Performing Gender at Work

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Ismail Amla, Partner and Human Capital & Diversity Lead, Accenture

Elisabeth Kelan brings a fresh perspective to an age-old issue, which is impacting all businesses today. How – in a world of changing demographics, employee expectations and business need – do we leverage the potential of the full workforce so that diversity of gender provides distinctiveness and competitive advantage? Kelan provides some insight supported by robust empirical evidence. A great tool for professionals looking at developing a Human Capital Strategy that will stand the tests of the coming decade.

Silvia Gherardi, Professor for Sociology of Organizations, University of Trento

This passionate book takes a look at the rapidly changing relationship between gender and technology. It is a must read for those who want to learn more about what it means to perform gender and to be performed by gender at work.

Sylvia Ann Hewlett, President, Center for Work Life Policy

A strongly motivated, compelling piece of research. Elisabeth Kelan challenges us to think about the ways in which the evolving economy shapes new gender inequities. Her eye popping investigation into how gender progress lags as technology expands is a must read.

Susan Vinnicombe, OBE, Professor and Director of the International Centre for Women Leaders, Cranfield University

This book challenges the gendered nature of ICT work and is based on studies of two companies in Switzerland. Scholars of gender will welcome Elisabeth Kelan's insightful reflections. The author should be congratulated on producing such a well written and engaging book.

Judy Wajcman, Professor of Sociology, London School of Economics

Technology, the economy and gender relations are at a critical juncture of transformation. This book provides a major and original contribution to grasping the mechanisms involved by treating gender as a performance. It is a compelling read for anyone interested in the gender relations of the digital economy.
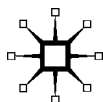
Performing Gender at Work

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To my grandfathers, Dr. med. Fahri Keçecioğlu and Herbert Wehrmann, who maintained a keen interest in new technologies throughout their lives

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1
Introduction

Performing gender in the information and knowledge economy

In the mid-1990s a radical shift in economic production took place. This shift is often compared to the introduction of steam-powered machines, which changed the economic mode of production. Like the steam engine, information communication technologies[1] (ICTs) transform the way in which economic value-added is created. These new technologies are the pivot of the changing economy because surplus value is created through the application of knowledge to information. Technologies speed up this application of knowledge on information and are a result of these knowledge-generating processes (Castells, 2000; 2004a). This means that these new technologies are shaped by and shape society (MacKenzie and Wajcman, 1999b). The new economic formation is referred to as 'the information society', 'knowledge society' or 'new economy',[2] or sometimes as 'the weightless economy' (Quah, 1999) or 'software capitalism' (Bauman, 2000).

These changes in the economic mode of production alter current workplace organisations and give rise to new management forms. Rather than muscle power being used to shift heavy industrial goods, the shared brainpower of individuals and institutions now fuels the economic engine. The means of production are no longer heavy machinery in which an industrialist has to invest, but less capital-intensive factors such as computers or brainpower. Work in the new economy no longer has to be done in a sweatshop, but can be done either in the home, as in pre-industrial times, or in state-of-the-art offices where free gourmet food, a gym, childcare, laundry and dry cleaning services on-site render the office a place where one wants to live (Elgin, 2005).[3]

The new managerial forms emerging are infused with individualisation and flexibility. Work relations used to be fairly standardised for most people; today's working practices result from individual negotiations and are accordingly much more flexible. Whereas previously employers bought the labour time of a worker/employee for a fixed sum for a fixed number of hours, today's work is organised around targets to be met. How people organise their work is up to them, provided the final result fulfils the goals set (Pongratz and Voß, 2003). Moreover, jobs for life and the idea of delayed gratification seem to have become more the exception than the rule. This means that workers are increasingly required to be flexible in line with the demands of market cycles and to find work elsewhere. These changes, together with the alleged decline of other socially structuring parameters such as gender, class and race, led Beck (2000b) to state that individuals now have the chance to be the author of their own biography, although this involves risk at the same time. Sennett (1998), in particular, points to the risk attached to being flexible. Being flexible means that the individual's time horizon shrinks to the short term, and this short-term mentality results in people having difficulties in creating consistent narratives of their selves. This results, Sennett argues, in a 'corrosion of character'.

In these times of change, not only is the economy changing but also gender relations seem to be in flux. Although gender previously had an enormous influence on the life chances of individuals, theorists such as Beck (2000b) and Castells (2004b) suggest that gender as a structuring mechanism of society is becoming less relevant. Often the changes in gender relations are portrayed as directly associated with women's gains. Social movements such as feminism are said to have been so successful that gender equality appears formally to have been achieved. This is certainly the case if we look at changes in voting rights and access to education and the professions in the West. Other indicators regularly used to assess the state of gender relations are rising divorce rates, new forms of patchwork family, women's increased ability to control fecundity and the associated liberatory effects for sexuality, and women's rising presence in paid employment. These indicators add to the impression that we are witnessing a 'genderquake' (Wilkinson, 1994).

Although this suggests that gender relations have changed greatly, in other areas they appear to have changed little. Some argue that there is now a more gender-aware tone but that gender relations themselves have not changed dramatically (Coppock *et al.*, 1995; Franks, 1999; Wetterer, 2003; 2004). If we look, for example, at women's employment, it is noticeable that the labour market is polarised along gender lines, with women

clustered in low-paid, low-status jobs and men in high-paid, high-status jobs (e.g. Anker, 1997; Halford and Leonard, 2000). Although the gender pay gap is said to be narrowing, the disparity between women's and men's earnings is still stark. The pay gap is 15 per cent in the European Union (BBC, 2007) and 17 per cent in the United Kingdom (BBC, 2008). However, as more women have entered high-paid, high-status jobs, the polarisation among women has also increased (Hakim, 1996).[4] Many women are still faced with glass ceilings, glass cliffs or leadership labyrinths (Eagly and Carli, 2007; Ryan and Haslam, 2007; Ryan *et al.*, 2007; Weyer, 2007). At the same time, relationships among women at work have altered, leading to a rise in research into the 'Queen Bee' phenomenon and its link to demography (Ellemers *et al.*, 2004; Ely, 1994; 1995; Mavin, 2006a; 2006b; 2008). Women's positions in society and at work have thus become more complex and multifaceted.

The popular portrayal of women's liberation has often linked it directly to its cost to men. Although men are still disproportionately positioned in the most powerful positions in the economy and society, they are regularly portrayed as 'in crisis' (Edley and Wetherell, 1999; Gill *et al.*, 2000; 2005; Hill, 1997; McDowell, 2000; 2001; 2002; 2003). Men's positions are supposedly threatened by the changes in the economy and gender relations. With women's greater presence in the labour market, men are often no longer required to be the breadwinner. Indeed, some researchers argue that men have difficulties in fulfilling this function because the new economy favours interpersonal skills and flexibility, which are qualities associated with femininity (Hill, 1997; Nixon, 2005; Webster, 2000; Weis, 2006). Women are believed to be particularly good at juggling different forms of workplace flexibility, have never relied on uninterrupted careers and have the social skills that are so desperately needed to facilitate the sharing of information and knowledge in the new economy (Peters, 2001; Pink, 2001). This implies that women are much better suited for these new jobs and men are lagging behind. Although men's positions are as heterogeneous as women's positions, the common assumption seems to be that only either men or women can do well in the economy. However, changes in gender relations and the economy are complex and defy such easy classification.

The evolving economy is an economy driven by technology. The relationship between gender and technology is, however, rarely the focus of attention in mainstream research, especially research in the work context. Feminist researchers have engaged with the opportunities and threats associated with the technoscientific developments for

transforming gender relations (e.g. Haraway, 1997; Plant, 1997). However, as Wajcman (2004: 6) points out, feminist analyses have tended to fall into one of two camps: either overoptimistically embracing new technologies as changing gender relations dramatically or rejecting new technologies as a continuation of women's subordination. This is particularly visible in relation to technologies in the workplace, where debates have often centred on whether new technologies are good or bad for women. Rather than taking either an overoptimistic or an overpessimistic stance towards new technologies at work, it is important to pay close attention to how technologies are developed and used in different work contexts by men and women.

What is particularly striking is not only the neglect of gender and technology at work in many mainstream theories but also that many of the theories of the new economy are not based on empirical research. Although the theories are in part built on detailed quantitative and qualitative empirical research, the empirical elements are often restricted to random examples. Yet, through empirical studies it is often possible to see connections that were previously overlooked. This applies especially to research on the complex relationship between gender, technology and work.

The intersection of work, gender and technology seems highly relevant to an understanding of the changes at work. Workers in the new economy not only have to be flexible and interpersonally competent; they also have to be 'tech-savvy'. The new worker has to embrace new technologies and has to be able to use these technologies in the knowledge creation process. Although women are regularly associated with flexibility and interpersonal skills, they are often regarded as less attached to technologies defined as important in society (Gill and Grint, 1995; Wajcman, 1991). Wajcman observes that 'it is rare to see a female face among the dot.com millionaires' (2004: 111) and thereby suggests that new gender inequalities could emerge in relation to technology work. Although many of the new skills required in the new economy may be gendered feminine, being tech-savvy does not seem to be one of them. Gender seems to be an important dimension when we think about the technology-driven economy, but often this gender dimension is given little attention.

The binary logic and the rigidity and fluidity of gender

A computer is really, if you look at the basics, is really confined to zeros and ones. Either it is yes or no, true or false, there is no grey area,

there is no maybe, there is no approximate. It is really, really exact and that is what I like. (Felix, research participant, Redtech, 36 years)

Computers and gender have in common that they operate on a rigid binary logic. Zeros and ones form the basis of how computers work. These zeros and ones are answers to yes/no statements which tell the computer what to do. In these logical statements there can be only two answers. This is linked to the binary logic developed by Aristotle, who stated that 'what is A' is different from 'what is not-A', and something is either A or not-A. What is the one cannot be the other. Gender knowledge is also organised in a binary form. When asked to indicate on a form whether one is male or female, most of us submit to binary logic in deciding on one box. The categories are mutually exclusive, and one can be only either the one or the other. Regardless of whether we look at sex, gender or sexuality, all are based on the idea of duality and polarity: male/female, man/woman, masculine/feminine, heterosexual/homosexual. In terms of valuation it is common that the male–men–masculine–heterosexual pole is socially valued over the female–woman–feminine–homosexual pole. This means that the binary is hierarchical. Thinking and acting in binaries is a common part of life, and these categories function to simplify everyday interactions (Degele, 2004). The way in which the gender binary is applied to everyday knowledge can be called 'doing gender' or 'performing gender'. I use 'performing gender' as an umbrella term for approaches which see gender as a social practice and as a 'doing'. The gender binary determines how gender can be performed. It also determines how a fluid performance of gender is interpreted as the expression of static gender duality. Enacting the gender binary means performing gender and being performed by gender. Performing gender becomes shorthand for the discourse analytic model of performing gender I develop in this book.

The gender binary has been theorised by gender researchers for some time. It is often perceived to be problematic, as it is rigid, static and normative and contains valuations. Therefore, many gender researchers (e.g. Butler, 1990; Fausto-Sterling, 2000; Irigaray, 1985b; Lorber, 2000) have tried to render the binaries more flexible, fluid and dynamic in one way or another or to dispense with them altogether. Much attention has been paid to how this gender binary is enacted daily. In feminist research there are two sets of approaches in theorising the gender binarisation of the world: on the one hand, ethnomethodological approaches to doing gender; on the other hand, poststructural discursive approaches to gender as performative. The latter are linked

to Butler's (1990) concept of gender performativity. The former are often linked to West and Zimmerman (1987), who see gender as 'doing', as a practice. These perspectives disavow essentialist tendencies and insist on the fluidity of gender as a means to understand why gender appears to be static. Doing gender is the process by which gender is enacted in a situation by drawing on a binary logic. However, the two sets of approaches are rarely combined to explore sense-making processes around gender. There are, indeed, good reasons for not combining the theories, such as retaining the epistemological purity of the models (see Chapter 3). Nevertheless, there are synergies to be gained from a careful combination, and I offer such a combination through a discourse analysis (Potter and Wetherell, 1987). A discourse analysis allows light to be shed on the sense-making processes in relation to performing gender.

