



# IN AND OUT OF THE BOYS' CLUB

## Women's narratives from the ICT industry

Master's Thesis

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## Abstract

The purpose of this research is to build understanding of the reasons behind women's low representation in the ICT industry. Conventional approaches have not been able to account for the persistence of the problem, and because of this, this study adopts a more critical perspective toward gender relations in ICT by drawing attention to the larger societal context of the phenomenon. The objective of the research is to explore how gender emerges in social interaction, processes and practices in the workplace, and how women give meaning to these experiences in narrative form. Following a feminist research orientation, I further problematize the societal context in which the women's meaning-making takes place.

This research is qualitative in nature and follows a social constructionist epistemology that understands reality to be formed through language in social interaction. Employing a narrative research methodology and wishing to give voice to women themselves, I produced the research data in semi-structured interviews with nine self-identified women who work in different positions in the ICT industry in Finland. In analyzing the women's narratives, I examined especially their dialogic and performance elements, reading closely the research context and the interactive nature of the narratives' production. After identifying prevalent themes in how the women discursively gave meaning to gender, I constructed the findings into one overarching narrative, "fitting in," on three analytical levels: the self, the organization and the society.

The findings of the study suggest that women's experiences of gender relations in ICT are shaped by the masculinity of technology and the oppressive gendered structures of business organizations at large. The women's generally positive experiences of the industry contained subtle, ambiguous and even contradictory meanings whose closer interrogation revealed gender to play a central role in whether the women felt competent, valued and fit for the workplace. ICT thus appears to be a place for such "doing" of gender that obscures and downplays the significance of gender, especially in potentially negative cases, while at the same reifying the traditional gender order that considers masculinity superior to femininity. Often the women also contributed to these oppressive notions of gender themselves regardless of the quality of their personal experience. The findings signal an internalization of the gender order and emphasize the need to make gendered structures visible in organizations.

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**Keywords** gender, women, technology, ICT, narrative, feminist research

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## Tiivistelmä

Tämän tutkielman tavoitteena on lisätä ymmärrystä niistä syistä, jotka vaikuttavat naisten vähäiseen määrään ICT-alalla. Tavanomaiset lähestymistavat eivät ole pystyneet selittämään ongelman sitkeyttä riittävällä tasolla, minkä vuoksi tutkin sukupuolta tässä tutkielmassa kriittisestä näkökulmasta kiinnittäen huomiota erityisesti naisten kokemuksia ympäröivään laajempaan yhteiskunnalliseen kontekstiin. Tutkimuksen tavoitteena on ymmärtää, kuinka sukupuoli nousee esiin erilaisissa tilanteissa miesvaltaisella työpaikalla, ja millaisia merkityksiä naiset antavat sukupuolelle muodostaessaan kertomuksia näistä kokemuksista. Feministisen tutkimuksen suuntaviivoja hyödyntäen pyrin tutkimaan, mitä ongelmallista näistä merkityksistä saattaa löytyä nimenomaan yhteiskunnallisen kontekstin valossa.

Tutkimukseni on laadullinen, ja nojaa sosiaalisen konstruktionismin tieteenfilosofiaan, joka ymmärtää todellisuuden muodostuvan kielen välityksellä sosiaalisessa vuorovaikutuksessa. Sovelsin metodologian osalta narratiivista tutkimusta ja tuotin tutkimusaineiston puolistrukturoiduissa haastatteluissa yhdeksän ICT-alalla työskentelevän naisen kanssa. Aineiston analyysissä kiinnitin huomiota erityisesti vuorovaikutuksellisuuden ja performatiivisuuden elementteihin, ja pohdin, mitkä tekijät haastattelutilanteessa mahdollisesti vaikuttivat kertomusten syntyyn. Kokosin aineistossa nousseista merkityksistä yhden laajemman temaattisen kokonaisuuden ICT-alalle sopivuudesta, jonka purin erikseen yksilön, organisaatioiden ja yhteiskunnan tasolla.

Tutkimuksen löydöksissä havaitsin teknologian maskuliinisuuden ja kaupallisten organisaatioiden sortavien sukupuolittuneiden rakenteiden kehystävän naisten tulkintoja sukupuolesta työpaikalla. Naisten päällisin puolin varsin myönteiset kokemukset ICT-alasta sisälsivät paljon hienovaraisia, epäselviä ja jopa ristiriitaisia sukupuolen merkityksiä, joiden lähempi tarkastelu paljasti sukupuolen olevan varsin merkittävä tekijä siinä, kokivatko naiset itsensä sopiviksi, päteviksi ja arvostetuiksi työpaikalla. ICT-ala näyttäytyikin paikkana sellaiselle sukupuolen tekemiselle, joka yhtäältä häivyttää sukupuolta ja etenkin sen mahdollisia negatiivisia merkityksiä melko vahvasti, mutta toisaalta vahvistaa erilaisin tavoin perinteistä sukupuolijärjestystä, jossa maskuliinisuus nähdään feminiinisyttä arvokkaampana. Näiden sortavien käsitysten vahvistamiseen osallistuivat naiset usein kertomuksissaan myös itse riippumatta heidän omakohtaisen kokemuksensa laadusta. Löydökset antavat viitteitä sukupuolijärjestyksen sisäistämisestä ja alleviivaavat tarvetta sukupuolittuneiden rakenteiden näkyväksi tekemiselle organisaatioissa.

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**Avainsanat** sukupuoli, naiset, teknologia, ICT, kertomus, feministinen tutkimus

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Vilma Hämäläinen

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# Table of Contents

<b>1</b>	<b>Introduction.....</b>	<b>1</b>
1.1	Objectives and research questions.....	3
1.2	Research approach.....	5
1.3	Key concepts.....	6
1.4	Structure of the report.....	7
<b>2</b>	<b>Women in ICT: a critical view on gender and work.....</b>	<b>8</b>
2.1	Feminist perspectives on organization studies.....	8
2.2	Ideologies of Western society.....	11
2.2.1	<i>Patriarchy</i> .....	12
2.2.2	<i>Capitalism</i> .....	16
2.3	Gender.....	20
2.3.1	<i>Gender as practice</i> .....	20
2.3.2	<i>Gender and identity</i> .....	24
2.4	Conceptual framework.....	28
<b>3</b>	<b>Methodological choices.....</b>	<b>30</b>
3.1	Narrative approach.....	30
3.2	Data production.....	33
3.2.1	<i>Research context and interviewees</i> .....	34
3.2.2	<i>Narrative interviewing</i> .....	35
3.3	Data analysis.....	38
3.4	Research evaluation.....	41
<b>4</b>	<b>“Fitting in” in ICT.....</b>	<b>44</b>
4.1	Negotiating the self.....	45
4.1.1	<i>In search of professional space</i> .....	46
4.1.2	<i>Personal fit: a match or a clash?</i> .....	50
4.2	Navigating the organization.....	54
4.2.1	<i>Performing under the spotlight, or the issue of tokenism</i> .....	55
4.2.2	<i>Sports, sauna and social relations</i> .....	61
4.3	Reflecting the society.....	66

4.3.1	<i>Masculinities as a pass to the boys' club</i> .....	66
4.3.2	<i>The ambiguous gender</i> .....	70
4.4	Summary .....	73
<b>5</b>	<b>Conclusions</b> .....	<b>77</b>
	<b>References</b> .....	<b>83</b>
	<b>Appendices</b> .....	<b>89</b>

# 1 Introduction

Women in tech has solidified its position as the topic *du jour* in the past few years. From seminars and girls' coding movements to young female role models and increasing media commentary, getting more women into technology seems to be on everyone's lips. The concern is valid, though not new. Women's low representation in the information and communication technology (ICT) industry has been under discussion since the 1980s in Finland, and a number of initiatives have tried to tackle the issue mostly from an awareness-raising perspective (e.g., MIRROR, n.d.; Teknologiateollisuus, 2011). These efforts have not resulted in significant change: men made up over 71 percent of the industry's workforce in 2015 (Teknologiateollisuus, 2016). With the will to get more women into technology at an all-time high, it seems necessary to have an adequate understanding of the dynamics behind women's low representation in ICT. Why has such a situation come to be in the first place? Why does it so adamantly persist? In this thesis, I give voice to women themselves and aim to provide answers to the above questions by offering a critical perspective into gender relations in the ICT industry.

As often in life, this project is motivated by personal experience. I have twice been employed in a male-dominated company in what I loosely define the digital service industry in Finland. While I enjoyed my work and the friendships I built in these organizations, I noticed a peculiar undercurrent in my experience I could not immediately get a hold of. Upon closer examination, I identified a subtle pressure to behave differently with certain people at the office. Typically, they were men, though sometimes also individual women. Around these people, I turned tougher – more assertive, funnier, nonchalant – for reasons I could not articulate at the time. What I was sure of, however, was that a sense of effort and nervousness underpinned the interactions for me. Am I passing? Am I being tough enough, or the right kind of tough? Do I fit in? By last year I had become bothered by these questions and wanted to better understand the complex and often uncomfortable tensions that seemed to revolve, above all, around gender. Could this be part of the reason I had so few women colleagues in ICT?

Generally speaking gender has not received wide attention in mainstream organization research. Organizations have been regarded as neutral, ignoring gender altogether, or gender has been studied as a variable, focusing on differences between men and women along categories such as managerial styles, occupations or wages (Acker, 1992; Calás & Smircich, 2006; Wilson, 2001). While these approaches help provide information on current gender-based inequalities from a statistical perspective, they fail to account for why such inequalities persist. This is partly because organizations have been understood as fundamentally just systems (Calás & Smircich, 2006). Therefore, in an effort to produce knowledge that can help drive change forward, I will follow the steps of critical and feminist scholars by looking beneath the surface: I will study gender as active doing that is continuously re-enacted within the gendered structures of society (Acker, 1990; Connell, 2005; Martin, 2003). This relational understanding of gender will not only help challenge the notion that gender is two-dimensional and static, but also make visible the historically weighty power relations that are embedded in its production.

As my personal experience makes clear, a critical study of gender relations should not be limited only to overarching structures in society. Gender is an integral part of one's identity, and its role can be pronounced in the daily experience of life, including work, which tends to consume much of our resources on a daily basis. It is because of this that I study gender relations specifically from the perspectives of women. Research has already shown that being a woman in a male-dominated industry requires a negotiation between a feminine identity and the masculine norms of the working context (Adam et al., 2006; Gherardi & Poggio, 2001; Guerrier, Evans, Glover, & Wilson, 2009). This is not necessarily a negative claim: the ways women give meaning to gender relations vary, and working in a masculine environment can in fact have strong positive links with identity for some (Hatmaker, 2013; Tuori, 2014). Still, the fact remains that gendered structures do contribute to an exclusionary reality for others and facilitate a “doing” of gender in ways that maintain traditional perceptions of its two separate spheres (Gherardi, 1994). As such, the phenomenon requires critical attention.

The reason why I think the ICT industry specifically warrants in-depth interrogation of gender relations is three-fold. First, the industry is blooming primarily in Western



countries that are among the world's most equal societies by many standards. Yet, ICT remains a highly segregated sector and has a particularly masculine history in Finland, the context for this study. Marja Vehviläinen's (1996) work on the gendering of technology in Finland reveals that information technology was from the very beginning a male project in which specific top-down management practices established a sharp gender division within the sector's jobs along with a culture that discouraged critical discussion. In consequence, masculinity became embedded in the methods, practices and images of Finnish information technologies over the course of several decades. Second, Finland is at the same time known for its "genderless gender", i.e. the prevalence of gender-neutral rhetoric that tends to conceal gender and its significance for both personal and professional realms of life (Korvajärvi, 1998; Lahelma, 2012). The combination of these two elements is perhaps the most challenging for tackling gender-related questions, and precisely because of that, necessary.

Finally, technology has a unique position in contemporary capitalism as the "motor of progress" (Connell, 2005: 164), and indeed technology shapes the world and the way we live at an unprecedented speed. I find it troubling that this future is at the hands of a relatively homogeneous group of privileged men in the West. Women's low number in ICT is not simply an issue of individual women's career aspirations, but a critical question of power: whose voice is heard and whose life experiences continue to be reflected in decision-making about matters that affect the population as a whole. It is imperative to try new approaches to the problem for radical reformation of our future, and in this study, I direct our attention toward the structural processes of gender that negatively and disproportionately affect women.

## **1.1 Objectives and research questions**

As already discussed above, gender is a substantial element of social structuring both for ICT organizations and the individuals working in them. At the same time gender is often anything but substantial in practice. Gender is obscure, ambiguous and hidden within the complex processes of human interaction – something conventional research

approaches have not been able to account for. Therefore, the purpose of this master's thesis is to bring in a more critical perspective into gender relations in ICT by exploring how women's experiences of the male-dominated industry are shaped by their larger societal context. In pursuing this objective, I am interested in how gender emerges in social interaction, processes and practices in a male-dominated workplace, and how women give meaning to these experiences. Applying a feminist research perspective, I will further study how the meanings of gender reflect the societal context they are produced in. In other words, I have both an interpretive aim to understand human experience, and an emancipatory aspiration to problematize the context of that experience. On this basis, this research aims to answer to the following question:

*How do women who work in the ICT industry in Finland experience gender relations in the workplace?*

In looking into the experience of gender relations I will need to pay attention not only to how individuals' identities are shaped by the experiences in the workplace, but also how the gendered structures of the society at large frame the process. Therefore, I further consider the following three sub-questions that support the analysis of both micro and macro levels:

- *What kinds of meanings does gender gain in accounts about the self?*
- *Which meanings are ascribed to gender relations within the organization?*
- *How do women's accounts reflect the larger societal context in which they are constructed?*

I wish to note that my exploration of these questions is affected by both the scope of this research and the limits of our gendered language. My research focus is restricted to gender, leaving out other categories such as race, ethnicity, class, sexuality and religion. Second, even though our understanding of sex/gender is becoming more dynamic, the use of man-woman and female-male binaries is still prevalent in literature. As I, too, speak of only the two in this research I exclude those individuals whose belonging in

these categories is fluid, ambiguous or, as in the case of gender identity, non-existent. I will use the terms woman/feminine and man/masculine interchangeably when speaking of gender that is socially constructed, and female/male in reference to biological sex.

## 1.2 Research approach

I explore the research problem of gender relations in ICT on the basis of social constructionism, an epistemological standing that understands reality to be formed in social interaction (Riessman, 1993). Social constructionism rejects the notion of objective knowledge and emphasizes the uncertainty of truth as all knowledge is created through interpretations of the world. Language and stories in particular are the tools used in constructing knowledge and meaning (Czarniawska, 2004), and because of this I apply narrative inquiry in both the production and analysis of the research data. In terms of data production, I conducted semi-structured narrative interviews with nine self-identified women who work in different positions in ICT companies in Finland. To analyze the data, I followed Riessman's (2008) dialogic and performance analysis, which focuses on close reading of the research context and the interactive nature of the narratives' production. Studying narratives helps understand the ways in which individuals construct their identity, but it also opens avenues for the analysis of societal contexts as narratives always draw from the cultural symbols available (Hyvärinen & Löyttyniemi, 2005).

What underlies my research as a whole is a feminist research approach. This means that I critically analyze the meanings of sex/gender, and aim to make visible the assumptions that sustain gender-based oppression in the current ways of organizing the society (Calás & Smircich, 2006; Lykke, 2010). Feminist research also highlights the situated nature of knowledge and examines the power relations in its production. In line with this I wish to emphasize that this study necessarily reflects my own experiences and interests. The choices I have made about the topic, the approach and the final narrative of this report are situated in the space I occupy as an educated white woman in Finland. This is a work

told specifically from my perspective, and it might very well be different for someone else exploring the same questions.

### 1.3 Key concepts

*Feminist studies:* A critical academic field aiming to problematize the meanings of sex/gender and the ways in which these categories contribute to intersectional oppression in knowledge production and the organization of society (Calás & Smircich, 2006; Lykke, 2010).

*Gender:* A social construct that is actively (re)produced in interaction, as guided by normative conceptions of behavior and activities appropriate for one's sex category (West & Zimmerman, 1987). Different from sex, a biological category.

*Identity:* An ongoing construction of a person's understanding of self; an embodied and social practice that draws from cultural resources (Alvesson & Due Billing, 2009).

*Narrativity:* A methodological approach that understands language and storytelling as the primary means of making sense of reality and social existence (Riessman, 2008).

*Patriarchy:* A socially structured system of domination, oppression and exploitation of women by men (Walby, 1989).

*Social constructionism:* An epistemological standing that understands individuals to construct knowledge and reality through social interaction (Burr, 1995).

## 1.4 Structure of the report

In this first chapter I have positioned my research and outlined its motivations, goals and research questions. In chapter two I build a theoretical framework for the study by critically evaluating relevant academic research on patriarchy and capitalism, the underlying ideologies of today's ICT organizations. I also present gender as a social construct and discuss prior research on women in male-dominated fields, especially ICT. Chapter three begins the empirical section of the report. I explain my methodological choices, covering narrative inquiry and the data production process, as well as an evaluation of the research. In chapter four I present my interpretations on the research data and analyze the experiences of women in ICT on three levels: the self, the organization and the society. Finally, I discuss the findings against prior research and offer suggestions for further avenues of inquiry.

## 2 Women in ICT: a critical view on gender and work

To study the experiences of gender relations from a critical perspective calls for a theoretical approach that facilitates an analysis of that experience on multiple levels. On one hand, the focus is on the individual: their history, personality and identity, which all shape how they perceive themselves and others in a masculine working environment. There is also the immediate environment of the experience, the ICT company, which as a private business organization operates within the technology sector of a capitalist economic system. Finally, the cultural and ideological elements of the surrounding society frame the experience as a whole. For insights into *why* gender seems to play a key role in women's low representation in ICT, I deem it necessary to cover both micro and macro levels of the issue.

