Some may object to the claim that the neoliberal project’s importance has been overly magnified in the thesis at hand; that it is inclined towards relying too much on British and North American research, in other words, theorizing and empirical research conducted in nations whose workplaces
may be more emphatically marked by neoliberal and individualistic rati-
onalities (cf. Gray, 2009) than in Sweden. Perhaps this is true, and is a weak-
ness of the study.

Still, and especially in the case of larger companies that have OHS on
the agenda, the governing of risk and safety increasingly relies on multi-
party bodies such as ISO (International Organization for Standardization)
and commercially operating consultancy expertise. Since these are by defi-
nition ‘management systems’ it would appear that a certain amount of
authority is transferred to the managers who will be tasked with imple-
menting them, while at the same time they have to rely less on government
authorities’ expertise and control. Indicative of the latter, the number of
safety inspections by Swedish authorities has dropped from just under forty
thousand in 1997 to about twenty-one thousand in 2009, thus almost be-
ing halved over a thirteen-year period. This is due to reductions in the
Swedish Work Environment Authority’s budget, and subsequent layoffs of
inspectors, but also on a recent strategy to focus on information dissemi-
nation rather than inspection (Riksdagens revisorer, 2003; Arbetsmiljöverket,
2009). This is at least an indication that the Swedish Work Environment
Authority is operating in line with neoliberal governmentality and dealing
with its enduring concern with excessive government intervention, and
consequently governing less and at a distance. In this situation one might,
like Power (2007), fear that the administrative systems, which can only
indicate that risk and safety are managed properly, become the primary
reality which is controlled by the authorities and other governing bodies,
whereas the physical working environment becomes a less significant rea-
li ty, something that only employees themselves should assess.

Final comment and future research

Regarding the question of how this study can inform and influence the
actors and organizations that have been studied, and whether it ought to, I
agree with Mitchell Dean’s (2010) position on how critical research can
contribute to society. This thesis’s potential lies, then, in its capacity to
describe and analyse governing discursive practices and idea complexes
that designate risk objects and ways of working with these in such a way
that their taken-for-granted character is challenged. In my view, the thesis
has done so not least by identifying ethical dilemmas and instances of em-
ployee resistance that are embedded in employees’ communication and in
their own narratives. In communicating some of these dilemmas and, per-
haps at times, inconvenient findings, the study hopefully helps to open up a
That said, I would like to point out some areas and concerns that may be relevant for future research. A shortcoming of this study, which can be avoided in future studies, is that it, partly inadvertently, has focused on sudden risks and occasional ill-health due to accidents, while long-term conditions that lead to ailments and illnesses have largely been overlooked. This is partly due to the fact that research on safety and research on health are largely separate research endeavours. The former focuses on suddenly occurring accidents, and since this research tradition had a profound influence on the thesis at a critical juncture, the long-term unhealthy conditions, that do not necessarily lead to ‘accidents’ or disasters, received less attention. Since this is an unfortunate separation that has ethical and political implications, it is important to be aware that it exists and also take it into account when one chooses a research direction.

While the study has used a rich body of interview material, it has used less material derived from less researcher-driven methods, such as participant observation or the type of discursive data that was gathered from the safety committee meeting. Future research could thus use a larger amount of material from various ‘naturally’ occurring organizational and communicative events. Such an ethnographic approach may well be combined with discourse analysis (Alvesson and Deetz, 2000) in which the discourse analysis helps to give readers a fairly accurate picture of what is actually said, to enable detailed analysis of e.g. ethico-political dilemmas, and also to raise the degree of transparency as far as analytical observations and conclusions are concerned (cf. Potter and Wetherell, 1987).

