Who wants to be in a prison -

if you can be in a palace?

Rewriting organizational control

in the work setting of IT-engineers

Written by Sara Fredriksson, Eva Oeltges & Sandra Schiesbühl

Degree Project submitted in part fulfillment of the requirements for the

MSc Managing People, Knowledge and Change

LUND UNIVERSITY

School of Economics and Management

Abstract

This interpretive study, taking place in the context of the IT-company Ericsson[1], aims at exploring the engineers' understanding and experience of organizational control. The study builds on data gathered through semi-structured interviews, which are analyzed by taking the lenses of discourse theory. The study firstly shows the engineers' understanding of control as something 'bad' whilst contrasting it with freedom as something 'good'. This leads to the second finding of engineers presenting themselves as being free of control meanwhile showing awareness of certain restricting factors within project work. These findings are discussed by drawing upon metaphors of a prison and a palace, thereby uncovering the phenomenon of rewriting organizational control. With the study pointing towards the engineers being social actors of constructing the world as they understand it, this allows us to argue for the influence of discourse when rewriting organizational control. Lastly, our research contributes to rethinking organizational control in the setting of IT-engineers by taking a new perspective on the role of projects in engineering work.

Keywords: organizational control, discourse, freedom, engineers, knowledge-intensive firms

---

[1] The research site for our study was the IT-company Ericsson AB as a representative for a contemporary KIF in the Swedish context.

Acknowledgements

To all of you who made this possible. Thank you.

Special gratefulness is expressed to ...

To our interviewees for time and insights.

To our supervisor Nadja Sörgärde for invaluable feedback and support.

To Mats Alvesson for inspiration and criticism.

To Björn Åkesson and Pia Lindström for finding our interview victims.

<div align="right">

...and most of all to Matias Juarez...

</div>

We simply could not have done this without you.

We wish you a pleasant reading!

Table of Content

A day at Ericsson ...

... She arrives at the office rather early in the morning, wanting to have some time alone before her colleagues get in. After grabbing a cup of coffee, she opens her laptop and begins going through her emails. The last couple of days, she has been staying at home taking care of her sick little daughter. She has however been able to work from home and thereby she is still up to date with her projects. This flexibility of being able to work from wherever it fits her is one of the reasons to why she feels happy working for the company. In an international company, work however never sleeps, and overnight she has received a vast amount of emails from colleagues in faraway places like Shanghai and Quebec...

She chooses to prioritize the most urgent emails, not really because someone tells her to, but because she believes it is the best way of handling it. This freedom of being able to choose how to structure her work is also something she values highly. She would get crazy having a boss telling her exactly what to do, now she can do whatever she wants, however she wants it and whenever she wants it. It's all up to her as longs as she delivers her work in time. After dealing with the most urgent matters, she takes a look at her calendar to update herself with upcoming meetings that she needs to prepare for. These meetings in combination with her involvement in current projects are determining the agenda for her workday.

When her colleagues start dropping in she takes time to have a coffee together with her colleagues, discussing various matters from sick kids, holidays and new phones to upcoming meetings and ongoing projects. One of her colleagues is formally her manager, they speak a bit in the corridor and she updates him on the status of her daughter as well as of her work and a goal, within one of her projects, which she has been struggling a bit with. Despite formally being her manager, he has no real insight in or control over her direct work tasks - something that she values. His role is rather, besides receiving her weekly written reports and checking that she delivers her work on time, to enable her work and to coach her towards further development. The latter is done through annual goals agreed upon in concert between her manager and him.

She spends the rest of her day working on developing a component that she is responsible for, something that includes working on the checklists connected to the project, double checking that certain processes are being followed, emailing the sourcing department as well as meeting with designers. She does however have to leave work a bit earlier than usual, she has a meeting with a contractor renovating her bathroom so it is more convenient for her to work from home during the afternoon whilst waiting for him, again she thanks her lucky star for being granted this well needed freedom allowing her to choose. [2]

---

[2] With this fictive story we do not claim to portray reality, it is merely an illustrative way to provide the reader with an insight to what we interpret to be an Ericsson engineer's everyday working life. The story is based on material gathered during the interviews that this study builds upon, particularly focusing on the most salient patterns and thereby not claiming to portray reality.

1 Introduction

Based on the fictive story about a typical working day of an engineer at Ericsson, this chapter aims at providing the reader with a presentation of the contemporary background to this study and thereby arguing for its relevance, purpose and contribution to academia as well as practice.

1.1 Background

At first glance, the introductory story portrays a workplace characterized by freedom, almost seeming too good to be true, meanwhile the issue of organizational control being rather overlooked. This arose our attention to take a closer look at the engineers' experience of organizational control in their workplace seemingly characterized by freedom. The interest in the topic of organizational control in the setting of engineers was touched upon by organizational scholars such as Kunda (1992), Barley (1996), Alvesson (2004), Rennstam (2007) as well as Newell et al. (2009), allowing interpretive and critical insights.

Within the paradigm of a knowledge society (Clegg et al., 1996), it is particularly the IT-industry that seems to be the rising star among knowledge-intensive firms (KIFs), fueling into consumers' crave for technological solutions (Barley, 1996). Since society and companies are increasingly dependent on technology, guided by constant technological innovations in their daily lives, the IT-industry and its engineers are regarded as symbols of the knowledge era (Barley, 1996), thus placing them in the 'post-bureaucratic' era (Clegg, 1990; Baker, 1992). Deriving from this, KIFs seem to have moved away from traditional bureaucracy and managerial control, towards more flexible structures. Given the context of KIFs, this further leads to the idea that normative control forms are more appropriate than traditional means of control, such as behavioral control (Alvesson, 2004; Rennstam, 2007; Newell et al., 2009).

In engineering work, literature (Robertson & Swan, 2003; Alvesson, 2004) claims this type of work to be characterized by complexity and ambiguity. Resulting from this, questions of autonomy and self-determination are claimed to become central, particularly as autonomy is argued to be highly relevant for engineers, as for instance stated by Rennstam (2007). Authors including Foster and Harris (2009) and Ekman (2012) can be taken as examples of making freedom a central aspect of the concept of autonomy. This leads us back to the introductory story portraying a workplace, where freedom is emphasized as a guiding theme.

1.2 Problematization

Built on this background, this revealed that engineers are claimed to have high needs for autonomy in a context assumed to being less bureaucratic and controlled (Kunda, 1992; Robertson et al., 1999; Starbuck, 1992). By opposing this claim with critical research on the topic of organizational control, one study is particularly relevant in the context of our research namely "The Return of the Bureaucratic Machine?" by Kärreman et al. (2002). In this study the authors argue that KIFs, particularly IT-companies, by trend may rather be characterized by formal structures and rules than the discourse might actually reveal. This points towards a seldom-made claim in the so-called 'post-bureaucratic' era. The study by Kärreman et al. (2002) can be regarded as one example for not only questioning the claimed "'end of bureaucracy' story" (Höpfl 2006, p. 9) and the resulting disappearance of behavioral control forms, but also the claimed autonomy and freedom of knowledge workers. Besides them, other studies including Barker (1993) argue that images such as the 'iron cage' by Weber (1958) may be compensated by other less obvious means of control, meanwhile being more constricting and limiting in the context of engineering work. By drawing upon another study by Kärreman and Alvesson (2004) called "Cages in Tandem", the authors firstly argue for a merge of more bureaucratic and normative control forms in organizations, rather than the former being replaced by the other. Given this idea of a certain interplay between these control forms, their study built on the claim of having a more loosened 'structural cage' compared to a tighter 'mental cage'.

This has shown that literature holds opposing claims regarding the nature of knowledge work. On the one hand, mainstream literature argues traditional control forms to be less applicable in the field of knowledge work, thereby instead referring to the importance of normative control forms. On the other hand, interpretive and critical literature questions the claim above. Instead, they propose not only the presence of more bureaucratic control forms, yet project an even more restrictive nature of them (Kärreman et al, 2002; Kärreman & Alvesson, 2004). Given this problematization, Rennstam (2007) introduces the idea of peer-reviewing as a medium of control in engineering work. This new way of looking upon the phenomenon of organizational control in the context of IT-engineering inspired us to rethink organizational control, in turn forming the base our study builds upon.

1.3   Research Purpose

The relevance of this study derives from literature's opposing claims in regards to organizational control in the context of the IT-industry. Thus, the purpose of this study is to explore what may lie below these opposing claims. We thereby intend to provide new insight by rethinking the phenomenon of organizational control, where we see a lack in research, particularly in the specific context of IT-engineering. It does however not lie in our interest to uncover how engineers are actually controlled, as this may be more of a technical research matter. Instead, this study seeks to explore the engineers' understanding and experience of control at our research site Ericsson, whereby their subjective idea of whether or not being controlled plays part in. In addition, the rise of IT-companies with engineers becoming the symbol of the knowledge workers accentuates the relevance of our research. Last but not least, this research strives to contribute to academia as well as practitioners in terms of rethinking organizational control.

1.4   Research Questions

Our study is guided by two main research questions:
- How do engineers at Ericsson understand organizational control?
- How do engineers at Ericsson experience organizational control in everyday work life?

1.5 Delimitations

There are several theoretical and empirical limitations to this study. Within the field of organizational control, we aimed at uncovering how engineers as one specific type of knowledge worker understand and experience organizational control. This is further placed in an internal organizational setting, being solely based on the IT-firm Ericsson. We purposely chose to take such a narrow perspective in order to address what for us seemed to be a lack in research. This refers to a lack of understanding control in the specific work field of IT-engineers. The conclusions of our study foremost address the field of IT-engineering, yet can be of relevance to the wider context of knowledge work.

Within the topic of organizational control, we wish to refer to the theoretical focus of limiting our study to behavioral control forms. Thus we intentionally put other control forms like normative forms with cultural or identity control aside. As we chose to purely take the lens of discourse theory, we find it necessary at this point to briefly reason for why not taking other possible lenses while seeking to understand the study's findings. Amongst others, an identity perspective may have been another plausible one to take. This idea derived from our notion of engineers revealing a strong view of what characterizes them as engineers as well as their work, which we find could have delivered an interesting base for researching engineers' view of organizational control through an identity lens. However given the limitations of our study, we moreover believe identity to be underlying deeper levels, which would need to be researched throughout a longer period.

2   Literature Review

This chapter aims at mapping the existing literature on our research topics by especially drawing upon interpretive and critical insights. We will thus start with painting a picture of the literature around engineering work in order to establish a base for further discussions. The following section will focus on organizational control within the context of engineers. Finally, this chapter has the ambition to show the current research gaps, thereby arguing for the importance of this study in particular.

2.1   Painting a picture of engineering work

Literature on organizational control within the setting of engineering work commonly depicts a similar picture, namely the one of engineers seemingly being less controlled than any other types of work (Kunda, 1992; Robertson et al., 1999; Starbuck, 1992). This claim is built upon a range of factors that play into the work of engineers. Besides a claimed highly autonomous work, even depicting autonomy as a prerequisite for the job, it may be further linked to the expert status of engineers, or the complex ambiguous work of creativity and innovation (Newell et al., 2009). Given the claim of such distinctive features of the engineers' work, this opens up different ways of how to approach the topic of organizational control. As we consider the nature of engineering work as a relevant aspect to understand organizational control, we will firstly draw upon literature on engineering work.

2.1.1   The role of complexity and ambiguity in engineering work

For describing the nature of engineering work, the aspects of complexity and ambiguity become firstly important. Complexity as one characteristic can be linked to the engineers' cognitive competence their work is depending on. Authors such as Newell et al. (2009, p.

24) define knowledge workers in general as "both professionals and those with other discipline-based knowledge or more esoteric expertise and skills". Thereby, they are claimed to usually engage in complex, creative and problem-solving working tasks (Alvesson, 2004), where they face the challenge of applying specialized knowledge or even create new knowledge (Newell et al., 2009). This engagement in highly intellectual work is what Alvesson (2001) and Kärreman et al. (2002) consider as central for KIFs, such as IT-companies. Importantly, this highlights the need of expert knowledge as a main characteristic of engineering work, as another major contributor in research on knowledge work named Barley (1996) discusses.