Therefore, my aim in this literature review is 1) to provide an overview of the key concepts that shape the experience of gender relations for women in ICT, and 2) present relevant empirical research findings related to said concepts. I will discuss patriarchy and capitalism as the key ideologies making up the larger societal context for business organizations. I then look at gender as a dynamic social construct that is continuously "done" in interactions, processes and practices in the workplace. Finally, I discuss the linkages between gender and identity, offering insights into how women negotiate the potential conflict between their sex and the masculine space they work in. Before diving into these topics, however, I dedicate the first section of this chapter to a discussion on how a feminist research orientation guides my understanding of knowledge production.

### 2.1 Feminist perspectives on organization studies

*(...) feminism has always, to some extent and in some way, been philosophical. That it asks how we organize life, how we accord it value, how we safeguard it against violence, how we compel the world, and its institutions, to inhabit new values, means that its philosophical pursuits are in some sense at one with the aim of social transformation. (Butler, 2004: 205)*

Feminist research refers to a field of academic scholarship that problematizes the meanings of gender in society (Lykke, 2010). Even though gender has always been a prevalent element of human life it was it was well into the 1900s, following the rise of the feminist social movement, that feminist academia began to form around the critical study of gender relations. Feminist scholars now consider gender to be the primary category contributing to social order, and look into the ways in which this produces oppression for women and other groups of people across space and time (Calás & Smircich, 2006). An important aspect of feminist inquiry is to make visible the taken-for-granted assumptions that underlie our current ways of organizing the world from financial markets to governments, workplaces and knowledge itself. In doing this, feminist scholarship is *critical* toward the institutions and systems that create and sustain the status quo, *political* in its efforts to drive forward social change, and *plural* in the theoretical perspectives and methodological approaches it uses (Calás & Smircich, 2009).

Historically, feminist perspectives have developed alongside shifts in epistemological trends and worldly phenomena. The scholarship has in different times focused on different aspects of gender-related questions, and feminist tendencies differ quite a lot in how they approach subjects like “woman” and “experience” in the context of organizations. In their mapping of different feminist research orientations, Calás and Smircich (2006) discuss how early liberal feminism was more focused on the pursuit of equity than the elimination of inequality. Rooted in abstract individualism, liberal feminism assumed organizations to be fundamentally just systems that would find their optimal and fair form through rational decision-makers. Organization studies in this tradition have applied mostly positivist methodology in documenting women’s and men’s managerial differences and the low number of women in management instead of questioning why such phenomena exists in the first place (Calás & Smircich, 2006). In contrast, socialist feminism from 1970s onward conceptualized gender as a complex social construct affected by structural, historical and materials elements. Class, sexuality and race were included in the analysis of gender relations, driving forward an understanding of intersectionality: multiple and simultaneous categories of oppression (Calás & Smircich, 2006). Organization studies on gendered work have been particularly

prevalent in socialist feminist orientation, revealing insights on how gender and sex are embedded and reproduced in the structures of jobs, organizations and the division of labor as a whole (e.g., Acker, 1990; Gherardi, 1994; Martin, 1990)

What has marked the development of feminist theorizing after socialism is postmodernism and the stratification of the research subject. Postmodern thought emphasizes the discursive and subjective nature of reality, rejecting thus the notion of women as a unified group whose knowledge or standpoint might be more valuable than that of others (Calás & Smircich, 2006). Postmodern feminism is interested in language, and how the hierarchical male-female dualism has become embedded in the reality language constructs. Consequently, postmodern feminists have focused on deconstructing said reality, be it in the form of organization theories, everyday office practices or media texts (Calás & Smircich, 2009).

A key concern in the postmodern denial of objective truth has been whether it threatens the political goals of feminist scholarship. The most recent developments in feminist theorizing aim to balance these affirmative and deconstructive elements. Lykke (2010) discusses how objectivity can be valid insofar as it is partial and local, presented as a discursive construct of both the knowing subject and researcher. This situatedness of knowledge is also present in transnational feminist perspectives that shine light on intersectional oppression and “the others” within the Eurocentric power relations of the globalizing capitalistic world (Calás & Smircich, 2006). Bodies and the materiality of lives lived in the intersections of race, class and sexuality are an important focus in these perspectives – something I regret my own research will not accomplish due to limited scope.

What seems to remain a unifying goal for different feminist research tendencies is the challenging of the traditionally positivist practices of science. Feminist scholars reject the implicit objectivity and purity of science, and draw attention to how all knowledge is produced in positions that necessarily reflect the subjectivities and interests of those involved. Feminist research calls for transparent assessment of how the researcher’s beliefs about what can be known (ontology) and how (epistemology) affect the research.



Feminist theorizing understands the social and economic order of societies to be embedded in knowledge and its production, making it imperative to aim to transform the ways in which these processes are conducted (Calás & Smircich, 2006).

In sum, the rich and varied tradition of feminist research currently leans on situated and local knowledge production that acknowledges the researcher's position and impact on the research (Oinas, 2004). The focus of the analysis is on one hand the discursive constructions of the self and its multiple subjectivities, and on the other hand the materiality of the discriminatory societal context in which the self is constructed (Calás & Smircich, 2006). These are also the signposts for my study. I construct gender as a key identity marker that dominates the ordering of social relations and warrants closer inspection for its discriminatory impact on women. Following the postmodern line of thought, I acknowledge that the truth is uncertain, and aim to depict the research participants, including myself, and their interpretations of reality as complex and dynamic. I focus on alternatives and possibilities as guided by context, rather than producing fixed definitions or essentializing notions of sex/gender and women's experiences. In other words, I do research "for women, rather than about women", as Allen and Baber (1992: 9) aptly put it.

I have now clarified the critical perspectives that guide this research as a whole. I will next continue building the theoretical framing by discussing the key ideologies that underlie the operating environment of ICT organizations in the Western world: patriarchy and 21<sup>st</sup> century capitalism.

## **2.2 Ideologies of Western society**

In the quest for answers to women's low representation in ICT, I consider it crucial to build an adequate understanding of the root causes for the status quo. This knowledge seems to be missing from most current analyses, yet without it sustainable change seems a rather unrealistic goal. Therefore, in this second part of the literature review I turn to the larger societal context of the ICT industry and aim to build a more in-depth

understanding of the values and assumptions that underlie our current ways of organizing the Western society. Societal context itself is a vague term, but I use it to refer to “institutional constraints, power relations and cultural discourses” in the words of Catherine Riessman (2008: 101). I will namely use the concepts of patriarchy and capitalism to offer insights into how gender and work intersect in society both historically and today.

The premise for the following discussion is that patriarchy and capitalism are the ruling ideologies of Western society. Here, I understand ideology as a system of ideas and beliefs that reflect the conditions of a specific social group, and whose promotion and legitimization may conflict with the interests of other groups (Eagleton, 1991). As opposed to feminism, which is an ideology as well, patriarchy and capitalism serve the interests of dominant social groups and classes; the wealthy, educated, able-bodied white Western male embodies the individual who benefits most from both patriarchal and capitalist ideology.

### **2.2.1 Patriarchy**

Western societies have a longstanding relationship with patriarchy. Defined as a socially structured system in which men dominate, oppress and exploit women (Walby, 1989), patriarchy can be traced back to the early days of recorded human history. Historian Estelle B. Freedman (2002) reviews how men have been portrayed as the rulers of women in most monotheistic myths and stories about the human origin, while religious institutions have enforced men’s superiority by granting them exclusive status as prophets and priests alongside the symbolic male God, the Father. The hierarchical order of genders has also been passed on in folk stories and idioms that speak of the virtues of men in contrast to women (Freedman, 2002). From “wearing the pants in the family” to “being the man for the job,” even contemporary language is full of meanings that symbolize male power as opposed to the female. For patriarchy’s prevalence now extends thousands of years, it has sometimes been criticized as too all-encompassing to be used as an analytical concept (Wilson, 2001). I find, however, that it is precisely the

historical weight of patriarchy that makes it one of the defining ideologies of the Western society, and as such an essential analytical backdrop for any critical research interested in gender.

Conceptually, patriarchy can be understood on different levels of abstraction. Walby (1989) first draws attention to patriarchy simply as a social practice. This view acknowledges that the hierarchical order of the sexes is not necessarily the same in every context, and takes a rejective position toward biological determinism, arguing that for instance the “aggressive man” and the “submissive woman” have more to do with historically constructed stereotypes than natural differences between the sexes. At a less abstract level, Walby identifies six structures where patriarchy is practiced: paid work, cultural institutions, the household, the state, sexuality and violence. These forms of patriarchy are causally related, but fairly autonomous and also static over time. It is the more specific practices of patriarchy and also their degree – the intensity of the oppression – that vary under the changing gender relations (Walby, 1989). In paid work, for instance, women were initially denied access to specific jobs altogether. While no official barriers exist today, sex segregation persists in most industries, signaling a shift in discrimination to a less radical, but perhaps more obscure variety.

Interestingly, patriarchy and the structuring of work share much history. Freedman (2002) discusses how patriarchy seems to have emerged as the result of increased complexity in human societies. According to her, the shift to an agrarian society may have been a key catalyst for the decline of egalitarianism. Before settled agriculture, women and men shared economic and religious responsibilities, and though both held distinct tasks, they complemented each other. The social arrangements among early hunter-gatherers were thus quite equal. According to Freedman, social life in agrarian communities was shaped by increasingly specialized farming jobs and the exchange of goods. The new economic system began to accumulate surplus and wealth into families, driving forward a class hierarchy. During these changes, property became the exclusive right of men; women’s authority was limited to the household while men exercised power in public arenas (Freedman, 2002). The development of complex class and gender relations thus seems to be linked to the rise of trade and commercialization – systems

that made a separation between the public and private life spheres and the work they entailed.

The public–private dualism is a key element of patriarchy also in more recent history. By the eighteenth century a fairly stable concept of the gender hierarchy had formed, which gained institutional support from the newly established economic and state order in most of Europe and North America (Connell, 2005). However, with the rise of industrialization there was a significant shift in the dominant patriarchal structure from household to paid work. Industrialization marked a moment when – due to capitalism’s need for working bodies – women gained access to the public realm of life for the first time. Because of this major shift, for example Walby (1989) considers private and public to be the two main historical forms of patriarchy. Whereas private patriarchy had discriminated against women by restricting their space to the household, public patriarchy moved the main site of oppression to the structures of wage work and the state. Public appropriation utilizes segregationist and subordinate practices, and its nature is collective rather than individual (Walby, 1989). From unequal pay to workplace harassment and segregated industries, current examples of public oppression are not hard to find. This perhaps speaks of just how recent the developments in women’s rights have been – and that the change is still ongoing.

Drawing the above historical notions together, it seems that patriarchy has the ability to persist across space and time, placing the masculine above the feminine in new and different ways. A much-used concept in understanding this (re)production of the gender order is hegemonic masculinity, which R.W. Connell has introduced with the following definition: “the configuration of gender practice which embodies the currently accepted answer to the problem of the legitimacy of patriarchy” (2005: 77). Hegemonic masculinity has to do with images of masculinity – strength, competitiveness, objectivity, unemotionality – that become defined and valued against subordinate non-hegemonic masculinities and femininities. Hegemonic masculinity maintains and most importantly, legitimates, patriarchy by seemingly providing grounds for gender order and the numerous practices in which it manifests itself (Connell, 2005). A particularly relevant hegemonic masculinity is rationality – again defined against the idea of feminine

emotionality – which is widely used to argument for various social arrangements from wage labor to the highly privileged position of science and technology as the “motors of progress” (Connell, 2005: 164). Because reason and logic implicitly claim to represent the interest of all, the social structures produced within the patriarchal system are difficult to challenge, and in the long run become taken for granted, or seen as inevitable.

To speak of hegemonic masculinity is not to contend that there is a single dominant masculinity. Many hegemonic masculinities can exist simultaneously (Acker, 2005), and as critics of the original concept have pointed out, they are often used in dynamic and even deceptive ways (Demetriou, 2001). For example, Arxer (2011) found out that male college students utilized emotive expression, a traditionally feminine quality, in their in-group discourse to enforce group coherence and at the same time marginalize women and gay men. Such practices of so-called hybrid masculinities are more recent and they have been mainly observed among those in powerful positions, i.e. among young heterosexual white men, which may signal yet another transformation the patriarchy is undertaking with the increasing pressure and criticism in the internet age (Bridges & Pascoe, 2014). Exposing patriarchy then does not necessarily mean its practices vanish, but that they find new ways of maintaining the gender order.

Lastly, I wish to clarify that hegemonic masculinities are not restricted to the use of privileged men. Also subordinate groups of men, as well as women can practice hegemonic masculinities. For example, Forbes’ (2002) interviews with black women managers revealed how they constructed their work experiences in masculine terms. The women took part in practices of masculine organization culture, used masculine vocabulary and claimed a sexless identity in the workplace. The women’s masculine subjectivities devalued the feminine in different ways, which Forbes (2002) argues to speak of internalization of hegemonic masculinity. Patriarchal structures can be thus maintained not only by the privileged, but by the oppressed as well. Much of this maintenance occurs in organizations, and on this note I will move to the next section, which offers a more detailed account of capitalism, the ideology under which business organizations currently operate.

## 2.2.2 Capitalism

Capitalism is widely considered to be the key driver of economic growth and development in the modern era. Business organizations and increasingly also other societal actors operate within the frame and values of the capitalist system in global scale – a direction that has prompted much critical analysis in feminist academia. Acker (2005: 82) has called capitalism “the ongoing male project” for it is historically the work of those men who embody hegemonic masculinity in their time. Qualities such as competitiveness, aggression and rational intellect are embedded in the principles of the free market system, and reflected in how capitalist organizations pursue profits at the cost of environmental and human rights. Historically, this is not a new development. Acker (2005) explains how the rise of industrial capitalism in Britain and the US was made possible through the recruitment of immigrants, slaves and women to manual labor. Exploitative gender and race relations served as the very foundation of private ownership and accumulation of wealth whose primary receivers were, and still are, white men. In the global dynamics of capitalism, the exploitation touches especially vulnerable groups such as women and children in third world countries where the capitalistic production currently finds its low-cost work force (Connell, 2005). The gendered and racialized substructures of capitalism are thus not a thing of the past, but constantly reconstituted in different ways.

Theoretically, contemporary capitalism leans strongly on neoliberal ideology, which promotes privatization, market deregulation and entrepreneurial activity on the basis of individualism. In a sense this goes against the traditional notions of patriarchy; the entrepreneurial individual creating their own luck has no gender. Connell (2005) points out, however, that this has less to do with concern for social justice than absolute indifference about it. Reforming society through neoliberal agenda has mostly worsened the position of women as cuts typical in public sector employment, education and tax transfers hurt them the most (Connell, 2005). A key criticism towards neoliberalism is then precisely its theoretical disregard for the diversity of lived experience and opportunity. To claim that the liberal individual represents anyone is to reject the oppressive material reality that comes along with a body that is, for instance, black, veiled

or disabled. There is thus a fundamental abstraction taking place in the liberal ideology: the universal individual is disembodied (Pateman, 1988).

Acker's (1990) influential work on gendered organizations builds on this idea and argues that capitalism constructs jobs and workers in abstract terms even though they have a built-in idea of masculinity. The ideal employee, she explains, is depicted as a focused and dedicated individual with few obligations outside the workplace. What is embedded in this idea is a division between the public and private spheres of life, and an implicit assumption that the key processes outside the organization, namely procreation and household work, are handled by women. The concept of work is thus inherently gendered despite the claims of its gender-neutrality. Acker (1990) further points out that because gender may be difficult to perceive when only masculine is present, women can be seen to bring in gender issues to the workplace by simply being there. What the feminine represents – sexuality, emotionality and the physical body – is seen as a disruption to the orderly capitalistic production (Acker, 1990).

In practice, this can have concrete implications for women's experience in the workplace. Kanter's (1977) classic study on gender in the corporate world offers a useful concept of the *token*, which refers to a situation of being the only or one of the few differing individuals in an otherwise homogeneous group of people. In some ways, being a rarity can work for women's advantage in terms of standing out positively through difference. What tokens become, however, are symbols: they act as representatives of their category rather than just themselves (Kanter, 1977). The attention female tokens get can consequently lead to increased performance pressures, partly because of the need to do well as a female professional, but also as a feminine woman. This *double bind* can heighten women's self-consciousness and affect the way they behave and make decisions, for instance by needing to adopt masculine ideals of competitiveness, aggressiveness and ambition while at the same time avoiding direct competition with, or authority over men; displaying sufficient femininity through humility and politeness (Gherardi & Poggio, 2001).

Kanter (1977) also discusses how the contrast between the token and the majority group makes the latter's shared culture visible in organizations – something for instance men in ICT companies may not otherwise be aware of. In an effort to manage the challenge the token represents, the majority group can draw attention to the differences between the token and themselves. In meetings where a woman was present, Kanter (1977) observed men making interruptions such as “Can we still speak in technical terms?” that highlighted their difference through gendered competence, putting the token under a spotlight. She also noticed men exaggerating in-group commonalities in more informal settings through topics such as sports, drinking and sexuality. Similarly, Collinson and Hearn (1994) have identified informality as a key practice of masculinity in organizations where humor, sports and drinking alcohol serve as common ways to identify with the in-group of masculine individuals and differentiate between other groups of people, often to an exclusionary effect. Faulkner's (2009) observations of an engineering office further confirm that subtle informal practices of masculinity can make it easier for men than women to fit in despite the generally inclusive interactions in the workplace. These practices are not always malicious in intent, or acted on a conscious level, but can nonetheless contribute to a heightened sense of self-consciousness and tension for the tokens. They also symbolically highlight that femininity is out of place in such contexts.