Furthermore, the studies have empirically been limited to one nation, although the companies are transnational. That is, all research materials have been collected and produced in contact with factories located in Sweden and in Swedish (but then translated into English) although these factories are parts of divisionalized enterprises whose general offices are not necessarily located in Sweden. It could be possible for further research to track developments and discourses from consultants or other parties, to the general office, the division offices, and factories, and thus take more account of the transnational networks and institutions and actors that affect plants and employees performing their work in a particular country. Although it certainly would be a very challenging task, I believe that such research could make an important contribution.
SAMMANFATTNING

Inledning

Kommunikation spelar en viktig roll i olycksförebyggande arbete och när man vill dra lärdomar från inträffade tillbud och olyckor. Men vad är det för risker som ska åtgärdas för att förebygga olyckor och ohälsa? Och hur formas dessa risker genom olika synsätt och former av kommunikation?


Analysen har delats in i fyra delstudier. Två av dessa är omfångsrika på det sättet att de går på tvärs genom de tre studierade företagen. Två av delstudierna är så kallade single case-studier som studar ett företag. Dessa delstudier fördjupar frågan om den diskursiva konstruktionen av risk, och den diskursanalytiska metoden inom risk- och arbetsmiljöområdet. De företag som studeras verkar inom branscher som hanterar potentiellt hälsovådliga kemikalier, vilket betyder att risk och arbetsmiljö är...
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grundläggande arbetsområden i verksamheten, inte bara med tanke på de anställdas hälsa och produktionens effektivitet utan också med tanke på det omgivande samhället och företagens anseende.

Avhandlingen tar intryck av, och utgör ett försök att bidra till, två konstruktivistiska forskningsinriktningar. För det första så finns det forskning som utifrån Foucaults maktperspektiv intresserar sig för organisationer, risk och arbetsmiljö, och analyserar diskurser som har stark etisk och politisk betydelse (t.ex. Gray, 2009; MacEachen, 2000; Zoller, 2003). För det andra så har jag betonat forskning som på mikronivå analyserar diskursiva strategier som olika organisationsmedlemmar är beroende av i sin förhandling och hantering av risk (se Iedema m.fl., 2006a; Linell m.fl., 2002; Neville, 2001; Sarangi m.fl., 2003; Sarangi och Candlin, 2003). Att kombinera dessa inriktningar ser jag som ett sätt att hantera kritik som har riktats mot båda dessa forskningsområden, där den första ovannämnda inriktningen ibland riskerar att förringa empirisk variation och mänskligt agentskap, medan den andra tenderar att undervärdera maktfrågor (Brownlie, 2004). Jag möjliggör då en undersökning som tillskriver personer kapacitet att vara diskursiva aktörer, men vilka ändå reproducerar och utsätts för särskilda former av makt och kunskap som realiseras genom diskurs.

En annan viktig ambition är att använda resultaten från de olika fallstudierna till att initiera en diskussion inom företagen och företagens branscher, och inom andra relevanta branscher, rörande styrningen och hanteringen av risk- och arbetsmiljöfrågor. Denna diskussion bör inte minst involvera chefer och fackliga representanter som genom skydds- och styrgrupper kommunicerar om risk och arbetsmiljö, och som tidigare än andra kommer i kontakt med nya trender, koncept och ledningsprogram på arbetsmiljöområdet.

I det kommande kommer projektet teoretiska och kunskapsmässiga utgångspunkter tas upp. Därefter sammanfattas var och en av de fyra delstudierna. Ett slutord och förslag på framtida forskning avslutar sammanfattningen.

**Teoretiska utgångspunkter: Diskurs, makt, och styrningsrationalitet**

Avhandlingen intar ett kritiskt, tolkande förhållningssätt till organisationer och aktualiserar frågor rörande språk och makt. Detta har sin utgångspunkt i att risk- och arbetsmiljöarbete inte är ett en gång i tiden och för alltid definierat område, utan dess betydelse förhandlas och förändras i samhället och i organisationer. Risk och skyddsarbete kan sägas vara ”fly-
tande” begrepp som fixeras och förhandlas genom diskurs – genom språkliga praktiker och genom sätt att se.