By acknowledging the complexity in their work, another distinct feature come in the foreground. Organizational scholars such as Alvesson (2001; 2004) as well as Robertson and Swan (2003) further bring critical consideration onto ambiguity into play. In the specific case of engineers, ambiguity refers not only to the nature of what they exactly do, but also to the result of the work. Given this insight into technical work so far, it may go without saying that managers often do not know or understand the work of their subordinates in terms of specialized expert knowledge. This argument of ambiguity in their work is what Whalley (1986) and Rennstam (2007) bring into discussion by looking upon engineers as "trusted workers", meaning that managers are in need to trust and delegate responsibility to their subordinates, as they are the "esoteric experts" (Newell et al. 2009, p. 24). For understanding the complex ambiguous role and work of engineers, Barley (1996) provides a framework in his article on the technization of work. His description on what engineers do is basically aligned with Hargadon and Sutton (1997), that is the idea of "'[taking] care of' materials by 'transforming' them into symbols" (Rennstam & Ashcraft, 2013, p. 6). By applying expert knowledge, engineers thereby engage in interpreting those symbols, as Barley (1996) notes.

He reveals technicians, IT-engineers being a main example, as the new ideal type of work and calls them the symbol for the knowledge era. Particularly, Barley (1996) continues by noting that the role of engineers is not only characterized by being portrayed as problem solvers and functionalist specialists, but also being buffers and brokers. This means that

engineers are perceived as being prior responsible for transferring meaning of symbols by sharing it with the social world, as well as for enabling and sustaining technical infrastructures that are necessary for others to do their work. This framework by Barley (1996) particularly shapes the relevance of knowledge-intensiveness work of engineers in post-bureaucratic organizations, even representing them as the ideal type of today's workers. However, critical positions including taken by Rennstam and Ashcraft (2013, p. 7), challenge the "technician [as] an archetype of the knowledge-intensive character of work in the modern era". This viewpoint is aligned with Thompson et al. (2001), who point to an increased importance in knowledge in work rather than knowledge work itself.

Besides such distinct features of engineers, which may then already require a specific work settings for engineers to be able to work in, as researchers like Newell et al. (2009) claim; goes hand in hand with ambiguity and uncertainty in KIFs as such. Organizational scholars (Alvesson, 2004; Kärreman et al., 2002; Kunda, 1992; Robertson et al., 1999) discuss such an ambiguity-centered approach shaping the nature of IT-companies, thus "ambiguity, uncertainty, and indeterminacy may be the 'natural' state of affairs in KIFs" (Robertson & Swan, 2003, p. 838). Specifically, this uncertainty and ambiguity in the engineers' work setting is argued to be noticeable in non-standardized working procedures. This moves along with portraying organizational structures becoming less bureaucratic and hierarchical, rather they seem to be flexible and ad-hoc forms (Alvesson, 2004; Kunda, 1992; Newell et al., 2009).

2.1.2 The role of autonomy in engineering work

Continuing this thought, researchers and others claim (Alvesson, 2004; Kunda, 1972; Newell et al., 2009) engineers are assumed to be predominantly shaped by their competence and expertise by engaging in complex, creative and problem solving work tasks within an ad-hoc and flexible working environment. Based on this, many authors (Alvesson, 2004; Kunda, 1992; Meiksins & Watson, 1989; Newell et al., 2009) outline autonomy as one of the main distinctive features in engineering work. It may ultimately be the complex and ambiguous nature of engineering work that shapes the need for a high

level of autonomy for engineers. This aspect is strengthened by Rennstam (2007), arguing that autonomy plays a critical part in engineering work, as it both enables and makes it necessary to work in autonomous modes.

When it comes to definitions, Foster & Harris (2009, p. 139) for instance discuss that "the principle of autonomy is concerned with the idea that individuals should be free to make their own choices". Other authors, such as Ekman (2012) notes that autonomy is moreover defined through empowerment that is given to employees. Giving a feeling of empowerment to employees, so it is argued, can serve as a means of motivation (Watson & Meiksins, 1991), specifically self-actualization, often being a desired status characterizing post-bureaucratic employees (Ekman, 2012). Another example of defining autonomy can be linked to Coeckelbergh (2006, p. 238), who elaborates on autonomy in engineering work on a group level. He thereby argues "this concept means the independence not of the lone professional but of a group that has some degree of self-containment and self-determination." As these definitions indicate, different authors draw upon different sub concepts, which they see most relevant for autonomy. One can observe that ambiguity may lie in defining what autonomy is. Critically reflecting upon this, thereby positioning ourselves, we may face the case of one may solely make claims to be autonomous (Alvesson, 2004).

2.2 Painting a picture of organizational control in the work setting of engineers

Built on this literature review on engineering work, it has shown that engineers can be looked upon as a specific type of knowledge workers. Researchers may argue for this due to a number of reasons, we however focused on the aspects of complexity and ambiguity in engineering work as well as the need for autonomy as distinctive characteristics, which one could see as posing specific demands on organizational control (Alvesson, 2001; Rennstam, 2007). This pre-understanding served to map the ground for how organizational control can be understood in the engineering context.

2.2.1 Traditional understandings of organizational control

Literature (Alvesson, 2004; Kunda, 1992; Robertson & Swan, 2003) claims that traditional understandings of organizational control become less relevant to knowledge work due to the autonomous nature of the professionals as well as the complex work tasks, as Alvesson (2004) argues. As Ouchi (1980, pp. 134-135) notes "when tasks become highly unique, completely integrated, or ambiguous for other reasons, then even bureaucratic mechanisms fail". By that, literature claims a focus on other than traditional bureaucratic control forms, leading to the claim of bureaucratic control to be less present in the post-bureaucratic era (Alvesson, 2004; Kunda, 1992; Robertson & Swan, 2003). In the respective context of engineering work, Rennstam (2007, p. 16) refers to the "problem in the shape of a discrepancy [...] when we combine the characteristics of engineering work with organization theory's dominant concepts of organizational control".

These dominant concepts of organizational control are argued to have mainly evolved from organization theory (Rennstam, 2007). What literature commonly terms under the umbrella of behavioral control, is built on a manager-centricism approach targeted at influencing employees' behavior (Anthony & Godvindarajan, 2007; Berry et al., 2005). While Rennstam (2007) discusses mainstream literature, he depicts behavioral control as a vertical control approach. For the use of this thesis, we however frame these behavioral control forms as traditional perspectives on control. The latter represents the most common and referenced control forms, taking Edward's basic strategies of behavioral control as an example (Edwards, 1979; Gossett, 2009). To begin with, *simple control* resembles much of the idea of Taylorism as being concerned with direct supervision and exercising control in direct ways of authority, evaluation and disciplinary action based on reward and punishment; *technical control* (Edwards, 1979) means that control work is supported by means of technology; and *bureaucratic control* aims regulating organizational activities by a system of rules in order to directly influence subordinate's behavior (Edwards, 1979; Ouchi, 1979; Mintzberg, 1979). Bureaucratic modes of control are thus typically characterized by focusing on hierarchy, division of labor, standardization and centralization, which enables evaluation and discipline of employees' behavior through organizational policies and the creation of rules (Gossett, 2009; Kärreman et al., 2002).

Hence, this traditional perspective on control has been shaped towards bureaucratic and technical understanding throughout history. The most common image of picturing this perspective may be portrayed in the 'iron cage' by Weber (1958). Weber's (1958) metaphor was created in times of modernity and the rise of capitalism, thereby fundamentally shaping the look upon bureaucratic control (Höpfl, 2006).

When however remembering the independent working character of knowledge workers, vertical and formal control forms that follow a manager-oriented perspective seem to become useless (Alvesson, 2004). As argued above, managers are often claimed to be less knowledgeable than their engineers regarding specific work, making vertical control less relevant and creating the necessity of trusting the engineers regarding their specific work (Rennstam, 2007).

2.2.2 Moving beyond traditional understandings of organizational control

By taking new perspectives on the claimed post-bureaucratic era, most researchers understood moving beyond traditional control forms as moving towards normative ones. With traditional control forms argued to be inadequate (Gilbert & Sutherland, 2013), this has shifted the focus towards indirect forms of control, primarily normative understandings (Alvesson, 2004; Robertson & Swan, 2003). Before moving towards normative forms, this firstly implies regarding traditional forms such as bureaucratic control less relevant. In much of the ongoing debates, a wide range of authors including Clegg (1990), Baker (1992) as well as Child and McGrath (2001) have been arguing for a fall of bureaucracy, where its dominance has slided away by transcending onto the new century of post-bureaucracy (Josserand et al., 2006). Drawing upon post-bureaucratic understandings of control, normative control forms assumingly defined as emphasizing social, cultural, ideological facets of contemporary organizations rather than instrumental mechanisms. Hence, the subordinates' mindset is argued to be targeted through norms and values within organizations. Ultimately, normative control can be understood in terms of creating strong internal commitment, identification with the organization and intrinsic work satisfaction (Alvesson & Kärreman, 2001), opposed to perspectives on control that are leaned onto rather bureaucratic, technical or simple control.

However, Rennstam (2007) goes even one step further in the sense that he draws upon another way of classifying organizational control. In regard to normative control, he understands these in a different way as most literature. This is based on the fact that he categorizes them as being vertical control methods, as still guided by management. Therefore, he focuses on horizontal control in order to elaborate on control forms that are free of managerial influence. Rennstam (2007) delivers much of the needed research on organizational control in the setting of IT-engineers, as his study focuses on horizontal control taking the lens of peer-reviewing based on teamwork. Importantly, this research is an example of taking some new perspectives on organizational control, specifically in the context of engineering as knowledge work.

Moving beyond traditional perspectives not only opens up the field of much discussed normative control, also does it open up rethinking traditional control forms as such. This is in response to the earlier mentioned debates that claim the so-called "'end of bureaucracy' story" (Höpfl, 2006, p. 9) by questioning its fall in a range of new discussions (Maravelias, 2003, Alvesson & Thompson, 2005; Höpfl, 2005; Josserand et al., 2006). This does not mean to completely disregard traditional forms, but instead drawing upon an adapted understanding of bureaucracy as the context of the modern knowledge era may demand (Kärreman et al., 2002; Höpfl, 2006). These responses should serve as a way of widening the reader's horizon for considering newly combined types of bureaucracy in the setting of KIFs.

This is what Kärreman and Alvesson (2004, p. 172) refer to as "modern bureaucracies", that is the interplay of different forms of control. Even though normative control has become more important in KIFs, this does not say that they substitute any bureaucratic mechanism of regulating organizational activities. Further support is given by Kärreman et al. (2002, p. 85), who critically conclude in their research on two organizations relying primarily on knowledge workers that KIFs should not be interpreted as the "antithesis of bureaucracies". From this critical perspective, Kärreman and Alvesson (2004) refer to it as a 'cliché' that contemporary organizations are becoming increasingly more flexible and network-based. This critical insight can be best reflected in the title 'The Return of the

Machine Bureaucracy?' by Kärreman et al. (2002), who claim that less bureaucracy in KIFs may be overrated. This phenomenon is referred to as 'selective' or 'soft bureaucracy', both suggesting that the nature of knowledge work may be increasingly shaped by bureaucratic modes of control. The meaning the authors project onto selective bureaucracy refers to an ambiguity-centered approach, aiming at coping with the common characteristic of ambiguity in knowledge work. What may be particularly characterizing the 'soft' version however is the seemingly less obvious presence of bureaucracy. Kärreman et al. (2002) conclude by laying stress on a difficulty of strictly differentiating such, given that different combinations are present in KIFs.

Having illustrated these various ways of looking upon the 'bureaucracy vs. post-bureaucracy' discussion, we intended to guide the reader away from such traditional perspectives on bureaucratic control. In turn, we are rather aligned with such a 'softer' understanding of bureaucracy, moreover embracing overlapping possibilities rather than considering control in engineering work as 'black and white'. Disregarding the possibility of combinations of different, adapted control forms would contradict with the context of engineering work being characterized by ambiguity. This is reinforced by our social-constructionist worldview, as we do not find it at the center of our research to become lost in absolute categorizations of control.

2.2.3   The cages of the "post-bureaucratic era"

Built on this softer understanding of bureaucratic control forms, the 'post-bureaucratic era' yet finds its presence in the light of rather less obvious cages. As in bureaucratic times, control was mainly expressed through the hard notion of the 'iron cage' (Weber, 1958), this has led up to contemporary metaphors of the structural cage (Kärreman & Alvesson, 2004) and the glass cage (Gabriel, 2005).

In regard to the structural cage, Kärreman and Alvesson (2004) offer a well-grounded study as a starting point by putting organizational control in the context of KIFs. For once, their study builds upon the structural cage, which represents bureaucratic modes including

regulations, mechanisms and procedures in contemporary organizations. What the authors argue for is a loosened form of this cage due to the fact that any bureaucratic control forms, built on Weber's iron cage (Weber, 1958), encounter limits in organizations such as KIFs because a certain degree of autonomy and freedom is given to organizational members. Instead, they argue that normative and socio-ideological control forms not only become more relevant, but also more controlling, as portrayed in the contrasting metaphor of a mental cage (Kärreman & Alvesson, 2004).