What makes the claim of organizations' gender-neutrality troubling is that it makes it more challenging to see how gender is part of not only informal workplace cultures, but work itself. Research has shown that both women and men associate women's work with qualities such as patience, caring and conscientiousness, while men's jobs are perceived to require efficiency, problem-solving and technical skills (Kinnunen & Korvajärvi, 1996). In time, these perceptions of gender-appropriate work can become understood as inevitable and therefore, difficult to challenge under the gender-neutral ideology of capitalism. In one empirical example, Hanappi-Egger (2013) found that the issue of women's low representation in STEM education was believed to be out of the hands of the university. The research participants agreed on the fields' gender-neutrality and even rejected the role of gender – all the while emphasizing objectivity, performance, logic and facts as key organizational values of science and technology. The premise of gender-neutrality thus obscures the fact that what is valued and perceived as competence



is strongly underpinned by masculine connotations. This makes it harder to see that gender may play a role in why certain individuals “make it” while others do not.

All in all, gender seems to be embedded in different aspects of capitalist organizations in ways that reify the superiority of masculinity and may make it more difficult for women to experience a sense of belonging. One might wonder: is there any light at the end of the tunnel? Some scholars suggest that the information age has made it possible for women to enter previously male-dominated domains partly because of a need for new capabilities (Kelan, 2008; Muzio & Bolton, 2006). In ICT, an increased service orientation has created a demand for soft skills such as sociability and attentiveness, which have been traditionally coded feminine (Kelan, 2008). In some ways, then, there seem to be new opportunities for women that would leverage their feminine competence. In reality the situation is more complex. Women occupying roles that combine technical and feminine skills has not come with a fundamental challenging of ICT’s gendered roles, but largely drawn from the traditional notion that women and men are suited for different jobs because of their inherently different skills (Guerrier et al., 2009). Also, men with feminine skills have been reported to fulfill the role of an ideal ICT worker more easily than women who are simply perceived as being their normal selves (Kelan, 2008). The challenge for women to negotiate between their sex and the masculinity of the ICT industry thus seems to persist – perhaps because getting more women into ICT seems to be happening on the terms of the gender order and capitalism’s needs, rather than through the acknowledgment of fundamental gendered structures that value masculinity above femininity.

In conclusion, I will claim that a major barrier to inclusive business organizations lies within the gender-blindness of capitalism. As long as organizations are falsely perceived as gender-neutral, a radical reformation of gender relations will remain a challenging task. Here, those with decision-making power are in a key position because, after all, organizations are made up of real people. It is on the shoulders of powerful individuals *within* capitalistic organizations to acknowledge the logic of non-responsibility under which they have been operating thus far (Acker, 1998, 2005), and drive forward new ways of organizational structuring that take into consideration gender and other

intersections of power. As my focus in this study is limited to gender, I shall next move on to the final thematic area of this literature review and discuss gender in more detail.

## 2.3 Gender

Up until now I have discussed gender from the perspective of overarching societal structures that provide the context for ongoing valuation of masculine over feminine. I will next shift the attention to the concept of gender itself. It is hard to name an element that would permeate our social existence to the degree that gender does. It is an inextricable part of our identities and interactions, being at the same time present and invisible, acknowledged and ambiguous. Most of us carry on with our daily lives without constant awareness of being a gendered person, yet we use assigned bathrooms, shop for clothes in different departments and browse magazines that cater to our assumed interests. Gender is thus quite deeply entangled in the mundane aspects of life, and therefore, best understood as something that is “done” over and over again in social interaction, including work.

In the following sections I will introduce gender as active doing within the gender institution, and discuss its linkages with both organizations and individuals in terms of gendered processes and practices, and identity construction, respectively. As throughout the study so far, I will use the terms female/male in reference to biological sex, and woman/feminine, man/masculine in reference to gender that is socially constructed.

### 2.3.1 Gender as practice

Traditional views of people as living beings make little distinction between biological sex and social gender. Being born into a female or male body directly translates into *being* a woman or a man, reflecting an understanding of gender as something innate, static and universal (Lykke, 2010). As early as 1949, however, writers have suggested that gender is in fact a social construct, something one becomes rather than is (de Beauvoir, 1988).

One of the first academic conceptualizations of gender as an active process is the “doing” of gender, which West and Zimmerman introduced in 1987. They define it as “the activity of managing situated conduct in light of normative conceptions of attitudes and activities appropriate for one's sex category” (1987: 127). Contrary to an essentially determined feature of individuals, they see gender as a recurring accomplishment that takes place in everyday social interaction. This accomplishment leans on stereotypical perceptions of femininity and masculinity that have formed over time, and that we routinely use to navigate our social environment. Participating in the doing of gender is hardly optional; whether we like it or not, we will be appointed a sex category in any social situation and held accountable for managing the normative performance of femininity or masculinity in a satisfactory manner (West & Zimmerman, 1987). When the process is then continuously repeated over time, the notions of femininity and masculinity are eventually taken for granted, and even considered natural. This is reflected, for instance, in how women’s low number in science, technology, engineering and mathematics (STEM) is brushed off as an inevitable result of women’s different interests.

When the prevailing gender-based inequalities are understood as a reflection of essential differences between the sexes, the doing of gender becomes much more than a simply interactional phenomenon. Martin (2003) offers a useful concept of gender as a two-sided dynamic where on one hand it is individuals who practice gender in everyday life, but on the other hand it is the gender institution that makes the gendered practices available to them. Put differently, concrete and embodied practices – maneuvers, words, non-verbal cues, identificatory markers – find their gendered meaning within the institution of gender (Martin, 2003), which is accepted and enforced in society in many ways. Institutions justify their arrangements and social relations with ideologies, and the binary conception of gender differences is an apt reasoning for the status quo, which those in power typically benefit from (Martin, 2004). The naturalization of gender differences eliminates the moral and cognitive dissonance inequality issues may give rise to, and thus prohibits the crucial opportunity for learning and change (Heiskanen, 1996).

What is embedded in the binary of masculinity and femininity is that the two are inherently hierarchical and that they become defined against the other; to understand what masculine aggression is, you need its counterpart, the feminine tenderness. Therefore, the doing of gender also contributes to the continuous reproduction of the different valuation between masculinity and femininity. Silvia Gherardi (1994) has spoken of the two as different symbolic universes that are maintained through the dual processes of ceremonial and remedial work. The former refers to behaviors that tend to highlight the differences between masculine and feminine, and through this, ritualize the symbolic gender order. The rules of ceremonial work are defined by behaviors, manners and etiquette considered appropriate and desired for each sex. Remedial work, on the other hand refers to the behaviors that tend to neutralize a threat to the gender order by deferring to it. Gherardi (1994) argues that for instance women's tendency in organizational discourse to request permission to speak ("Can I just add something?") and minimize their competence ("This is just a thought, but...") are tactics that aim to remedy the situation in which they are symbolically intruding a masculine space. One such space is the very context of this research: women working in the business of technology, a double masculinity of sorts.

In ICT organizations, gender becomes practiced along two dimensions where masculinities frame the norms for what is perceived appropriate and desired: technology and the capitalist business context in general. Technical skills are typically associated with "men's work" (Kinnunen & Korvajärvi, 1996), having resulted from a longstanding situation of female segregation in creating and developing the methods, practices and textualities of information technologies (Vehviläinen, 1996, 1999). In this context, the doing of gender can find complex and contradictory forms. Several studies have found that women do gender in technical contexts by distancing themselves from technology (Adam et al., 2006; Guerrier et al., 2009; Kelan, 2008). For example Adam et al. (2006) noticed that some women tended to deny that they worked in ICT as such, emphasizing instead their role as working with, or helping people through technology. Similarly, Guerrier et al. (2009) found that women saw soft skills rather unproblematically as a good middle ground where to make most of their "natural" competence while still working in a technological context. In adopting these positions women do gender

discursively according to the traditional notions of gender-appropriate work, enforcing the idea of technology as a masculine realm.

Women who work in technical positions may have less room for such distancing. Powell, Bagilhole, and Dainty (2009) reported that female engineering students already in work life adopted several strategies to gain male acceptance in the workplace. The women for instance acted like one of the boys, accepted discrimination and tended to highlight the advantages of the field rather than focus on the downsides such as sexist commentary. Hatmaker (2013) also suggests that women can adopt a pragmatic stance to dealing with interactions that undermine their worth as female technical experts. In her interviews with female engineers, Hatmaker found that men expected the women to handle certain tasks around the office, ignored their input in meetings and imposed a requirement for the women to prove their intelligence and technical competence. The women judged such discrimination, but still considered it part of the industry; something one simply has to deal with (Hatmaker, 2013). By downplaying the significance of such gendered practices and in rejecting their own femininity, women might do gender by in fact “undoing” gender (Powell et al., 2009).

Yet, rejecting one’s femininity is not a straightforward strategy either. The double bind of masculine contexts, mentioned already earlier in this chapter, requires women on one hand to perform masculinities to be taken seriously, but on the other hand display sufficient feminine characteristics to fulfill the normative performance of their sex category (Gherardi & Poggio, 2001; Powell et al., 2009). The latter is likely to fall under the remedial work Gherardi (1994) suggests to neutralize the threat to the gender order. The doing of gender in organizations thus appears to occur through a disruption–repair loop where women’s presence challenges the gender-neutral perception of masculine contexts, requiring them consequently to remedy the situation by various interactional practices. As a whole the process contributes to the maintenance of masculine norms and acts as a source of continuous identity negotiation for women.

Though prior research suggests a rather discouraging situation for women in technical contexts, it should be remembered that the experience of gender relations is not

necessarily negative for individual women. It is dynamic persons who take part in the doing of gender in dynamic, situated moments – also with varying levels of consciousness of gender relations. What can be further studied is how women negotiate their identity in the gendered situations and interactions in the workplace. I will next discuss this in more detail in the last thematic section of this literature review.

### **2.3.2 Gender and identity**

I have in the previous sections discussed gender as an institution, power structure and practice that is grounded on deterministic notions of two sexual spheres. I have also problematized how gendering practices reproduce oppression by organizing various areas of society according to a hierarchical valuation of the masculine and feminine. These perspectives emphasize the soci(et)al aspect of gender, yet in this study I also want to understand better the meanings women as individuals ascribe to gender relations in their workplace. Here identity comes in as a necessary lens for it focuses on how people themselves experience their lives (Alvesson & Due Billing, 2009), and facilitates the analysis of both micro and macro levels of this experience (Alvesson, Ashcraft, & Thomas, 2008). Therefore, I dedicate the final conceptual area of this literature review to the relationship between gender and identity.

In general terms, identity is about the creation of meaning to answer to the question “Who am I?” (Alvesson & Due Billing, 2009). The quest for this meaning is ongoing, and the process is kept alive by the inherently changing nature of life both on a daily and more long-term basis. Socially oriented researchers agree that identities are constructed, that is to say that they do not reside as an objective set of characteristics within a person (Alvesson & Due Billing, 2009). This implies a contingency upon social relations, largely because our experiences and interactions with the outside world shape our understanding of life and, in consequence, ourselves (Alvesson & Due Billing, 2009). The complexity and fragmentation of social relations can justly be expected to reflect on identity construction as well; the process may not be very straightforward, and even involve different degrees of conflict and contradiction.

Theoretically, identity has been studied from a number of perspectives and also on very different philosophical grounds. The classic approach in psychology commonly distinguishes between personal and social identity. Harshly summarized, personal identity theory emphasizes a person's unique and nuanced attributes such as "thoughtful" or "hot-tempered" (Alvesson et al., 2008), while social identity understands individuals to define themselves based on group memberships (Ashforth & Mael, 1989), for instance by the belongingness to "women" and "programmers". These two theories approach identity above all from the perspective of the individual, and focus on the internal and role processes of identity construction. Another theoretical school – the one I restrict my focus on – understands identity from a discursive perspective. Here, language and communication are acknowledged as the key mechanisms of identity construction. Rather than studying roles as separate from the people who take them up in interaction, the focus is shifted on the language through which individuals construct and negotiate meanings for their identity on a continuous basis (Davies & Harré, 1990).

If communication is seen as the medium for identity construction, attention must be directed to how language exactly facilitates this process. One approach is studying storytelling, or more specifically, narratives, which people intuitively use to give meaning to their life experiences (Riessman, 2008). Davies & Harré (1990) talk about discursive positioning that often takes places in narration. They describe it as a process in which individuals position the many versions of themselves as coherent actors in the storyline at hand. The positioning is not necessarily intentional, it can be done by other people as well, and as it happens the different positions the self finds can come to contradict each other (Davies & Harré, 1990). These contradictions, in a way, reflect the messiness of our daily life and interactions with other people. Kraus (2006) has pointed out that modern identity construction is much less about reaching coherence than continuously negotiating between the different meanings the self gains. Identities are thus multiple and in constant flux. By studying the narratives in which the self is constructed, it becomes possible to identify the presence of conflicting and complex meanings (Alvesson et al., 2008).

Another important aspect of discursive identity is that it acknowledges identity construction as an embodied practice, and as one which draws on the available social narratives about who one can and should be (Alvesson & Due Billing, 2009). In other words, the positioning is necessarily affected – for better or for worse – by the broader cultural context it is produced in, and may reflect normative expectations for conduct (Davies & Harré, 1990). This is where I wish to draw the linkage between identity and gender as well: one can hardly separate gender from identity and its construction because it is the defining social category in the Western society, and because gender is inherently about normative conceptions of how to be (West & Zimmerman, 1987). Cultural masculinities and femininities are played out on individuals through their identity (Alvesson & Due Billing, 2009), and therefore I understand gender as a category that guides and challenges the positioning of one’s identity, especially in highly gendered settings such as the ICT industry.

To say that gender challenges the positioning of women’s identity in the ICT industry is no understatement. Several studies have looked into women’s identity construction in technical contexts, revealing significant, multi-faceted and ongoing negotiation that revolves around the clash of the feminine self and the masculine practices of the context, some of which involve even overt discrimination (Adam et al., 2006; Faulkner, 2007; Gremmen & Benschop, 2009; Guerrier et al., 2009; Hatmaker, 2013; Jorgenson, 2002; Tuori, 2014). How do women, then, cope with such pressures? Some women obscure their feminine identity, either as an act of invisibility (Adam et al., 2006) or through becoming “one of the guys,” emphasizing their masculinities (Powell et al., 2009). In other words, the women disqualify their own gender identity in an attempt to blend in as “neutral” individuals.

For some women, negotiating gender relations can also involve positive validation. Hatmaker (2013) learned that some female engineers framed the recognition of their technical expertise as the result of long-term image projection; proving oneself to the coworkers and the organization. The moments of recognition thus served as a source of increased confidence and positive professional identity. On the other hand, for those in non-technical positions, femininity can be framed positive in terms of gendered skills.



In her dissertation on identity work, Annamari Tuori (2014) interviewed female ICT professionals who described being softer, communicative and co-operative as an advantage to them as professionals. While likely enhancing the women's sense of belonging and appreciation in the workplace, these identity positions potentially enforce notions of gendered work rather than truly benefit women's position in ICT (Guerrier et al., 2009; Kelan, 2008). Even positive identity positions then could contribute to the larger oppressive gender order in society.

Finally, Gherardi and Poggio (2001) point out that because sex and gender are understood as dualistic categories, gender identity becomes constructed through difference. Yet, in masculine working contexts women are required to perform both masculinities and femininities to a sufficient degree. This could contribute to ambivalent reactions to gender relations. Adam et al. (2006) noticed how women tended to share examples of discriminatory behaviors in the workplace without explicitly criticizing them or implying that they judged them. Similarly, in Hatmaker's (2013) interviews female engineers reviewed their experiences from different perspectives, shifting between positive and negative experiences without clear conclusions. This ambivalence could be linked not only to the fundamental conflict in performing two gender identities, but also to the context of the negotiation. Seemingly gender-neutral organizations do not readily accommodate critical examination of gender, partly because women can become assimilated to the culture, and partly because addressing gender breaks the illusion of neutrality.

Though some of the empirical findings discussed above have been conducted with female engineers specifically, it seems safe to claim that being a female professional in a technical context – regardless of position – is likely to require identity negotiation. Such negotiation appears to involve complex processes that often entail conflicting or contradictory elements. The masculinity of technical contexts does not necessarily mean strain or negative experiences for individual women, and can even offer ways for positive identity positions. Still, insofar as these positions tend to downplay discriminatory practices and even deny the meaning of gender in work contexts, they can be considered

problematic because they obscure oppressive gendered structures that do create an exclusionary reality for some and generally make it harder for women than men to fit in.