När det gäller makt så används mer specifikt begreppet styrningsrationalitet (eng. governmentality). Denna term som myntades av filosofen och idéhistorikern Michel Foucault (2000c) syftar till de sätt på vilka individers eller grupperers ägerande styrs eller riktas. Att analysera styrningsrationalitet innebär att undersöka de mekanismer som verkar för att forma och mobilisera grupper och individer, och som verkar genom gruppers och individers val, önskningar, förväntningar och behov (Dean, 2010). Med styrningsrationalitet menas alltså inte bara formellt politiska och administrativa strukturer i en stat, utan styrning i många olika sammanhang, där ibland i sådana vinstinriktade organisationer som studeras i projektet. Begreppet innebär att fokus inte bara sätts på dem som söker styra, utan också på dem som styrs; på hur de styr sig själva och förhåller sig till andra försök till styrning av dem (Dean, 2010).


Vad som här syftas till med styrning och kontroll är numerar framför allt en typ av bemyndigad självstyrning och självkontroll. Denna framväxande, nyliberala styrningsrationalitet förkastar välfärdsstatens omfattande och direkta styre, och förespråkar istället en bemyndigande form av makt som uppmuntrar förmågan hos organisationer och individer att reglera sig själva emedan de arbetar mot gemensamma mål som hälsa och produktivitet (Foucault, 2000c; O’Malley, 1996; Power, 2007; Rose, 1999a). Den
brittiska sociologen Nikolas Rose förklarar att denna styrningsrationalitet innebär en tvåfaldig process som gör aktörer och individer både mer autonom och ansvariga. Dessa processer ”öppnar upp fritt utrymme för enskilda aktörers val” emedan dessa relativt autonoma aktörer ändå ”omsluts av nya former av kontroll [min översättning]” (Rose, 1999a:xxiii). Samtidigt som denna styrningsrationalitet öppnar upp för fler frågor där arbetsgivare och olika grupper av anställda samverkar, så blir naturligtvis tillfällena då motstånd kan utövas också fler (Rose, 1999a:xxiii).

Avhandlingen argumenterar för att olika former av styrning tillämpas sida vid sida i olika organisationer på risk- och arbetsmiljöområdet, och att dessa olika sätt att styra implicerar olika kommunikativa dilemma. Dessa dilemma blir konkreta och synliga genom diskursanalysen.

### Urval och material

Delstudie I. Styrning av ansvar för beteenden: En närstudie av ett skyddskommittémöte

Även om ett antal studier hävdar, och visar, att säkerheten på arbetsplatsen alltmer blir olika personalgruppens ansvar (t.ex. Gray, 2006, 2009; MacEachen, 2000), så har dessa studier inte behandlat i särskilt stor utsträckning hur denna attribuering av ansvar realiseras och ”blir till” i interaktion och språkliga praktiker. Delstudie I fokuserar därför på hur en fabriksledning söker mellanchefers och fackliga representanters samtycke för genomförandet av ett program för beteendebaserat säkerhet. Liknande program för beteendebaserad säkerhet implementeras i ett stort antal länder, och det har fått allt större uppmärksamhet även i Sverige.

Tre diskursiva strategier som användes vid skyddskommittémötet analyserades i detalj. De visar på formandet och åberopandet av (1) ett jämlikt partnerskap genom ”retoriskt samarbete” och vagt tal som utelämnar frågan om vems beteende som är problematiskt; (2) en hierarkisk diskurs genom kraftfulla språkliga direktiv och påståendesatser; (3) en konkurrensdiskurs där den egna fabriken tävlar med andra fabriker i affärsdivisionen om vilken produktionenhet som implementerar programmet snabbast. Sammanfattningsvis kombinerar dessa diskursiva strategier på ett kraftfullt sätt konstruktionen av ömsesidig samverkan och jämliga relationer tillsammans med en disciplinär, hierarkisk social ordning som kräver delta-garnas samtycke till programms genomförande.