Mainly, these studies show how the so-called 'cages' become tighter and more constraining, yet through normative ways. Another example particularly important for the setting of IT-engineering, refers to Barker's (1993) by drawing upon his study on account of an ethnographic approach. His research primarily reveals the finding of self-managed teams. This is often the case in engineering work, as also supported by Rennstam (2007). Barker (1993) moreover builds his study on Weber's iron cage (1958), where he refuses to regard bureaucratic structures, rules and this control as the most restrictive force. Rather, Barker (1993, p. 4) argues that "the irony of the change in this post-bureaucratic organization is that, instead of loosening, the iron cage of rule-based, rational control, as Max Weber called it, actually became tighter". Referring to this as concertive control, he discusses this as an even tighter control than bureaucratic structures, as the shared meaning and belief system becomes very strong in restricting the organizational members even more than bureaucratic structures. Barker (1993) continues to argue that even though employee empowerment and autonomy is placed in the center of engineering work, this makes it most powerful and restrictive. He builds his arguments on the premises that (1) concertive control is created by team members themselves and (2) is difficult to be aware of it. Strengthened by Gossett (2009, p. 4), he notes "ironically, concertive control systems illustrate that the more freedom workers have to participate in their own management, the more controlled they can become". The examples of Barker (1993) as well as Kärreman and Alvesson (2004) showed that knowledge workers, specifically engineers, may be constrained even tighter on a normative level; in a way of 'compensating' the bureaucratic, iron cage by Weber (1958).

Gabriel (2005) offers a new perspective on contemporary organizations by making use of the metaphor of a glass palace and glass cage. One of his main arguments thereby builds upon the seemingly constraint-free display of glass palaces, as contemporary organizations are more and more framed as made out of glass; however arguing at the same time that it might rather be a glamorized image, as it is only the perception that makes constraints of the glass cage less obvious, hence leading to solely illusions of freedom. This reflects his discussion about "both the glitter and the fragility of organizations in late modernity" (Gabriel 2005, p. 9). Linking this to Rosen (1985), he introduces the example of a gathered company breakfast, serving as a platform for manipulating one's perception through symbols. In this respective context, authors such as Gabriel (2005) and Rosen (1985) rather emphasize the phenomenon of being misguided by one's perception when it comes to the experience of organizational control. This offers another perspective on the cages of the 'post-bureaucratic era', specifically the one of a less visible display of bureaucratic control.

Built on this, we position ourselves with such critical scholars in terms of being skeptical towards the idea of being free of constraints in an organizational context. As mainstream literature often portrays organizational control in a power-free system (Ekman, 2012), this is especially challenged by Hardy (1996), who critically remarks the constantly present power of the organizational system itself. This pluralistic and process-relational approach puts control in a framework that acknowledges power relations, thus indicating a certain degree of domination and control by the system itself (Foucault, 1972; Hardy, 1996). We importantly align our understanding of control with this insight, as we argue that one can never be completely free of underlying power forces when being involved in organizational systems, even if seemingly having autonomy (Gabriel, 2005; Watson, 2006).

2.3 Identified research gaps

The literature review has shown that existing literature on the topic of organizational control in the context of engineers concurrently points towards the following research gaps. Deriving from this, most research in the field of control on engineering work places

the focus on normative control forms. In this sense, unlike much of the mainstream literature arguing bureaucratic control in modern KIFs to be less relevant and applicable, the study of "The Return of the machine bureaucracy" claims a critical stance by proposing bureaucracy yet to be present in KIFs (Kärreman et al., 2002). We find this opposing claim to be in need of further research in the specific context of IT-engineering. We thereby aim at exploring what may lie below what literature commonly claims.

Building on this, we generally note a research lack in rethinking control in engineering work. With rising importance of the working field of IT-engineering as KIFs (Barley, 1996), we find it crucial to look into possible underlying less obvious control means around engineers as knowledge workers; besides normative forms. This need for reconsidering organizational control in the work setting of engineers has been touched upon by Rennstam (2007), whereby he points at peer-reviewing as well as technology as inspiring examples for relevant control forms in engineering work. Nevertheless, what literature seems to lack research on, is the possibility of considering the engineers' experience of projects as a medium of control. Hence, this lies at the core of our research.

2.4   Theoretical framework of discourse theory

By taking the analytical lenses of discourse theory, this goes back to the well-known French philosopher and postmodernism Foucault (1972; 1979; 1980), who primarily shaped the importance of discourse theory through his critical research on power. Similarly to Foucault (1980) as well as Alvesson and Sköldberg (2009), we see discourse as much more complex due to certain power and knowledge relations. Clarifying our standpoint by taking Foucault's (1972; 1979) discourse theory into account, we discuss our findings by regarding a certain power play as the puppet master behind discourse. Out of the very complex research done by the postmodernist philosopher, what we wish to highlight is firstly seeing discourse as a medium for uncovering claims and assumptions (Foucault, 1972; Miller, 1997; Alvesson & Sköldberg, 2009). Subsequently, discourse lives off of certain power relations as an expression of the latter. This eventually makes certain discourses dominant over others (Foucault, 1980; Alvesson & Sköldberg, 2009).

Moreover, Foucault (1972; 1980) related discourse theory to the basic premise of not only influencing our ways of talking, but consequently ways of thinking and acting. This rationale makes discourse theory particularly important for our study, as it is further the perception of certain phenomena that is affected by discourse.

By thus taking the analytical lenses of discourse to discuss our findings, we apply discourse theory as a frame of references for shaping certain power plays of dominance. This in turn makes transferring meaning through symbolic language a crucial starting base (Alvesson & Sköldberg, 2009). This inspired us to draw upon metaphors as ways of discussing our findings in relation to literature while applying discourse theory.

3 Methodology

This chapter will initially provide the reader with an understanding of our research approach, thus leading to the relevance of an interpretive research design. Secondly, the chapter aims at elaborating on our data collection method as well as data analysis. To conclude, we will emphasize the relevance of reflexivity.

3.1 Research Approach

The journey of a research starts much ahead of the day a researcher decides to conduct a study. It is the social world we are and have been living in, which has been guiding us all along to take certain beliefs and assumptions over others. Specifically, the assumptions a researcher takes regarding ontology and epistemology as two central philosophies, guided us as researchers towards a particular paradigm. We found it thereby necessary to clarify our personal assumptions in order to enable the reader to follow our lens on the social world, in turn influencing our study. With ontology being concerned with questions of one's existence, our view on reality was stemming from social constructivist beliefs. We rejected the idea of the existence of one single objective reality, but believed that we as human beings actively construct realities, which then allowed there to be multiple realities (Alvesson & Sköldberg, 2009). By considering this for our study, this was in coherence with our epistemological underpinnings, referring to the view on the nature of knowledge also being constructed by multiple truths, opposed to the existence of one objective truth (Bryman, 2012). Built on this broader elaboration our personal ontological and epistemological premises, we as researchers were guided to take an interpretive paradigm. This interpretative paradigm as a methodological framework not only set our epistemological and ontological positions, moreover formed our views and taken-for-granted beliefs on human nature and the social world (Alvesson & Sveningsson, 2008; Chalmers, 1999).

Thereby being deeply driven by an interpretive knowledge interest, this allowed us to explore how engineers Ericsson understand and experience organizational control in their engineering work. The goal was thereby to gain a deep understanding of the worldviews that the research subjects took. What we further take from this is the understanding of giving voice to the research participants through addressing them as human beings. This interpretive way of doing research becomes not only highly emic in the sense that we base our sense making on listening to our research subjects (Bryman, 2012), but also the need for engaging in an interpretive academic work. The latter can be explained due to several considerations. To start with, the topic of knowledge work and workers itself is already shaped by a high degree of ambiguity regarding definitions and categorizations. For us, this means that our study indeed depends on our subjective viewpoints, as the topic itself underlies so much ambiguity, which makes a study of technical knowledge interest inappropriate. In other words, given the situational and contextual nature of knowledge (Newell et al., 2009), this underlies our interpretive approach to research (Prasad, 2005). Further, by focusing on Ericsson as one specific KIF, we do not measure knowledge by means of quantity, but instead strive for in-depth understanding, which lies at the core of an interpretive research paradigm. What then becomes apparent is the belief that we as researchers are a central instrument throughout the process of conducting research by regarding ourselves as inseparable from text and interpretation (Prasad, 2005), being sense-makers in qualitative research. This means we regard this research process to be highly value-laden through our subjectivity (Prasad, 2005).

Moving from the paradigm to the specific design approach, a qualitative, moreover abductive approach has been chosen. Firstly, we are aware of the fact of having a lot of pre-knowledge within the fields of knowledge work and control, as we are familiar with much of literature from previous courses. We are thereby aware of the fact that we cannot conduct an inductive study due to being pre-guided. And secondly, our research process was thus characterized by a circular process of moving between empirical data and theory, which reinforced our study being of abductive nature (Alvesson & Sköldberg, 2009).

3.2   Data Collection Method

Stemming from an interpretive philosophical stance as explained above, the choice of methodology was clearly guided in a certain direction. This means that we aimed at uncovering the interviewees' understanding and experience of organizational control through a semi-structured interview design as the main data collection method. We further engaged in observations and taking field notes.

3.2.1   Semi-structures interviews

Even though semi-structured interviews follow a preliminary template of topics to cover, they allow free discussions with the omnipresent possibility of adapting to unexpected circumstances (Bryman, 2012). This made semi-structured interviews as an adequate tool for exploring the meaning of how our research subjects construct to the world through gaining an insight into their worldviews, thus creating rich and describing data. We particularly paid attention the keep a dynamic character of the interviews, meaning to be open for unexpected and transformational findings. Hereby, we worked in an emic way, meaning that we listened to the interviewees in terms of how they projected their meaning and experience of control. In regard to the sampling process, finding the right interviewees is a crucial requirement (Bryman, 2012). As a starting point for this, we provided our contact person at Ericsson with an interview profile consisting of the basic requirement, namely the interviewees being knowledge workers. As the corporate language at Ericsson is English, all 16 interviews were conducted in English, in detail 12 with current employees, two with managers and two with former employees. In respect to current employees, we conducted interviews with mainly component engineers, being located within different areas of Ericsson, collaborating with the sourcing as well as the design unit. Important to note is that some of the employees were given team-leading responsibilities. We moreover conducted interviews with two managers, as we hoped for a better understanding of the engineers' context by considering the bigger picture of what it means to be an engineer. Lastly, we believed that it was of special value for our thesis to get additional insights from two former employees of Ericsson. Those interviews

particularly gave us the chance to gain viewpoints by interviewees, who were already more distanced to Ericsson, leading to a more reflected perception.

3.2.2 Observations

Due to the majority of interviews being over phone, it was important for us to make an observation by visiting the company site in Lund. This served to supplement the insights mainly of verbal nature with such of non-verbal one. The impressions we retrieved from there functioned as underpinnings of our already findings.

Furthermore, according to Silverman (2007), the real power of interviews manifests itself as being an observation. This means that we regarded the interviews as delivering the potential for being observations in themselves. Being particularly relevant for our face-to-face interviews, we hereby benefited from our research team of three people as we divided roles, as to such having not only an interviewer. Thus, we divided specific roles for one member taking the function of leading the interview questions, another focusing on supporting with follow-up questions, but also the opportunity for one to take the role of a distanced observer. This enabled gathering many of the advantages that observations offer. In turn aligned with Ryan and Bernard (2003), we took observations by means of field notes as a way of strengthening findings, used for both face-to-face and phone interviews. After having taken field notes throughout the entire research process, when reflecting about these, we indeed noticed tight connections to the findings of verbal nature.

3.2.3 Critical discussion of methodological choices

The choice of Ericsson as our research site was strongly driven by its current presence on the IT market, where knowledge is growing faster than in most other industries, thus making creation and innovation through continuously new knowledge a key factor. This makes Ericsson a relevant Swedish as well as global company.

In terms of sampling, there are several aspects we seek to highlight in order for the reader to comprehend our choices, including such that may be perceived as possibly problematic

without further explanation. Firstly, we as researchers were aware of the fact that it may be regarded possibly problematic to include interview subjects that have been former employees at Ericsson. However, after having been in a continuous discussion, we ultimately decided to include them, which can be justified by firstly being aware of possible biases, especially on a personal level. However, we took their contributions very critically towards potential personal resentment and evaluated the answers independently from potential personal to functional answers. Yet, we believed these subjects to be offering very relevant insights as having had the chance to have some critical distance to the company.