## 2.4 Conceptual framework

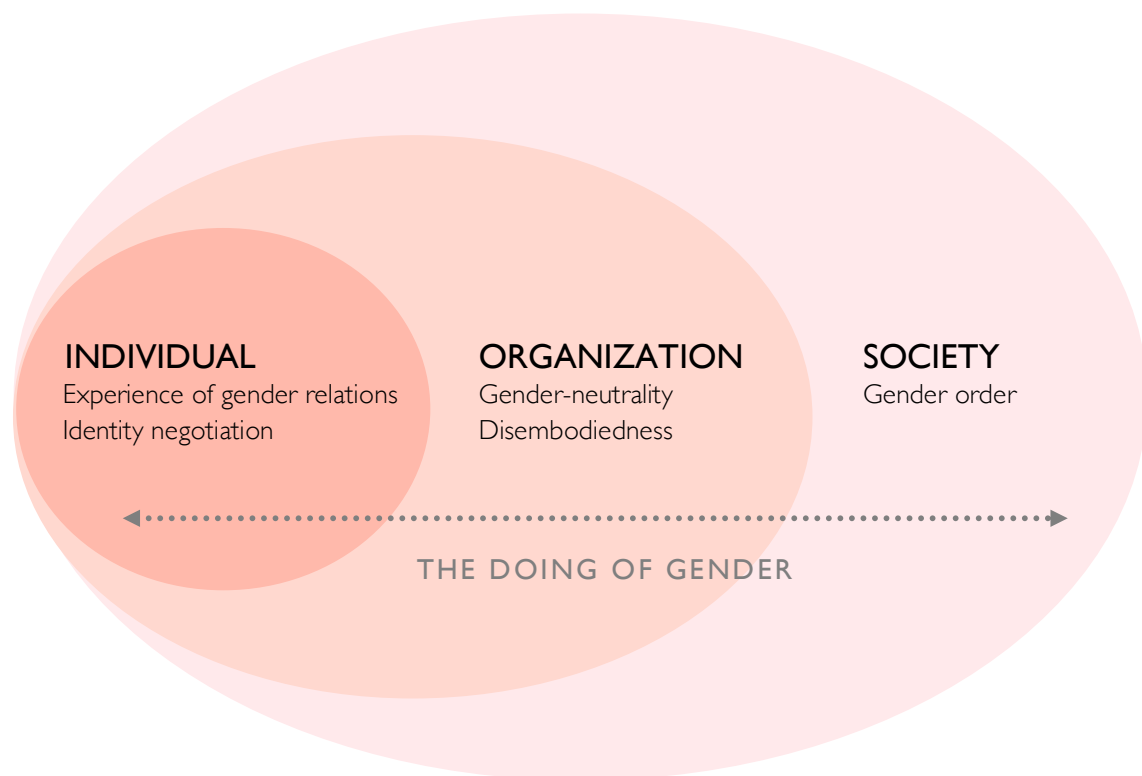
In this literature review I have discussed gender from different angles in the context of contemporary male-dominated business organizations. My aim has been to offer an overview of the key concepts that shape the experience of gender relations for women in ICT. I have shown that substantial, historically weighty structures of gender live on in workplaces, finding often subtle and ambiguous forms in daily interactions. I have also highlighted why these structures are problematic insofar as they tend to neutralize gender while at the same time maintaining oppressive and exclusionary relations for women.

On the societal level, patriarchy offers the concept of *gender order* for the research. This refers to the superiority of masculine over feminine, a historically substantial structuring of social relations that continues to find new forms in the modern society (Freedman, 2002; Walby, 1989). The gender order is supported and made legitimate through hegemonic masculinities that embody the currently accepted forms of masculinity (Connell, 2005). In technological contexts, these masculinities typically include rationality, competitiveness and orientation towards performance, logic and facts – ideas that find their definition in contrast to their feminine counterparts in an inferior symbolic universe (Gherardi, 1994). On the organizational level these concepts become played out through claimed *gender-neutrality*, which tends to obscure the gendered substructures of capitalist organizations. Normative masculinities and the images of men are embedded in the concepts of work and ideal employees (Acker, 1990) and the currently reigning neoliberal ideology further strengthens the *disembodiedness* of capitalism: the ideology fails to acknowledge that individuals' lived experience and opportunities are affected by intersectional discrimination.

Finally, ICT companies employ individuals who *experience gender relations* in the masculine organizational context first-hand in various dynamic and situated interactions. In these

moments, individuals take part in discursive *identity negotiation* that aims to support their understanding of themselves and resolve potential conflicts to the meanings of self in the workplace (Alvesson & Due Billing, 2009). What these practices of social interaction and identity negotiation do as a whole is contribute to the continuous *doing of gender* under the gender institution (Martin, 2003; West & Zimmerman, 1987).

In sum, I have argued that contemporary ICT organizations operate in a space that fundamentally obscures gender and in which the doing of gender through interactions, practices, and the negotiation of identities tends to reify the gender order; the superiority of the masculine (see Figure 1). This conceptual framework will support the interpretation of women’s experiences of gender relations in ICT companies as I move forward towards the empirical findings of this study. Before this, however, I will describe the choices I made regarding my research methodology.



*Figure 1: Elements shaping individuals’ experience of gender relations in the ICT industry*

### **3 Methodological choices**

In line with its positivist tradition, mainstream business research has generally not discussed philosophical standings and positions of the researcher. What has been done in the name of pureness and objectivity could be seen as an obstacle to discussing the elements that constitute a subject position in the first place: the researcher's values, motivations and the context they live in. Also, gender has been treated as a neutral variable, focusing the research of gender-related problems on quantifiable issues such as the wage gap and the glass ceiling, without critically exploring the reasons behind such phenomena (Calás & Smircich, 2006; Wilson, 2001). In order to better understand those reasons, it is necessary to shift the focus to the complexity and context – on the hows and whys – of the issue. Qualitative research accomplishes this (Eriksson & Kovalainen, 2008), making it a direction I naturally leaned towards long before I knew my research question.

Because qualitative research digs deeper into the root causes of a phenomenon, it also helps us build understanding of complex issues in a way that supports our efforts to change them. This is in line with the feminist orientation of this research. Human sciences largely inform qualitative business research, creating a space for creative synthetization of different disciplinary theories that have the ability to forge new avenues for our understanding of the gendered world (Lykke, 2010). In the following sections I will discuss my qualitative methodological choices in more detail, starting from the narrative approach and continuing with an account of the data production and analysis phases. In the end, I will provide an evaluation of the presented methodology.

#### **3.1 Narrative approach**

In this study, I look into the experiences and meanings of gender in ICT through narrative inquiry, which approaches knowledge production from the viewpoint of language, meaning and interpretation. Storytelling has always connected people over

shared experiences, and stories have been a historically important way for the oppressed to build group belonging (Riessman, 2008). At the same time, narratives have gained emancipatory interest also in academia as scholars have wanted to understand better the experiences of marginalized groups in society. Still in the current day, researchers can use narrative methods to access and give voice to those who may otherwise not be heard (Hesse-Biber, 2007). In the context of this research, I utilize narrativity to shine light on women's experiences of gender relations in a male-dominated context.

My employing narrative inquiry leans on the interpretivist paradigm of ontology, the nature of reality. Interpretivism understands realities as multiple as they are constantly experienced and shaped by the actions of proactive social beings (Hudson & Ozanne, 1988). In other words, reality is not unified, but dynamic and subjective because it is created in interaction. This further leads us to the epistemological standing of this research, social constructionism. Social constructionism understands knowledge as an inherently social concept that individuals construct between each other (Burr, 1995). This view rejects the existence of objective truth that could be observed from the outside, and instead stresses knowledge as the product of social processes and interactions. Language is an integral part of such processes and interaction, and therefore narrative inquiry is also a constructionist approach: it understands reality to be formed through language in social interaction. By interrogating the language – specifically, stories and accounts – we can get a better understanding of how people make sense of their social existence (Czarniawska, 2004).

Storytelling itself is an age-old medium for human interaction, knowledge transfer and education, and it is the conventional form of communication because it gives order to our life experiences by emplotting the events of the past, present and future together (Bruner, 1991). Happenings that would otherwise seem arbitrary are sewn together in narratives, linking them to a person's life story and in the process of doing this, giving them higher meaning (Czarniawska, 2004; Polkinghorne, 1988). In other words, people construct narratives to make sense of their lives and the lives of others. Narratives are interpretations that establish meaning out of the complex reality of lived experience, and serve as grounds for further interpretation through analysis (Riessman, 2008).

A narrative can take many forms, but at its simplest, it can be considered an account of what happened. Taking a spoken, performed or textualized form, a narrative typically contains a sequence of two or more events that give it an intelligible structure and a plot (Czarniawska, 2004). A narrative structures events on a timeline, giving narratives a temporal quality and a key role in helping us understand time (Bruner, 1991; Hyvärinen & Löyttyniemi, 2005). Narratives are also created in a specific moment in time for a specific audience (Riessman, 2008), meaning that they are constructed socially. Because of this, narratives are highly context-dependent and change in relation to cultural and interpersonal factors. Different audiences may receive different versions of the story, and they may also interpret the story differently. Multiple meanings therefore lie at the core of narrative research, taking place first within the narrator, then in the primary receiver, the researcher, and on and on in the following receivers (Czarniawska, 2004). This leads us to conclude that narratives have mostly to do with interpretation, and indeed, narrative inquiry follows postmodern thought in the view that knowledge and truth are subjective (Bold, 2012). This opens the door to the heart of narrative inquiry: how is this particular story told? Why is it told in this way?

Narratives are perhaps most often used to study human identity. When personhood is understood as a narrative construct – a continuous revision of a plot that explains who we are and what our purpose in life is – the inquiry into the details of this process helps us better understand the workings of the human mind (Polkinghorne, 1988). At the same time, it should be remembered that individuals do not operate in a vacuum, but are the products of the society and culture they inhabit (Bruner, 1991). Narratives, no matter how autobiographical and private, draw from the cultural symbols available and assume that these symbols are known and familiar to the listener. In doing this, narratives tell us about the tacit knowledge and shared meanings within a culture (Hyvärinen & Löyttyniemi, 2005). From this viewpoint, narratives facilitate an analysis of the context in which the meaning-making takes place. In this research, I pay special attention to the larger societal context in which the gender order, ICT's masculinity and its claimed gender-neutrality intersect.

Because narratives are so closely linked to the time and place of their production, contextualizing the narrative is of crucial importance in understanding it. Here, an important notion is that narrative data is actively produced rather than collected, requiring the researcher to acknowledge their own and the research participants' role in the process and critically reflect on its effect on the results (Riessman, 2008). In other words, what positivist researchers would consider a risk for objectivity is the very starting point for narrative scholars who understand knowledge as a product of human interaction. This may raise the question of whether narratives can be relevant for a socially critical study. Does it not create a conflict to discuss these matters through personal narratives that provide no objective certainty? Bochner (2001) argues that the narrative inquiry is mindful of social issues and the advances made in this realm insofar as it acknowledges that individuals' struggles can be political. Moreover, narrative social studies can purposefully incorporate morality and empathy by looking at the truth of knowledge as pragmatic truth, that is recognizing how personal narratives are a way for individuals themselves to make sense of their struggles, and finding their own truth in their experiences (Bochner, 2001). It is from this standing that I employ narrative inquiry in this research on women's experiences in ICT: to critically consider both the individual and their wider societal environment. The next section describes in more detail the methods I used to produce data together with nine women working in the ICT industry.

## **3.2 Data production**

Because I understand knowledge to be socially constructed, I approach also data from the perspective of active production instead of collection, which has positivist connotations and may create a false perception of the simplicity of the process. For this research, the production took place in interviews with nine women who work in different positions in ICT companies in Finland. The following sub-chapters will describe this process in more detail, starting from the research context and interviewees and moving on to narrative interviewing.

### 3.2.1 Research context and interviewees

The context of this research is the ICT industry in Finland. Historically speaking, technology has been exceptionally male-dominated in Finland with the early computing pioneers consisting of “worlds without women” (Vehviläinen, 1996: 143). These men laid a foundation for a culture that discouraged critical discussion and established a sharp gender division within the sector’s jobs through top-down management practices. Information technology was considered a male project, and even though Finnish women participated in the labor market in high numbers, their space in ICT was restricted to specific expert positions with limited organizational power (Vehviläinen, 1996). Against this history it is perhaps not so surprising that sex segregation remains an issue in ICT with women currently representing approximately 28 percent of all ICT workers (Teknologiateollisuus, 2016). As I wanted to study gender through women in this context, I had to come up with criteria that would help me find a suitable research sample. I considered the following: diverse representation of educational and professional profiles among persons of any age who self-identify as women, and who currently work in a software company, local or global, that provides software consultancy and/or software products for B2B clients in Finland. This generous definition of a software company allows for variety in company size and sub-industries, but ensures a typical representation of a business in the field of technology: fairly young and male-dominated. As for the participants, the loose demographic diversity criterion aims to add a certain level of locational richness, not build a comprehensive representation of women as a unified group.

With these criteria, I set out to look for participants through my social network and, to my pleasant surprise, was quickly referred to a number of interested participants. In the end, I had the opportunity to meet and interview nine women in the greater Helsinki region within a one-month period between December 2015 and January 2016. The women, none of which I know well personally but out of which two I had briefly met before, are between the ages of 25 and 40, and all hold or currently pursue a higher education degree. Some women’s professional experience spans two decades while some are working in their first post-graduation job. The women work in a number of expertise



areas including technology, communications, business and design. Because of my open criteria for the participants, everyone ended up being – unsurprisingly – white, Finnish-speaking and sharing an upbringing under the gender institution specific to Finland. I felt this supported my research project through a shared first language and a compact scope of research. Still, I was at times painfully aware of the possibilities beyond this sample, and also wondered how I would approach the research had there been an interested participant from an additional minority group such as ethnicity. Would I realign the research focus on intersectionality, or perhaps racism? In the end, I did not have to find answers to these questions, and the discussion of the present study is limited to gender.

### 3.2.2 Narrative interviewing

A central element of the empirical section of my research was narrative interviewing, which aims to produce narrative accounts for the researcher to use as research data. There are many approaches to personal narratives from extensive life stories to carefully detailed accounts of specific events (see Riessman, 2002: 697–698), but what is a common element to all narrative interviewing is that the researcher aims to facilitate and encourage the interviewee to tell stories. The idea is to pose questions that *invite* narrative accounts, and *give space* for the interviewee to tell them (Hyvärinen & Löyttyniemi, 2005). Rather than having the researcher determine the topics and even outcomes beforehand, narrative interviewing places focus on the interviewee’s agency and embraces the unknown this premise creates.

In the feminist research tradition, narrative interviewing has a special history and a symbolic significance in making women and women’s issues heard. An initial idea of narrative interviews as intimate and emancipating encounters has been abandoned, however, for a less romanticized perspective that prioritizes the analysis of power in the data production (Oinas, 2004). It is acknowledged that the interviewee and the researcher both participate in the production of the data in their own terms, choosing – even if unconsciously – what to disclose, what to hear and which conclusions to draw (Bruner,

1991). It should be noted, however, that while the interviewee has power in deciding which information to share and which version of a story to narrate, the researcher still has the upper hand in the research process as they define the research focus, interview questions and makes the final call on what is relevant when interpreting the data (Oinas, 2004). Power can thus never be fully eliminated from the research process, and in light of this a narrative interview is best understood as an encounter to which the interviewer and the interviewee both bring different resources, not as a neutral exchange of knowledge (LaPointe, 2011).

The practical execution of narrative interviews varies greatly depending on the research question and also the researcher's capabilities. Hyvärinen and Löyttyniemi (2005: 194–198) offer a strategy that follows the principles of in-depth life story interviews: the researcher first asks a question that invites narrative storytelling, and directs further or clarifying questions on the topics or events the interviewee has brought up after they have finished spontaneous speech. Only at the end might the researcher ask additional questions about topics that did not come up during the interview. I adopted this approach, but with high awareness of my inexperience as a narrative researcher. Interviews can be surprising in terms of how much the interviewees speak (Hyvärinen & Löyttyniemi, 2005), or how they react to the questions and the research topic (for challenges in feminist interviewing, see for example Oinas, 2004). Open interviews can also come with expectations of depth and intimacy, which should not be the measure of the data quality (Oinas, 2004). The dynamic and situated nature of the interaction alone should be considered as a sufficient – and fruitful – starting point for the research and interpretation. Thus, I chose to abandon the goal of a fully open interview and opted for a more semi-structured format where I could simply focus on presenting *narrative-seeking questions* (Hyvärinen & Löyttyniemi, 2005) with the support of an interview guide.

My interview guide consisted of five general themes and supporting prompts (see Appendix 1), which I anticipated could help facilitate a comfortable interview situation for both me and the women. As my research interest is in studying women's narratives through feminism, not the other way around, I did not frame the interviews in terms of problems, issues and negative experiences. Still, the interviewees always make their

judgments about the researcher's assumed interests and take a stand against them in their narratives (Oinas, 2004). My research interest in women in the Finnish context alone may have conveyed a critical stand toward gender topics.

The interviews were conducted in the participants' homes, workplaces, coffee shops and restaurants according to their preference. The location's privacy and noise level undoubtedly affected the interview situation in many ways, but I deemed it most important that the women were able to choose according to their preference in order for them to feel comfortable. Because I met most of the women for the first time, I began each interview by telling briefly about my own background and the general topic of my thesis to establish trust and build rapport (Hesse-Biber, 2007). I also asked for permission to record the interviews and stressed that the participation was voluntary. I further attempted to emphasize the co-creative nature of the encounter by clarifying why I had an interview guide with me, and by emphasizing that there are no right answers and that the women were welcome to ask questions and let me know if they wished not to discuss a particular topic.

During the interviews, I expressed active listening and encouragement with probes such as head nods, uh-huh sounds and echoing, as recommended by Hesse-Biber (2007). The dynamic nature of the interviews became evident over the course of the nine encounters, however, and I found it quite challenging to assess an appropriate level for my involvement. Sometimes I asked further questions out of the pressure of a silent moment, sometimes out of my own uncontained enthusiasm. On one hand this added to a natural conversational flow, but on the other hand it affected the direction of the interviews. What I found most challenging was managing my role upon hearing highly personal, even traumatic, narratives of topics such as sexual assault in the workplace. I could sense the range of conflicted and painful feelings related to these events and felt an urge to offer an empathic response as a fellow human being, not as a researcher. In these moments, I used discretion in directing the interview to a different topic if necessary, and felt that in the end all interviews ended on a positive note. Though not a requirement for good quality data production (Oinas, 2004), I felt pleased to notice that most women appeared positively stimulated by the discussion and seemed happy, even

relieved, to share their experiences. This solidified my own perspective into the problematic nature of the research topic and provided a personal satisfaction in the research process.