Focusing on gender as a practice is important to understanding how gender is enacted in situations, and researchers have also explored how gender is achieved in relation to work generally and to the technology workplace specifically (e.g. Bruni *et al.*, 2004; 2005; Cockburn, 1985; Fitzsimons, 2002; Gherardi, 1994; Gherardi and Poggio, 2007; Hall, 1993; Kondo, 1990; Korvajärvi, 1998; Leidner, 1991; Martin, 2003). Some research has also started to refine theories of doing gender at work (Fournier and Smith, 2006; Nentwich and Kelan, 2007) and to develop ideas around undoing gender at work (Deutsch, 2007; Hirschauer, 2001; Pilgeram, 2007; Pullen and Knights, 2008). Martin (2006) provides an excellent summary and further development of the debates in the area of 'doing gender'. Martin distinguishes gendering practices from practising gender. The former are practices that gender. These are institutionalised practices that require and allow individuals to do gender and that set the framework in which gender can be done. Practising gender, in contrast, is the literal saying or doing in a situation. Martin also stresses the immediacy of performing gender, which often happens on an unconscious and non-reflexive level. If gender is done without reflecting about it, one way to change the way gender is done is to raise awareness and the reflexivity of those practices. This is in line with much research on stereotypes (Kelan, 2008; Roberson and Kulik, 2007).

Gender as a practice can take different shapes when the economy itself is transforming. Through these processes new ways in which subjects constitute themselves become available and older ones perish (e.g. McDowell, 1997; Skeggs, 1997; Walkerdine *et al.*, 2001). This invites the question: Is gender under these circumstances still performed with

a gender binary in mind, or is it performed in different and new ways? One way to study the intersection of changing work and gender is to look at how gender is performed at work.

Gender, technology and the Swiss context

Social theorists such as Castells (2004a; 2004b) are optimistic about the new economy but do not disguise the fact that new inequalities may emerge around the ability to use ICTs in the knowledge creation process. Those who are not as able to learn and use technology will be the 'losers' of the network society. Among the 'winners' of the new economy are those who sell knowledge-intensive services around ICTs. ICT employment is one area of work that is frequently singled out as an example of the changing economy. High-level ICT work is regularly seen as the flagship of the new economy and as emblematic for the new working life, as it shows the new employment conditions, such as flexible work and self-management, that are characteristic of the new economy.

Although Castells notes the emergence of new classes, he does not comment on the fact that the new classes could also be cross-referenced with gender. As Wajcman writes, 'The hacker culture he [Castells] eulogizes is a male culture – in fact, a predominantly white middle-class culture, too' (2004: 62). Women are overrepresented in low-end ICT work such as data entry; they are rarely in the elite jobs of the network society which Castells describes. The new economy may thus be a male endeavour and may not open equal chances to all.

There is a widely proclaimed skills shortage in high-end ICT work. In 2005 the skill gap was projected to be 13.9 per cent in the European Union by 2008, which means that 350,000 ICT jobs would be unfilled (Kolding and Kroa, 2005). It is, therefore, not surprising that women are seen as a major resource to fill this skills gap (European Union, 2008). Data for the United States and Canada, however, suggest that the number of women in computer science and computer engineering undergraduate courses is not growing or is even falling. In 1993/4, 18 per cent of students were female, but by 2006/7 only 12 per cent were female (Vegso, 2008). A *New York Times* article claims that 25 years ago more women were working in ICT than today (Stross, 2008), and a report by the European Commission (2008) argues that the gap between men and women in employment in engineering and technology is persistent and will not self-correct. The sustained lack of women in ICT education and employment has puzzled many researchers (Webster, 2005).

The social shaping of technology perspective argues that ICT work is seen by society as something that men do (Wajcman, 1991; 2004). As a consequence, women do not want to be associated with something that is coded as masculine. It is, therefore, important to investigate critically what role gender plays in these workplaces, which are often hailed as the future of work. This future of work may contain gender dimensions that have to be taken into consideration when we think about a changing economy.

The new economy is conventionally seen as happening in places such as Silicon Valley, where high-tech innovation and cool, modern workplaces go hand in hand. In contrast to the cool and modern image of Silicon Valley, Switzerland appears more like a well-organised theme park based on chocolate, cheese and cleanliness. Everything seems to run literally like clockwork, and the creative chaos of places such as Silicon Valley is almost absent from the popular perception of Switzerland. Switzerland is not an obvious choice of location in which to study ICT work, as it is not one of the new economy hot spots. However, part of the changing economy is that the economy is global. This means that the new economy is not restricted to these high-tech places; rather, these new economic formations will span the world. It is, then, logical to study other places, often not the first you think of when talking about the new economy.

Switzerland has a reputation for technical excellence, through institutions such as the world-famous Swiss Federal Institute of Technology, and for service excellence, mainly through world-class hotels. ICT companies are attracted to Zürich because of a highly educated workforce, a strong work ethic among employees and a 'business-friendly' employment law which means that employees can be laid off much more easily than in other European countries (NZZ, 2004). The ICT sector leaders, including Microsoft, IBM, Cisco and Sun, all have national headquarters or at least offices in Zürich. Google also located its European research laboratory in Zürich (Google, 2008). This clearly shows that Zürich is an ICT hub in the world and a viable ICT location that deserves further attention.

Aims and structure of this book

One aim of this study is to understand how gendered subjects are constituted by focusing on how gender is performed in ICT work at a time when gender and work are changing. A particular interest of mine is what positions people have available to them and how these

positions are negotiated and taken on or rejected. My aim is, then, to expose gendering dynamics in the new working arrangements by exploring subject constitution processes as a way of doing gender in ICT work.

To show such gender performances in the ICT workplace, three areas of study are important. First, the workplace and working practices have to be studied to explore the ways in which gender is relevant for the organisation of work in the new economy. Second, it is useful to look at biographies to evaluate how the life course is used to make sense of the past, present and future. The third area relates to gender, how it is conceptualised in a work context and what kind of ideology about gender is operating. These three areas are interwoven and indicate how subjects construct themselves in light of socioeconomic change processes. These three aspects are fundamental to exploring how gendered subjectivities are produced by elites in times of gender and economic change. Therefore, one of my aims is to contribute to an understanding of how work and biographies change with economic conditions and also how gender is implied in these processes.

The book is divided into two parts: one methodological–theoretical, and one empirical. Having briefly introduced the research in this first chapter, I review in the second chapter how social scientists and gender theorists have made sense of the changes in gender relations and at work. I argue that treating gender as a performance enriches the understanding of gender, work and technology. In the third chapter I explore the epistemological and methodological approaches to gender as a process by contrasting ethnomethodological and discursive/poststructural approaches, developing a way to understand gender as a doing in a discourse analytic way.

In the first chapter of the empirical half of the book (Chapter 4), I focus on the changes at work by looking specifically at the conceptualisation of the ideal worker. I explore how the skills of the ideal worker are gendered in an ICT work environment. In Chapter 5 I discuss how ICT workers talk about their biographies and how this could be read as gendered. At the heart of Chapter 6 is the question of which understandings of gender are used by ICT workers. This chapter sheds light on the gender knowledge apparent in the ICT workplaces studied. In the conclusion I summarise the main contribution of this research and look at potential future research. In addition, I show possible limitations of seeing gender as a doing and what further research may have to consider.

Conclusion

In this opening chapter, I have alluded to some of the central thinking, which has shaped and influenced my research. At the heart of this book is the aim of theorising the changes at work and in gender together by looking at how gender is performed in ICT work. The notion of the binary is not only a metaphor for the transformation into a digital economy; it also provides a mental framework on the basis of which much thought around gender is organised. It is thus a metaphor for thinking through possible changes and continuities in gender at work. This idea is fleshed out in much more detail in the following chapters.

2
Changes at Work and
in Gender Relations

Currently, we appear to be witnessing radical changes in the world of work and gender relations. With changes in the economic mode of production, organisations are believed to become flat, flexible and even feminised. Organisations are now operating in network-like structures. Work is becoming flexible in terms of its mode, time and location, and workers are often granted the right to manage their own work independently. Biographies take new shapes, and a standard career pattern is no more. Gender relations are supposedly changing, with more women excelling in education and entering paid employment. At the same time, the job market is segregated by gender. In this chapter changes in the world of work and in gender are outlined and interrelations highlighted.

The chapter is divided into four sections. In the first section current social theories with respect to changes at work are discussed. In the second section I turn to how gender is discussed in current social and gender theories. In the third section I look specifically at how organisation and technology studies analyse gender as procedural. In the final section I outline why ICT work is a particularly good example to study the intersection of gender, technology and work in the information and knowledge society.

Changing work

In this section I approach changing work relations by engaging with recent social theories, namely the theories of the network society, reflexive modernisation, the 'entreployee' and the new/flexible capitalism. The theories I cover are by no means the only social theories on changes at work, but they function as examples for how these changes

have been theorised. Other outstanding research on this topic has been conducted by Boltanski and Chiapello (2006), who provide a detailed account of how the criticisms of capitalism have been incorporated into modern management theories. They argue that the charge of alienation at work has been addressed by management writers who emphasise self-determined work in projects, job enrichment and empowerment. Through these measures, workers are encouraged to give their best by bringing their whole identity to work. For the purpose of this book I decided to use a different set of theories to elucidate these issues, and these theories are organised on a continuum between giving less and giving more attention to lived experience.

Castells' network society

Castells develops a theory of the *network society* in the information age in three monumental volumes covering the topics of networks, technology and work (Castells, 2004a), identity and social movements (Castells, 2004b) and the collapse of statism (Castells, 2004c). Castells' core argument is that because capital is now accumulated by applying knowledge to information, the economic mode of production is changing. The new economic mode of production is informational, which means that knowledge is applied to information, knowledge creation takes place in networks of strong or weak links and technology is paradigmatic as it makes possible the global organisation of value accumulation (Castells, 2004a: 32, 527).[1] The network society is characterised by a self-perpetuating and self-accelerating mechanism: knowledge creation, the central commodity, is accelerated through ICTs, and knowledge is in turn the basis for new technological developments (2004a: prologue, ch. 1). Because in recent times capitalism has become global, the new economic form is informational, networked and global.

The network society is also characterised by the dynamic between network and self (Castells, 2004a: 3). The self, or identity, is for Castells a fiction that gives purpose in life and is based on certain cultural attributes which are regarded as giving meaning. Identities have specific purposes and functions (2004b: 8), such as supporting the hegemonic order (legitimating identities), resisting the hegemonic order (resistance identities) or relating to a project (project identities). Identity as a self-reflexive project, as theorised by Giddens, is according to Castells possible only for global elites who operate within the network (2004b: 12–13). For the majority of people, locality and time-boundedness remain central, and this requires an identity formation which is independent from the network logic (2004b: 13). Consequently, most identities are defensive

of the network logic and relate to a locally specific community. At the heart of the informational society is, therefore, the dynamic between the function provided by networks and the purpose and sense of self provided by resistance and project identities.