Delstudien knyter an till Foucaults diskussion om makt och styrningsrationalitet. Foucault (1990:86) förklarar att ”makt är godtagbart endast under förutsättning att den döljer en väsentlig del av sig själv [min översättning]”. Han har vidare hävdat att vardaglig maktutövning i organisationer präglas av ”ödmjuka metod och små åtgärder [min översättning]”, jämfört med de mer hotfulla manövrer som en suverän härskare kan kosta på sig att använda (Foucault, 1995:170). Mot bakgrund av Foucaults påståenden, och i förhållande till de diskursiva strategier som delstudien identifierar, dras följande slutsatser.

Den första diskursstrategin. Delstudien visar att vad som maskerades genom mildrande uttryckssätt och ”ödmjuka metoder” var att beteendebaserad säkerhet gör personalen själv till föremål för beteendemässig modifieering. Personalen själv formas till riskobjekt som måste hanteras. De lokala chefernas många tvetydiga ”vi”-referenser och så kallade nominaliseringar – alltså beskrivningar av skeenden i vilka aktörer aldrig nämns – gjorde att ett partnerskap och samarbete formades som försköt andra möjliga beskrivningar där olika parter skulle kunna synliggöras och där olika parters olika grad av ansvar för beteenden skulle kunna tydliggöras. ”Vi” använd-


I förhållande till tidigare forskning som tar utgångspunkt i Foucault och undersöker risk- och arbetsmiljöfrågor (t.ex. Chikudate, 2009, Collinson, 1999; MacEachen, 2000; Zoller, 2003) bidrar delstudien genom att analysera naturligt förekommande diskursiva praktiker, och genom att visa på
något av den konstituerande kapacitet som Foucault tillskriver lokala ”mikroskopiska” praktiker (Foucault, 1990:100–101). I förhållande till risk- och arbetsmiljöforskning som har betonat viken av maktfrågor i samband med konflikter mellan olika parters perspektiv (t.ex. Gephart, 1984; Perrow, 1999; Summerton och Berner, 2003) utgör delstudien ett bidrag genom att uppärmsamma en vardaglig tilldragelse, ett skydds- kommittémöte, där styrning till stor del realiseras genom det subtila formandet av kollegialitet och olika beslöjande formuleringar som förskjuter olika parters existens och avvärjar potentiellt kritiska, konstruktiva diskussioner.

**Delstudie II. Diskurser och identitetsskapande i utsagor om incidentrapportering från professionella inom kemisk industri**


I den första typen av positioneringar, den mot incidentrapportering som ett objektivt instrument, så var det mycket tydligt att incidentrapportering verkade i linje med föreställningar om den felande människan. På den fabrik (West Plant) där tillbudsrapportering användes mest frekvent visade den samlade statistiken över incidentrapporter att arbetstagarnas beteende oftast ansågs vara den främsta orsaken till incidenter och olyckor. Som ofta är fallet med människors förhållningssätt till den här typen av ledningssystem, så var det inte någon som ifrågasatte de förfaranden och metoder som ledde fram till, till synes, objektiva siffror och slutsatser om incidenters orsak och riskobjektets natur (se Power, 2004). Att incident-
rapportören anger orsaken till tillbuddet vid själva rapporteringstillfället, istället för efter en utredning, visar på den mycket svaga grund man hade för slutledningarna och statistiken som gjordes. Den administrativa, objektiva diskursen uppmuntrar heller inte ifrågasättande eller tvetydighet.