The interviews lasted 60 minutes on average and their transcriptions yielded a total of 111 pages of text (single-spaced Times New Roman, size 12). I followed a true verbatim transcription, marking down pauses, laughter, false starts and significant non-verbal cues. At this stage I also compiled the notes I had made during the interviews, and embarked on the analysis phase with a preliminary understanding of the emerging themes. I will next discuss the data analysis process in more detail.

### 3.3 Data analysis

Analyzing narrative data is not a straightforward task, but a world of possibilities. In the analysis phase, the researcher is in a key role because they must render the data into comprehensible form through interpretation. Narrative analysis does not only look into what is said, but how something is said and why it is said in this way (Riessman, 2008). To analyze narrative meaning is to look into the production of that meaning and consider how the findings help us better understand the social world we live in (Polkinghorne, 1988). To study the meanings women ascribe to gender in a male-dominated industry means interrogating *what* the meanings are, *how* they are narrated in a specific historical time and place, and drawing conclusions as to *why* this could be. The research question largely affects the direction of the analysis, as narrative inquiry can facilitate a focus on minute structural detail of language or zoom out to the cultural resources the narratives reflect. In my study, I lean toward to the latter.

On a general level, narrative analysis can be categorized as descriptive or explanatory (Polkinghorne, 1988). In the former, the researcher aims to describe the narratives people construct in making sense of the world. The researcher brings forth the narratives already present in what someone is saying, providing an accurate description of them. Descriptive analysis can be used to study groups and the harmony or conflict in their

internal narratives, and also cultural meanings by contrasting individual accounts against the cultural stock of narratives in a particular context. Explanatory analysis, on the other hand, aims to give a narrative explanation to why a particular outcome happened. Here, the researcher retrospectively constructs a new narrative, which entails those events that are significant to the development of the outcome. Both of these approaches are visible in my research. I mainly aim to describe the meanings the interviewees create in their narratives and discuss their interplay with the societal context of their production. At the same time, I try to build a storyline to the research as a whole, constructing a coherent entity that provides answers to the questions that motivate me to do this research in the first place: why does the low number of women in ICT persist? How is gender related to the phenomena? In my effort to clarify these questions to myself I adopt the explanatory lens.

The initial task of identifying narratives in a semi-structured interview data such as mine is not a straight-forward task, as there are no cut-and-dried rules to what a narrative consists of; the boundaries of stories are interpreted by the researcher (Riessman, 2002). I aimed to find those parts of the interviews that described a sequence of events regardless of whether these events had happened in the past or whether they were still happening in a more ambiguous frame of continuity (Hyvärinen, 2010). I also paid attention to those elements of the interview data that were autobiographical and allowed me to see how the research participants positioned themselves in different events of their life (Davies & Harré, 1990). Because narratives do not often follow the structure of a traditional, well-rounded story with a clear beginning and an end, I further considered short and dispersed forms in speech, along with projections of future events, that could make up what have been called “short stories” (Bamberg, 2004; Georgakopoulou, 2006).

In the study of narrative accounts several analytical tools can be used depending on the research problem. Riessman (2008) offers thematic, structural and dialogic/performance analysis as common approaches that can also be used simultaneously. Out of the three, thematic analysis interprets data through themes that the researcher develops based on factors such as the data, academic theory and the goal of the research. Thematic analysis

gives little to no attention to the local context of the data production, nor does it study the speech of the narratives in detail – the focus is on societal context. Structural analysis, on the other hand, zooms in to closely interrogate the language of the narratives. Focus is given to, for instance, narrative styles, forms of speech and different structural ways the narrator uses language to convey meaning. Dialogic/performance analysis combines both of these elements, but adds a consideration for the interactive and dialogic context of the narratives' production. Here, special attention is given to the social elements of the production: how the researcher and their interpretation influences the data production (Riessman, 2008).

In my own analysis, I mostly applied the signposts of dialogic/performance and thematic approach, but also studied some performance features of the language such as sounds, laughter and non-verbal cues the women used. Because of the sensitive nature of the research topic I also paid careful attention to those things that may not be visible in the narratives upon first reading: peculiar word choices, negations, missing words or topics that are left out altogether. Riessman (2008) discusses such reading under dialogic/performance analysis, while Hyvärinen (2010) uses the term expectation analysis: because stories always draw from cultural resources, they reflect what is considered normal, expected. Expectation analysis tries to see the horizon against which the story is constructed and through this, reveals insights of the context of production (Hyvärinen, 2010). Gender as a taboo subject in organizations could be one such horizon in this research.

Analyzing interview data from women of different disciplinary backgrounds initially caused me to worry: I was not sure whether I would be able draw coherent insights out of the experiences in different – and differently gendered – expertise areas. However, what first made me anxious turned out to be an excellent analytical window into the linkages between gender and work. Based on my notes I had a preliminary understanding of the emerging themes that popped up in the women's narratives. I then read the transcripts several times with different "lenses," keeping track of the most prevalent themes while also constructing an understanding of each individual separately.

By the end of this process I had identified three prevalent themes: gendered work, masculine workplace culture and the sexual body. Because of scope limitations, I made the difficult decision to omit the last theme, which covered accounts of overt sexism, sexual harassment and even sexual assault. This important theme would have warranted my sole attention and a drastic refocusing of my research, and in doing this I would have had to leave out the two other themes, which were more prevalent in the sample. Therefore, I proceeded to construct the two remaining themes into one overarching narrative, “fitting in,” on three analytical levels: the self, the organization and the society. Through this structure I was able to incorporate both micro and macro level insights by closely interrogating select quotations from the interviewees. As a whole, this approach supports a critical analysis of the participants’ experiences of gender relations in ICT while allowing readers to make their own judgments of the quality of my interpretations.

As a final note I wish to mention that analyzing gender relations critically was not an unproblematic choice for me. An internal tension of conducting emancipatory research with individuals who may not themselves identify with such goals was present already in the interviews and continued in the analysis phase. Knowing how complex and sensitive the topic is, I was not surprised to have one research participant request not to have her direct quotations used in the analysis. This left me with eight sets of original data, which was well sufficient for the purposes of this research. Still, I often found myself negotiating between the potentially negative reactions from the participants and my personal commitment to produce more in-depth insights about gender in ICT.

### **3.4 Research evaluation**

Narrative research is interested not in facts, but meanings that are created for a specific audience in a specific time and place – a unique context that is acknowledged and carefully analyzed in the research process. In light of this, the traditional positivist research criteria of reliability and validity cannot be applied to assess the goodness of narrative qualitative research. This brings out a challenge for a novice researcher, who must come up with a suitable local and context specific criteria on their own. Such

criteria cannot provide definite conclusions on the merits of the study, but they make it easier for the reader to assess the goodness of the research. In this research, I turn to *reflexivity*, *persuasiveness* and *dependability*, which all increase the overall trustworthiness of narrative research.

Reflexivity refers to a continuous awareness, examination and reflection of how the researcher's background and assumptions impact the research process and the dynamics between the researcher and the research participants (Bold, 2012; Hesse-Biber, 2007). While reflexivity is important in all qualitative research, it is particularly important in a narrative study with emancipatory aspirations. When the researcher is understood as a co-creator of knowledge with agency toward specific issues, they have the responsibility to provide information on what guides and yet limits their interpretations. By critically assessing their impact on the knowledge production process, the researcher establishes their position and increases the trustworthiness of the research. During this research, I have practiced reflexivity by keeping a research journal throughout the process and reflecting on a number of helpful questions by Hesse-Biber (2007) and Anderson and Jack (2001) in regard to my own biography and values, especially prior to the interviews. I have included reflections on these issues in different sections of this report and paid attention not to obscure my voice in order to make my position clear.

Persuasiveness is another criterion that can be used to evaluate narrative research. Riessman (2008) discusses persuasiveness as the measure of how plausible and reasonable the analytic interpretations the researcher offers are. Good narrative research convinces the reader that the conclusions the researcher draws are logical and believable. It is then essential for the researcher to be very clear in constructing their interpretation by providing support for the arguments and choices they have made. Using research data – the narrative accounts – as evidence of genuine data and support for any claims made is one way to do this, as is the consideration of alternative interpretations and negative cases. These discussions help show the reader the steps the researcher has made in drawing conclusions. The concept of dependability is close to this, meaning that I as a researcher provide all the necessary information for the reader to trust that the research has followed a logic and that the process has been well-documented (Lincoln & Guba,



1985). This increases the traceability of the decisions made during the research, and further adds to its trustworthiness. In order to fulfill these criteria, I have striven to describe my research process and the decisions I have made in detail, including alternative approaches or options and my reasons for not choosing them.

As a final note, I consider it an important ethical criterion to ensure absolute anonymity for the individuals who have participated in this study. The use of pseudonyms and the removal of any company information that may link the participants to their identity fulfill this criterion. With these measures in place, I will next present the empirical findings of this research.

## 4 “Fitting in” in ICT

*You don't just end up there. Men can end up there, but women don't. (Elisa)*

ICT companies operate in a space where fundamentally oppressive structures of gender come together with values and practices that obscure and neutralize gender to a great degree. This creates an interesting premise for women working in such organizations, and I find the above quote from Elisa, one of the nine women who took part in this research, to aptly capture how the situation often does not simply *happen*. Being a woman brings an additional dimension – or several of them – to the table, and the narratives produced for this research revealed complex and often contradictory meanings for gender in the workplace. In this fourth chapter I will offer my interpretations on these meanings under one overarching theme of “fitting in”.

What surfaced in all interviews were different ways of negotiating gender in regard to roles and competence areas during the women’s career. In different ways, the women expressed how technology’s connection to masculinity had played a part in their education and career choices in the past, and how gendered job perceptions continued to affect their work in the present moment. What varied, however, were the meanings the women ascribed to gender. While the imbalanced ratio and job segregation between women and men in ICT was readily addressed by all, it was less clear-cut how the women felt about such phenomena personally. Analyzing the meanings each woman gave to male dominance and its effects on their working experience was the fruitful part of the analysis, and in this chapter I will try to present my interpretation of not just what was said, but *why*, bringing in reflection of the wider societal context in which the narratives were produced.

In this chapter, I have organized my findings onto three levels: the self, the organization and the society. This categorization supports the interrogation of both micro and macro level issues, all the while providing answers to my supporting research questions:

- *What kinds of meanings does gender gain in accounts about the self?*
- *Which meanings are ascribed to gender relations within the organization?*
- *How do women's accounts reflect the larger societal context in which they are constructed?*

Each of these levels entails two separate themes that I found prevalent in the research data. It should be noted that in the process of constructing the themes I have made decisions about which data to include and which to exclude. My personal experiences, research interests and the knowledge I have acquired during the research process have also inevitably shaped the analysis. I have strived to honor the participants' original accounts and meaning-making to the best of my ability, but still, the result is an interpretation and reflects my aim as a feminist researcher to include critical commentary on the social conditions of the ICT industry. Therefore, not all interviewees may identify with the themes presented here.

As I discuss the findings I use direct quotations from the interviewees to give readers an opportunity to judge my interpretations against the original interview data. As the interviews were conducted in Finnish, I have translated the quotations to English. Though I have strived to maintain the general tone and nuances of speech with each woman, dialects and idiomatic expressions native to Finnish have been lost in translation. I have also omitted those false starts and fillers I considered non-essential to the interpretation in order to represent the interviewees as the articulate and intelligent beings they are.

## **4.1 Negotiating the self**

As argued in chapter two, entering a male-dominated working environment may require women to negotiate between their femininity and the masculinity of the context. For masculinity – though often dressed in claims of gender-neutrality – is the norm for organizations both in terms of physical bodies and more abstract concepts such as

values, representing the feminine affects the way women construct their identity. In order to build understanding of this process I begin my analysis by looking into those narratives that touch upon the self: who am I? What is my story? How do I perceive myself as a woman working in ICT? The interviews brought up two key dimensions in which identity negotiation takes place: the professional and the personal self. The distinction between the two is perhaps not optimal, as the negotiation of the personal self also takes place in the context of the organization, but I use these terms to distinguish between the two somewhat different aspects of work.

#### 4.1.1 In search of professional space

Generally, the women who took part in this research were happy and even excited to work in ICT. They described the industry and their work as fast-developing, positively challenging and comfortably compensated. Representing various positions from sales to design and development, the women appeared to find satisfaction in their work. Under this general contentment, however, the linkage between technical skills and professional competence came up in interesting ways.

In the interviews, I noticed how some women discussed technology in neutral, unproblematic terms. These individuals had been around technological innovations and the latest gadgets since childhood, and for them pursuing a career in ICT did not hold special significance; rather it had been driven by rational concerns about steady employment opportunities and the chance to learn something new. For many women, however, entering and working in the ICT field was characterized by coincidences and surprises. Their path to education in technology, or a job in an ICT organization, had not been a given, but an unlikely venture into the unknown.

*So yeah, I entered [the ICT industry] in the early 2000s when I graduated. I really didn't think I would end up in the IT world since it felt very technical and more, like, programmer oriented. I feel like maybe the role of a user interface designer, for example, of*

*course didn't really even exist 15 years ago. So in a way I think that the industry has developed towards a direction where there now are more jobs also for this more humane perspective. (Anna)*

*If I had known that I would be doing this kind of work, I probably never would have imagined that I'd be doing so well here. But I think it has to do with that same issue, that the nature of the work has changed so much, or maybe not changed, but back then it was so different. So you need these skills related to personality, it's not all about how well you understand the technology itself, but you need also imagination and sociability and organizational skills and these kinds of things. (Kaisa)*

Anna, a senior design expert with a technical PhD, and Kaisa, a M.Sc. who works as a business consultant, both position themselves as non-technical professionals who have benefitted from the industry's change. Their accounts reflect a prior expectation of ICT as an environment where they would not fit, let alone succeed, due to lack of technical expertise. What they had perceived as the universal ICT professional was someone with a high, though rather abstract level of technical capability – a role they had not envisioned for themselves. Their first-hand experience in ICT had changed this perception to some degree. They felt the industry had opened up to their expertise area when the need for more human-centered capabilities had emerged, a shift that continued to contribute to their professional confidence. This finding resonates with prior research on women perceiving the so-called hybrid roles as a middle ground in which to comfortably work within a masculine industry (Guerrier et al., 2009).

The above narratives do not discuss gender explicitly, yet the distinction between technical and soft skills follows the traditional lines of gendered competence areas. This also seemed to apply to the inherent valuation of these two spheres: while Anna and Kaisa felt that their expertise was in demand and they were appreciated as professionals, they would reflect on themselves and their skills against technical competence. For instance, during our interviews Anna and Kaisa were careful to remind me that they worked on the softer side of ICT, and that they were by no means technical themselves

despite their educational background. It was as if they did not dare claim a membership to a club they were already part of. Kaisa shed some light on this when she described her relationship with technology in general. She explained that her interest in STEM subjects had stemmed from her respecting them more than humanities because she considered them difficult. She expressed feeling “dumber and less skilled with technology than boys”, a remark I inquired more about.

***Mm. Um, can you still elaborate on feeling dumber and less skilled than boys when it comes to technology, why do you say that?***

*Um well, because it's true, or like, we just don't have anyone else with my profile working for us, so everybody understands and talks a lot more about servers and such things. So like if you just look at it from a purely technical perspective I'm just not that good, I mean it doesn't actually mean being dumb, but it's just this kind of like a stereotype that I maybe have gotten stuck with personally, that I'm not as good when I don't know those things technically.  
(Kaisa)*

Kaisa's elaboration highlights how deep the perceived linkages between technical competence and masculinity run. Even though Kaisa knows she is bringing in valuable capabilities to her company, she compares her general competence to the technical skills of men – even when she is full aware that she is acting based on a stereotype. The way she says “a stereotype that I maybe have gotten stuck with personally” interestingly signals a certain responsibility she takes for such behavior; it is *her* who holds onto the stereotype and lives with it. These questions of self-valuation were not present for those women who told me they had been around technology since childhood, and who based on my observation exhibited more masculine characteristics.

It is now interesting to study the experience of the only woman working in a fully technical position. Ronja, a senior developer, had worked as a programmer for most of her career. She had started her studies in computer science with little prior experience,

and found herself observing the world of technology as an outsider. Even though she had later fallen in love with programming, I got the impression that feelings of self-doubt and inadequacy had marked her career. It had taken Ronja a long time to understand where those feelings stemmed from, as she shared in the following excerpt toward the end of the interview.

*I feel like it took me years to realize that when— somehow I thought that those boys who have been playing with computers since little kids, that they always know everything. So only after I gained more experience did I realize that they actually don't, that they just usually present themselves with more confidence or don't necessarily say that "I don't know anything about this" or something... (Ronja)*

Since first entering the university, Ronja seems to have compared herself to men for whom technology was a long-time interest, a hobby with which they had become well-versed since childhood. What Ronja in the above narrative describes as boys' tendency not to show their uncertainty could be interpreted as a practice of masculinities within the context of technology. These masculinities shaped Ronja's professional identity, contributing to feelings of self-doubt and inadequacy. Ronja had also experienced sexist comments that questioned her passion and competence throughout her career, which surely further fueled the identity negotiation between the feminine self and the masculine profession. In the above narrative, however, Ronja shows that she is now aware of such dynamics. She positions herself as a female programmer who is aware of the gendered nature of technical work. This seems to have served as a source of positive professional identity through increased self-confidence and an ability to handle the arising negotiations better.