Secondly, another factor worth mentioning refers to the position of most of our interview subjects, as being component engineers, as those may be specifically characterized by being able to operate from different locations. When interviewing these employees, being less controlled, and in turn having higher levels of freedom and flexibility, may in that sense represent a higher requirement for this type of work than for other fields of engineers. The findings may thereby be highly dependent and potentially biased on this specific group of engineers.

Thirdly, the age of many of the interview subjects may be emphasized. Not knowing each interviewee's exact age, but by having heard most of their employment durations at Ericsson, many subjects have been working for Ericsson for a time span between 20 to 30 years. This implies a certain age group, which in the next step means a certain level of employment relationship. The latter may be characterized by a certain degree of trust as a given, besides making certain themes prevailing and others not. Clearly, certain control forms like by being told exactly what to do become less likely and necessary with long-lasting employments as employees may most likely be experts in their daily work and therefore are less in need for direct instructions regarding their work. Rather, autonomy as mainly understood as independent work in general becomes a likely theme compared to fresh employees not having gained such a position yet. Another factor worth considering involves gender, as the majority of our sample was male.

For our thesis, conducting most interviews over phone became a necessity due to the interviewees being autonomous knowledge workers with very flexible locations, for instance we had interviews with employees currently located in China. Due to these circumstances, it becomes necessary to elaborate on our choice for phone interviews over videoconference. Given the fact that our interviewees had the wish for anonymity largely at heart, skepticism regarding data protection and privacy law of some of these platforms such as Skype may be regarded critical. This led us to find proper and focused phone interviews as a much more powerful method for retrieving interesting insights by actually laying the stress on the verbal nature. In particular, considering the greater possibilities for our interviewees to relax within the anonymity provided by the distance of the phone, thereby increasing the possibilities of more personal answers.

3.3   Data Analysis

Departing from a standpoint of regarding research as a "developmental recursive task" (Marshall & Rossman 1999, p. 24) as well as approaching qualitative research as a craft (Daft, 1983), we engaged in a reflexive and circular process of our analysis. Thus, we refrained from perceiving our research project as a linear work, by following a step-by-step order, as stated by Marshall and Rossman (1999, p. 21), "real research is often confusing, messy, intensely frustrating, and fundamentally nonlinear". In order to secure this developmental process, we analyzed the data in a simultaneous and continuous manner, while taking interviews, giving us the opportunity to keep the reflexive character of our research project. In order to manage large amounts of complex data in nature, it is commonly suggested to apply certain strategies within the process of data analysis. For that reason, we followed a cutting and sorting technique of analyzing and codifying data, as Ryan and Bernard (2003) put it, similarly to how Rennstam and Wärefors (2011) see the entire process of qualitative analysis as consisting of sorting, reducing and arguing techniques. Deriving from this comes the understanding that within the task of reducing data as a prime challenge, certain additional methodological tools can be applied. This means for us that we worked with strategies of discourse analysis as well as thematic analysis, as the 'search for themes' (Bryman, 2012). The latter worked as one way of an initial categorical reduction (Rennstam & Wärefors, 2011). This particularly means that we

dealt with identifying themes through looking for similarities, differences, metaphors and stories (Ryan & Bernard, 2003). Hence, we engaged in a series of several steps for the sake of analyzing, codifying and making sense our interview data.

Step 1: Transcribing

The first step concerned transcribing all the conducted and recorded interviews. We particularly made sure that everyone had an equal amount of interviews to transcribe in order to secure an even better understanding of the interviews.

Step 2: Initial and selective coding

For the process of initial coding, we decided on doing this in an independent way, meaning that all three of us engaged in this step separately in order to be free of each other's biases. The aim of this step was to look for very obvious salient themes, such as specific metaphors and repetitions pointing to different understandings of organizational control. As a way of sorting the data, we made use of the highlighting and tracking function by using different colors and comments, reflecting the difference between key and sub themes. While this process was still close to the data as stated necessary by Rennstam and Wärefors (2011), the step of selective coding aimed at sorting the data according to different labels. This was moreover built on the previous coding work, with the difference of now executing detailed color-coding. In other words, we engaged in a process of in-depth categorization through having discussed and agreed upon the central themes. This can be regarded as a key as it required a base of common understanding first, so to clarify which labels should be emphasized since further selective coding was conducted individually. This step supported our process of sense making on a more reflexive level. This moreover reassured the circular nature of this process, not aiming at separating the collection and analysis process from each other, rather using this intertwinedness to our advantage of continuously adapting and improving our research.

Step 3: Creation of summary tables as a way of reducing

This part symbolized the main strategy in reducing and cutting the complex amounts of data by first reflecting on the coding done so far. Therefore, we created summary tables for all interviews, linking three columns indicating (1) how the interviewees understood and experienced this theme, (2) how we interpreted and (3) connected to representative quotes to each key theme. This especially gave us an overview of what emerged to be most salient, particularly given through similar and confirmed perceptions, as well as those standing in contrast. Further, what has not been said, resembling missing data, was a key indicator for uncovering contradictions on an in-depth level. Later in the process we returned to the interview transcriptions in order to find more distinctive quotes supporting the arguments.

Step 4: Data preparation for arguing

One of the most crucial and trickiest steps of any data analysis process is to actually relate the interpretations of the most salient findings to the bigger picture, hence requiring some distance to the text. After having reduced the data and findings through summary tables, we thereafter formulated the key findings from all data collections. We did this together by engaging in creative working methods, such as mind maps. We indeed experienced this final step of the data analysis process as very challenging not only because it was difficult to keep an overview of the overload of data but also to create a red thread throughout our arguments. In terms of arguing for our findings, we aimed at ensuring our arguments to be of solid and trustworthy ground through basing arguments on specifically selected quotes after the salient themes had been turned into findings.

To conclude, we want to highlight again the circular nature of this data analysis process. Despite structuring the analysis process according to steps for the ease of reading, we did not want to indicate a fixed sequential, linear structure. Indeed, we experienced a constant back and forth when analyzing the data, as common in qualitative research[3].

---

[3] Based on our understanding of interpretive researchers, this comes with the understanding of acknowledging them as human beings opposed to pure data. In turn, the term 'data' is rather used as a way to align the methodology chapter with how literature commonly refers to it.

3.4 Criteria

Achieving ultimate validity, reliability or even generalizability as striving towards typically in positivist research (Bryman 2012; Ryan & Bernard, 2003), do not lie at the core of qualitative research however. Instead, we focused on trustworthiness and reflexivity throughout our research as the prime criterion for conducting qualitative research, thereby striving towards rich rigor and credibility in qualitative research (Tracy, 2010). By being aware that *we* are the primary instruments, this made our research indeed highly value-laden (Merriam, 2002). As a main general characteristic of qualitative research, we hereby wanted to pinpoint that we are fully aware of its advantages as well as downsides in order to produce richly descriptive research. Continuing the thought of enriching this qualitative research through a focus on being reflexive, this process more than anything involves constant evaluation and justification of our methodological choices and interpretations (Alvesson & Spicer, 2012). This has the purpose of becoming aware not only of the benefits of one's models, but also of its limitations. This evaluation process as a continuous companion throughout the journey of research fuels on self-distance. How we intended to apply exactly this, refers to examples of being aware of our own biases and assumptions, for instance in regard to engineers' level of freedom.

When looking at literature however, rather vague definitions on reflexivity exist, wherefore it may be more useful to describe its significance while drawing upon the concept of 'functional stupidity' by Alvesson and Spicer (2012). The latter may be symbolizing a lack of reflexivity, hence a danger of obtaining no self-distance, no awareness of possible downsides - so-called stupidities - of one's own research, which may ultimately lead to becoming caught in what Alvesson and Spicer (2012) call a 'tunnel vision'. In this sense, our thesis project benefited from the fact of being three students working on it, thus not hindering us from the ability to move between multiple perspectives, which are necessary to gain a holistic picture. This is why the trick of the reflexivity game involves balancing both being in the project and distancing oneself through the means of engaging in reflexive interpretation, which is what Alvesson and Sköldberg (2009) name the interplay of reflecting upon the conditions and context surrounding one's research, at different levels of interpretation.

4   Analysis

This chapter aims at analyzing the interviews by drawing upon selected quotes by the interview participants. The chapter is divided into three main parts, thereby starting off with discussing the data that underpins the interviewees' way of emphasizing freedom in their job; leading to analyzing the data which supports the interviewees' understanding and experience of control; and ultimately arriving at the analysis of restricting factors in the engineers' work.

As described in the methodology, the conducted interviews were guided by an interview guide in turn building upon our research questions. The following analysis is however based on the insights presented by the interviewees. In order to give voice to the interviewees' viewpoints the analysis has been structured according to highlight the most salient themes[4].

4.1   'Good' Freedom

When it came to the question of how the engineers experience organizational control in their everyday working life, they most of the time chose to speak about a different topic instead, namely the topic of freedom. This can be shown by a quote of one employee called Bosse, where he switched from the topic of control to the one of freedom within a few seconds.

"So it is not like I have a manager who [tells] me what to do every minute or every day. I have a lot of freedom, that's it." (Bosse).

Another example is Olle, who rapidly changed between the two topics. Particularly in his case, he emphasized the freedom as something 'good', which was additionally strengthened by the positive tone of his voice. This seemingly positive association with

---

[4] To protect the integrity of our interviewees all names in this study have been altered. The names have been chosen randomly amongst the fictive characters by Astrid Lindgren.

freedom became a salient matter throughout all the interviews, as their positive formulations and our field notes suggested.

"It would be very annoying to have a line manager sort of deciding what I will do and keep track on a day-to-day basis. The freedom is good I think." (Olle).

4.1.1   Own decision-making

When letting them speak about their work and role in general, by far most of the interviewees immediately addressed the specific concept of freedom. As this kept happening recurrently, we identified it as a pattern. It was coherently emphasized in various ways. Firstly, the engineers focused on the aspect of freedom by describing, what we framed as, their own decision-making in their daily work; something they typically described as "free to choose", "free to do" and "it's up to me". For instance, one employee, named Anders, presented this decision-making role in the following words: *"Yeah, I think I am free to do … to decide my daily work I would say." (Anders)*

The way the engineers presented the freedom of own decision-making can be further exemplified by the following quotes, thereby not only stressing the notions of "free to do" and "free to choose", but also the engineers' similar understanding of freedom. *"You're quite free to what you want to do, right." (Johan);* as well as *"You have the freedom to pick what you want to do." (Oskar)*; and *"That's a thing that I am free to choose" (Erik).*

The understanding presented by Johan, Oskar and Erik, as shown above, was similarly revealed by Emil, who used the expression of "free to choose", as the quote below demonstrates;

"I meet my manager and say Hello in the morning and maybe my manager goes home before me in the evening. She or he is not controlling or not telling me what to do. I am telling myself what to do every day. I work quite independent of management. I report to their demands what the outcome is, in a report." (Emil).

Another common feature, later turning out to be a salient pattern, was the focus on own decision-making in the engineers' daily work commonly described by the engineers by using the expression "it's up me". The following quotes may indicate this common emphasis on the aspect of own decision-making;

"I have this feeling of freedom and it's up to me to prioritize" (Bosse); "But in the end, it is up to you how you do it." (Johan); as well as "A lot of things is up to you." (Oskar)

In addition, this was emphasized when Johan, repeated himself by drawing upon the expression "it's up to me" several times during the interview.

"I decide quite a lot of what I want to do this week. Nobody tells me "Now you should do this and that. Or have you done this?" I may be given a task to do, but how I define the task, is up to me." (Johan).