Den andra typen av positioneringar, den mot att bedöma individer och grupper ur produktionspersonalen, har sin grund i att många utsagor i intervjuerna innehöll just evaluerande, normaliserande utlåtanden (se Foucault, 1995). Det var även i detta fall den fabrik som använder incidentrapportering mest frekvent (West Plant) där sådana evaluerande uttalanden vanligen gjordes. I deras system för incidentrapportering införivas alla medarbetare med namn och antal utförda incidentrapporter. I en så kallad ”topplista” över rapportörer listades alla medarbetare utefter antal utförda incidentrapporter. Topplistans grafiska symbol är en gyllene stjärna, en symbol som jag förmodar att många kommer ihåg från barnomsorgen eller de tidiga skolåren. Några anställda blir också föremål för beröm i intervjuerna, på grund av deras förmåga att skriva. Eftersom de positiva värdeomdömena gavs till de på toppen av den glidande ”topplista” spelade även gradvisa skillnader mellan anställda roll. Denna betoning på att skriva, och möjligheten som infinner sig att uttrycka värdeomdömen om människors förmåga att skriva, visar på förändringar i rollkraven för den som jobbar inom industrin. Delstudien visar därmed på hur individens ansvar för riskhantering – vad som har kalls ”sekuriseringen” av identitet (Rose, 1999b) – är relaterat till en annan process som har kallats ”textualiseringen” av arbete (Iedema och Scheeres, 2003), alltså ökande krav på, och omfattning utav, språklig kommunikation inom och mellan professioner.

het för att hantera tillbudsrapportering som ett rollkrav. Den mobiliserade talaren som någon som kunde sätta gränser för när det var rätt att rapportera. I några fall användes handlingsfrihet till att undvika incidentrapportering och till att undvika en form av (upplevd) överdriven försiktighet som inte ansågs motiverad. Handlingsfrihet användes också för att skapa sig en ”egen plats” dit ledningens blick och förvaltningsvärderingar inte kunde nå.

Studien visar att incidentrapportering kan vara ett instrument för att öka personalens ansvar, både när det gäller att anpassa organisationens medlemmar till nya plikter rörande riskkommunikation, och i formandet av människan som riskobjekt, alltså som orsak till incidenter och tillbud. Studien visar därmed hur tillbudsrapportering formas till en social teknologi som knyter samman diskurser genom vilka maktrechtningar och ansvar för risk etableras och, delvis, utmanas. I syfte att bidra till en samhällsvetenskaplig forskning om incidentrapportering visar delstudien hur incidentrapportering diskursivt normaliseras och accepteras, men också delvis ifrågasätts och väcker motstånd.

**Delstudie III. Säkra arbetare eller säkra arbetsplatser? Dilemman i namngivningen och förhandlingen av tillbuds- och olycksorsaker i intervjuer med anställda inom kemisk industri**

Artikeln syftar till att studera dilemman som uppstår när anställda på säkerhetskritiska arbetsplatser namn, reproducerar och förhandlar hälsorisker och skyddande åtgärder. Även om det i tidigare forskning har påpekats att ”beteende” nu är en helt dominerande diskurs när det gäller arbetstagares hälsa och säkerhet (t.ex. Gray, 2009) så väcker artiklen frågan om inte människors riskdefinitioner och styrning av åtgärder alltid innehåller dilemma och därför alltid är ofullgångna och i viss mån mottagliga för förändring.

Resultaten visar att formandet av det mänskliga riskobjektet får särskilt stor genomslagskraft eftersom både äldre och nyare beteendeorienterade begrepp och förklaringar används. Oavsett om de härrör från vetenskaplig eller populär diskurs, så har äldre diskurser om mänskliga faktorn, vårdslöshet och klumpighet placerat arbetstagarens kropp och rörelser i centrum för vad incidentkausalitet och vardagligt, förebyggande arbetssmiljöarbete skall handla om. Följaktligen, när nya begrepp som ”beteende” och konsultprogram för hanteringen av dessa införs så kan argumenten om Vikten av arbetstagarens beteende förankras i redan befintliga förståelseramar. Studien indikerar att den fysiska arbetsmiljöns risker inte har gjorts till
vardaglig diskurs på samma sätt, samt att dessa hanteras genom en hierar-
kisk arbetsfördelning och därför kräver mer utav ett expertspråk samt
utbildningsinsatser för att krav ska kunna ställas från arbetstagares sida.