The network society and its new organisational form, the network organisation, require an individualised and flexible labour force. The network logic is internalised in the network organisation, which replaces the bureaucratic organisation. A prime example of informational network organisation is Cisco Systems, where information is transformed through knowledge into sellable services (Castells, 2004a: 197). Cisco Systems offers consultancy services and creates an added value by using its own knowledge to mediate the contact between customer and client companies. Applying knowledge to information is the profit-creating activity. The emerging jobs – most of them managerial, expert and technical jobs – have a strong information and knowledge component (2004a: 232, 245) and make use of information technology (IT). Therefore, IT literacy becomes central (2004b: 185). The new elite consist of managers, experts and technicians who are the prototypical professionals applying knowledge to information to create the added value of the network society (2004a: 533; 2004c: 392).

In the flexible organisation, fixed-hour working arrangements, long-term work promises and a stable career are replaced by flexible employment contracts, including part-time work, self-employment and subcontracting (Castells, 2004a: 298ff.; 2004c: 392). Work becomes decentralised, flexible and individualised and incorporates market-like features. Alongside the changes in the work context, careers change as individuals use networks to advance their careers and also relocate globally to find new work. A core characteristic of information workers is that they are able to train and re-train over their life course to adapt to the ever-changing work environment. Castells calls this 'self-programmable labour' (2004c: 392). Self-programmable labour is facilitated by access to education. These information workers are, however, according to Castells, the only group who use the global labour market (2004a: 265). The other group are 'human terminals' or generic labour (2004c: 392), who receive signals to accomplish an action.

Castells develops a far-reaching theory of the organisation of work in the network society but touches only marginally on how a new economic mode of production influences the individual ability to construct identities and biographies, a topic which is more central to the theorists of reflexive modernisation (see below). He also provides few details about the subjective experiences of living in a network society.

There is, for instance, little insight in his work into how people in different labour pools construct their identities, which would highlight the dynamic between the network and the self.

Beck's reflexive modernisation

The term 'reflexive modernisation' was coined in a volume written by Beck, Giddens and Lash (1994), of whom Beck has engaged most intensively with the changes at work. The term denotes the transition from the first to the second modernity (Beck, 2000b: ch. 3). Whereas the first modernity 'was characterised by collective lifestyles, full employment, the national and welfare state and exploitation of nature', the central features of the second modernity are 'the ecological crisis, the decline of paid labour, individualisation, globalisation and the gender revolution' (2000b: 18). Reflexive modernisation combines, first, the idea that the new society is a reflexive one and, second, the idea of a society that reacts reflex-like to changes (2000b: 21). Reflexive modernisation means that traditions can be negotiated and decided individually, which is called 'de-traditionalisation'. As a result, individualisation and risk increase. Traditional 'markers' of identity, such as occupation, class and gender, which have determined the life course of individuals in the past are losing their importance (Beck, 2002; Beck and Beck-Gernsheim, 2002a). It is now up to the individual to shape his or her own life:

> The choosing, deciding, shaping human being who aspires to be the author of his or her own life, the creator of an individual identity, is the central character of our time. It is the fundamental cause behind changes in the family and the global gender revolution in relation to work and politics. (Beck, 2002: 22–23)

Under reflexive modernity institutions are tailored to self-organised and individualised biographies, in a process called 'institutionalised individualism' (Beck and Beck-Gernsheim, 2002b) or 'collectivised individualism' (Beck, 2002).[2] An individual biography is not only an 'elective biography', 'reflexive biography' or 'do-it-yourself biography' (Beck and Beck-Gernsheim, 2002a) but also always a 'risk biography' (Beck, 2002). The term 'risk biography' captures how having a choice is also a burden, as the individual is personally liable for wrong decisions and consequent failures (Beck, 2002; Beck and Beck-Gernsheim, 2002a). Beck stresses that '[a]ctive management (and that does seem the right term) is necessary for the conduct of life in a context of conflicting demands and space of global uncertainty' (2002: 26). Biographies now

have to be managed, and they become both a task and an accomplishment at once. For Beck people still base their identities around their work life. This means that failing at work is often equated with failing as an individual. It also means that individuals are 'condemned' to decide and to carry the burden of their decisions. Constructing an appropriate self becomes an ongoing task. If people no longer rely on traditions, the self becomes a reflexive product (Giddens, 1994), or, put differently, 'we are not what we are, but what we make of ourselves' (Giddens, 1991: 75). With vanishing traditions, the creation of the self is constructed as becoming an active choice.

With the changes in the economy, labour is becoming increasingly flexible (Beck, 2000a: 45) and work arrangements individualised (2000b: 30, 54ff.). People are encouraged to act like small companies in a Me & Co format, where individual success or failure is directly visible in income (2000b: 3). The changes at work also result in the rise of a new type of worker: 'high-tech nomads' who internalise the new market relations and organise their lives on that basis. They work, facilitated by new ICTs, at home or in a traditional office, in teams and in isolation (2000a: 45). However, this type of working arrangement seems to be relevant only for those who have the appropriate resources to live a reflexive lifestyle, as there will be – as Lash (1994) points out – 'reflexivity losers'. As traditions fade away, much that was decided previously by position in the social matrix is now down to the individual.

Voß and Pongratz's *Arbeitskraftunternehmer/*entreployee

The theory of the *Arbeitskraftunternehmer* (entreployee) was developed by Voß and Pongratz as an ideal-typical concept to illustrate the consequences of individualisation for work (Pongratz and Voß, 2003; Voß, 1999; Voß and Pongratz, 1998; 2000). This ideal type could potentially be the new type of work in the globalised knowledge society (Voß, 1999; Voß and Pongratz, 1998; 2000) and is the result of the flexibilisation of labour through which workers are encouraged to sell their labour capacity on the market. The entreployee is a 'self-entrepreneurial' type of worker (Pongratz and Voß, 2003) and embodies the changing relationship between organisations and the labour force (Voß and Pongratz, 1998).[3] The entreployee is replacing the employee of the Fordist regime; in Fordism the employer bought the labour time of an employee, as a capacity to work, but employers could never be certain whether workers used their full labour power (Pongratz and Voß, 2003). The entreployee, in contrast, is hired to get a certain task done and is given self-responsibility and autonomy to do so, such as deciding

freely when and how to work (Pongratz and Voß, 2003; Voß, 1999; Voß and Pongratz, 1998; 2000). The positions the entreployee can take range from working mainly with one company to working for various companies.

The work relations of the *Arbeitskraftunternehmer* are characterised by three elements. First, increasing self-responsibility leads to new forms of surveillance. This surveillance is no longer conducted by management but has moved to the workers themselves. Characteristic of this new self-surveillance is the following slogan: '*It doesn't matter how you manage your job and what you do in detail, the main thing is you achieve at least the goals set*' (Pongratz and Voß, 2003: 244, italics in original). A second tendency is the 'economisation' of work. Individual workers have to keep an eye on efficiency, as they not only have to produce an output as efficiently as possible but also sell it on the market. A third tendency is that private life is increasingly ordered like an organisation. This is facilitated by new ICTs through which the worker can work everywhere but is also expected to work everywhere. Thus, private life has to be organised and co-ordinated with the demands of work (Pongratz and Voß, 2003; Voß, 1999; Voß and Pongratz, 1998; 2000). This means that individualised, frenetically planned lifestyles and biographies become normal (Voß, 1999). This new form of work is much more efficient than earlier ways of organising work, because it is now the individual who engages in a new form of self-exploitation. Individualisation of work means in this context a market orientation of the individual life. To be successful, individual lives have to be geared towards the market and entreployees need to internalise market relations. This is labelled the 'subjectification of work' (Voß and Pongratz, 1998), through which the individual is responsible for his or her own success (Voß and Pongratz, 2000: 239). The new working arrangements are internalised and lead to new narratives about a market- and success-oriented self.

Sennett's new capitalism

In his essays on the *new capitalism*, Sennett (1998; 2006; 2008) provides insight into personal experiences of living in the new form of society. Where the other theorists deal with wider social theory, Sennett focuses more on the work context and the consequences of the new capitalism for individuals. New capitalism means for Sennett that people become flexible. This is because organisations use labour on demand and hire and fire people on the basis of business cycles. Historically, jobs were based on routine, loyalty and delayed gratification; the new jobs are said to offer a new challenge every day. People are increasingly

exposed to risk and an uncertain future at work. These changes render it increasingly difficult for people to create personal narratives which could sustain their characters or their sense of self (Sennett, 1998). Narrating a life and building character require a long-term perspective, but this vanishes in the new work environment.

A personal narrative can be constructed in retrospect, but Sennett argues that unpredictability becomes particularly visible when people are unable to voice their own future plans. Their futures appear unpredictable to workers (1998). Workers are expected to be self-oriented and short-term focused, which means they have no view towards the long term and towards incorporating past experiences into their identity (2006). This leads to identity fragmentation and a questioning of one's own worth (2006). Such employment conditions can expose a mismatch between what people experience and what they need to construct their characters. Thus, these employment experiences lead, according to Sennett, to a corrosion of character. This self over time seems to carry some essentialist notions, in that the self is not regarded as shifting and floating but as being constant over time.

Sennett looks specifically at the consequences of new working practices for the formation of identity. For him team and project work result in personal relations becoming superficial and oriented to the short term. This is because teams come together, work intensely as teams and then disperse. The short-termism which is now prevalent in workplaces is also visible in the fact that the experience accumulated over a lifetime becomes worthless. In the new world of work, youth and fast adaptation are the desired characteristics (1998: 94). Furthermore, IT becomes central in most workplaces. Revisiting a bakery he had researched years before, Sennett found that bread had now a life on screen, as the whole process was controlled by technology and visualised through screens. Employees needed to know more about information technology than about bread (1998: 68). Much of the craftsmanship and knowledge of manual work is, for Sennett, lost in technology.

Sennett also looks specifically at the meaning of failure. Interestingly, he chooses here those who are otherwise said to be the elite workers of the new economy: technical specialists. He interviews technical specialists who worked for IBM and were at the forefront of creating the new economy. Sennett describes how these technical specialists have come to terms with having been made redundant. IBM was for a long time seen as a strong company and promised its employees jobs for life, but in a wave of restructuring many IBM workers lost their jobs. Sennett traces how those workers shifted from feeling betrayed, that the

economic climate was responsible for their redundancy, to seeing themselves as responsible for their situation because they had not taken the chances offered to them in a new economy start-up (1998: 129). Sennett highlights the process by which people made themselves responsible for not embodying the ideals of the new economy, such as seeking available opportunities.

Sennett points to an important change in power relations:

> Workers' sense of personal responsibility and personal guilt is compounded by the rhetoric of modern management, which attempts to disguise power in the new economy by making the worker believe he or she is a self-directed agent. (2000: 7)

It is the individual who shoulders the risk. Sennett thus shows that work continues to be a crucial element in the formation of identity for a wide array of workers and how the changes associated with the new economy affect the formation of the self. One way of changing the current situation in the workplace which Sennett describes eloquently (1998; 2000) is to introduce meaning-giving elements to work. One meaning-giving element is, according to Sennett (2008), craftsmanship. A craftsman does good work for the sake of work itself. Work gives him or her meaning, and this meaning leads to self-respect. For Sennett (2008) this meaning-induced self-respect is central to constructing one's own identity in the long term.

There are various overlapping areas and mutual influences in the works discussed here. At the most basic level, the theorists agree that society and work are changing in profound ways which are related to the new centrality of ICTs and new forms of flexibility about where and how to work. Most theorists also agree that reorganisation of work and society leads to new forms of inequality for those who cannot compete well enough in the new work environment. However, there are different emphases in and differences between the theories. First, knowledge and technology are for Castells the engine of the information society, and keeping knowledge up-to-date to sell it is the basic characteristic of the new high-end worker. Although the other theorists mention skills such as life-long learning, those skills are less central to them than to Castells. For instance, Sennett talks about how experience through seniority is no longer wanted as the newest knowledge is required, which for him is an expression of the short-termism of the new economic formation.