All in all, the negotiation of competence and the professional self seemed to be affected by a number of different elements: the individual's masculinity/femininity, their relationship and early experience with technology along with their current professional role. Those women who had been in touch with technology when they were younger

did not compare or value their current non-technical roles against technical competence; I noticed this through the absence of such commentary. Interestingly, these women also exhibited masculine characteristics such as directness and assertiveness most strongly, and even described themselves as “rough.” In contrast, some women expressed clear feelings of inferiority and inadequacy in regard to technology. There seemed to be an association with technical skills and the general idea of competence in ICT. Although this perception had been proven false by the women’s own experience, especially in non-technical roles, a comparison and valuation still took place. For Ronja, the only participant who currently worked as a programmer, the masculinity of technical work had directly manifested in undermining and sexist comments and a feeling of being an outsider in the field she loved. These findings support the close link between masculinity and technical competence. As long as women are measured – and women measure themselves – against these ideas, fitting in professionally becomes an internal process under endless negotiation.

#### **4.1.2 Personal fit: a match or a clash?**

What lies outside the “actual” work in any organization is the personal: different personalities, interests and shared life experiences, which may form relationships of varying degrees between coworkers. The personal also has to do with the culture of an organization, which may manifest for instance through values, the qualities that mark social interactions between people, and the behaviors that are encouraged or rewarded in the workplace. These are elements that can all play a role in the women’s work experience and affect their sense of belonging, as was the case for Kaisa. She shared the following account when asked about the downsides of the ICT industry:

*Then probably because of these stereotypes, or because of something else, many of my coworkers are a bit different from me as people. So I feel like I’m not bonding that well with anyone at least at my current job. So people are interested in collecting old computers and playing computer games, and then when everybody are men they talk a lot about ice hockey and such so it’s very*



*stereotypical. But I don't think there's much else I can think of off the top of my head. (Kaisa)*

The personal dimension contributes negatively to Kaisa's experience, in which she identifies, if with some hesitance, stereotypes as restricting the variety of personalities and interests in her colleagues. Computing and gaming seem to fall under the general stereotype of an ICT worker while sports mark the stereotype of a man. What is noteworthy is that the ICT worker is discussed without sex/gender: interest towards technology is not directly linked with being a man, which could signal the perception of ICT as gender-neutral. I also interpret Kaisa to remain in a somewhat passive position in this narrative. She speaks of her colleagues as individuals simply realizing their gender-based stereotype, and perhaps because of this she does not openly challenge the situation or even imply that it would have much significance to her. Still, lacking the possibility to bond with one's coworkers could be significant in the long run as stereotypes tend to persist over time and major changes in the male-dominance of ICT do not seem to be in near sight. For Ronja, the senior developer, connecting with men in the workplace had also been more difficult in light of past experiences. She was pleased to currently have a number of female colleagues because she shared the experience of motherhood with some of them:

*Often it feels like, for instance, purchasing clothes for kids is like— at one job I was like, “Gaah, crazy stress with kids’ mid-season clothes.” And this one man who was sitting next to me was like, “Yeah, that’s exactly what’s stressing me too.” Like, he also had young children but he was just scoffing there like he didn’t really get it. (Ronja)*

Ronja implies that sharing and discussing the topic of parenthood with a male colleague had not been successful for her in the past. In the above narrative she shares a personal matter that was causing her distress, trusting that she might empathetically connect with the man who also had young children himself. Instead, the colleague mobilizes sarcastic humor in his response. Ronja seems to find this belittling and ridiculing rather than amusing, and positions herself to counter the attack: she frames the colleague's remark

in terms of his detachment from the reality of caring for children. In a way, this breaks the traditional division of labor where caring work is assumed to be the realm of women. This might have to do with the fairly equally shared caring responsibilities in the Finnish context: men are expected to take care of children. Ronja uses this to negotiate the challenge to her identity as a programmer-mother – and finds now female colleagues positively contributing to her feeling comfortable in the workplace.

The way Ronja's colleague used sarcastic humor in the above narrative is important because I noticed humor coming up also in other women's narratives. For them, however, it gained completely different meanings. Crude and sarcastic humor was part of the workplace culture: a way of communication that built trust and cohesion within the group of coworkers. This humor was part of the women's identity, and they also considered it an inseparable part of the industry. Especially in younger ICT companies the workplace culture can often be described as relaxed and tongue-in-cheek. I was told that women who would find for example sexist or nerdy humor offensive would not be fit for the industry. Conversely, being included in the office humor served as a reason for these women to feel at ease in the workplace. This was the case for Pauliina, a designer who had thoroughly enjoyed her career in ICT after working in advertisement:

***Are there any situations where you've felt that you're very conscious of your sex?***

*Well, maybe at some sauna evenings, but. (Pauliina)*

***How do you feel there?***

*Quite alright. Nothing special. Because, like, they're good people, and you know— and it's not— because you don't get treated any different so just like, the jokes are as awful for me as they are for everyone else. So when you're like one of the guys, and I think all of us women here are like one of the guys, but it's not like— (pause) it also depends a lot on your personality, so if you didn't want to, if you were very sensitive to crude humor or something, for*

*instance, then I believe it would be taken into consideration too.*  
*(Pauliina)*

For Pauliina, feeling self-conscious about her sex in informal sauna evenings does not gain a negative meaning. She is, after all, included in the banter along with her male colleagues – a fact that contributes to a sense of equality for her. Here, I like to draw attention to the direction of the inclusion. It is the men that extend the practices of masculine organization culture to women, accepting them in the group of “guys”. Masculinity thus seems to improve the personal fit and a sense of belonging to the workplace, at least if the organizational culture is masculine. This could be partly because women who fit into the masculine culture neutralize the potential gender issue femininity presents. Interestingly, Pauliina realizes immediately as she speaks that this masculine practice may in fact exclude some women, and offers an assurance that different personality types would be taken into consideration. The present study cannot confirm this hypothesis, though many less masculine participants clearly enjoyed their work and most likely had at least some coworkers they could connect with on an interpersonal level. The following and final account in this section comments on this issue of personality and organizational fit. Speaking is now Elisa, a business consultant who had started her career as a programmer:

*I once thought about the kind of women we have working [at our company]. So they are all, if you think about the consultants, they are all quite, like, loud. They have clearly— so I'm the only kind of quiet one— I feel like they've, like, elbowed their way [into the industry] and in a way I sometimes wonder how cool it would be if some of them were not like that. (Elisa)*

**Why?**

*Because not all women are like that, and then it means that these other types have not made it here. (Elisa)*

In this narrative, I interpret Elisa to ascribe her female colleagues masculine qualities.

Loudness, when describing a woman, breaks the feminine stereotype of gentleness and politeness, as does “elbowing one’s way”, using determined force to take one’s place. Elisa thus constructs the majority of her female colleagues as masculine, and does not, at least in this narrative, fully identify as one herself. There is a slight conflict in the way she talks about “making it” in the company: she has made it herself despite being quiet. Nonetheless, she seems to ponder whether there is an unspoken requirement for women to possess traditionally masculine characteristics in order to fit in in the industry.

Elisa is not too far off with her speculation. Based on the narratives in this section it seems that masculinity and femininity are indeed linked to the personal dimension of work, affecting how, and if, women perceive themselves fitting into the workplace. Women with masculine qualities seem to have an advantage in blending in as they may be taken as one of the guys. For others, hobbies, interests and family matters remain as elements that may or may not find resonance among male colleagues. If the attempts to connect with coworkers fail, additional identity negotiation may be required to negotiate the arising tension of the situation. It should be noted that these dynamics are highly dependent on the organization, and the degree to which women felt a sense of belonging in their current and past organizations varied quite a bit. Each company forms its own little society in which different norms, practices and unspoken rules apply, and these also create different premises for the doing of gender. With this in mind, I will next move one level higher from individuals to organizations and analyze how gender framed common interactions on the organizational level.

## **4.2 Navigating the organization**

The women I interviewed worked in very different kind of ICT companies. Some were established, large and headquartered outside Finland, some smaller and local with varying degrees of dynamic startup mentality. Gender topics had not been explicitly discussed in most of these organizations, and the women’s experiences of everyday practices in the office had a number of similarities. In this section, I will discuss these practices from two perspectives: what happens inside and outside the office. The former

entails work-related conversations, meetings and client interactions, while the latter comprises company outings, informal get-togethers and sports activities. This categorization follows the distinction between the professional and personal spheres of work I used in the previous section on identity negotiation. What typically prompted the narrative accounts in this section was my question of work situations when the women felt an awareness of sex/gender – either their own or others’.

#### 4.2.1 Performing under the spotlight, or the issue of tokenism

Inside the office, the women described being self-conscious about sex/gender most often in group settings, typically meetings, sales calls and similar. Gender seemed to be a subtle, but noticeable internal tension that stemmed from being the minority sex in the room. Its meanings were not very readily discussed and I often had to inquire more to get closer to the bottom of the issue. The following narrative from Iida, an outspoken consultant with high awareness of gender issues, captures many of the themes and experiences the women shared with me. Because the account is quite lengthy and contains a lot of material for analysis, I will dissect it in two parts.

***Can you think of any examples of work situations where gender typically comes up in some way?***

*This does not come up within our own team, things are actually pretty equal between us despite these [prior] examples. And also you can have a say about it by telling them “Fuck no, I’m not doing this.” if you start to get the feeling that you’re being given monkey jobs. But, I think that a classic example is a sales meeting that I have called. And then when my male colleague comes there with me no one looks me in the eye during the discussion. So it’s like all of a sudden I don’t exist there, and the assumption is sort of like, “You’re probably going to take the minutes.” And then you’re like “Weelll...” But of course you can’t say “Fuck no, why are your behaving like that?” in a client situation. (Iida)*

In this first part of the account, gender becomes an issue in a sales meeting. Within her own team Iida, a self-described feminist, is used to an equal position to her colleagues and is able to call out gendered practices without an issue. In a client meeting, however, the dynamic changes. First, Iida as if disappears from the room when put in a group of men, some of which are not part of her own in-group. She becomes removed from the other professionals in the men's eyes, quite literally: she is not acknowledged by eye contact. Second, it is implied that she should take a secretarial position in the meeting, reflecting the traditional hierarchy of gendered jobs. It is noteworthy that these discriminatory practices occur when individuals external to the organization are present – something Faulkner (2009) also reported in her observation of engineers.

What makes the situation difficult for Iida is that she cannot speak up even though she finds the situation offensive and is angered by the treatment she gets. Iida conforms to the normative behavior expected in a business context involving a client. Bringing up discrimination would likely cause a conflict in the meeting, breaking at the same time the perceived gender-neutrality of organizations, and probably cause problems for Iida's employer – not to mention Iida herself. The context thus seems to quite effectively silence opposing voices and through that maintain its image of gender-neutrality. Apart from direct sanctions, speaking up also conflicts with traditional feminine qualities such as being pleasant, complying and conflict-averse. Because of this, many women may not speak up about gender issues in the first place. Iida was the only woman in this research sample who explicitly condemned sexist treatment and told me she did not have a problem speaking up for herself or other women because her lively and strong personality already raised opinions – calling out gendered behavior and being considered “difficult” would not hurt her any more. She was also quite well-informed of gender issues and likely felt confident in her ability to argue for her views. At least partly, then, having awareness of the gendered structures of society could help in the negotiation of gendered phenomena in the workplace. This was also the case for Ronja, who was better able to deal with undermining treatment toward her professional identity as a programmer after learning about masculinity in regard to technology. The second half of Iida's narrative now sheds some more light on the issue of awareness:

*And well, then maybe also in some— the trainings are sort of like [challenging], because of course when change is already difficult, and then for some people it is highly irritating that the person teaching you how to use that new technology is like a two-year-old and worst of all, a young woman. So I have a really hard time imagining that someone in a training would have told a colleague of mine that “This Service A reminds me of a system we used before Service B, Service C. So I’m that ancient, but you probably wouldn’t know about that because I don’t think you were even born yet when Service C was in use.” And then you can’t really respond to that in any other way than by saying “Well actually we’ve done lots of transfers from Service C operating systems to Service A, and the experiences have always been very positive. It’s all part of our competence.” But yeah, it’s really hard for me to imagine that someone would have said that to my male colleague. And somehow you have to take role differently, like, I’m not comparing going to a meeting to going to the battlefield, but you sort of have to be on top of your game at all times. (Iida)*

In another typical workplace interaction Iida trains a client in the use of new technology. A discriminatory remark ensues. In the situation Iida is the unusual superior of the local context: a young female authority with technical expertise. The disruption in the gender order challenges the client Iida interacts with, who in turn tries to re-establish his own superiority by undermining Iida’s technical knowledge. The way Iida begins this account implies that she is well aware of occupying a position a man is expected to hold, even conveying sympathy toward the older male client and his attempt to preserve his power. Still, in her response Iida describes being forced to exhibit business-appropriate behavior. She directs attention away from herself to the company she represents and ensures the client of the company’s positive experiences in supporting the shift to new technology.

Iida's narrative ends with a description of meeting-related pressure. The need to be alert and ready to manage social interaction was echoed also in other women's experiences about meetings. From getting interrupted to feeling general discomfort and self-consciousness, meetings were among the top situations where women felt gender emerged at work – in their minds, that is. Some women felt nervous about speaking up and consequently held back to some degree because they wanted to avoid an argument with individuals who they assessed as more aggressive. Sex/gender, again, was not explicitly mentioned, but it seemed clear that these individuals were men. Meetings thus appear to be places for the doing of gender in terms of participation in the discussion; men were more aggressive while women remained passive. Being the only or one of the few women in the room also created pressure for the women to do and perform well, in line with Kanter's (1977) findings of the so-called tokens in organizations. Depending on the woman, however, this pressure was not always given negative meanings. For Pauliina, the designer, being a young female in an expert position made client meetings excitingly suspenseful. She had had to face assertive or difficult clients in the past, but had over the years learned to argue for her views in business language. She now felt she was able to prove herself more easily and considered doubts from the clients' part a boost to her determination:

*When you usually are the only woman, so then you sort of [feel] like you need to represent the whole sex [laughter], and be like, the cleverest person. Or at least I feel, and then especially when... (pause) sometimes you have those experiences when you feel like maybe you're not being taken seriously, so those just boost [the determination] and then you're just like, "Oh, now. Now I'll show them." and... (Pauliina)*

In the narrative, Pauliina expresses feeling as if she represents women as a whole. Kanter (1977) explains this to occur because tokens' presence highlights the absence of their social category, making others give symbolic weight to everything they do; how do *women* in technology do this or that? Consequently, women may feel like they are representing all females rather than themselves, just as Pauliina does in the above narrative. Her genuine laugh does, however, imply that she has not struggled with the matter too much.



Rather, it has served as a positive challenge for her to do her best. What catches my eye in the narrative is how Pauliina says “Or at least I feel.” This could be because she has not heard of anyone else having the same experience, but also because in light of her positive perception of the industry she is careful not to generalize a potentially negative experience to all women. What also affects Pauliina’s interpretation is her general professional confidence and a sense of belonging in ICT as one of the guys, as she put it in an earlier account. For many women the reality is different.

So far in this section the women’s experiences have showed that sexist, discriminatory or otherwise tensioned interactions inside the office seem like manifestations of the gender order attempting to reinstate itself. What happens, then, when the interactions are positive? Elisa, the developer turned project manager spontaneously shared a story of a moment of inclusiveness from the time when she had started on a new project.

*I wanted to mention, now that you paid [attention] to being a woman. So when I started to work on that project two to three hours a week and when our CEO introduced me, like, “Elisa is now joining the project,” he told this other [superior] who was the... more difficult case that “Just so you know, Elisa is not a secretary.” So that’s how this project kicked off. Because, like, I’m not the only one who kind of— like it was quite clear that he was this older man, and that the CEO, like, immediately [intervened]. And I was just like “Wow. Like, okay.” So in a way I’ve felt like good at work, like, appreciated. (Elisa)*

In this narrative, the CEO of the company makes a rather significant inclusive gesture by publicly addressing the future relationship between Elisa and her superior in the project. It is implied that the older non-Finnish superior would consider Elisa as an inferior and as a secretary, catering to his and the project’s needs – a traditional gendered hierarchy of jobs and roles. Elisa expresses being surprised by the CEO’s effort, perhaps not having expected discrimination in the workplace and now imagining how her working situation might have been without this pre-emptive intervention. In our interview Elisa never mentioned the sex of the CEO, which leads me to trust it was a

him. Perhaps Elisa would have brought it up if a woman was leading a software company, and if a woman had so directly addressed an issue related to gender. This happened at least in the interview with Sofia, a business consultant in her mid-20s who had started working for her current employer, a software business, already during her studies three years ago. For her, it was her first job in ICT and she could not readily think of many gender-related issues from the workplace – or at least she did not bring them up during the interview. Either way, towards the end of our session she described how she had experienced inclusive action from her female superior.

*Maybe the fact that you're a young woman and you don't necessarily have the experience, so then in some situations you might feel that, er, how to put it, that maybe they care more about you or that they try to ease [the work] or, like, tell you not to do it like so, more than they would to a man (...) also because our team leader is a woman she of course might find it easier to talk about how one feels, or like, emotions, to another woman, so maybe she wants to make it easier for— it could also be that she can more easily tell me than others that “Hey, take it easy now.” or “Let's ease your workload.” which she may not do to male team members in the same way... (Sofia)*

***How do you feel about that?***

*Well it's probably good that one cares, and I like that a manager knows how to look after the wellbeing [of employees], but maybe they could treat everyone the same way. (Sofia)*

It appears that Sofia's female superior has attempted to make sure Sofia is not overworking herself – a gesture that had not been extended to Sofia's male colleagues. For Sofia, who did not have first-hand negative experiences from work, the care of her boss seems to feel conflicting and even unequal. She seems to feel slightly uncomfortable with the attention she is receiving and even though she appreciates a superior being considerate and caring, she wishes the practice to be extended to all employees equally.