Besides Johan, another employee, namely Bosse, further engaged in repetitions of the theme of freedom. What supported our impression of the engineers speaking about high degrees of freedom in their daily work, was that Bosse was not only repeatedly underlined the concept but he did it with an increasing determination in his voice. This determination of both Johan and Bosse made us reflect upon their seemingly importance to make us understand the relevance of the freedom they were describing by saying, *"[...] the feeling of some sort of decision, or freedom to decide on my daily work [...]"; "I mean, I think I said I feel a lot of freedom in my work [...]." (Bosse).*

4.1.2 Flexibility

Within their role of own decision-making, the engineers described ways of how they are making decisions and choices in everyday work. They thereby moved on a more specific level through addressing flexibility, for instance *"So, there's a lot of flexibility." (Johan).* The term flexibility was commonly characterizing their examples of what specific daily aspects were up to them to decide, for example choosing work hours as well as work locations. In regard to the former, the example of flexible work times, commonly practiced at Ericsson, turned out to be an important aspect in the work of an engineer, underlined by

statements such as, *"Cause we got flexible hours, right. So I can basically come and go as I please." (Melker).* In the case of another engineer, named Erik, he used quite determinant words in order to stress the role of flexibility in his daily work when he said that, *"I'm boss of my time" (Erik).*

Besides the example of describing the possibility of choosing free working hours, as one way of highlighting what was up to them to decide, the interviewees moreover emphasized their flexibility in terms of work locations, which in turn strengthened the pattern of flexibility from an additional perspective. By this, the employees talked about the possibility to work from home and have online access to work from locations all over the world. Referring to this as working in remote and agile ways, Tommy strengthened this by saying that, *"It's not you can work from home. You can sit anywhere in the world and you can work." (Tommy).*

Overall, this general pattern of freedom was reinforced by the site-observation, serving as a support for the interviewees' responses. During this site observation we were able to gain a first-hand insight into the environment surrounding our participants' on a daily basis. What was striking was the design of the office building itself, the modern atmosphere created by a transparent glass construction allowing the flow of natural light. Right following, we found ourselves in an immense display of sofas, instantly creating the association of just wanting to relax. On our way to the conference room, we noticed an internal gym while passing by corners filled with refreshments and snacks. All these little features enhanced a generally positive feeling, but moreover associations of freedom. Given this insight into our research site, we retrieved the notion of the engineers' working environment playing around with different associations of freedom indicating that whoever wanted to, may do and take whatever they liked.

To conclude, the interviewees seemed very keen on highlighting their freedom, in particular as an answer to the question of how they experience organizational control in their work. Apart from the interviewees explicitly referring to freedom as something "good", they additionally seemed to be keen on communicating the concept of freedom positively throughout all interviews to us. This can be reasoned not only by the instant switch to the topic of freedom as well as commonly positive formulations of their

sentences, but also nonverbal impressions they gave away. It seemed that it felt natural and more comfortable for them to talk about freedom, which may explain their switch to this topic within seconds.

Further noticeable were the common terms the engineers used throughout presenting and explaining the freedom in their work. They firstly referred to the freedom of own decision-making, while then specifying this with a pattern of flexibility. All together, the engineers engaged not only in much "I" talk, but it became even clearer by the frequent use of the expressions "up to me", "free to choose" and "it's flexible", particularly when taking the site-observation into account. Especially the repeated talk around freedom by some of the engineers made them seem even more determined to make us aware and understand the role freedom plays in their work. This led us to get the feeling of the employees being eager to present themselves in a way that would show freedom to be a significantly characterizing part in their daily work.

4.2 'Bad' Control

While freedom was presented in a rather positive light as a main aspect of their work, the interviewees seemed to contrast it with the concept of control, the latter thereby resembling rather negative associations. The quote below by Anna well reflects this negative association with control, by comparing it with being constantly watched by someone. Even if not all engineers explicitly stated the term "negative" itself, it was seemingly present in the engineers' way of describing control throughout the interviews.

"For me that is actually a negative word that somebody like "big brother is watching you"... Yeah [laughter] I don't like that [...]" (Anna).

4.2.1 Traditional understanding

The quote by Anna well mirrors one of the most commonly made connotations presented by the engineers, this is the one of associating control to a rather traditional understanding of control. These captured notions we interpreted as direct supervision and micro-management under the umbrella of behavioral control. They did not mention these

traditional concepts around organizational control explicitly, yet their way of depicting their understanding of control can be linked to such control forms.

"I experience it as something negative because I would associate it with someone trying to keep control on like I said details in I go about my work." (Olle).

The quote by Olle, where 'it' refers to control, can be taken as a representative example of instantly relating their general understanding of control to a more traditional perspective on it. Most frequently, the engineers thereby portrayed a manager supervising employees. As exemplified in the quote below, Bosse put control in relation to something that, in the field of organizational control, may be regarded as direct supervision.

"So it is not like I have a manager who tells me what to do every minute or every day." (Bosse).

The quotes above, by Olle and Bosse, can be looked upon as well resembling this negative association with control. It seemed that control was understood as causing a feeling of having to follow the instructions given by a manager, which gave us the notion that the engineers saw control as something being imposed by someone else onto them. Following instructions was also indicated in terms of rules by Johan, *"[...] So we are not really never restricted in tight rules here." (Johan),* who arose the impressions of control being connected with having to follow rules, which would in turn evoke feelings of being restricted. However, Johan framed this perspective of what can be related to behavioral control as not being present at Ericsson, which will be the dominant theme guiding through the next section of the analysis.

4.2.2 "Not me"

Based on the understanding of control, presented by the interviewees, particularly the "not me" was striking. For instance, the quote by Emil not only reveals this common understanding of control in terms of what we would call direct supervision, but also emphasized that this does not apply to him, as the end of the quote shows.

"Some may think, 'You should do this and this every day, and then they ask you when are you ready with this, then you report to that and then you get a new task, and then you do that and so on.' But this is not the way how I work." (Emil).

Particularly Emil had an ironic undertone in his voice, which reconfirmed the "not me". Other interviewees frequently negated the idea of being controlled at Ericsson, as reflected by Nisse when stating that *[...] I mean we don't have that you need to do have to do this or that today." (Nisse).*

When linking this to their understanding of control as consisting for instance of direct supervision and micromanagement, the ideal managerial interaction was rather described as being on a generic, more strategic than a detailed operative level. Britta as a manager put it in the words of, *"So I as a manager have no ambition or need or will to penetrate into the details and to be specialist within their areas [....]" (Britta).*

Interesting to note here was how managers revealed a similar experience of control as being something rather negative than the employees. Resulting from this basic similar understanding, even the managers were very keen on presenting control in a certain way to us, communicated that they do not execute control over the engineers. On top of this, Olle even spoke about a feeling of annoyance if control in terms of direct supervision or micromanagement would be the case at Ericsson.

"It would be very annoying to have a line manager sort of deciding what I will do and keep track on a day-to-day basis." (Olle).

In order to strengthen this "not me", the interviewees drew upon several examples of specific job industries in order to clarify their viewpoint. In this sense, one employee, Johan, compared his engineering work at Ericsson with the car manufacturing industry as a way of distinguishing the two.

"In a factory line where you are building a car. So you know the line it's spilling one step at the time and at the end you have a product, right. So [there are] well defined steps that should be taken. It's not like that in a component engineer role, right [...]" (Johan).

Furthermore, Melker compared Ericsson to the fast-food industry, namely McDonald's, as a way of putting a clear contrast between these two. When Melker was ironically saying, *"I mean, this is not McDonald's." (Melker),* we noticed a strong negative reaction that took a resentment-like level. Even though McDonald's may be connoted with many different viewpoints, it thus seemed to be important for Melker to clearly separate his engineering work from other work, such as McDonald's. There may be several ways to reason this, on the one hand the engineers' understanding of having rather complex work tasks thereby requiring lower levels of control. On the other hand, this may reflect the understanding of McDonald's and the car industry as workplaces representing the essence of behavioral control forms, thereby highly differing from Ericsson as a workplace. Given these comparisons to other job industries, it seemed the interviewees were very keen on letting us know that Ericsson is not a workplace where this kind of control seems to be applicable, going even further by emphasizing that it is a workplace where control is not needed.

The argument of giving us the impression of no control being present in their job became even more striking when looking upon the quote by Bosse, commenting at the very end of the interview on the control-related questions.

"No, I could just comment it was interesting questions and these type of questions … you don't think about these things much on a daily basis. As you could notice, sometimes I could not even really answer. But very interesting." (Bosse).

His personal conclusion points at the difficulty in talking about certain themes, as they did not seem to be confronted much with in their work, making control a rather less conscious issue. We hereby found support in the idea of organizational control being something they are not used to talk about, thus opening up many different possible interpretations.

To conclude, we gained the impression that the engineers have an overall negative understanding of control, referring to control as something 'bad'. The engineers mainly communicated the latter by connecting control to ideas that literature would propose as behavioral control through direct supervision and micromanagement. What these parts in

turn suggest is that the engineers presented the idea of control as something not applicable in the work of an engineer based on their understanding of control. They commonly expressed this through the linguistic use of "not me". By pinpointing a strict separation between their own and the car- as well as fast food industry, they presented a contrast in terms of control levels.

Disregarding the question of whether the engineers are controlled, what can be said is that the analysis points towards the most probable conclusion of the participants not presenting themselves as being controlled in their job. From this, more likely than not, we can point to the likelihood of them not feeling controlled. We arrived at this conclusion by considering the negative connotation with control as elaborated on the first part of this analysis, the statements of "not me" as well as the opposing emphasis on positive concept of freedom.

4.3 Acceptable Projects

Built on this analysis so far, the interviewees painted a picture of not being controlled through forms of direct supervision and micromanagement. When the engineers then moved on speaking about their ongoing work, they commonly referred to projects they were involved in. The engineers additionally described how their individual involvement in projects guided everything from work tasks to work time. One employee exemplified this through calling his job project-oriented.

"The base from the beginning is that you have a task that is ... "Your job is that ...", then you follow the work, but the work that we do is more project-oriented, not manager-oriented." (Emil).

Thereby, the engineers made an effort in clarifying the important role projects have in their work. We started noticing a certain pattern of projects guiding their work. Especially having heard the importance of projects, indicated by the pattern above, it was interesting for us to further listen to how the engineers portrayed common ways in how the projects seemed to guide their work.

4.3.1 "But"

What we can say however is that even though not presenting themselves as being controlled by managers, the engineers simultaneously described certain factors in their work, which they commonly have to follow within their projects. Johan can be taken as an example by saying, *"Of course you have a lot of rules and processes that sort of guide you [...]" (Johan)*.

Johan can be considered as one of many interviewees describing the necessity of following processes and rules. When another engineer, Emil, explained to us how certain things are done in his by stating, *"Then I had to take things up to the design people and see that we ... how to do something as well what to do so. So have to inform the team and inform the way to go forward and with analysis [...]." (Emil)*.

We became curious noticing that what they seemed to refer to, was a certain way of doing things, which would show some kind of structure. In the case of Emil, it seemed that he particularly stressed the word "have to", in turn associated with having to follow any kind of rule. The expression in itself points at an involuntary nature, making it no longer a matter of their own free choice.

The way, how several engineers described how 'things' are commonly done in projects, led us to observe a pattern of the engineers describing restrictive factors. We moreover retrieved this as a contradiction to the salient pattern of own decision-making, as highlighted by the engineers while describing their freedom. This contradiction raised our attention, as it was seemingly omnipresent throughout all the interviews. To facilitate the use of the contradiction in this study, we framed it as the so-called "but". The engineers' notion of the "but" was commonly addressed not only to through a "but", moreover through "as long as" and "if".

Anna, one of the interviewed managers, put it in the words of *"I think it's good that we have this kind of freedom but under responsibility, of course" (Anna),* while another interviewee described this from the perspective of an employee by drawing upon the

restrictive word "if" by saying that, *"In the end of the day, if the manager gets what he or she wants, then you get all the liberty that you want." (Oskar).*

This pattern was similarly revealed by Melker, moreover contradicting himself within one single sentence. By stressing especially the expression of "as long as", this pattern was something the engineers often communicated to us when saying, *"[...] I mean I basically structure my own day and as long as I get the job done nobody cares, you know." (Melker).*

Melker thus contradicted himself more than once during the interview, which arose our attention. By speaking about the freedom in his daily work in terms of structuring his day, he concurrently highlighted the relevance of deadlines. *"How I do it or when I do it as long as I meet the designated deadline it's fine." (Melker).* Having analyzed the quotes above, it is interesting to note while the engineers referred to the contradiction or the "but", this seemed to take place without their awareness.

When remembering the engineers' understanding of control as something negative or even 'bad', interestingly the engineers did not seem to give the same impression when describing the restrictive factors in their work practice. This can be well exemplified by one female employee referring to checklists as a vital part of the ongoing projects, when telling us that, *"It's more for specific points in the projects when you need to make sure that everything is aligned and everything is ready like it's supposed to be. I don't find it limiting in my work." (Lisa).*

Even though not being an engineer herself, she works closely with the engineers in projects. Her insights into engineering work raised our awareness, as it was especially she herself who started reflecting about her colleagues' ongoing projects. Thereby not only being familiar with checklists, as indicated above, it was further interesting how she spoke about projects a possible medium of control in engineering work.

"I think the engineers are more controlled in their daily work by their project because they may have meetings, like short meetings in the morning where they divide what tasks need to be done." (Lisa).