Second, all these theorists engage with identity formation on one level or another. Theorists of reflexive modernisation and the entreployee

stress that the new ideal worker has to construct a narrative identity in which self-responsibility is central, which leads to new chances and burdens. Sennett tends to be more pessimistic, arguing that the new working conditions corrode the sense of self, in that no narratives of identity that span across time are possible. Through craftsmanship people are able to find meaning in work. For Castells, identities do not seem to be central at work, as identities are defined in his theory as giving a sense of self and purpose that to a large extent counteracts the network logic with which the workplace is infused. We are, therefore, confronted with a situation in which people who comply with the network logic, such as high-end knowledge workers, do not seem to have an identity of their own. Their identities seem to be one with the network logic.

Third, biography is conceived by some theorists as an important element of the changing working relations. Sennett's notion of sense of self as character contains a time dimension and in this is similar to biography. Likewise, in the theories of reflexive modernisation new forms of biography are emerging, as we can no longer rely on pre-fixed elements to structure our life and instead we see the emergence of 'do-it-yourself' biographies. For Castells careers as work biographies take the form of networks, and consequently individuals have to invest in networks to construct their careers and co-ordinate their life according to the heart beat of the information society – the network. The entreployee has to forge a career under similar constraints, and the consequences for individuals are an economisation of their whole lifestyle and thus also of their biographies. Although there are differences in how elements of changing work and society are weighted, there seems to be an agreement that the economy and work are implicated in a process of transformation and that this transformation requires new narratives of the self.

Changing gender

In my discussion of how current social theories conceptualise changes in society, I omitted an important area where change is also presumed to happen: gender relations. I take a closer look at how these theories reflect on gender change in this section.

Patriarchialism and the de-traditionalisation of gender

Castells devotes a section of his second volume to what he calls the end of patriarchalism and changing gender relations. The end of patriarchalism is a consequence of what Castells refers to as the mass standoff

of women who contested their roles. Women's mass entry into paid-work is critical, as it gives women better bargaining positions in familial relations. Women's entrance into paid work is linked to stereotypically feminine skills, such as interpersonal skills, being highly valued for the emerging information jobs (Castells, 2004b: 176–177). Women's achievements in education means that they also represent a qualified labour reserve highly suited to performing self-programmable labour (2004b: 185ff.), flexible enough to fulfil the needs of the network society (2004b: 185ff.). Women are also in demand as generic labour as a result of their low unionisation and because it is apparently 'more acceptable' to exploit women on the shop floor (2004b: 181). Castells asserts that the '[f]eminization of paid labour leads to the rise of the "flexible woman", gradually replacing "the organization man", as the harbinger of the new type of worker' (2000: 12). Castells is among the few social theorists who emphasise changing gender relations so strongly, and he combines changes in work and in gender relations in asserting that women appear better suited for the new information jobs.

Gender also features prominently in the theories of flexible modernisation, as one of the elements said to lose importance in the process of de-traditionalisation. Giddens, for instance, sees gender relations as a tradition which is no longer taken for granted and which is under scrutiny and must be negotiated (1994: 105ff.). For Beck and Beck-Gernsheim (1990; 2002a), gender ceases to determine life course, particularly because women have gained more power over their lives, specifically decisional power over marriage, children, divorce, education and employment (1990). Gender thereby appears to lose its binding power. In the move to a multi-activity civil society that Beck wants to shape, disrupted lifecycles, which are penalised in current standardised careers, become normal. Moving in and out of paid employment and combining different kinds of work becomes common, parental work is shared and people have more than one job (2000a: 53ff.; 2000b: 6). This multi-activity society appears to be modelled on women's lifestyles, which many people now emulate (2000a: 54ff.; 2000b: 2). The gender construction is in a way paradoxical, because on the one hand being a man or a woman is said to be less important, but on the other hand the new society appears to be modelled on women, or at least a very traditional image of womanhood relating to child care and multi-tasking. It is interesting to note that even though society is said to have been de-traditionalised with respect to gender, it is also saturated with traditional images of womanhood.

Whereas gender is relatively prominent in the theories of reflexive modernisation and the network society, it is not a major element of the theories of flexible capitalism and the entreployee. Sennett refers to women in some of his examples; there is a hint that gender relations have changed when one of his protagonists, Rico, changes his job to enable his wife to move up the career ladder (Sennett, 1998), something Rico's father is unlikely to have done for his wife. Women are also mentioned as a group of workers who have demanded flexible labour for a long time and who therefore compelled the tendency towards flexibilisation (Sennett, 1998). The notion of the craftsman has often been criticised for referring only to men. However, rather than use a term such as 'craftsperson', Sennett includes women as examples in his 2008 book in an attempt to avoid the charge of sexism. Overall, gender is rarely mentioned; men and women in Sennett's work seem to confront similar challenges, and there seems to be little difference in terms of gender.

In terms of the entreployee, it should be mentioned that the German term *Arbeitskraftunternehmer* refers to the generic man and that Voß and Pongratz also regularly use 'he' or 'him' for the entreployee (Voß and Pongratz, 1998: 22, in a reprinted version). This leaves little doubt that the ideal seems to be male. Sometimes being a woman is mentioned briefly to explain that being an entreployee is even more difficult if one has caring responsibilities, but taking gender into consideration is by and large left to other authors (e.g. Henninger, 2003; Jurczyk, 2002). Thus, although gender occupies a relatively central position in some theories, in others it is not conceived as a central issue.

Reconsidering gender at work

Regardless of whether gender is seen as central, feminists engaging with changes in society have fiercely critiqued all theories for not taking gender seriously enough. One of the most sophisticated critiques comes from Wajcman, and her work is a particularly good starting point because she points to elements which may complicate the theories. In an article on the identity narratives of managers, Wajcman and Martin (2002) explore the explanatory potential of the theories of flexible capitalism and reflexive modernisation in relation to gender at work. They argue that both theories see careers as gender neutral, and they find that men and women take up similar market-driven narratives when talking about their working lives. Whereas Sennett argues that the new working arrangements change identities, Wajcman and Martin point out that women's identities were never built only on their work life. In fact, they found that the narratives of men and women differ most in

respect to their private life. They conclude that if women's identities are corroding, then it is due not to work but to other aspects of life.

Drawing on Wajcman's earlier work (1998), one could even argue that women have to adapt their identities when entering the world of management as they have to learn how to perform masculinity correctly. In a more recent book, Wajcman (2004) engages with Castells' work and points to one of his gender blind spots. She writes that Castells is enamoured with the hacker culture but fails to see that this culture is dominated by men (2004: 62). One may indeed wonder why Castells does not make this fairly obvious link between technology and gender. Although Castells asserts that women are the ideal workers for network organisations because of their education and interactive skills, he ignores the fact that the top knowledge professions are infused with technology and that this technology is often perceived as gendered masculine. It becomes clear that gender is far more complex and multifaceted than the theories allow and that a more differentiated understanding of gender is needed to make sense of the changing work environment.

According to the social theories discussed above, it appears that we shape our own lives through the choices we make. This climate of self-creation is at the heart of the work of Walkerdine, Lucey and Melody (Lucey *et al.*, 2003; Walkerdine, 2003; Walkerdine *et al.*, 2001). They focus on transitions to womanhood and how difficult these transitions are for working-class and middle-class women. With respect to employment, for instance, whereas working-class women often have only the 'choice' of low-paid employment with the constant threat of unemployment, middle-class women aim for professional careers. Middle-class girls ensure this self-realisation by investing in their intellectual capital by 'collecting degrees'. The authors show how becoming a bourgeois feminine subject is produced in light of the fear of failure. Academic excellence is no longer something special but something ordinary, normal and expected. Similarities between the otherwise different positions of these young women are to be found in the requirement for both working-class and middle-class women to juggle paid work and family. The authors show convincingly how conflicting the construction of contemporary feminine subjecthood is and that gender and class continue to matter in complex ways. In a similar vein, Skeggs (1997) has pointed out how working-class capital restricts women's movements through space, as they do not have the 'right' capital for 'trading up' at work, for instance. It is, therefore, important to note not only that gender, race and class continue to matter in terms of how people arrange their lives, but also that although some men and women are able to

shape their life in similar ways, there is a divergence between the pos-
itions women and men can take up (for two different arguments see
Hakim, 1996; Walby, 1997).

Little research deals explicitly with differences between and among
men and women in light of the recent changes in career structures.
Careers are like biographies now, supposedly self-authored and no
longer linear, hierarchical and based in organisations but non-linear
and project- and portfolio-based, where performance on recent projects
determines which job one gets next.[4] These new careers are believed
to be no longer based on the male lifecycle but to be more in tune
with women's lifecycles. These new forms of career are, therefore,
often described as feminised (Fondas, 1996), and the assumption is
that women do better in these new forms of career. Yet research has
suggested that old forms of men's homosociability, such as the prefer-
ence of men for socialising with other men and for appointing in their
own image (Kanter, 1977; Witz and Savage, 1992), continue to structure
employment experience and to privilege men. A new version of the old
boys' network was found by Tierney (1995) in an area where careers
are commonly said to be flat and flexible: software development. Here
men used their social relations with other men to advance their own
careers. Wittel (2001b) stresses that new media portfolio employment is
based on commodified relationships, a network sociality, where social
relationships become functional. This means that gender asymmetries
could be articulated even more in these new employment forms than
they were in bureaucratic careers. Previous research has suggested that
informal work environments are not *per se* better for women but that
informality could give rise to male homosociability (Cook and Waters,
1998; Gill, 2002). This would imply that new career models do not
mean that gender and, indeed, race and class matter less but that gen-
der is enacted in a new way.

Gendering flexibility

Flexibility is one area where changes in the work environment should
be particularly visible. Flexible work can be defined as follows:

> Flexible labour is conventionally thought of as part-time, tempor-
> ary and self-employment. However, it is also often taken to include
> a host of other types of work, such as freelancing, subcontracting,
> outsourcing, homeworking, teleworking, franchising, zero-hours
> contracts, fixed-term contracts, seasonal working, flexi-time, con-
> sultancy work and many more. A common feature of all these types

of employment is that they diverge from the pattern which became regarded in mid-twentieth century advanced capitalist economies as the 'norm'. Such 'standard' jobs and careers were defined as full-time, permanent, open-ended and secure. (Felstead and Jewson, 1999: 1)

These new types of work are often labelled 'precarious employment', 'atypical work' or 'flexible labour'. 'Standard' jobs were more standard for men than for women. Flexibility is a buzzword connected to the heralded work/life balance which is said to be facilitated by ICTs (Baruch, 2000; Felstead *et al.*, 2002; Lewis, 2001; Robinson, 2005; Stanworth, 1998). Flexible work arrangements are commonly thought to enhance the paid-work/care interface and to contribute to gender equality (see also Brandth and Kvande, 2001; 2002; Fulton, 2001; Lewis, 2001; Perrons, 1999: 391; Sheridan and Conway, 2001; Tremblay, 2002).