Det mest framträdande dilemmat gällande både beteendemässiga och
miljöorienteerade diskurser var att de tenderade att bryta mot normer om
jämlikhet. När det gällde beteendediskursen manifesterades detta genom de
många undvikande och beslöjande formuleringar som användes rörande
ansvar för riskfulla beteenden, samt de många försöken till reparerande
formuleringar som visade på en föregripande medvetenhet om att egalitär
normer höll på att brytas. Billig m.fl. (1988) har tidigare förklarat att den
beteendeorienterade diskursens moraliserande praktik öppnar upp för kri-
tik på grundval av egalitär övertygelser. Vad den här artikeln bidrar med
är att visa hur detta förhållande manifesterar sig empiriskt och med avse-
ande på diskurser om arbetsplatsrisker och skyddande åtgärder. Vidare så
hade det mest slående dilemmat när det gällde arbetsmiljöorienterade åt-
gärder att göra med produktionspersonalens anspråk på större delaktighet
i organisationen, och alltså, även i detta fall, anspråk som har sin grund i
egalitär normer.

Vidare så är det inte alls på ett ensidigt sätt som människor ställer sig till
orsaker till tillbud och olyckor. I och med att det finns olika former av
kunskap, logiker och diskursiva kategorier i arbetet med risk och arbets-
miljö, så kan olika aktörer i varierande grad mobilisera resurser för att
ifrågasätta både ”den osäkra arbetsplatsen” och ”den osäkra arbetaren”.

I de fall då aktörer vill lansera en nykategori – som till exempel bete-
ende – så måste dessa engagera sig i diskursivt arbete som motiverar över-
gången från en tidigare etablerad förklaring till den nya. Delstudien visar
på hur detta diskursiva arbete kan gå till, och med vilka diskursiva strate-
gier. Den nyanserar därmed diskussionen om individens ökande ansvar för
risk och riskhantering genom att belysa hur synsätt förespråkas, möts, och
förhandlas.

Desstudie IV. Att förstå kommunikationsbarriärer bland personal på
säkerhetskritiska arbetsplatser utifrån ett dialogiskt perspektiv

Medförfattare: docent Åsa Kroon Lundell

Delstudie 4 är primärt en metodologisk studie. Syftet är att argumentera
för ett diskursanalytiskt angreppssätt rörande frågor om hur risk och sä-
kerhet hanteras av personal på säkerhetskritiska arbetsplatser. Särskilt
fokus sätts på konstruktioner av ”vi” och ”dem”. Därmed närmar sig stu-
dien samma typ av problematiska fråga som har undersöfts i många andra

Mot bakgrund av resultaten som presenteras så demonstrerar studien, och argumenterar för, att det finns en fara i att försöka förespråka univerella lösningar på komplexa kommunikativa dilemma, med tanke på att kommunikation alltid bör ses som oupplösligt sammanbunden med kontextuella faktorer. Den fortfarande ganska framträdande förekomsten av olika kommunikationsideal (så som ”dialog”) i studier om risk och arbetsmiljö är då begränsande för möjligheten till att finna mer komplexa och produativa sätt att undersöka och förstå risk och säkerhetsfrågor utifrån ett kommunikativt perspektiv.

**Slutord och fortsatt forskning**

Syftet med avhandlingen har varit att analysera hur risk- och skyddsåtgärder konstrueras, reproduceras, och förhandlas genom kommunikativa medel inom säkerhetskritiska organisationer. Den har konceptualiserat dessa dansande kommunikativa handlingar som inkludade i olika former av styrning (eng. “governing”). Det vill säga, hanteringen av risk och arbetsmiljöfrågor behöver inte bara vara ett ansvarsområde som staten delar med, och delegerar till, arbetsgivare enligt välfärdssamhällets modell, utan hanteringen kan formas på olika sätt genom ett flertal olika institutionaliserade rutiner och kommunikativa medel. Avhandlingen har närmast sig dessa definierande praktiker och synsätt som särskilt angelägna att studera eftersom det är genom dem som den organisatoriska uppmärksamheten kan flyttas från en typ av område eller objekt till ett annat; som resurser kan tilldelas, eller ej, till hanteringen av vissa former av mänsklig exponeering; och som parter utses som ansvariga för skyddsåtgärdar.