4.3.2   Softer terms

Several quotes above, like the ones by Lisa and Johan, already implied certain terms used in order to describe ways of following up on the progress of project work. Those examples were primarily the terms of "guiding" and "making sure". When analyzing in more depth, we noticed quite a wide range of similar expressions, with further examples of "keeping track" and "checking". For instance, Anna as one of the managers made use of the latter by saying, *"And then of course, I don't go in and check the operative work they are doing [...]" (Anna).*

Another example refer to Lasse, who spoke about the expression of "making sure" in relation to actions point in the context of projects by stating, *"Yes and we had action point to make sure that…you have to realize by the way [...]" (Lasse).*

These common references got our attention and made us interested in analyzing this, as we noticed traces of these all being regarded as softer equivalents of control. What became striking was the fact that the word control itself however was rarely used. As a way of exemplifying this, Pelle said that, *"So it's also my responsibility that the team [is] running on the right track [...]" (Pelle).*

Anders, another employee, even emphasized "keep track" several times during the interview, which strengthened the common repetition of this expression. *"But [there] can be some problems to keep track of all projects"* as well as in *"No, because normally I don't work with just one thing. I work with ten different things at the same time and to keep track of that, of everything [...]" (Anders).*

Olle as another example seemed very keen on presenting the expression of "keeping track" to us, wherefore we noticed a pattern of softer notions of control throughout his interview. This firstly became obvious in *"So it is very easy to keep on track what is going around the clock." (Olle, employee)* and was reinforced by him later during the interview when stating *„Well, it's about being structured and kind of keeping track of what I do. That's fair but the word control ... I can't .... Negative perspective on that." (Olle, employee)*

Not only that Olle used it several times throughout the interview, he even referred to the same expression within a few seconds in the following quote. In this sense, he represents one example of the interviewees' consistent use of such softer synonyms to control.

„So it must be difficult for a manager to keep track on what we actually spend our days on then. I would say it needs that they go out in the organization and speak with the people you work on with a day-to-day basis. That's the only way to keep track on what I do." *(Olle, employee).*

His use of "keep track" made us wonder about why the word control itself in turn was not used. When building on our field notes, we experienced the candidates to seemingly feel more comfortable and natural talking about control when using such softened and euphemized ways of referring to what we would frame as traditional bureaucratic control in everyday work. By speaking in softer terms whilst avoiding putting these into a context of control, we gained the impression that anything project-related was not included in their understanding of being control, thereby not placed in the 'bad' box of control.

Throughout the interviews, what the interviewees seemed most keen on presenting to us, refers to the central role projects seem to play as guiding their work. After we became interested in hearing more on that matter, another salient pattern was revealed to us. This refers to the "but" in form of restrictive factors, as several interviewees emphasized this as being a rather strong restriction in their claimed freedom. This "but" was on the one hand exemplified through the notions of the structures, rules and processes the interviewees gave away. On the other, this concerned checklists and deadlines, given the context of project work. The notion of the "but" as a salient pattern was something we in turn interpreted as a contradiction to the pattern of freedom the engineers presented earlier on. What further reinforced this was how the engineers seemed keen on communicating softened and euphemized ways of describing control in everyday project work, most of the time referred as "keep track".

4.4 Conclusion

In conclusion, the engineers presented themselves as having a high degree of freedom in their job rather than presenting themselves as being controlled. We indeed sensed a general categorization of control as 'bad' and freedom as 'good'. When reflecting upon the engineers' way of depicting freedom as something 'good' and control as something 'bad', we found this to be captured quite well with the metaphor of a palace and a prison. Given this black and white thinking of the themes of freedom and control we retrieved from the engineers, this should symbolize a way for illustrating the engineers' notions, of verbal and nonverbal nature, retrieved throughout the interviewees. Using these metaphors as imaginary tools will help transferring our impressions, retrieved during the interviews, to the reader. However, this study does not argue for the metaphors' actual existence, as it may only show indicators pointing towards similarities, leading to this interpretation.

The feelings the engineers gave away when describing control may be similar to the feelings of being restricted one might have when being in a prison. Our association with a prison is based on being caught in a rule-dominated place, most importantly restricting you in your freedom. This metaphor leans onto our interpretation of the language the interviewees used to describe control as negative, moreover as a contrast to freedom. The restrictive-like metaphor of a prison should thus symbolize the common platform of the interviewees' understanding of control in terms of close supervision and micromanagement under the umbrella of behavioral control. This in turn leads to capturing a range of comparisons with having to follow rules in 'tough regimes' like McDonald's to "big brother is watching you" in terms of constant supervision.

As indicated above, the metaphor of a prison can moreover be looked upon as an interpretation of the strong contrast to the theme of freedom made by the engineers. Therefore, we found the metaphor of a palace well resembling the interviewees' way of contrasting control. This portrays much of a clash between 'good' and 'bad', similar to the engineers contrasting control to the much more positively associated theme of freedom. Our association is built upon seeing a palace similar to a fairy tale one such as Aladdin's. Such a palace not only represents a unique glory and magnificence, but is painted in shiny

and glittery colors and filled with treasures, catching your attention. The palace is not only attractive from the outside, but also evokes curiosity wanting you to go inside. Once being in the inside world the glittery treasures compete for your attention and distract you from seeing anything else, such as palace walls or palace guards. Reasonable signs for drawing upon the metaphor of a palace was the talk around the theme of freedom in a glorified way thereby neglecting to see restrictions in this valued freedom. By recurrently stating "it's up to me", "I am free to do" and "I am free to choose", this led us interpret these to resemble feelings of uniqueness, similar to the feeling of being granted to the palace. By considering this shiny, attractive metaphor of a palace as an opposite to the metaphor of the prison, the latter becomes even more powerful.

Besides this categorization of 'good' and 'bad' as one key theme, another matter the engineers sought to present to us referred to the role of projects guiding their work. We additionally noticed several patterns indicating a contradiction. This contradiction refers to the engineers not presenting themselves as being controlled by behavioral control means, whilst at the same time referring to and thereby being aware of certain processes, rules and structures. These processes, rules and structures were commonly addressed in the context of their project work and not only seemed to guide their project work, but also seemed to be restrictive. Interestingly, despite these apparently restrictive factors, the engineers did however not seem to present these as control and thereby not categorizing the projects into their 'bad' box of control. One may remember examples of feeling a need to follow certain instructions and structures that caused the employees to feel generally negative about control. This justified us to regard this as a contradiction in itself, which as interpretive researchers in the next step becomes worth looking into, exploring the interviewees' underlying feelings and experiences leading to such a contradiction. How come that the interviewees do not portray themselves as being controlled whilst being aware of restrictive factors in their project work?

5 Discussion

This chapter aims at discussing the empirical data presented in the antecedent chapter; putting it in relation to previous literature on the topic and finally coming to a conclusion aiming at answering the research questions this study builds upon. The chapter is split into two main parts with the purpose of each addressing a research question.

5.1 Who wants to be in a prison if you can be in a palace?

Based on the analysis in the previous chapter, it was striking how the engineers' contrasted the concept of control with the one of freedom, thus for themselves categorizing the two into boxes of 'good' and 'bad'. The rhetorical question of '_Who wants to be in a prison if you can be in a palace?_' will be drawn upon for further discussing our findings. As this question is built upon our chosen metaphors of a prison and a palace, their meaning behind it indeed refers to, '_Who wants to talk about control if you can talk about freedom?_'.

5.1.1 A prison of control

The prison metaphor is mainly based on the overall negative, particularly restrictive-like notions the engineers gave when presenting their understanding of organizational control. It thereby creates a common platform by summarizing the interviewees' understanding of control. Indeed, we noted literature being characterized by the use of similar imagery tools in order to explain organizational control. One of the most fundamental metaphors in the field of organizational control literature is the iron cage by Max Weber (1958). When moving beyond this bureaucratic and rational perspective on control, two other examples refer to the metaphor of the structural cage by Kärreman and Alvesson (2003) and the glass cage by Gabriel (2005). As one can see, the 'material' of the cage has been exchanged with softer ways of portraying it, but the metaphor of a cage itself remains in contemporary critical literature, in turn pointing to a negative restricting association with control.

Authors, such as Barker (1993), even argue that the 'iron cage' in 'postmodern' times became tighter, which seems then to be in contrast with this softer way of expressing it.

When discussing this literature in relation to the interpretations of our interviewees' responses, we found the latter to mirror a similarly rhetorical way of revealing organizational control. We perceived this cage- or prison-like picture of control as one major uniting element between literature and our interviewees' responses by stressing the absence of freedom. Apart from this, what the engineers communicated during the interviews was the rather traditional understanding, something that turned out to be a salient pattern throughout our interviews. From their way of describing control, we noted that the engineers seemed to have a rather limited picture of which forms characterize control. Only certain control forms seemed to be understood as control as such, as for instance we interpreted their notions as direct supervision and micromanagement under the umbrella of behavioral control. In turn, they can be put in relation to Edward's basic strategies with special relevance of bureaucratic control (Edwards, 1979; Mintzberg, 1979). Hence, their way of understanding control would rather go back to the time of Weber's iron cage (1958). This strengthens the reason of why we have chosen the prison metaphor, opposed to other ones representing softer forms of 'cages'.

Having discussed the prison metaphor with literature on organizational control, we noticed the latter to be predominantly drawing upon notions of cages. No matter if cage or prison, it seemed that it is coming back to the restrictive-like understanding being present in literature and our findings. What became most salient throughout this discussion so far is the dominance of control as something 'bad'. As the conclusion of the analysis has pointed out, the black and white thinking of the employees, thereby putting control in the 'bad' box, can be somewhat aligned with what literature reveals. Important to note here is that the metaphor of a prison, and thus the box of 'bad' mirrors the engineers' presented understanding of control opposed to their actual experience of it at Ericsson.

5.1.2   A palace of freedom

Remembering the metaphor of a prison, representing the negative and restrictive notions around control revealed by our study participants as well as by literature, the metaphor of a

shiny palace offers an opposing picture. Subsequently, the prison metaphor becomes even more powerful when discussing it in relation to literature. We thereby lean our metaphor of the palace on Gabriel's (2005) glass palace, as a way of emphasizing the freedom-dominating display of contemporary organizations. While he draws upon the material of glass in order to highlight the seemingly constraint-free notions, we however base our metaphor on the shininess and glory of the palace as such, which should symbolize the very positive notions around the presence of freedom in the participants' work. In this sense, we take the work by Gabriel (2005) into account, pointing at the specific discourse of freedom to be a present phenomenon not only in organizations, but generally in today's society. With the given limitations of our research study, we do not aim at making claims about discourses in society nor discourses in organizations in general, only being a dominant theme at our research site. However, the insight by Gabriel (2005) supports the finding of our study. He thereby referred to examples of the flexible organization, being a present way of organizing companies, as well as being free in own decision-making. With this as one example of contemporary literature, we noticed a focus on the theme of freedom.

Even if not all literature is mentioning freedom as explicitly as Gabriel (2005) does, literature mostly does address the latter, yet under the concept of autonomy as we see it. This increasing importance of autonomy (Alvesson, 2004; Rennstam, 2007; Foster & Harris, 2009; Newell et al. 2009; Ekman, 2012) is not only what we see as linked to our interviewees' understanding of freedom. For instance taking Foster & Harris (2009, p. 139), who define autonomy as "the idea that individuals should be free to make their own choices", which well reflects the pattern of own the decision-making commonly presented by the interviewees. Putting our engineers' communicated freedom under the umbrella of autonomy; Barker (1993) relates autonomy to control in a rather ironic way. Even though placing his thoughts into the setting of concertive control, his arguments as introduced in the literature review argue that an emphasis on empowerment and autonomy may actually make the control system most powerful and restrictive. In detail, the difficulty of becoming aware of this kind of control can be seen as a center argument, as supported by Gossett (2009).

Even though putting this into the context of concertive control, we find it generally to be a central thought for understanding freedom-dominating organizations, as the engineers spoke about their daily work to us. By drawing upon the critical literature and linking this to our interviews, it seemed that the association with freedom was however predominantly shaped by the understanding of it being 'good'. This may lead to additionally supporting our argument of the black and white thinking, the one of 'good' and 'bad' about freedom and control, as freedom may seemingly not be put in relation to critical constraining notions. Besides Gabriel (2005) and Gossett (2009), this can be further opposed by taking Hardy (1996) into account who shall remind us on the omnipresent power of the organization system itself - denying pure constraint-free notions - which can in turn be linked to Foucault's (1972) way of arguing for control to be omnipresent in organizations.