However, rather than existing gender relations being radically changed, old gender arrangements are reinforced through flexible working. The pay gap between men and women still exists for contingent workers, but it is justified in a new way, as women might work fewer paid hours because of caring duties (Di Natale and Boraas, 2002). Perrons (2003) shows in relation to new media work, widely regarded as an ideal case study for new economy flexibility, that workers display a 'make hay while the sun shines' mentality and often work long hours. That same flexibility in terms of where, when and how much to work had negative implications for women (and men) with caring responsibilities: owing to the double burden, they had less time to work and re-train, were more restricted in terms of time and had consequently lower earnings. This study accords with one by Ekinsmyth (1999) about freelance magazine work, where those who worked in flexible yet high-risk employment situations were women. Ekinsmyth states that 'those individuals "choosing" risky employment are more likely to be women, and therefore differentials in degrees of risk between men and women are likely to intensify gender inequalities' (1999: 364).

Flexibility may also require homeworking or teleworking. Many studies have shown how home-based women workers have selected this type of employment because it allows them to combine paid and care work better (Beasley *et al.*, 2001; Bryant, 2000; Mirchandani, 1998; Sullivan and Lewis, 2001; for a theoretical review see Wilson and Greenhill, 2004). Bryant (2000), for instance, reports how mothers organised their working day around their caring duties. Mirchandani (1998) argues that although mothers cannot care and do paid work at the same time, they are able to juggle them much better when they have flexible rather

than fixed working time. Women may do household chores in their 'break', when quite clearly the break is no longer a break from work but a change in tasks. Therefore, telework allows mothers to fulfil the script of good mother and good worker without altering the gender of who does the lion's share of home and care work (Sullivan and Lewis, 2001). To do their paid work properly and to concentrate, mothers working from home often have to employ nannies (English-Lueck, 2002: 135). Thus, the work–care nexus is not dramatically changed or challenged.

Mothers working from home generally does not upset the gender order. Much more change in gender relations could be caused by men working from home, but few studies explore this (Brandth and Kvande, 2001; 2002; Cooper, 2000; Halford, 2006). One of the exceptions is Halford's (2006) work on home-working fathers.[5] These fathers were able to build new relationships with their children, but commonly they did not contribute a great deal to household tasks. Thus, the traditional gender division of labour was maintained. Whereas most mothers were expected to do care and household work in addition to their job, men rarely changed their roles at home, which suggests that forms of flexible working may not transform gender relations in the home. Flexibility in general cannot be said to trigger radical change in gender relations, but it appears that temporal and spatial flexibility allows existing gender relations to solidify. In this way people continue to enact a traditional version of gender, although there is room to create new understandings of gender.

De-institutionalisation of gender and cultural feminisation

What is particularly striking in thinking about gender and social change is that although gender is said not to matter because it has been de-traditionalised, with the valuing of feminine skills, being a woman seems to be an asset. One explanation for this paradox would be that gender relations have not changed, but we have lost the ability to articulate the relevance of gender (Wetterer, 2003; 2004). Wetterer (2003) calls this 'rhetorical modernisation', whereby gender is made invisible in accounts even though it continues to structure people's, and particularly women's, lives. She argues that when heterosexual couples are asked about their arrangement of household tasks, they answer as if each partner is doing his or her share, but these shares seem to mean that women do quantitatively more chores than men.[6] This could mislead theorists to assert that gender no longer matters. Wetterer (2003) relegates the problem to one of rhetoric, so one could get the impression that rhetoric does not matter as long as material gender inequality persists.

Wetterer (2003) touches on an interesting point, but from a discourse analytic perspective, which I flesh out in Chapter 3, it is of little use to say that only the rhetoric changes. Instead, claiming to be gender egalitarian should be understood as the construction of a preferred identity because sexism is no longer a tenable subject position. It would then be important to look at other resources people use to negotiate positions. One might, for instance, ask how people define 'fair share' when discussing household work (e.g. Dixon and Wetherell, 2004). It would then be possible to see how people negotiate their understanding of gender in these situations, and one could assess how old gender knowledge persists but is combined with new gender knowledge.

This leaves us with the problem that in many of the social theories discussed above gender is said to lose its binding force for the life course yet women are assumed still to possess typical feminine skills. Adkins (1999) argues that in new work relationships gender is far from being de-traditionalised. She cites teamwork in the tourist industry as an example, which is often done by husband-and-wife teams, with team members playing family roles. Gender is, therefore, very present in the work life and enacted daily. Adkins (2002) continues this line of argument in asserting that we currently see a *cultural feminisation* in which femininity is vital in many aspects of (working) life.

Adkins (2002) draws on McDowell's work (1997: chs 6–8) to point out that aesthetic labour such as managing one's own physical appearance, which has been associated with flight attendants for example, is now relevant to people working in financial services. This is the case not only for women but also for men. By 'cultural feminisation' Adkins means that elements normally associated with femininity become relevant for both men and women and are used as a cultural currency in a work context. The feminisation of skills does not mean that women are the ideal workers, as men can and do adopt those feminised elements. That femininity is suddenly valued is, however, a new feature of society and seems to challenge the hierarchical organisation of the gender binary, in which the masculine is usually valued over the feminine. One could interpret this to mean that gender is de-institutionalised (Heintz and Nadai, 1998), as there are no formal and institutionalised gender inequalities, but that gender still has to be performed on a daily basis.

Cultural feminisation together with the de-institutionalisation of gender may explain the conflicting gender image conveyed in these social theories: there is change in gender relations, and gender discrimination is less institutionalised. What continues to exist is the assumption that men and women are different and have different skills. The

new economic formation prefers skills labelled as feminine skills, and therefore women are the model for the new worker. Although feminine skills are valued, that does not mean that only women can enact them. The new worker may not be a feminised worker: as Adkins writes, the 'ideal worker of post-industrialized service work is one who can claim to possess a flexible relation to gender performance and hence to have taken up a reflexive stance towards gender' (2002: 58). Although feminine skills may have risen to importance in recent times, it is unlikely that masculine skills will wither away (Cheng, 1996; Collinson, 1992; Collinson and Hearn, 1994; Kerfoot and Knights, 1993; Martin, 1996; 2001). Men and women have to be flexible with regard to what gender behaviour they perform. This means that even though formal institutionalised barriers relating to gender may disappear, gender continues to be a cultural currency and thereby a mental frame that people draw on to make sense of the world and, more important, that they enact daily. The continual practice of gender which is required at work is not covered in the theories regarding social change, yet it is exactly this practice that may make it possible to understand the complexities of the changes in gender and work.

To pursue this point, it is insightful to look at how gender identities are constructed in the theories discussed above. Even though the identity concepts vary from purpose in life to sense of self over time, it is notable that all these theories see identities as something constructed and fluid that often needs to be narrated. Gender theories have been operating with gender identity as a social construct and as fluid and flexible for some time (see Chapter 3). Although most social theorists would agree that gender is socially constructed, they treat gender identities as rather static. Castells talks, for instance, about how feminism as a social movement is based on the projected identity as woman. However, when he talks about women's skills, there is little mention of these skills being ascribed to women and of how women can use this association to create themselves as proper women by enacting these skills. This would mean constructing a gender identity, and gender identity would very clearly emerge as performative and as something that has to be done, but this dimension is not considered in the theories of social change. Identities need to be constructed through work life and so on; gender identities appear to exist, but the work that goes into maintaining them is disguised. This is problematic, as working practices themselves appear gender neutral and cannot be interpreted as ways of doing gender. How gender is enacted by working or not working with technology and by how flexibility is taken up is glossed over. It is, therefore, vital to look

not just at how gender is done in the workplace but also at how gender identities are constituted. The socio-psychic mechanisms of subject constitution must be included to understand the changes in the world of work and gender; only then is it possible to theorise gender and work together and to understand how gender and work are changing and mutually constitutive.

In this section I considered how changes in gender relations are discussed in current social theories. Some theories do not consider gender to a great extent; in other theories gender is an element which contributes to changes in society. However, in relation to the workplace in particular, I have shown that the presentation of gender lacks different dimensions; for example, the complex relationships between gender and technology and between gender and flexibility are glossed over. The representation of gender oscillates between gender no longer being a binding force and women having the right skills to be successful in the new world of work. This was theorised around the de-institutionalisation of gender and the cultural feminisation of work, which means that gender no longer formally inhibits one gender from participating fully in society. Yet gender still has to be enacted on an everyday level. In the social theories discussed, gender identity is rarely seen as something that needs to be enacted in situations. A fuller understanding of the changing interrelationships between gender and work could derive from seeing gender identity as constructed in relation to work.

Gender, work and technology

As the performance of gender, as well as the construction of gender identities, is vital to understanding the relationships between changing work and gender, it is useful to explore how approaches in technology and organisation studies have theorised and researched gender as continually constructed. Many studies on gender, technology and work do not attempt to research gender as socially constructed but engage with the fact that women and men are clustered in different jobs (horizontal segregation) and that men tend to be in higher positions than women (vertical segregation) (e.g. Amsden, 1980; Anker, 1997; Becker, 1957; 1964; Hakim, 1996). In these approaches it is common to see gender, technology and work as something fixed and stable and not as something that is constructed.

Constructionist approaches to gender have, however, shown that gender, work and technology are mutually constructed (Acker, 1990; 1992; 1998; Britton, 2000; Cockburn, 1983; 1985; Faulkner, 2000a;

2000b; Game and Pringle, 1983; Hacker, 1989; Henwood, 1993; 1996; 1998; Korvajärvi, 2004; Mellström, 2004; Mills and Tancred, 1992). The aim of these studies is not to understand how women can close the gap between women and men in relation to technology creation and use but to explore how jobs and technologies are constructed as masculine or feminine and how this excludes either women or men. Gender, technology and work are not accepted as neutral categories that simply exist; the emphasis is on how gender, technology and work are constantly constructed. A particularly prominent approach in recent times has been to see this co-production of gender, work and technology as something done in interactions (e.g. Bruni *et al.*, 2004; Corneliussen, 2003; 2004; 2005; Faulkner, 2000b; Gill and Grint, 1995; Gottschall, 1998; Korvajärvi, 1998; Martin, 2003; Mendick, 2005; Puwar, 2004; Stobbe, 2005). This approach is likely to overcome the limitations of the social theories discussed above, as it offers the chance to see how gender, technology and work are negotiated and enacted every day. Thus, it is possible to explore how gender, technology and work are constantly mutually constructed.

Gendered by design and by association

The central argument of theories around gender and technology and gender and organisation is that technologies and organisations are gendered by design and by association. When we think about certain jobs, they often carry gender assumptions, and the performances required at work tend to be of a gendered nature. These gender assumptions become clear when we look at the characteristics ascribed to the ideal worker. In many occupations and organisations the ideal job holder is conceptualised as a man (Acker, 1990; Ferguson, 1984; Kanter, 1977). It has been shown that careers are modelled on men's lifecycles (Gallos, 1989; Wajcman, 1998), that job descriptions give preference to men (Acker, 1990), that performing masculinity is conflated with normal business practices (Martin, 2001) and that team work and Taylorism contain a masculine undertone (Benschop and Doorewaard, 1998a). It has also been shown how organisational discourses in general contain a masculine subtext (Bendl, 2008), and that women are less likely to fit the ideal template in organisations or as entrepreneurs (Ahl, 2004; Essers and Benschop, 2007; Rubin, 1997). All these studies highlight how organisations are gendered masculine.

These masculine scripts are said to be problematic for women because they have to fulfil the parameters of masculinity to do the job (e.g. Gherardi, 1995; Marshall, 1984; Puwar, 2004; Wajcman, 1998). In other

jobs the performance of femininity is scripted in, such as in nursing, secretarial work, childcare, call centre work and flight attending (Belt *et al.*, 2002; Brewis and Linstead, 2000; Heintz *et al.*, 1997; Hochschild, 1983; Mills and Wilson, 2001; Murray, 1996; Pringle, 1987; 1988; Tyler and Abbott, 1998; Williams, 1989). In these occupations the practice of femininity while doing the job seems to be prescribed. These studies have highlighted how job performances are gendered and how, far from these jobs being gender neutral, gender is scripted into and symbolically associated with them.