I tidigare forskning har en spänning och konkurrens uppmärksammat mellan individuellt och kollektivt skyddande strategier (se t.ex. Gray, 2009,

(1) Trots att studien visar att kollektivt förebyggande åtgärder åberopas och reproduceras i vissa anställdas utsagor så blir det också uppenbart att en stor del av ansvaret för att undvika skador och ohälsa läggs på den enskilde arbetstagaren. Analysen har kunnat visa att denna individualiseringsbottna i traditionella identitetspositioner, med hierarkiska direktiv jämt produktionssociala självförebråelser som befäster viken av att arbetstagare ska utföra sitt arbete med större försiktighet, samt i de nya koncept och teknologier som främjar medarbetaransvar och deltagande i linje med nyliberala idéer om effektivt resursutnyttjande.

(2) Avhandlingen utgör också ett bidrag till forskningen genom att den visar hur anställdas utsagor om risk och säkerhet exponerar dilemman, och särskilt när, medvetet eller ej, egalitär normer tas i beaktande. Till exempel så visar paper I och III hur de moraliserande inslagen i en beteendediskurs regelbundet kompletteras med förmodrande, pronominella eller helt aktörslösa diskursiva val. Därem exponerar talaren sin medvetenhet om egalitäre normer och söker föregripa kritik rörande att han eller hon ”skyller” på andra eller inte inkluderar sig själv som ansvarig. Avhandlingen argumenterar vidare att denna diskursiva ”förmildring” av produktionssociala riskansvar villkor beteendediskursens fortsatta inflytande inom risk och skyddsområdet.

Förhoppningsvis genomförs det i framtiden fler kvalitativa, diskursanalytiska studier som kan komplettera och främja både risk- och diskursanalytisk forskning, men förstås också arbetsmiljöarbetet ute på arbetsplatserna. Forskningsdata i sådana studier får gärna omfatta inte bara intervjuer utan även till exempel inspelade samtal från produktionsavdelningar eller sammansattarum. Avhandlingens fokus på enskilda fabriker kan också vidgas till att omfatta konsultfirmor, divisionsledningar och huvudkontor på en internationell arena. Även om ett sådant projekt skulle vara resurskrävande så torde sådan forskning kunna bidra till flera discipliner med intresse för risk och arbetsmiljöområdet.

Som diskursanalytisk forskare vill jag gärna fortsättningsvis delta i ett utbyte av forskningsresultat, idéer och argument för att berika det gemensamma vetenskapliga tänkandet kring risk-, hälso- och skyddsfrågorna.
IJOEL RASMUSSEN

Safety in the Making

REFERENCES


Iedema, R., Jorm, C., Long, D., Braithwaite, J., Travaglia, J. and West-


Jag tänkte spela in intervjun. Då behöver jag inte skriva, utan kan istället bättre lyssna och ställa frågor. Är det okej? Det är bara jag som kom mer att lyssna på inspelningen.

Starta inspelning.

Jag tänkte att du kan börja med att beskriva lite vad du arbetar med, vilka arbetsuppgifter du har och så.

Huvuduppgift? Sidouppgift?

Och hur länge har du arbetat här?

Hur benämner ni olika, mer eller mindre svåra olyckor? Om ej svar: kallar ni dem incidenter, tillbud, olyckor, eller?

Kommer du ihåg någon incident? Ja, när hände det senast något?

Vad skulle du säga orsakade den här incidenten? Kan du komma på ytterligare orsaker?

Har ni något system för rapportering av incidenter?

Hur går det till vid incident rapportering?

Kan du berätta om någon erfarenhet av sådan rapportering?

Rapportera det mycket, anser du, eller låter vissa bli att rapportera ibland. Varför i sådana fall?

Hur skulle du beskriva reaktionen på rapportering?

Sker det någon återkoppling?

Välkomnas rapporteringen eller hur är reaktionen?