The fact that the female superior has attended to Sofia privately could signal the superior's own experience of gender-related performance issues such as women's higher tendency to strive for perfectionism or their need to prove themselves more in masculine contexts. Be it as it may, Sofia's account underlines that the experience of gender relations inside the office is highly context dependent. The practices that for some contribute to important support and inclusion may be conflicting to others. Also, how women deal with exclusionary or discriminatory practices varies. Only rarely, however, seems it to be possible for women to address such practices directly; dealing with sexist or undermining comments quietly is part of navigating the ICT industry as a woman.

#### 4.2.2 Sports, sauna and social relations

The previous section discussed the practices of gender inside the office. I now move outside the office and look at how various non-work activities such as office parties, team outings and other informal get-togethers with coworkers appeared as places for the doing of gender. Informality has been offered as an important element of masculine practices within organizations (Collinson & Hearn, 1994), and against this it was interesting to notice that the women often downplayed or even denied that informal work situations had much significance to them. Gender relations did not necessarily contribute to a negative experience but rather created – again – an ambiguous tension that may or may not have required action from the women. Here Anna, the senior design expert with a technical PhD, shares how she resolved a tensioned lunchtime dynamic between herself and new male coworkers:

*Well sometimes you notice that not everyone acts so naturally around a woman. Like, we had new employees who joined the company and they were men, so then they went and asked my male colleagues for lunch but never dared to ask me. But then of course I just went along and the situation normalized. But you could tell that they were being kind of shy with the opposite sex (...) So like sometimes— there's a chance that you could be left out if you didn't*

*yourself be like “Pffh, I will go there, I won’t let it affect [me] at all.”*  
(Anna)

In this narrative, lunch is an informal activity that excludes Anna. Anna assesses the behavior of her new male colleagues resulting from her being a woman and them feeling shy or a bit awkward to approach a woman in the workplace even with an everyday matter such as lunch. This could be because of the fear of appearing to establish romantic or sexual relations with a female coworker, a masculinity I imagine could be more typical for the more introvert and technical ICT worker as opposed to the more outgoing and aggressive type. For Anna, the situation feels unnatural and tensioned, and it requires her to act. Here, the responsibility is on Anna; without her deliberate effort, she may be left out. The way she describes her effort with “pffh” conveys a quality of forced determination. Anna does not explicitly discuss this incident in negative terms, but she did bring it up in terms of the downsides of the ICT industry. Gendered tensions thus have contributed to her having to navigate the informal work practices with effort.

When asking the women whether there were any situations at work when they were self-conscious about sex/gender in one way or another, informal get-togethers in the late hours, namely sauna evenings (Finnish *saunailta*), came up most often.

*Well there are all these like get-togethers, client trips and others, so sure, it would be kind of nice sometimes to— and of course sometimes men have their male topics to discuss that and like, in that kind of situations you’re maybe wishing there was some other woman as well, because there always isn’t. And, like, these kinds of situations where you’re having a get-together and all the men go to sauna and then you’re left there kind of like, “Ookay then [laugh], what now.” So there’s like no... Then you have to come up with something to do for yourself. But those [situations] are very, like, informal and in that sense, not very significant, but yeah...*  
(Maria)

*No... Well, maybe if there's a sauna evening then those are sometimes difficult with the dev team. Often you're the only woman and then quite often you just skip, and be like, "Let the guys go amongst themselves." Well, one time we were going on this island so then I was battling whether I could ask about it in advance and then I was like "Would it be in any way possible for everyone to wear a swimsuit so we can go to the sauna at the same time so nobody has to go alone?" And they were like "Oh, well, okay." So like... (Ronja)*

Sauna evenings provide a highly interesting practice of gender due to their cultural significance in Finland. A typical way of spending a casual evening with friends, going to the sauna serves as a way of bonding and promotes social cohesion. At the same time, going to the sauna separates men and women, who typically go to the sauna unclothed within their own group. The practice of going to the sauna segregates the sexes due to the revelation of the body, and socially excludes women if they are the only one or among the few, in the office. Yet this informal way of exclusion seemed to hold interesting meanings for the women. Sauna evenings clearly had made them think about gender and perhaps feel aware of gendered relations, but they did not consider this problematic. They did not express clear discontent with the situation and some even outright denied the significance of such outings. I felt as if the informal was not connected to the work itself, the formal practices inside the office that created value toward the company or its clients. Yet sauna holds symbolic significance because the revelation of sexual bodies breaks the illusion of neutral, ungendered employees. Perhaps this discrepancy was negotiated through the denial of the meaning.

The conflicting nature of the body-based social exclusion was evident also in Kaisa's accounts of her company's out-of-office activities. Upon first asking about her experiences of informal get-togethers she did not consider the issue relevant or important enough to discuss.

*Ummm well... I don't know, like we have some pre-Christmas parties and quite a lot of sport things and there you have separate*

*locker rooms and sauna shifts, but not really anything I think is worth mentioning. (Kaisa)*

Here, Kaisa even a bit abruptly finishes her sentence, cutting short the discussion on informal work situations. Yet when I later inquired more about the weekly floorball practice that had come up during the interview she shared the following narrative.

***You mentioned that when there's been a floorball practice, women have not gone. Why do you think that is?***

*Well there was one woman, but... but like... that's a good question. I am personally not a big fan of team sports and I prefer the gym, pilates and such. Of course men are like physically better so that's maybe why I didn't want to go there, because if like, to begin with, they are... Or like, stereotypically men are stronger and better at floorball and such sports, so I didn't want to go because I didn't want them to think I'm bad at it. And now, for instance, we play volley ball every two weeks, and I don't really want to go there because I don't want to appear bad at something in case they project it on something else unconsciously. And especially I don't want to go there wearing those female volley ball players' clothes [mild laugh]. Well, whatever. (Kaisa)*

In this account Kaisa first discusses men's physical skillfulness as a reason for not wanting to attend the company sports practice, but recognizes immediately that her thinking reflects more of a stereotype than a fact. It is then women's lower physical capability – the counterpart of the stereotype – that becomes the issue. Playing sports with men presents a risk for Kaisa to live up to the stereotype, strengthening a view of herself as less physically capable. The scenario is problematic because it entails the possibility for the men to unconsciously think of Kaisa as weaker and less skilled in general, not just in sports. The seemingly harmless sports practice has now become a situation that could negatively affect Kaisa's prospects in her actual work inside the office. Kaisa also mentions the wear of women's volleyball sports attire – even though

an unrealistic scenario most likely – as another barrier for participating in sports. The comment seems to be rooted in her experiences of sexual harassment at work that she shared with me earlier in the interview. Kaisa applies humor in the form of exaggeration of the required sports attire possibly to lighten the actual, quite likely painful, reasons for avoiding situations where she might be harassed again. She makes the comment quickly and in a slightly embarrassed or sheepish manner, trusting I understand what she means and perhaps wishing not discuss the matter any further. Contrasting this narrative with her earlier comment on the low importance of informal work situations, it appears that the denial of their meaning actually covered quite significant gendered practices that have shaped Kaisa's experience of the ICT industry negatively.

All in all, the narratives the women shared about informal work situations often downplayed their meaning even though such situations seemed to quite clearly exclude the women out of certain social situations. I believe this may have to do with the perceived gender-neutrality of organizations that the informal practices in the workplace tend to break. These meanings are then consequently negotiated through the denial of the significance of such practices, even though they may be exclusionary and also concretely contribute to men's organizational power in terms of decision-making and the sharing of work-related and personal information (Collinson & Hearn, 1994; Faulkner, 2009). Also, I must mention that a few accounts of non-segregated informal activities such as trips and office parties came up in terms of overt exclusion, sexual harassment and even sexual assault. The victims had not brought these cases up in the workplace, and in fact only two women out of nine, Elisa and Iida, mentioned having top-level superiors with whom they felt comfortable to discuss matters of inequality. This is alarming, and shows not only how detached sex/gender is from organizational discourse, but also how intimately it is related to power. If sex/gender is not openly and critically discussed in organizations, the oppressive practices that were reality also for many women in this study are likely to carry on. This task, of course, is not an easy one. Gendered structures are deeply rooted in society at large, making it often quite difficult to make sense of gender in the first place. On this note it is time to move on to the third and final level of analysis.

## 4.3 Reflecting the society

What has perhaps already become noticeable in this chapter is that gender is a complex topic to discuss and its meanings can be challenging to put into words, especially without prior awareness. False starts, contradictions and jumps from one thought to another have marked the women's narratives – a sign that warrants close inspection of the production context (Riessman, 2008). What has also been touched upon throughout the two previous levels is the difference in experience between those women who perceive themselves as one of the guys, and those who do not. The research participants who seem to exhibit more masculine characteristics – either by my interpretation or their own identification – appear to have genuinely positive experiences of the ICT industry whereas other women's narratives convey meanings of a more conflicting nature. In this last section of this study's findings, I look more closely into these two themes and discuss how they reflect their larger societal context.

### 4.3.1 Masculinities as a pass to the boys' club

One of my earliest observations during the interviewing phase was how some women seemed rather unbothered by different aspects of gender in ICT. Regardless of how their experiences had been, gender did not gain much significance in the recounting of stories from the workplace. In some cases, the meaning of gender was subtly rejected throughout the interview, in some cases denied in direct contradiction of narratives that had just reviewed gender-based struggles at work in detail. Sometimes the women's experiences seemed genuinely positive and unproblematic despite the occasional sexist remark from an older client. This was an interesting dynamic, and when studying the women's experiences as a whole I came to conclude that the issue seemed to be at least partly rooted in masculinities, which I will explore next through select cases.

Pauliina, the designer in a dynamic and growing software company, appeared to have one of the most positive experiences from the industry. She had previously worked in advertisement, which she described as "hierarchic." She had jumped to ICT intrigued by



the culture of freedom she had perceived in modern Finnish software houses. She now fully enjoyed herself in a flat organization with a relaxed organizational culture, and was clearly happy with her workplace where she considered herself as one of the guys, free to be herself:

*I feel like this is one place where I have never felt that it mattered whether one was a man or a woman. And then the contrast was so crazy when in the advertising agency all marketing managers, all marketing executives, all PMs and all people, they're all women, so it's, like, a very feminist industry, or feminine, maybe not feminist—okay well a bit of that too, but so you have a feminine industry and there when you see a client you go “Oh, did you get your hair done?” and like the sense of community is really strong there, that we're doing things together. And then you have the industry where no one actually cares what you're wearing to work, no one has ever said anything. Once someone told me “Hey, I like your laptop bag.” I was like “Woow, [laughter] someone is making a comment.” Because you've become used to not caring how you look like. Whether you're coming straight from the summer cabin or going to the club later, it's whatever. So like, that contrast is kind of wild, somehow, and amusing. What it is, really, is— (pause) because it is freedom when you don't have think about anything. (Pauliina)*

In this narrative Pauliina frames freedom in terms of the possibility of not having to live up to normative notions of feminine behavior. She constructs femininity along the traditional notions of friendly chit chat, a sense of community and paying attention to one's own and others' appearance, which become contrasted with the rarity of receiving an appearance-based compliment in the ICT office – a masculine practice. When studying Pauliina's case closely, one can notice that there is a premise to her positive experience: she is able to feel free in her workplace because she fits in well enough to pass as one of the guys. Other women may also define freedom with the same words – not having to think about anything – but for them the lived experience may be very

different; if they do not pass as one of the guys they may in fact have to think about gender quite a lot whether they want to or not.

Gherardi (1994) has used the term *honorary man* to describe a situation when women are included in the practice of masculinities by men, accepting them as one of the guys as Pauliina also describes herself. Gherardi contends that in accepting this status women tend to disqualify their own gender. This is not immediately apparent in the above account: Pauliina mentions being able to come to work dressed up for the club, implying she is able to perform also femininity at work if she wants to. Still, it is possible that her feeling free depends on her masculine characteristics that allow her to dynamically move between gender roles. This could be the case also with Iida.

Iida was the lively, outspoken and assertive consultant with a background in communications. She was the only woman in this research who described herself as a feminist and was aware of how discrimination and stereotypes could affect women's low representation in the industry. She also spoke up about such matters openly. What is interesting is that Iida's own background is heavily linked to masculine spaces: she described having been interested in technology already in childhood, supporting herself later as an entrepreneur. Iida had also been involved in various student and startup activities over the years. She was thus accustomed to working in male-dominated areas from business to entrepreneurship and technology. This dynamic plays out in the following excerpt:

*So yeah, I do feel that, or it's just somehow so fucking ridiculous that people find it very cool that you've ended up in the technology industry. Then you're like, "You could as well. It's not hard." (Iida)*

In this narrative I interpret Iida to be frustrated with the persisting low number of women in technology, having judged herself the stereotypes of a difficult field to be unfounded. For her, technology was a field among others and from her perspective a place where any woman could work. Consequently, the narrative also seems to let out irritation over the fact that her own position in technology seems to be a cause for marvel

– for her it was not a big deal. What could influence her view is that she possesses those characteristics that place her in the in-group of masculine individuals and allow her to navigate masculine spaces with ease while still holding onto her feminine identity. During the interview Iida never referred to herself as one of the guys or in other ways discuss the reasons why her personal experience in ICT had been positive in terms of gender – whether she is aware of her masculinities or not behind the above statement “It’s not hard.” remains unclear. Iida could be consciously making a feminist effort to redefine femininity, even if it theoretically speaking would be extremely difficult (Gherardi, 1994).

Despite the open question of Iida’s self-awareness of her masculine characteristics, the narratives of the nine women in this study suggest that masculinities seem to have an important role in whether women fit in in an ICT organization or not. Moreover, the practice of masculinities tends to maintain the image of organizations’ gender-neutrality, further concealing the gendered structures of work and organizational culture that can exclude individuals. When this happens, perceiving – let alone critically acknowledging – gender is likely to become more and more difficult. The women that I interpreted to have the lowest levels of critical awareness of gender issues *and* who seemed to exhibit more masculine characteristics denied that women’s low number in ICT was a problem that required solving, or that special attention to gender should be paid in recruiting in order to increase women’s numbers in the industry – even when they had experienced gender-based struggles themselves. This supports the linkage between (hegemonic) masculinities and the gender order, and the notion that the gender order can be internalized by those who it oppresses (Forbes, 2002). I will wrap up this section with a final narrative from Maria, who currently worked in sales in an established ICT corporation.

What marked the interview with Maria were her concise responses to my questions. There was a big contrast to some women who seemed to think out loud, weighing options on how to interpret their experience and even questioning their own sayings. I also noticed that Maria did not use negative words to describe her experiences such as sauna evenings where she was often the only woman, opting instead for expressions like “Maybe it would be nice to have something similar for women.” It was as if she avoided

saying out loud that there was something negative about her experience in a male-dominated workplace. The following narrative elaborates on her feelings about being the only woman at a sauna evening.

*But men do always have those guy topics to discuss, don't they. And then of course you don't want to go— or like if they want go ahead and discuss certain things and talk amongst themselves and so on, then you're kind of like "Well, are they now discussing different topics because I'm here?" So like, [laugh] that's not really a desirable [outcome] either. (Maria)*

In this narrative I find Maria to position herself as an intruder in the men's space. She implies that joining a group of men interacting with each other would disrupt their socialization around men's interests and draw negative attention to Maria as the cause of such disruption; the men might be bothered by her presence. It is this fear of disrupting and bothering the men that I believe speaks of subordination in this context, and which I find to reflect the internalized secondness of femininity. Could it be that because of this Maria did not ascribe negative meanings to gender in ICT in general? After all, this would mean challenging the gender order embedded into work and organizations at large. Similar ambiguity about the negative meanings of gender was present also in other women's interviews. The last section of the findings will next discuss this topic in further detail.

### **4.3.2 The ambiguous gender**

As discussed throughout this thesis, gender is a rather complex topic: prevalent, yet ambiguous, and therefore difficult to make sense of – especially if one has not spent much time thinking about gender in a critical light before. In this research, different structural elements of the women's narratives revealed contradictions and invisible horizons of expectation against which the narratives were constructed. One pattern I noticed was that the interviewees seemed to assume that women have negative experiences about work in ICT, and that this was what I wanted to hear about. When

asking about how it feels like to be a woman in ICT, I received the following answers among others:

*Well, I haven't experienced it as like— for it me it has actually been a positive thing only. (Maria)*

*Well I think there are a lot of positives, but, I tried to think beforehand what have been the negative experiences because I figured we might discuss these kinds of things here. (Anna)*

The way Maria begins her first sentence with a negation implies an expectation of a negative experience, after which she is quick to assure that her own experience of being a woman has been positive. Anna is more explicit in the way she describes having prepared for the interview – despite my never saying that I would apply a critical research perspective or be interested in negative experiences in particular. These assumptions of negative experiences show that the participants are aware of gender-based challenges in the field, yet most of them did not readily ascribe negative meanings to these experiences in their own case. The problematics of gender are thus not confirmed by the women themselves. This contradiction could stem not only from the Finnish cultural context of the genderless gender, but also from the gender-neutrality and disembodiedness of ICT organizations: by naming gender as an issue in the workplace, the women would make these structures visible and put themselves in a position that could be disadvantageous to them.

Contradictions were also present in how the participants spoke of the differences in competence between men and women. Being a woman and possessing traditionally feminine qualities such as sociability or human-centeredness served as a key element of some participants' professional identity. Gender and gendered competence was an important part of why they felt valued in the workplace – yet at another moment they could reject gender's meaning for performing a job, as Kaisa's narrative now shows. Prior to this account she had said that women's low number in ICT was not considered a major problem in her workplace.