Gender in organisations and occupations is regulated through associations and design; technologies have also been linked to gender. One body of work has engaged with how gender and technologies are negotiated at work and with how technologies and the social construction of technologies influence occupational and organisational gender segregation (Appelbaum, 1997; Arvanitaki and Stratigaki, 1994; Bradley, 1986; Cockburn, 1983; Fitzsimons, 2002; Kelkar and Nathan, 2002; Liff, 1986; Sundin, 1998; Wajcman, 1991: ch. 2). These studies have shown how technologies can enforce or challenge gender segregation at work and how technologies can flexibly be defined as masculine or feminine according to who performs the job. The close association between women and having a nice, friendly telephone voice (Rakow, 1988) led to call centres in the Northern developed world being staffed largely by women, whose jobs are not only stressful but also precarious and prone to rationalisation (Belt *et al.*, 2000; Poynter and Miranda, 2000; Wickham, 2001).

One could assume that when technologies enter the workplace, they are gender neutral, but this would be to neglect the fact that technologies are also gendered by design (Berg, 1994; Berg and Lie, 1995). Technical development can take different roads, but which roads are taken depends on social interactions (MacKenzie and Wajcman, 1999b). Such social interactions include how designers configure the user and thereby decide between different design options (Woolgar, 1991). Gendered assumptions are vital in this process and shape the design of technology. Webster (1996; 1997) has demonstrated how the image of the female user of office technology was influential in the first generation of word-processing being an extension of office equipment rather than computing. Hofmann (1999) illustrates the flexibility of the image of the user of technology by showing that through the design of interfaces secretaries are constructed either as able to learn shortcut keystrokes or as unable to navigate independently and therefore in need of menus. Technologies contain gender scripts (Rommes *et al.*, 2001)

which prescribe who ought to use them.[7] These salient gender assumptions are referred to as gender *in* technology (Faulkner, 2001: 83).

These gender scripts are often influenced and reinforced by the gender *of* technology (Faulkner, 2001: 83), which refers to the symbolic association between gender and technology. It has been argued for some time that the computer is perceived as something masculine and more appropriate for boys and men (Aune, 1996; Haddon, 1999; Kirktup, 1992; Phipps, 2007; Wajcman, 1991). This means that many women shy away from computing technology, in a process called 'computer reticence, wanting to stay away because the computer becomes a personal and cultural symbol of what a woman is not' (Turkle, 1988: 41).[8] Engaging with technologies is, therefore, influenced by the gender scripts and associations surrounding these technologies and can be interpreted as a way in which gender is done (Gill and Grint, 1995).

Although scripts can be subverted through use, in general the presence of gender scripts means that to engage with technology is to perform gender in the way these scripts prescribe in order to uphold the gender ideology (Corneliussen, 2003; 2004). Lohan (2001), for instance, has shown that men construct their use of the telephone, a feminine-coded technology (Martin, 1991; Moyal, 1992; Rakow, 1988), as different from that of women, that is, as less chatty and more task-oriented. Another example of how people orient to the gender ideology and are thereby performing gender is visible in studies of engineers who construct themselves as good in the masculine endeavour of technology by reducing their competence in dealing with people (Faulkner, 2000b) or in relation to household tasks (Massey, 1996).[9] These men are performing masculinity and simultaneously constructing a masculine identity by drawing on and invigorating gender binary knowledge by doing gender.

Performing gender and gender identity

As occupations and technologies require people to perform gender, jobs and technologies are also a premier tool for constructing a certain gender identity. As outlined in Chapter 1, the gender ideology prescribes that the world is ordered into masculine/feminine, man/woman and male/female. People, therefore, enact gender to construct a gender identity. Because workplaces and technologies appear gendered, they function as a means through which a gender identity can be constructed. That we feel like a man or a woman influences which job options seem to be available to us, and performing a job supports the construction of gender identity (Cockburn, 1985: 169). As technology is equated with

masculinity in Western societies (Faulkner, 2000b; 2007; Wajcman, 1991), technology professions would support a masculine identity construction. At the same time, other skills, such as nursing, are coded feminine, which allows a feminine identity construction. It appears that constructing a gender identity and doing gendered work go hand in hand.

The picture is more complex than this, however. There is considerable flexibility in the gendering of skills. The gendering of skills is, first, flexible historically, as many jobs have changed their gender associations; for example, the jobs of secretary and flight attendant moved from being associated with men to women (Britton, 2000; Mills and Wilson, 2001). Similarly, the early computer programmers were women,[10] but computer programming was slowly gendered masculine in the West as the computer's importance rose and it was associated with science, rationality and masculinity (Clegg, 2001; Oost, 2000) and as it was adopted by male hobbyists and gamers (Aune, 1996; Edwards, 1990; Haddon, 1988; 1990; Kirktup, 1992). Second, how skills are gendered often depends on which value is assigned to work and who claims the important skills (Bradley, 1995; Cockburn, 1983; 1985; Game and Pringle, 1983; Phillips and Taylor, 1980). An example of discursive flexibility in gendering skills is a comparison between selling insurance and selling fast food (Leidner, 1991). As Leidner (1991) demonstrates, the two jobs require similar skills, but selling insurance is defined as masculine, and serving hamburgers is defined as feminine. In a similar study it was shown that the job of waiting tables is divided between masculine waitering and feminine waitressing, despite the tasks being similar (Hall, 1993).[11] In these studies people often construct their work to suit their perceived gender identities, regardless of what is done. Gender identities thus appear static and independent of what is actually done at work.

Other studies have adopted more flexible views on gender identity (e.g. Johansson, 1998; Korvajärvi, 1997; 1998; Pierce, 1996; Stobbe, 2005).[12] In a study of an employment office, Korvajärvi (1998) found different work styles among men and women; for example, men were more efficient and women took more time to talk to applicants. Men's styles were rewarded because they fulfilled the organisational efficiency goal better than women's styles. Thus, gender identity is done by adopting certain work styles, which are, however, valued unequally. The enactment of gender was rewarded differently and a gender hierarchy established. That certain tasks and skills can be defined as masculine or feminine allows the enactment of gender at work.

It can be useful to study men and women working in so-called non-traditional occupations to understand not only that gender performance and gender identity may not be aligned but also how identities are constructed and negotiated on the job. People working in non-traditional occupations – for instance, men in nursing (Williams, 1995) – are required to perform skills associated with one gender, such as caring, yet they may not derive their gender identity from this performance: men in nursing may not label themselves feminine. Indeed, it appears that people in non-traditional occupations negotiate their gender identities by reflexively adopting or rejecting certain subject positions. For instance, men working in the feminised job of tour rep were found to construct masculine identities by adopting subject positions, such as having sexual relationships with customers, which were less available to women (Guerrier and Adib, 2004). Another way to construct a masculine identity is to behave like a 'lad', by talking about football or sex (Cross and Bagilhole, 2002). In an advertising agency masculine gender identities are constructed by employing attractive, 'hyper-feminine' and subordinate support staff (Alvesson, 1998).

Men in non-traditional employment move more quickly through the ranks (Heintz and Nadai, 1998; Murray, 1996; Williams, 1995), or *ride the glass escalator* (Williams, 1995: ch. 5), but the situation seems to be different for women. Most studies of women in men's jobs have demonstrated that women operate on a narrow path of acceptable behaviour (e.g. Bruni and Gherardi, 2001; Bruni *et al.*, 2004; Kvande, 1999; Marshall, 1984; McDowell, 1997; Poggio, 2000; Wajcman, 1998). For instance, women are required to perform the same masculinity as men at work, but gender is reinstated when they are treated with gallantry as women (Gherardi, 1994). It has been shown that women entrepreneurs practice gender by selectively drawing on subject positions to construct themselves as both women and entrepreneurs (Bruni *et al.*, 2004). Similarly, McDowell (1997) cites the example of some women who were photographed for a newspaper while behaving like traditional traders on a stock exchange floor. The women found this portrayal unacceptable, as it conveyed strong masculinity. Therefore, they had another photograph taken in which they appeared much more feminine. Apparently, this practising of masculinity on the trading floor was not congruent with their gender identity, and they renegotiated their feminine gender identity by practising femininity instead. It has also been shown that women construct their relationship to technology in technology professions as different by downplaying their technical competence and constructing themselves as more feminine (Henwood, 2000). By

selectively taking on or rejecting certain subject positions offered in a work context, people have considerable room to enact gender.

The fragile relationship between gender performance and negotiated gender identity comes under threat regularly when economic conditions change. With new management practices, the epitome of rationality – the manager – now has to be empathetic and multi-tasking, skills often described as feminine. In light of these changing requirements it is often asserted that women fit the bill much better (Fondas, 1997; Helgesen, 1990; Rosener, 1990). This essentialising and potentially reifying assertion of women's better suitability for management jobs has been widely analysed (Cunha and Cunha, 2002; Hatcher, 2003) and critiqued (Billing and Alvesson, 2000; Brewis *et al.*, 1997; Calás and Smirich, 1993), but there is little research into how managers, and particularly male managers, respond to the change from extreme masculinity to potential femininity. However, there is research on how men resist change because their gender identities are under threat. In a study of business process reengineering in a bank, masculine identities were shown to be threatened when the symbols of men's power, such as personal (women) secretaries, were stripped away (Knights and McCabe, 2001). The gendered power these men had over women secretaries functioned to strengthen their masculine identities, and therefore these men resisted change. Over time such masculine gender identities may have to be renegotiated to fit with the new workplace requirements. The same processes of resistance can be observed when part of the job that people identified with, such as a mothering role in retail shops, is replaced by new technologies. This requires women workers on the shop floor to construct their gender identities using other means (McLaughlin, 1999).

It is often assumed that economic changes have a negative impact on workers because they are forced to change. This process is not purely negative; it opens up the possibility to renegotiate and take on new subject positions. For instance, the new managerialism in the UK National Health Service requires nurses and doctors to renegotiate their positions and often redraws power balances (Leonard, 2003). The new managerial discourses helped a male nurse construct a new masculine identity for himself by downplaying the caring part of his job (Halford, 2003). Changes in the economic mode of production alter the way in which gender has to be performed as part of a job, and they influence the way in which identities can be constructed. In these instances we see clearly how changes in gender and work interact and how practising gender can be adapted flexibly to situations.

In this section the focus has been on how gender as a social process is conceptualised in technology and organisation studies. Jobs and technologies are gendered by design and association and require certain gender performances. These gender performances can be used to construct gender identities; at the same time, the gender connotations of jobs and technologies can change over time and through discourses. Even if a gender performance does not support one's gender identity, one can negotiate subject positions to construct a certain gender identity. This fluid and fragile relationship between gender performance and gender identity regularly comes under threat when economic conditions change, and in these moments gender performances and gender identities are renegotiated in light of new subject positions that become available. Thus, gender performances and gender identities are not something fixed but something that needs to be done at work continually. Particularly interesting are those moments when the routine doing of gender as a performance and as identification is altered as a result of changes in the economy. If we want to understand the relationship of the changing mode of economic production to gender and work, it is important to elucidate how gender performances and gender identities are constructed at work in times of economic change.

ICT work

Having outlined how social theorists have conceptualised the changes at work and in gender relations and how seeing gender performed and gender identity can enrich those theories, I now conclude the argument by pointing out why ICT work is an interesting work environment for the study of the relationships between changing gender and changing work. ICT work is the flagship of the new economy – indeed, so much so that often 'new economy' is used only to refer to dot.com start-ups. However, in this research I have adopted a much wider definition of the new economy as a new economic formation of which ICT workplaces are just one example. By ICT work, I refer to high-end jobs which carry social status and prestige, such as software engineering or technology consultancy, in contrast to low-end ICT work such as data entry.