Vilka blev följderna, åtgärderna?


Vilka träffar du en vanlig dag?

Träffar du cheferna på arbetsplatsen? Om chef: Träffar du operatörer/underhållspersonal?

När och på vilket sätt?

Operatörer: På ditt arbete finns det möjlighet till informella kontakter här, eller befinner man sig länge vid samma moment i produktionen utan att träffa/prata med andra?

Kan de enskilda arbetsuppgifterna till sitt innehåll eller tidsmässiga ordning modifieras?

Går det att utveckla ett personligt arbetssätt tycker du?
APPENDIX

Interview guide (intervjuguide, henceforth in Swedish)

- Jag tänkte spela in intervjun. Då behöver jag inte skriva, utan kan istället bättre lyssna och ställa frågor. Är det okej? Det är bara jag som kommer att lyssna på inspelningen.
- Starta inspelning.
- Jag tänkte att du kan börja med att beskriva lite vad du arbetar med, vilka arbetsuppgifter du har och så.
  o Huvuduppgift? Sidouppgifter?
- Och hur länge har du arbetat här?
- Hur benämner ni olika, mer eller mindre svåra olyckor? Om ej svar: kallar ni dem incidenter, tillbud, olyckor, eller?
- Kommer du ihåg någon incident? Ja, när hände det senast något?
  o Vad skulle du säga orsakade den här incidenten? Kan du komma på ytterligare orsaker?
- Har ni något system för rapportering av incidenter?
  o Hur går det till vid incidentrapportering?
  o Kan du berätta om någon erfarenhet av sådan rapportering?
  o Rapporterar det mycket, anser du, eller låter vissa bli att rapportera ibland. Varför i sådana fall?
  o Hur skulle du beskriva reaktionen på rapportering?
  o Sker det någon återkoppling?
  o Välkomnas rapporteringen eller hur är reaktionen?
  o Vilka blev följderna, åtgärderna?
- Vilka träffar du en vanlig dag?
  o Träffar du cheferna på arbetsplatsen? Om chef: Träffar du operatörer/underhållspersonal?
  o När och på vilket sätt?
- Operatörer: På ditt arbete finns det möjlighet till informella kontakter här, eller befinner man sig länge vid samma moment i produktionen utan att träffa/prata med andra?
  o Kan de enskilda arbetsuppgifterna till sitt innehåll eller tidsmässiga ordning modifieras?
  o Går det att utveckla ett personligt arbetssätt tycker du?
o Hur påverkar ett fel(-grepp) din säkerhet?
- Alla: Hur kontrolleras arbetet, alltså produktionstakten? Hur får man denna information?
- Finns arbetsinstruktioner? Instruktioner i vilken form? Vem gör instruktionerna? Går det att själv påverka?
- Träffas ni någon gång och utbyter åsikter om arbetet, prioriteringar, svårigheter osv.? Kan du berätta hur det egentligen går till? Konkret exempel?
- Om vi går tillbaka lite i tiden, kommer du ihåg fler incidenter? Orsak?
  o Nu har du berättat om X och X och X. Kan du berätta om fler typer av incidenter?
- Kan du berätta om någon allvarligare olycka som har skett? Hur gick det till?
  o Vad skulle du säga orsakade den här olyckan?
  o Kan du komma ihåg hur man kommunicerade kring den här händelsen? Mellan arbetskollegor, mellan olika yrkesgrupper?
- Såg att ni får en stor order och det blir mycket att göra; hur är arbetsbelastningen?
  o Går det bra att förena arbetsbelastning och hälsa/säkerhet?
  o Hur fungerar avvägningarna här? Hur ser din medverkan ut?
- Vet du om man kommunicerar med andra företag om risker, incidenter och olyckor? Forum?
- Händer det någon gång att medierna rapporterar om företaget?
  o Hur tycker du att rapporteringen brukar vara?
- Är det något mer som du har tänkt på som vi inte har tagit upp när det gäller risk och säkerhet?
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