Having discussed the palace metaphor with literature on organizational control, the presence of the freedom talk as we retrieved from our analysis, was a noticeable discourse in literature. Literature thereby supported our engineers' responses of an importance of freedom, by addressing freedom in terms of the concept of autonomy. By moreover having drawn upon critical literature, arguing for only a 'shiny' display opposed to an actual existence of constraint-free organizations, this stood in contrast to the engineers' understanding of freedom, being solely put in a 'good' box.

This in turn guides us towards an interpretation of the engineers actively constructing their boxes of 'good' and 'bad'. In this sense, we have argued for these boxes to represent a rather black-and-white thinking when it came to how they understand organizational control. It is the engineers themselves who construct the world as they understand it.

Building upon this, we will now continue with discussing the engineers' construction of 'good' and 'bad' through the lenses of discourse theory. Discourse theory becomes crucial at this point, as one part of constructing their world thereby relates to the way they talk about certain phenomena, moreover which of these they may give special voice to.

5.1.3   The 'shininess' of freedom

Starting where we left off, as argued throughout our analysis, the topic of freedom can be seen as one the engineers were very keen on giving special voice to. Due to the dominance of freedom in the engineers' talk, we may say they construct their world much around freedom. In the next step, this dominant theme of freedom can be looked upon as a strong contrast to the picture of a dark restrictive prison, whilst a palace may be painted in the shiny colors of freedom. When asking yourself, how would you experience such a shiny palace? Would this not consume your attention, at the same time drawing your attention away from others?

This metaphorical way of seeking to understand the engineers' focus on freedom as the 'good' box so-to-say, made us reflect upon the power relations within discourse. Leaning onto Foucault (1972; 1979; 1980), this link to literature helps us to discuss this question. What Foucault (1972; 1979) puts as the power system behind discourse, opens up the possibility of certain discourses dominating over others (Alvesson & Sköldberg, 2009). As the insight by Gabriel (2005) has already pointed out, one can for instance argue for the dominance of a discourse around freedom in organizations and society.

By applying discourse theory to our study, indicators such as our interviewees speaking in very positive terms about freedom meanwhile using rather negative expressions when speaking about control, may lay the ground stone for particular patterns to take over at Ericsson, seemingly the shiny one of freedom. Moreover, it was the interviewees themselves who switched the topic from how to experience organizational control to how to experience freedom in their daily work, seemingly being keener on presenting the latter to us. By switching the topic to freedom, this may address our initial argument of regarding the engineers as actors in constructing their world much around freedom, giving freedom much of a tribute in their daily work. The examples point towards the dominance of the theme around freedom, freedom so-to-say becomes the overpowering and outweighing theme. In the case of our study, we cannot speak about the dominance of a certain discourse as such, but it helps to make sense of the seemingly dominance of certain themes and patterns by drawing upon discourse theory.

Moreover, Foucault (1972; 1980) further argued for discourses not only influencing our ways of talking, but also ways of thinking and acting. As for the former already argued above, in regard to affecting ways of thinking and acting, we found this argument would benefit from drawing upon our site observation. When remembering the modern open atmosphere with light shining through the glass facades as well as the immense display of relaxation and refreshment spots, we started wondering how one could even notice anything besides that. Discussing this site observation by drawing upon Gabriel (2005), we found the setting to be closely related to his metaphor of a glass palace. According to Gabriel (2005), this metaphor stands for a display of seemingly constraint-free associations. He links this to freedom being claimed to be an omnipresent feature in today's organizational context, which would be in line with Ekman (2012) who reviews mainstream literature as often portraying organizational control as a power-free system. However, it may only be the facade, a visual illusion of having freedom while still being constrained in less obvious 'bricks' (Gabriel, 2005). Taking these ideas into account on our research, not only the building's glass facade at Ericsson, but also the general display can be closely related to Gabriel's (2005) metaphor, evoking similar constraint-free associations. Verbal as well as nonverbal elements such as the associations explained through the site observation, may enhance an already dominant themes at Ericsson. In other words, these insights may make the dominating theme even more 'shiny' and attractive when compared to a far more negative one, in turn making this one less 'shiny'.

In addition, the 'shininess' of freedom we have argued for can be linked to other critical scholars such as Alvesson (2013) and Rosen (1986). On the one hand, Rosen (1986) talks about the power of symbols that may manipulate one's perception. His study encouraged us to draw linkages to our argumentation by taking such symbolic powers into consideration at Ericsson. Knowing about what he portrays as a facade in today's society as an illusion, arose our skepticism questioning the engineers' claimed freedom in engineering work. This skepticism became strengthened when looking at Alvesson (2013) on the other hand. In his 'triumph of emptiness', he unravels the powers of discourse through addressing the phenomenon of grandiosity. Metaphorically speaking, the world as painted in golden and pink colors may reveal a better image than the substance below may actually be. From a critical perspective we may argue that freedom at Ericsson may be

painted in such shiny glittery colors, yet remaining skeptical towards its actual substance. Returning to the leading theme of this discussion - the contradiction we have argued for - one can draw a relation to the overpowering theme of freedom as a possible way of making sense of this phenomenon. Thereby having this critical insight in mind when reflecting upon the engineers not presenting themselves as controlled, but referring to certain restrictive factors, it may be the dominance of freedom distracting from control within context of the engineers' project work.

Ultimately, the 'shininess' of freedom may overpower any notions around control as such. Departing from the glamorized, 'grandiosi-tized' discourse around freedom (Gabriel, 2005; Alvesson, 2013) and taking symbolic powers into account (Rosen, 1986), this firstly led us to interpret that the engineers do not present themselves as feeling controlled most likely due to this dominating theme of freedom on a language level as well as in their daily work as shown by our site-observation. Going even further with this point of argumentation, we return to the importance of the engineers themselves constructing their world. It may be them who attribute symbolic value to the theme of freedom. Further, possibly being them who construct their own world as one around the 'shininess' of freedom. This led us to interpret that unlike freedom, the engineers do not construct their world much around the theme of control. By being actors building their own world through the language and talk they choose, the engineers have a say in influencing certain themes and discourses to become powerful, one overpowering another. In more detail, we find the interviewed engineers to have attributed the theme of freedom to become outweighing the one of control.

To conclude, we ask you to remember how we initially introduced the metaphors, using words of glory and magnificence to describe the palace. We drew upon the image of the 'shininess' in order to argue for the prevailing dominance of freedom at our research site, in turn distracting from the restrictive factors in the engineers' daily project work. Ultimately, this discussion of category-like thinking of the 'good' freedom and the 'bad' control can be linked to the engineers' understanding of control, as responding to our first research question.

5.2   Rewriting organizational control

Despite arguing for the dominance of freedom due to its 'shininess' while acknowledging the engineers' active role throughout, there may be other possible perspectives to take. For instance lacking such a critical insight, one possible conclusion can simply be that Ericsson's engineers are not controlled and consequently do not present themselves as being controlled, wherefore the thought of feeling controlled has not crossed their minds. One may simply assume that control is not a relevant aspect in their work; it is rather freedom as emphasized by the engineers during the interviews.

Going for this most obvious and convenient possibility would be in line with literature on post-bureaucratic era (Clegg, 1990; Baker, 1992; Child & McGrath, 2001), claiming traditional control forms to be less of an adequate tool for controlling knowledge workers. This would collide with their need for autonomy (Rennstam, 2007; Foster & Harris, 2009; Newell et al. 2009; Ekman, 2012). Following this premise, we would then assume the engineers not having referred to certain structures, rules or processes that in one or the other way may be regarded as control. As our analysis concluded, the engineers however did refer to such while elaborating on the research question of how they actually experienced control in their daily project work, yet without putting these into the 'bad' box of control.

From their responses, we found that the engineers rather revealed a softer understanding of control. By drawing upon critical literature in this context, we see a relation to the idea of 'soft bureaucracy' (Kärreman et al., 2002). We reason this by observing the presence of bureaucratic control forms to be generally less obvious at Ericsson. Giving the pattern of using softer terms as a way of describing how to 'follow up' in their project work whilst avoiding the expression of control itself, this reinforced the less obvious nature of bureaucratic modes as common in 'soft bureaucracies'.

Building upon this, we will subsequently continue with how the discussion of the engineers' construction of 'good' and 'bad' categories can be related to the contradiction; the contradiction of how come the interviewees do not portray themselves as being controlled whilst being aware of restrictive factors in their project work. Alternatively said,

a contradiction of how come noticeable control elements, however were not being placed into the 'bad' box of control. The idea of projects will thereby be presented as a form of rewriting control. We will draw upon the power of discourse with the engineers' influencing role meanwhile, as a base for exploring this in the context of project work.

Seemingly, the engineers did not categorize projects with the 'bad' box of control. As introduced above, the engineers described their project-related work in 'softer' terms in relation to the idea of a 'soft' bureaucracy (Kärreman et al., 2002). The use of such 'softer' terms, in turn, may make it less likely to become aware of any association to control, which can be linked to Gossett (2009) reviewing non-traditional control forms to be most powerful due to its difficulty of becoming aware. Due to this, the engineers' use of softer terms may further make it less likely for the projects to be put in the 'bad' box of control. In this sense, we interpreted that project features were seemingly not enclosed in the engineers' understanding of control, thus not part of the categorization of 'bad'. This may reason why the interviewees did not give away the same negative restrictive notions in the project context, as they did when speaking about their understanding of control. This phenomenon of transforming organizational control into less obvious equivalents is what we frame as rewriting control.

Relating this explanation to the bigger picture of the engineers being social actors of constructing the world as they understand it, one may even argue that they construct their world through their own 'discourse', thereby 'rewriting' their understanding of organizational control. As projects were seemingly not associated with control, we found their project work to be a way of rewriting organizational control. For the interviewees, it seemed to be natural of which notions may be placed in the good or the bad box, similarly to the impression we gained that the engineers presented them as feeling more natural speaking about freedom than control. Specifically however, we noticed the engineers to be shaping their own language primarily through good and bad, leaning onto a rather black-and-white thinking.

Summarizing this discussion, we may conclude that the engineers seem to rewrite control. Remembering their active part in this, regarding the engineers as actors constructing the world how they understand it, can then be seen as rewriting control for themselves. By

rewriting control for themselves, the interviewed engineers may make sense of their working environment. In the setting of our research, this rewriting of control seems to be done through projects, which links back to our second guiding research question.

5.3 Conclusion

To conclude, this discussion underlined the significance of discourse fostering the phenomenon of rewriting organizational control through projects. This has been firstly explained by the discourse around freedom being the dominant theme at our research site, thus most likely distracting the attention away from the discourse around of control. To illustrate this, we drew upon the metaphors of a palace and a prison in order to argue for the pattern of freedom being a dominant theme at Ericsson. By applying discourse theory along the discussion, we firstly argued for the engineers to be actors of constructing the world as they understand it. This served us to accentuate their active role in influencing the 'discourse' at Ericsson.

Based on this, we argued that control as such seems not only overpowered by the talk around freedom, but also that its negative connotations are reinforced by the engineers' categorization-like thinking of 'good' and 'bad'. As control was rather associated with 'bad', while freedom was connoted with 'good', the engineers' work within the projects seemed not to be connected with control. We thereby reasoned project work not to be part of their understanding of control, excluding the latter from the 'bad' box. We interpreted this as the engineers' rewriting organizational control through the use of 'softer' terms as a way of constructing their own world, and thus making sense of their working environment. We ultimately presented this as a possible way of exploring the contradiction deriving from the analysis, the one of how come that the interviewed engineers do not portray themselves as being controlled whilst being aware of some restrictive factors in their project work?

Making the reader reflect on our study, we conclude by asking '*Indeed, who wants to be in a prison if you can be in a palace?*'.

6 Conclusion

This chapter will conclude our thesis by putting our results in a wider context. It thereby presents how this study contributes to academia as well as discusses its practical implications. The chapter will end with suggesting ideas for further research.

6.1 Contribution to academia

Overall, this study contributed with an insight in rethinking organizational control in the work setting of IT-engineers. We thereby addressed the role of projects in engineering work in a new light. The projects seemed to be a platform, which engineers used for rewriting organizational control in order to make sense of their working environment. We thereby contributed to an increased understanding of engineers as one specific type of knowledge worker, as the phenomenon of rewriting organizational control can be regarded as a way of the engineers' constructing the world as they understand it. By this, we shed light onto how other than normative control forms, in our case projects, can be considered as less obvious ones.