The reason for focusing on high-end ICT jobs is linked to the social theories I discussed in the first part of this chapter. High-end ICT workplaces are a particularly good example for the new economy for the following reasons. First, ICT knowledge perishes quickly and has to be constantly up-dated to remain valuable (Kotamraju, 2002). Furthermore, the product sold in ICT work is knowledge-intensive, and

to create this service one has to apply knowledge to information. ICT work is one of the expert jobs that Castells sees as central to the new economy. Through the emphasis on selling knowledge Castells' key criterion for self-programmable labour is met. One of the key requirements of an ICT worker is to perform knowledge; that is, the ICT worker has to be knowledgeable about technologies and has to convey this image to clients. In this case the knowledge performed is linked to technology. However, performing perceived masculine technology knowledge is not in line with what is often perceived as feminine. For instance, women often downplay their own technical competence to enact femininity (Erb, 1996; Henwood, 2000; Schelhowe, 1997) or attribute their entry into ICT work to serendipity and luck to construct themselves as normal women who are not too interested in technology (Crump *et al.*, 2007). Another gender dimension could be that learning new technologies means that one has to invest considerable time in updating one's knowledge, which may be difficult for women (or indeed men) with caring responsibilities or with less ambition to excel in technologies. Therefore, it is vital to explore what gender performances are required in ICT work and who can enact them.

Second, ICT work makes use of the new organisational forms, such as team work and project work, which are said by Castells and Sennett to make up the new workplace experience. There are rarely clocking-in machines in ICT firms, and the individual workers are responsible for getting results regardless of how long it takes. This is in line with the theory of the entreployee. ICT workers have to manage their own time and meet often tight deadlines. Previous research has outlined how the long-hours culture and project cycles that go hand in hand with project work are often difficult for women and men[13] with caring responsibilities (Gill, 2002; Grey and Healy, 2001; Henninger, 2001; Perrons, 2003). The general imperative seems to be that ICT workers be flexible and fancy-free (Manske, 2003) and able to work whenever and however. When people talk about flexibilities in ICT work, they rarely talk about child care issues; instead, they tend to talk about more leisurely activities (Liebig, 2003). There are other elements of the workplace not considered in the social theories discussed above which may make a difference in relation to gender. For instance, women tend to work in 'softer' and 'less technical' areas, such as design rather than coding (CEPT Consult, 2002; Crump *et al.*, 2007; Henninger, 2001; Manske, 2003; Michel and Goertz, 1999; Panteli *et al.*, 2001; Poggio, 2000; Sandberg and Augustsson, 2002). Therefore, it seems to be re-enacted that women are more remote from technology, but what is defined as 'hard' and 'soft' appears to be

contextual and contingent. Such relative positionings towards technology provide insight not only into how the gender binary is enacted, but also into which gender performances can be staged and how different gender identities may be constructed in ICT work.

Third, one can expect ICT workers to be among the individualised elites who can author their own life and feel responsible for their own decisions, which was central to all the social theories discussed. Although ICT workers were once highly sought after, global outsourcing[14] and the bursting of the dot.com bubble have increased job insecurity in recent years. This creates more potential exposure to risk, which the theorists of reflexive modernisation talk about. It would, therefore, be interesting to explore how people perceive this risk, and also how biographies are shaped. Biographies are a way of constructing the self over time, and this dimension is, according to Sennett, at risk of being corroded. However, we also need to consider that men and women may narrate different biographies, as research on techno-biographies illustrates (Henwood *et al.*, 2001). This begs the question of whether decisions to enter ICT employment and the career paths within ICT work are structured by different choices – for example, that careers may be gender differentiated as men and women focus on different work areas. It is also possible that biographies could be told differently to practice gender and thus that gender is performed through biography. By focusing on how people imagine their future, we can also explore the options people seem to have available to them and how risk influences their employment decisions. This can be indicated by how far biographies can be constructed as individualised and de-traditionalised or how gender enters these accounts.

Finally, there is a persistent scarcity of women in technology work in the Western world[15] (Hewlett *et al.*, 2008; Vegso, 2008; Webster, 2005). For instance, in Switzerland 75–88 per cent of the ICT labour force are men[16] (Funken, 2002; Huber, 2002; Zimmermann, 2005), and there is a pay gap of 25 per cent in favour of men (Funken, 2002). This suggests little change with respect to gender. However, gender is rarely seen as relevant in ICT work and in structuring employment experiences (Gill, 2002; Henwood, 1996). This suggests that gender is seen as de-traditionalised but may continue to matter in different ways. Women in ICT work are also in a non-traditional employment area, and it could be interesting to see how gender identities are negotiated. Furthermore, it is worth considering how far gender identities in general are constructed in relation to a gender ideology. Given that men dominate ICT employment, one could assume that work performances are infused with masculinity. However, although ICT work has long

been portrayed as being populated by socially incompetent hackers, the insight that ICT work is service work has brought to the fore the social and emotional competencies ICT workers need to possess. Indeed, it has often been argued that women bring these essentialised social skills to work and should be recruited to ICT work in particular, given the skills crisis the sector is facing (CDI, 2002; Donato, 1990; European Union, 2008; Funken, 1998; Kolding and Kroa, 2005; Panteli *et al.*, 2001; Poggio, 2000; Woodfield, 2000; Wright and Jacobs, 1995). It has also been suggested that technical innovation might well profit from women's voices but that these voices are systematically excluded (Gray and James, 2007; Gray *et al.*, 2007). This could lead to a so-called feminisation of ICT work.

As Woodfield (2000) points out, the ideal ICT worker is a hybrid worker with technical and social skills. If social competence is associated with women, this challenges gender performances and gender identities at work. However, although women challenge the dominant masculine discourses of who can be an ICT professional and which positions women are supposed to take (Frenkel, 2008), research has indicated that women rarely become the ideal ICT worker (Peterson, 2005; 2007; Woodfield, 2000). We could gain insight by exploring how men construct their subjectivities in light of these changes and how they respond to the potential feminisation of skills, which is often seen by male workers as a downgrading of masculine skills (Cockburn, 1983; Hacker, 1989). New ways of negotiating subject positions may be opened up, and gender may be practised in different ways.

Given all these elements, it seems fruitful to study the changes at work and in gender by focusing on ICT work. To research some of the fields highlighted above, I decided to focus on three overlapping areas: work, biography and gender. It appears that the ideal ICT worker has been transformed into a socially and technically competent and flexible person. In this transformation of the ideal, gender seems to play a role, as these new skills are often gendered feminine. It is, then, useful to explore how ICT workers themselves see these changes and how they construct their own competence. One could also explore the different dimensions of performing technical knowledge and their relation to how a gender identity is constructed through positioning. By focusing on work one could link which gender performance is expected from the ideal worker with how people position themselves in relation to the ideal.

If biographies are individualised, gender should matter less in these biographies. If biographies are seen as sense of self over time, one could explore how gender is narrated and an identity constructed thereby.

This relates to both past and future, and these accounts could highlight the options people appear to have available to them and how they negotiate these options. Therefore, it is possible to explore what resources people use to present themselves and how gender may be done through these constructions.

The third area relates to the structure of gender knowledge itself. The understanding of gender could potentially be quite conflicting: although gender may appear de-traditionalised, which entails gender not mattering, cultural feminisation may be important, whereby the feminine is a new cultural currency and is lauded as such. It is interesting to explore how this gender knowledge is presented, how people position themselves in relation to this knowledge, what views of gender inequality are allowed or discounted and how the talk is structured to fulfil certain discursive functions. These three areas are explored in the three empirical chapters of this book.

Conclusion

In this chapter I have considered how changes in the economic mode of production interact with gender and work. Many social theorists argue that we live in a time of change, which is reflected in the fact that the workplace has become flexible and infused with ICTs and that knowledge has become key. This alters the construction of identities and biographies. Although gender is considered to some extent in these theories, the complex relations between gender, performance, identity, technology and work are left untheorised. Organisation and technology studies have developed sophisticated approaches to show how gender is enacted in relation to technology and work and have shown how flexibly and fluidly gender performances and gender identities are negotiated and constructed. These fragile balances regularly come under threat when economic configurations change, which means that 'doing gender' has to be renegotiated in times of change. Changes in work and gender relations are thus interwoven with socio-psychic subject constitution processes. ICT work is a particularly good example to show how gender, work and technology interact in times of economic change. I have outlined three main areas where these changes should become particularly visible: work, biography and gender. The focus of the next chapter is how to research gender as performed in technology work.

3
Theorising Performing Gender

In many everyday discussions and social science research, gender is perceived as static and as a property of people. To challenge this essentialism, which constructs men and women as fixed entities, the notion of the social construction of gender has become central to gender theories over recent decades. However, this theoretical insight is often difficult to translate into research practice. Instead of showing how gender is constructed, many studies claim to see gender as socially constructed but then treat gender as a stable, self-evident category within the research (Alvesson and Billing, 2002; Cameron, 1995; Hagemann-White, 1994; 1995; Speer, 2005). Cameron expresses this as follows:

> [A] huge proportion of empirical investigations begin by repeating the axiom that gender is constructed and then blithely proceed to ignore it. The question they pose is not how social subjects come to be constituted as women and men, but rather how these already constituted and gendered subjects behave, and especially how their behaviour differs. … This is to assume the very thing you ought to be explaining. (1995: 143)

The central problem is, then, that the social construction of gender is not shown in research and the fluidity and dynamics of how gender is achieved are left unexplored. Men and women are seen as already gendered, and the ways in which people become men and women are overlooked. If gender is socially constructed, then it is important to show how gender is constructed in specific situations, and thus it is vital to shed light on the dynamic processes of gender. To study the procedural nature of gender, many researchers have taken up the concept of 'doing gender'. Although this concept is prominent in current gender theories,

there seems to be no consensus on what doing gender means and how it should be studied. Instead of disentangling the different understandings of gender as a doing used in empirical studies on work and technology, in this chapter I return to two prominent approaches in current gender theories arguing for gender as performance: the ethnomethodological and the discursive/poststructural approach. These two approaches either are seen as incompatible or are combined without careful consideration of their epistemological differences. In this chapter I propose a new way of looking at gender as a practice that potentially overcomes the bifurcation of these two approaches by combining them.

The ethnomethodological approach

One approach dealing explicitly with gender as a practice was developed by West and Zimmerman in the ethnomethodological tradition. The stated purpose of West and Zimmerman's 1987 article is 'to propose an ethnomethodologically informed, and therefore distinctively sociological, understanding of gender as a routine, methodological, and recurring accomplishment' (1987: 125). To shed light on what it means to provide an ethnomethodologically informed understanding of gender, it is necessary to sketch out some of the underlying rationale of ethnomethodology as understood in this tradition. The central aim of ethnomethodology in this view is to 'analyze situated conduct to understand how "objective" properties of social life achieve their status as such' (West and Fenstermaker, 1995a: 19). This assumes a constructionist approach,[1] in which the world is socially created through interaction. Although the objective and factual nature of the world is constructed in interactions, the objective and factual properties appear to social actors as given. Ethnomethodologists analyse micro-interactions to reveal how the objective and given nature of the world is accomplished.