***Why do you think it's not considered a problem that... That there are so few women?***

*Because in practice it doesn't— or I don't think it has anything to do with doing the work, whether you're a woman or a man. Even though I just said that I may have these certain qualities that result from me being a woman, but on the other hand we also have some quite good project managers who are men. And so. (Kaisa)*

On one hand being a woman had supported Kaisa in her career development. She told me she had been able to take over responsibilities a woman was considered better at, such as speaking and hosting events and interacting with clients, which seemed to contribute positively to her professional identity. On the other hand, she denies in the above narrative that gender would play a role in the doing of work. Kaisa becomes aware of her contradiction, and negotiates the conflict by highlighting the men in the workplace who have succeeded in similar tasks as she has. This does not, however, remove the conflict in the initial denial of gender's meanings, reflecting perhaps the contradiction in the cultural reference point of when and how it *is* allowed to credit and give meaning to gender and when it is not.

Finally, some women also pondered out loud about how gender affected the interpretation of their experience:

*What I sometimes wonder is that how much of it is just having heard the "This must have been drawn by a woman." comments for years, like whether there are situations now where you interpret something to result from you being a woman, or could it be some other thing altogether. So it's kind of like my first interpretation now. (Ronja)*

*But yeah, I do have to say that I sometimes wonder if it [rude behavior] is because I'm a woman. Other than that I find that this is kind of like... (pause) although I do sometimes feel that if I was*

*a man then some things at work would be easier as well. (Elisa)*

***Which things?***

*Well things like that, that you wouldn't have to speculate whether he's behaving like that just because [I'm a woman], and like those cultural— like which cultures these [men] are from. (Elisa)*

Ronja and Elisa both try to make sense of their own interpretations of gender. Is my negative experience a wrong call made too quickly because I have become fed up with sexist commentary? Am I treated a certain way because I am a woman, or is it just the other person's personality? Ronja seems to doubt whether her being a woman could actually be the cause for different situations she currently interprets as gendered. Ronja appeared to have developed critical awareness of gender issues over her career, which could have sensitized her to identify gendered dynamics more easily – this has been at least the case for myself during this very research process. Still, Ronja treads carefully in interpreting gender, and clear answers remain elusive. The same goes for Elisa, who concludes that being a man would simply be easier; it would remove the doubt over whether she is experiencing discrimination or not. In sum, gender's ambiguity creates a challenge for the internal negotiations the women go through when trying to fit in in ICT.

#### **4.4 Summary**

My narrative analysis of nine women's accounts of the ICT industry suggests that women's experiences of gender relations are shaped by the masculinity of technology and the oppressive gendered structures of business organizations at large. The women's generally positive experiences of a fast-developing and dynamic industry contained subtle, ambiguous and even contradictory meanings for gender. A critical interrogation of these meanings offered support for the notion that technology and business organizations are gendered spaces where various practices tend to maintain the image of

gender-neutrality, while at the same time reifying the superiority of masculinity over femininity (Gherardi & Poggio, 2001). Central elements influencing the women's experiences and meaning-making of gender included their masculinity/femininity, current role, relationship with technology and critical awareness of gender issues in general. The ways in which these elements entangled in each individual's narratives were unique and complex, requiring close reading of the local context in each case.

Masculine norms provided the general reference point for the women's identity construction in the workplace, both in terms of the professional self and the personal self. Some women associated technical skills strongly with the general idea of competence required in the industry, valuing themselves and their traditionally feminine soft skills against a rather abstract idea of a technically competent ICT worker. With the women who had early childhood familiarity with technology – and who interestingly also exhibited more masculine characteristics – such commentary was absent. Ronja, the only woman in a technical role had endured undermining treatment and doubt toward her competence during her career. These findings offer support for the close link between masculinity and technical competence (Kinnunen & Korvajärvi, 1996). In terms of the personal self, masculine interests and organizational cultures appeared to affect whether women experienced a sense of belonging in the workplace. Those with more masculine characteristics positioned themselves as fit for the industry and felt clearly at ease in the workplace, as they were included for instance in crude and sarcastic banter. For others, the meanings were more ambivalent. While gender in these situations gained very different meanings for the women, it seemed that the negotiation of identity was fueled by rather masculine ideas of acceptable behavior, interests and personality traits. As long as women place themselves against these ideas, fitting in can become an internal process under endless negotiation.

In terms of organizational practices where gender was ascribed meanings, meetings and informal get-togethers such as sauna evenings came up often – though not necessarily in clearly negative terms. Meetings, especially with clients, were marked by a heightened self-consciousness and alertness for most women, in line with Kanter's (1977) work on token pressures. For some, the tension of these masculine practices was uncomfortable,



for others a source of positive determination. Only rarely, however, did it seem to be possible for women to address such practices directly; dealing with sexist or undermining comments quietly is part of navigating the ICT organizations as a woman. As to the informal organizational practices, sauna evenings and other informal get-togethers such as sports came up most often in terms of feeling self-conscious, yet their meaning was also most actively downplayed. I interpreted this to result from the conflict of perceived gender-neutrality; when employees are separated into locker rooms or saunas according to sex, their physical and sexual bodies become visible, breaking the image of the abstract worker (Acker, 1990).

In the bigger picture, the women's accounts reflected their larger societal context in two important ways. First, the women that I interpreted to have the lowest levels of critical awareness of gender issues *and* who seemed to exhibit more masculine characteristics rejected most directly that women's low representation in ICT was problematic – even when they had experienced gender-based struggles themselves. I find this to support the linkage between (hegemonic) masculinities and the gender order (Connell, 2005), and the notion that the gender order can be internalized by those who it oppresses (Forbes, 2002). Practices of normative masculinities tend to support the image of organizations' gender-neutrality, concealing the gendered structures of work and organizational culture that can exclude individuals. When this happens, perceiving – let alone critically acknowledging – gender is likely to become more and more difficult.

This leads me to the second macro level finding: the participants seemed to be aware of gender-based issues in ICT, but most of them did not readily ascribe negative meanings to these experiences in their own case. This contradiction could stem not only from the Finnish cultural context of the genderless gender (Lahelma, 2012), but also from the perceived gender-neutrality and disembodiedness of ICT organizations (Acker, 1990). These contexts provide cultural reference points for when and how it is appropriate give meaning to gender. By naming gender as an issue in the workplace the women would expose the oppressive structures of organizations and risk putting themselves in a position that could be disadvantageous to them.

In conclusion, the findings of this research suggest that women who work in the ICT industry in Finland give meaning to their experience of gender relations in light of oppressive gendered structures – though typically unconsciously. Practices of masculinity, in particular, tend to obscure and hide gender, supporting the image of the industry and its organizations as gender-neutral. When this is done, normative masculinities in the everyday doing of business and technology are reified, contributing to the larger gender order where masculine is valued over feminine in certain contexts of society.

## 5 Conclusions

I embarked on this research process with one question in mind: what could *really* be behind the persistence of women's low representation in the ICT industry? Over several decades, many initiatives and research projects had tried to tackle the issue with modest results, and I felt frustrated with the superficiality of mainstream explanations, which seemed to go in circles and hardly scratch the surface of a very complex issue. My own experience had suggested the problem might have something to do with gender relations, and now, at the end of the journey, I feel confident saying that my initial hunch led me to the right direction. I will draw together the findings and learnings of this research process in this final chapter, and discuss the study's key insights in relation to prior academic research.

So, in this thesis I have studied how nine women who work in the ICT industry in Finland experience gender relations in the workplace, trusting that their interpretations and meaning-making might reveal important insights of the larger societal context. I have approached the research problem from a critical perspective: feminist research orientation has guided my understanding of gender as a dynamic social construct, institution and power structure that maintains and reproduces oppressive social relations for women and other groups of people across space and time (Calás & Smircich, 2006). Theoretically, I have conceptualized gender as active "doing" within patriarchy and capitalism, two dominant Western ideologies (Connell, 2005; Walby, 1989). From this premise, I have then argued that ICT organizations are indeed gendered despite claims of gender-neutrality in technology and business at large. I have further shown that the ways in which gender gets done in the everyday interaction, practices and processes in the workplace tend to reify the historically weighty gender order in which the masculine is valued over the feminine (Gherardi, 1994).

Feminist inquiry typically aims to make visible the taken-for-granted assumptions that underlie our current ways of organizing the world (Calás & Smircich, 2006). This also applies to knowledge production: I followed a qualitative social constructionist

approach, which understands knowledge as an inherently social concept that individuals construct between each other (Burr, 1995). This view rejects the notion of objective truth, a perspective that in positivist research traditions has failed to explain complex social phenomena such as gender relations (Acker, 1992; Calás & Smircich, 2006; Wilson, 2001). As such, my onto-epistemological choices facilitated a more radical inquiry into the reasons *why* women's low numbers in ICT persist. Employing a narrative methodology further supported the building of in-depth knowledge about the ways women give meaning and make sense of their social existence through language (Czarniawska, 2004).

The study of narratives proved to be a challenging, but rewarding part of this research. In the nine semi-constructed interviews I conducted I quickly came to learn how dynamic situated meaning-making is: an endless number of elements in the social interaction between myself and the women shape their interpretation of their experiences. In analyzing the women's narrative accounts, I made further interpretations, interrogating not only what is said, but why (Oinas, 2004; Riessman, 2008). Do these false starts signal something? Why did she opt for this idiom? What is she leaving out of the story? The deeper I wanted to go the closer I had to read the local context of the production and the different reasons that might have played a part in it – just as Riessman's (2008) dialogic/performance analysis recommends.

What did the women's narratives reveal then? One of the central insights was that a person's masculine/feminine identity significantly shaped their interpretation of the masculine work context. Here, I defined identity as an ongoing construction of a person's understanding of themselves (Alvesson & Due Billing, 2009), and understood identity negotiation as a discursive social practice that always draws from cultural resources available (Davies & Harré, 1990). Alvesson and Due Billing (2009) note that cultural masculinities and femininities become reflected in individuals when they negotiate their place in the social world. I could notice this in how the more masculine women, i.e. the more assertive, blunt and self-described "rough" individuals tended to downplay the significance of gender and frame even negative events such as discrimination in positive terms; such experiences fueled the women's determination to

succeed. These findings are in line with prior research on women's coping tactics in technical contexts (e.g., Adam et al., 2006; Hatmaker, 2013; Jorgenson, 2002; Powell et al., 2009). What I found interesting, however, was that the masculine women did not appear to be coping in the negative sense of the word. They seemed genuinely content with their work and positions in the industry as one of the guys. Also, I did not get the impression that the women necessarily had to distance themselves from certain aspects of femininity in the workplace, as Pauliina's narrative on clothing and club attire suggested. This would be a more novel finding against prior research, but would require further inquiry, possibly observation, to be confirmed.

What less critical research orientations might have missed at this point is that despite the positive meaning-making of certain individuals, the ways in which these women position themselves as determined and persistent women yet good masculine "fits" reflect precisely the cultural masculinities mentioned earlier. I see a two-sided dynamic taking place in which the masculine history of technology and business contexts makes it difficult to see and acknowledge gender to begin with (Acker, 1990), and the masculine values inherent to such contexts – objectivity, performance and logic – further restrict the ways in which gender can be ascribed meaning (Hanappi-Egger, 2013). Consequently, the women in this study overwhelmingly avoided giving explicitly negative meanings to their experiences of gender relations. The more masculine – and thus successful – women framed their experiences positive as a whole while the less masculine women expressed ambivalence and contradictory meanings. Some women also saw traditionally feminine skills such as human-centeredness as a source of advantage and positive professional identity, very similarly to Hatmaker's (2013) findings.

Here it is worth highlighting that the women's stories and examples from the workplace did not lack offensive, violating or generally questionable practices of gender – this has been well-reported by other scholars as well (Adam et al., 2006; Hatmaker, 2013; Powell et al., 2006). Nearly all women had first-hand experiences of sexism and with many I sensed an air of powerlessness as to how to deal with gender in the workplace, even if they did not express it directly. The most disadvantaged appeared to be those who did

not readily embody masculinities and whose level of technological confidence was lower. Such individuals could experience heightened levels of identity negotiation in the industry, without necessarily knowing how to make sense of such experience. Interestingly, Ronja's and Iida's cases suggested that a critical awareness of gender relations could potentially be powerful in helping women fight feelings of devaluation in gendered interactions in the workplace.

All in all, the findings argue that the study of women's meaning-making of gender relations should not be restricted to the level of identity only. In addition to the interpretative aim of understanding human experience, I had an emancipatory aim which requires problematizing the context of that experience. By critically analyzing the women's narratives in light of patriarchy and capitalist ideologies, I was able to find out that the ways in which the women discursively practiced gender often reproduced normative ideas of what it means to be masculine (rational, tough) and feminine (submissive, conflict-averse) (Gherardi, 1994; Gherardi & Poggio, 2001; West & Zimmerman, 1987). The narratives also tended to reject or obscure gender in the ICT context, supporting the image of technology as gender-neutral (Hanappi-Egger, 2013), and consequently making it more challenging to address the oppressive sub-structures of business organizations at large.

Having now discussed the knowledge constructed during the research, I will next reflect on its implications for the original motivation of the study. As a critical researcher, my research orientation has been politically informed from the beginning. I find that equality is a moral imperative for human societies, especially in their local contexts such as the ICT industry where societal power has unjustly accumulated to the privileged. Through this research, I have been able to identify elements that seem to stand in the way of progressive change in such contexts. At the same time the findings have left me pessimistic at times. Deconstructing gendered structures appears to be an extremely challenging undertaking because practically any social interaction can be interpreted as gendered, and because the doing of gender – at least in the forms we currently know – tends to reproduce the gender order. As Silvia Gherardi (1994: "Remedial work as the

deferral of the symbolic order of gender,” para. 1) has put it, the challenge is in “saving difference without reproducing inequality.”

I wonder if looking at institutions could be a way forward. Martin’s (2003) concept of gender as a two-sided dynamic of gendered practices and the practicing of gender draws attention to the gender institution, which makes gendered practices available in the first place. Societal actors from government bodies to schools and private companies are able to do their part on an institutional level by promoting information about the diversity of sex and gender, and by employing very concrete practices that support an understanding of such diversity instead of enforcing the binaries of sex/gender. The ICT employers of the nine women in this study, for instance, could adopt unmarked unisex restrooms in the office and opt for team outings that did not require separating between men and women. The challenge in all of this remains, of course, in *who* would promote, argue and push for such changes – and how strong the resistance to such efforts could be. After all, the gender institution does tend to benefit those in power (Martin, 2004).

While many answers to the questions of gender relations are elusive, the upside is that there remain ample opportunities for further research. First, because of my constructionist approach, this study has only provided my interpretations on the research problem. My background, values, physical body and pre-understanding of the topic have all affected the knowledge I have constructed (Calás & Smircich, 2006; Oinas, 2004), necessarily limiting the choices I have made. I see intersectionalities as one important future consideration for women’s experiences in ICT industry in Finland. This study is restricted to a highly privileged context of white, educated women, and looking into simultaneous forms of oppression in a masculine – and nationally important – industry could be one way of building understanding of the challenges that lay ahead as demands for equality in the makers and creators of technology get louder.

On a more specific level, I am highly interested in the concrete practices that could potentially dismantle gendered practices in organizations. First, looking deeper into the ways masculine in-group women maintain certain aspects of femininity could help identify a potential shift in the accepted forms of gender practice in masculine contexts.

Second, my findings suggest that a critical awareness and understanding of gender relations might support women's identity negotiation in challenging situations and even help them call out inappropriate treatment. This could be further explored, especially in relation to the substantial topic omitted from the present study: the physical and sexual body, and sexuality's linkages with power. Two of the nine women I interviewed had experienced long-term sexual harassment and even sexual assault in the workplace. Neither appeared to have a coworker or superior with whom to discuss these experiences, which is alarming and highlights the need to understand gender as an oppressive power structure, and a matter that should be explicitly addressed in organizations by the highest levels of management. Gender relations is a difficult topic to begin with, and I find it distressing that organizations do not actively aim to ensure the lowest possible threshold for employees to bring up gendered discrimination – let alone take preemptive measures to eliminate discrimination altogether. I am intrigued by the possibilities feminist action research could provide for exploring these topics within the private sector.



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# Appendices

## Appendix 1: Interview guide

### 1. Background information

- **Tell me a bit about yourself: what is your background, what is going on in your life at the moment?**
- Hometown, education
- Family/relationship, hobbies, interests
- **What kind of job do you have right now?**
- Position, responsibilities, team, role in organization

### 2. Path to ICT

- **Tell me a bit about your work history and how you ended up in the ICT industry**
- Which things or events especially influenced your choice?
- What kind of role did the industry play when you were looking for work?
- How did you perceive ICT industry prior to entering?
- Describe your relationship with technology

### 3. Overall experience in ICT

- **How has it been to work in the ICT industry? Why (examples)?**
- How would you describe ICT as an industry?
- In which situations has the nature of ICT been particularly visible?
- What have you perceived as particularly positive about the industry? How about particularly challenging?
- What has surprised you?

### 4. Female experience in ICT

- **How does it feel to be a woman in ICT? Why (examples)?**
- Has gender ever come up in the work context? In which kind of situations?

- Have you ever noticed that being a woman would have been advantageous at work? How about disadvantageous? In which kind of situations?

#### 5. Women as a minority in ICT

- **Why do think there are so few women in ICT? Why (examples)?**
- **Based on your experience, is women's low representation discussed in the industry? How?**
- Do people try to find reasons for the gender disparity? How about solutions?

#### 6. Wrap-up

- What would you still like to add to the discussion?
- Feedback: how could I improve this interview experience?