By having discussed the overpowering discourse of freedom over control at our research site, we widened the horizon for certain themes, like freedom, to have high symbolic powers for engineers as a distinct type of knowledge worker. This is what we referred to as the 'shininess' of freedom distracting from the theme around organizational control. We illustrated an example of how discourse can be consuming a vast range of elements within the organizational work life. This in turn suggested that the 'shininess' surrounds not only the talk of engineers, but also the work setting in general. What becomes most relevant is that the engineers themselves take an active part in rewriting organizational control through projects as well as creating the 'shininess', as it was ultimately the engineers themselves who presented freedom as 'shiny' opposed to a less 'shiny' control.

Furthermore, our research specifically addressed the study "The Return of Machine Bureaucracy?" by Kärreman et al. (2002) by taking a new perspective on the role of projects as signs for a 'soft' bureaucracy. As our study rather pointed towards the omnipresent powers of bureaucratic control, we slightly distance ourselves from the title. We believe the term 'return' may be misleading by implying bureaucratic control had once disappeared. Hence, we perceive this phenomenon rather as the 'disguised continuation of the machine bureaucracy', where less obvious control forms may result in a perception of less bureaucracy being present.

6.2 Practical Implications

Besides contributing to academia as described above, this study further aimed at contributing to practice. In terms of such practical implications, we contributed to an increased understanding of how IT-companies can make sense of their engineers' worldview on organizational control. By gaining an insight into the engineers' understanding of control, this enables them to adapt their existing control forms to softer ones as a way of creating higher levels of acceptance for the latter amongst the engineers. As engineers are commonly regarded as needing high levels of autonomy due to their complex and ambiguous work, this in turn may help IT-companies to better understand of how to make use of control forms that address these requirements.

In addition, this contribution provided a deeper understanding of how a certain discourse may affect the individual's understanding of a specific matter, in this case the one of control. This deeper understanding may in particular be helpful for managers in their daily interaction with employees. It may thus depict the importance for managers to listen and become aware of the predominant discourse, considering its wider effects on the perception and understanding of the organizational members.

6.3   Suggestions for further research

Moreover, we suggest further studies on the topic of how projects can serve as a means of control in the context of engineering work. As this turned out to be a rather salient theme throughout our research, we call for future research in this area. Building on our work, especially interesting would be the research topic of projects being a disguised form of control. What would make this research suggestion even more salient, would be to align it with research by Barker (1993) as well as Kärreman and Alvesson (2004), who mutually argue for less obvious control forms to become even more powerful and restricting.

As our study faced limitations in regard to team-work, it would be interesting to conduct a similar study in a setting of engineers whose work is primarily shaped by working in teams. Besides the idea of recreating this study in a context of teamwork, it would be of additional interest to apply our findings to a different context within knowledge work. As different types of knowledge workers may reveal similar characteristics as engineering work, this may thereby make our findings a possibility to consider even in this context.

Lastly, as we concluded the phenomenon of rewriting might build upon the power of discourse, it would be of interest to look closer into how discourse itself could be used as means of control. By saying this, we are not suggesting a merely technical study trying to look at how this may be done, but rather taking a look at the creation of the discourse in terms of a being a possible means of control. This could be linked to a discussion around identity and normative control, where individuals develop a wish to identify with a collective, which may increase the importance of discourse and possibly even contributes to strengthening the latter.

List of References

Alvesson, M. (2001), 'Knowledge Work: Ambiguity, Image and Identity', *Human Relations*, 54(7): 863-886.

Alvesson, M. (2004). *Knowledge Work and Knowledge-Intensive Firms.* Oxford University Press.

Alvesson, M. (2013). *The Triumph of Emptiness*. Oxford University Press.

Alvesson, M. & Sköldberg, K. (2009). *Reflexive Methodology: New Vistas for Qualitative Research*. 2nd Ed. London: Sage.

Alvesson, M. & Kärreman, D. (2001), 'Odd Couple: Making sense of the curious concept of knowledge management', *Journal of Management Studies*, 38(7): 995-1018.

Alvesson, M. & Spicer, A. (2012), 'A Stupidity-based Theory of organizations', *Journal of Management Studies*, 49(7), pp. 1194-1220.

Alvesson, M. & Sveningsson S. (2008). *Changing Organizational Culture. Cultural change work in progress.* Routledge.

Alvesson, M. & Thompson, P. (2005), "Postbureaucracy", in Stephen, A. et al. (Eds), *The Oxford Handbook of Work and Organization*. Oxford University Press.

Alvesson, M. & Willmott, H. (2001/2), 'Identity Regulation as Organizational Control: Producing the Appropriate Individual', *Institute of Economic Research Working Paper Series*.

Anthony, R. & Godvindarayan, V. (2007). *Management Control Systems,* 12th edition. McGraw-Hill.

Baker, W. (1992), 'The network organization in theory and practice', in Nohiria, N. and Eccles, R. (Eds), *Networks and Organizations, Structure, Form and Action*. Harvard Business School Press, Boston, MA.

Barker, J. (1993), 'Tightening the Iron Cage: Concertive Control in Self-Managing Teams', *Administrative Science Quarterly,* 38: 408-437.

Barley, S. (1996), 'Technicians in the Workplace: Ethnographic Evidence for Bringing Work into Organizational Studies', *Administrative Science Quarterly*, 41(3): 404-441.

Berry, A., Broadbent, J. & Otley, D. (2005). Management Control. Theories, Issues and Performance (2nd Edition). Palgrave Macmillian.

Bryman, A. (2012). *Social Research Methods*. 4th Edition. Oxford: Oxford University.

Chalmers, A. F. (1999). *What Is This Thing Called Science?*. Buckingham: Open University Press.

Child, J. and McGrath, R. (2001), 'Organizations unfettered: organizational form in an information-intensive economy', *Academy of Management Journal*, 44(6): 1135-49.

Clegg, S. (1990). *Modern Organizations: Organization Studies in the Postmodern World*. Sage, London.

Clegg, S. et al. (1996), 'Management Knowledge for the Future: Innovation, Embryos and New Paradigms', in Clegg, S. & Palmer, G. (eds). *The Politics of Knowledge Management.* London: SAGE.

Daft, R. (1983), 'Learning the Craft of Organizational Research', *Academy of Management Review,* 8(4): 539-546.

Edwards, R. (1979). *Contested Terrain - The Transformation of the Workplace in the Twentieth Century.* New York: Basic Books Inc.

Ekman, S. (2012). *Authority and Autonomy. Paradoxes in Modern Knowledge Work.* Palgrave Macmillian.

Ejler, N., Poulfelt, F. & Czerniawska, F. (2011). *Managing the Knowledge-Intensive Firm.* New York: Routledge.

Foster, C. & Harris, L. (2009). From equal opportunities to diversity management. In Leopold, J. & Harris, L. (2nd Edition): *The Strategic Managing of Human Resources*. Prentice Hall.

Foucault, M. (1972). *The Archeology of Knowledge*. New York: Harper and Row. First published in 1969. Includes *The Discourse of Language*, first published (as *L'Odre du Discours*) in 1971.

Foucault, M. (1979). *Discipline and Punish: The Birth of the Prison*. New York: Vintage/Random House.. First published in 1975.

Foucault, M. (1980). *Power/Knowledge*. New York: Pantheon.

Gabriel, Y. (2005), 'Glass Cages and Glass Palaces: Images of Organization in Image-Conscious Times', *Organization*, 12(1): 9-27.

Gilbert, G. & Sutherland, M. (2013), 'The paradox of managing autonomy and control: An exploratory study', *South African Journal of Business Management,* 44(1): 1-14.

Gossett, L. (2009). 'Organizational Control Theory', *Encyclopedia of Communication Theory,* 706-10.

Hargadon, A. & Sutton, R. (1997), 'Technology Brokering and Innovation in a Product Development Firm', *Administrative Science Quarterly*, 42(4): 716-749.

Hardy, C. (1996), 'Understanding Power: Bringing about Strategic Change', *British Journal of Management*, 7: 3-16.

Höpfl, H. (2006), 'Post-bureaucracy and Weber's "modern" bureaucrat', *Journal of Organizational Change Management*, 19(1): 8 - 21.

Josserand, E., Teo, S. & Clegg, S. (2006), 'From bureaucratic to post-bureaucratic: the difficulties to transition', *Journal of Organizational Change and Management*, 19(1): 54-64.

Kärreman, D. & Alvesson, M. (2004), 'Cages in Tandem: Management Control, Social Identity, and Identification in a Knowledge-Intensive Firm', *Organization,* 11(1): 149-175.

Kärreman, D., Sveningsson, S. & Alvesson, M. (2002), 'The Return of the Machine Bureaucracy? Management Control in the Work Settings of Professionals', *International Studies of Management & Organizations*, 32(2): 70-92.

Kunda, G. (1992). *Engineering Culture: Control and Commitment in a High-Tech Corporation.* Philadelphia: Temple University Press.

Maravelias, C. (2003), 'Post-bureaucracy – control through professional freedom', *Journal of Organizational Change Management*, 16(5): 547 - 566.

Marshall, C. & Rossman, G. (1999). *Designing Qualitative Research* (3rd ed.). SAGE.

Meiksins, P. & Watson, J. (1989), 'Professional Autonomy and Organizational Constraint: The Case of Engineers', *The Sociology Quarterly,* 30(4): 561-585.

Merriam, S. B. (2002). Introduction to qualitative research. *Qualitative research in practice: Examples for discussion and analysis*, 3-17.

Miller, G. (1997). Building bridges: the possibilities of analytical dialogue between ethnography, conversation analysis and Foucault. In Silverman, D. (ed.), *Qualitative Research*. London: Sage.

Mintzberg, H. (1979). *Mintzberg on Management: Inside our Strange World of Organizations*. New York: Free Press.

Newell, S., Robertson, M., Scarbrough, H. & Swan J. (2009). *Managing Knowledge Work and Innovation* (2nd ed.). UK: Palgrave Macmillian.

Ouchi, W. (1979), 'A Conceptual Framework for the Design of Organizational Control Mechanism', *Management Science*, 25(9): 833-848.

Ouchi, W. (1980), 'Markets, Bureaucracies, and Clans', *Administrative Science Quarterly,* 25(1): 129-141.

Prasad, P. (2005). C*rafting Qualitative Research: Working in the Postpositivist Traditions.* New York: M.E. Sharp, Inc.

Rennstam, J. (2007). *Engineering Work. On Peer Reviewing as a Method of Horizontal Control.* Sweden: Lund Business Press.

Rennstam, J. & Ashcraft, K. (2013), 'Knowing work: Cultivating a practice-based epistemology of knowledge in organization studies', *Human Relations,* 67(3): 3-25.

Rennstam, J. & Wärefors, D. (2011). Att analysera kvalitativt material. In Ahrne, G. & Svensson, P. (eds.): *Handbok i kvalitativa metoder.* Liber, pp. 194-210.

Robertson, M. & Swan, J. (2003), ''Control - What Control?' Culture and Ambiguity Within a Knowledge-Intensive Firm', *Journal of Management Studies*, 40(4): 831-858.

Robertson, M., J. Swan, and H. Scarborough. 1999. "Creating Knowledge Within Expert Consultancy Firms: The Role of Organizational and Institutional Arrangements." Working paper. Warwick, UK: University of Warwick.

Rosen, M. (1985), 'Breakfast at Spiro's: Dramaturgy and Dominance', *Journal of Management*, 11(2): 31-48.

Ryan, G. & Bernard, H. (2003), 'Techniques to Identify Themes', *Field Methods*, 15(1): 85-109.

Silverman, D. (2007). *A Very Short, Fairly Interesting and Reasonably Cheap Book about Qualitative Research*. Los Angeles, London, New Delhi, Singapore: SAGE.

Starbuck, W. (1992), 'Learning by Knowledge-Intensive Firms', *Journal of Management Studies*, 29(6): 713–40.

Thompson, P., Warhust, C. & Callaghan, G. (2001), 'Ignorant Theory and knowledgeable workers: Interrogating the connections between knowledge, skills and services', J*ournal of Management Studies*, 38(7): 923-942.

Tracy, S. (2010), 'Qualitative Quality: Eight "Big-Tent" Criteria for Excellent Qualitative Research', *Qualitative Inquiry,* 16(10): 837-851.

Watson, T. (2006). *Organising and Managing Work (2nd Edition)*. Pearson Education Limited.

Watson, J. & Meiksins, P. (1991), 'What Do Engineers Want? Work Values, Job Rewards, and Job Satisfaction', *Science, Technology, and Human Values,* 16(2): 140-172.

Weber, M. (1958) The Protestant Ethic and the Spirit of Capitalism, transl. T. Parsons. New York: Charles Scribner's.

Whalley, P. (1997). *The Social Production of Technical Work - the Case of British Engineers*. London: Macmillan.