West and Zimmerman's (1987) model of doing gender is based on the work of Garfinkel, Kessler and McKenna, and Goffman. At a time when sociology was dominated by structuralist and functional accounts, Garfinkel (1967) proposed a framework in which individuals were active agents in creating social order. Individuals were seen as able to create order out of chaos through interactions. Garfinkel studied these sense-making processes using the documentary method. He analysed, for instance, how students made sense of conflicting answers given by advisors or what happens when people start to negotiate prices in supermarkets where fixed prices are the norm. In terms of gender, the study of the 'intersexed' person Agnes is particularly interesting, as out

of seemingly conflicting biological criteria the social reality of a clear 'sex status' was created by learning the correct way to enact femininity (1967: ch. 5).

Drawing on the work of Garfinkel, Kessler and McKenna (1978) wrote their classic book on the ethnomethodological understanding of gender. They analysed why gender appears as something natural, why the perception of only two genders exists and how sex becomes a biological fact. They argued, quite radically for that time, that social gender and biological sex are socially constructed. To substantiate their argument, they conducted interviews with transsexuals, because transsexuals were, for them, challenging the natural gender order. Transsexuals try to bring their biological sex into line with their felt gender identity, which means that sex suddenly appears no longer fixed but changeable.

In addition to the work of Kessler and McKenna, West and Zimmerman were influenced by Goffman's research. At the heart of Goffman's research is the analysis of everyday interactions. He compared everyday interactions to performances on stage, where acting is intended to leave a certain impression with the audience. In his work on gender Goffman (1979) showed how advertising shapes the understanding of gender and how masculinity and femininity are performed. He also analysed how men and women interact in ritualised form – for example, through gender 'displays', which are performances of idealised masculine and feminine behaviour (Goffman, 1976; 1977).

The crucial point West and Zimmerman develop from these analyses is that societal members perceive essential natures of manliness and womanliness as exogenous from particular situations and contexts and operate with the commonsense understanding that two genders exist (West and Fenstermaker, 1995: 20). However, from an ethnomethodological perspective, gender does not exist a priori but is created in interaction. In that sense the two genders that appear stable and objective are a posteriori product of interactions. Doing gender is, therefore, defined by West and Zimmerman as involving 'a complex of socially guided perceptual, interactional, and micropolitical activities that cast particular pursuits as expressions of masculine and feminine "natures"' (1987: 125). It is the interaction *per se* that creates differences, but differences are perceived by societal members as existing prior to the interaction.

If gender is an interactional achievement, the work that is involved in counting as a gendered person becomes central. To understand this 'interactional work', West and Zimmerman distinguish between *sex*, *sex category* and *gender*. Sex is the classification into male and female; sex

category is the application of sex criteria or 'the ongoing identification of persons as girls or boys and women or men in everyday life' (West and Fenstermaker, 1995a: 20). Gender is, then, 'the activity of managing situated conduct in light of normative conceptions of attitudes and activities appropriate for one's own sex category. Gender activities emerge from and bolster claims to membership category' (West and Zimmerman, 1987: 127). People are thus already sex categorised when they do gender. In the ethnomethodological approach the individual is an active agent who organises behaviour to express gender (1987: 127). The individual does certain things to count as a woman or a man and therefore draws on a repertoire of learned gender activities.

Although gender is an individual act, the interactional component means that the individual act is open to interpretation and assessment by others. To disavow what could be seen as a view that presents gender as voluntaristic, West and Zimmerman draw on Heritage's (1984) notion of *accountability*. Although individual actors are doing gender, they are accountable to the audience for doing gender vis-à-vis normative conceptions of gender. The resource used for this assessment is the commonsense and normative knowledge of the 'existence' of two genders and of the appropriate behaviour for each gender. Every act of doing gender is, therefore, *'at the risk of gender assessment'* (West and Zimmerman, 1987: 136, italics in original). Doing gender is, then, dependent on interactional and normative elements. West and Zimmerman ask in this light, '[C]an we ever *not* do gender?' The answer they give is that '[i]nsofar as a society is partitioned by "essential" differences between women and men and placement in a sex category is both relevant and enforced, doing gender is unavoidable' (1987: 137). That means that as long as there is the commonsense knowledge of a stable gender binary, gender needs to be 'done'. Moreover, if individuals fail to do gender correctly, the individuals not the norms are questioned (1987: 146). In this way the resources which allow for the interactional accomplishment of gender in the first place are enforced and made stable and durable.

In an ethnomethodological understanding, interaction entails elements such as gestures, body language and talk. As talk is fairly accessible for empirical research, scholars have often turned to talk to analyse how social facts are accomplished in interaction. An important approach to exploring gender in interaction is conversation analysis (Heritage, 1988). Conversation analysis was influenced largely by the work of Sacks, Jefferson and Schegloff (e.g. Sacks *et al.*, 1974).[2] Its goal is to show how intelligibility of behaviour is created through the

sequential organisation of language (Heritage, 1988). A classic example is adjacency pairs such as greetings. If the first part of an adjacency pair is said, the second part is required as a reply; otherwise, the behaviour would be treated as non-normal. Usually, the talk studied should be as 'uncontaminated' and 'authentic' as possible (Heritage, 1988: 130). For theorists of gender the study of language proved to be effective in showing how gender is produced in interactions. Research has shown that who interrupts whom creates the gender order (West, 1992; Zimmerman and West, 1975): for example, male doctors interrupt male and female patients more often than female doctors (West, 1992). There are now numerous studies exploring how gender is enacted in conversation and how gender is done in interactions (e.g. Baron, 2001; Buchholtz, 1999; Eckert and McConnell-Ginet, 1999; Goodwin, 2002; Kitzinger and Frith, 1999; Kotthoff, 1992; Weatherall, 2002; Wilkinson and Kitzinger, 2003). In these studies close attention is paid to how talk in interaction is organised and how gender matters in this organisation. Conversation analyses show doing gender and, more specifically, a *talking gender*. Conversation analyses are very effective in demonstrating how gender is made relevant in interactions.

Certain aspects of an ethnomethodological approach are useful here. First, one is able to show how behaviour is organised in interaction to create the impression that gender is stable and natural. Second, there is an emphasis on how these interactions are socially monitored. Third, doing gender is researched by paying attention to micro-interactions. The focus of ethnomethodological studies is how gender emerges from social interactions, or, in other words, how gender is done in a situation. Rather than counting men and women, the ethnomethodological approach makes it possible to see how men and women furnish their gender identities by engaging in gender-appropriate behaviour. Therefore, an *ab initio* strategy in which gender is created afresh in every situation is used, and it becomes possible to see how gender is achieved in a situation. This 'producer of gender' perspective provides rich material through which the dynamic nature of gender can be shown.

Although ethnomethodologists can show empirically how gender is produced in interaction, various issues are neglected. First, in the ethnomethodological account of doing gender, the norms structuring how gender can be done are left untheorised. It appears as if the norms are brought to life by the people who enact them, but norms exist prior to the act and influence how gender can be done. Norms exist in structures and institutions putting gender into operation. One example is that schoolyards are designed with specific activities for girls and boys,

such as gymnastic poles and football pitches, and in using these toys children learn to do gender (Maihofer, 2004a). The structures clearly influence doing gender, but this point is not discussed in West and Zimmerman's work.[3] As structures are relevant for doing gender, it is important to develop a clearer understanding of how doing gender is linked to norms and structures.

Second, we can assume that there is always a choice of which behaviour is enacted. However the only enactments that are considered are those that relate to norm-conforming rather than non-normative behaviour. It is correct that West and Zimmerman argue that there are different resources to do gender, but this flexibility in doing gender seems to be undermined by accountability. Through accountability only gender enactments in line with the binary gender norm seem to be performed. If non-normative gender behaviour is performed, then the perception of a stable gender norm may be challenged, allowing for new sense-making processes. Although it is sometimes mentioned that non-conforming gender behaviour is sanctioned societally, gender non-conforming is not focused on when norm-conformist behaviour is considered.

This blind spot is vital for the concept of change. Changes in how gender is done are not an important topic because in the ethnomethodological tradition it is assumed that the duality of the gender norm has to be constantly 'done' and re-established. If other options were taken up, as discussed above, then the gender norm would no longer be enacted, the unnaturalness of the norm could be exposed and new ways to see gender could emerge. But there is little room for change in this model of doing gender. In a reply to Thorne's (1995) criticism, West and Fenstermaker (1995b) discuss how change may happen. For West and Fenstermaker (1995b), as for West and Zimmerman (1987), we have to do gender because this is a basic way in which society is organised and the only way this could change would be if gender lost its importance. This would mean that gender ceased to be omnipresent. West and Fenstermaker cite social movements and collective action as examples of disruptions which can destabilise categories. However, it is not an individual action of doing gender differently that can, in their view, challenge the dominant gender order. The argument is that because gender is a relevant category we have to enact it, whether we want to or not. Change in this model can come about only when the category itself loses its importance. This theory of doing gender appears almost circular: because gender is important we have to enact it; thus, we ultimately reinstate the importance of gender, which in turn means

that we have to enact gender. Change is thus largely left unconsidered in this model.

Fourth, what seems to be missing from this model for doing gender is a psychological dimension. The model that West and Zimmerman (1987) are proposing is, as they say, a sociological one and not a psychological one. As gender is an interactional achievement, doing gender seems to happen between at least two people, and one person alone would, strictly speaking, not be doing gender. However, an insight into doing gender may be disguised. There are situations when I assess my own gender behaviour. For instance, when I am home alone and decide to wear a nice dress because it makes me feel much better, but no one else sees me, I may be doing femininity to bolster a feminine gender identity, but the audience is my internal gaze rather than another person.[4] As Degele (2004) points out, I would still interact with norms about beauty existing in society, but in this concrete situation I am acting not for an external but for an internal audience. This internal audience is not considered as doing gender, but it would be important to consider these mental processes as a way in which gender is done and also what people do to feel a certain gender. As I have demonstrated, the ethnomethodological approach to doing gender is valuable in understanding gender dynamics, but this understanding could be advanced by taking discursive/poststructural elements into consideration.

The discursive/poststructural approach

A second body of work which treats gender as a practice is what I would label the 'discursive/poststructural' approach. This approach is different from the ethnomethodological approach in its emphasis, and some of the problems I highlighted in the previous section are overcome by adopting a discursive/poststructural perspective. However, as I show here, in terms of empirical application new problematic issues emerge. I draw mainly on Butler's work. She has had a major impact not only in gender studies. As she develops her ideas out of the work of Freud, Lacan, Foucault, Derrida, Althusser, Austin, Hegel, Nietzsche, de Beauvoir and Wittig, to name only a small selection, it is not straightforward to assign any label to Butler's work. I opt for 'discursive/poststructural' to indicate that I am referring mainly to the redevelopment of ideas linked to poststructural thought.[5] This label should be treated as shorthand for the sake of simplicity.

In relation to Butler's concept of gender as a practice, it is interesting to note that although Butler's 1990 book *Gender Trouble* was published

after West and Zimmerman's work (1987), she develops her concept without reference to the ethnomethodological concept of doing gender.[6] At the centre of *Gender Trouble* lies the insight that although the aim of feminism is to liberate women, feminism constructs a stable subject, 'woman'. Through this construction, women are homogenised and parameters for what it means to be a 'real' woman are established. Instead of liberating the subject, Butler argues, this process limits the subject. Her alternative is to develop a 'critical genealogy of gender categories' (1990: xi), or a 'genealogy of gender ontology' (1990: 32). Like West and Zimmerman (1987), Butler questions why the gender binary appears plausible and natural, but her approach is to study how this plausibility is constructed discursively. For Butler gender and sex are discursive effects which come into being through discursive practices: '*gender* is not a noun, but neither is it a set of free-floating attributes ... gender is always a doing' (1990: 25). However, how gender is done differs from the ethnomethodological account.

The central concept for how gender is done is *performativity*. The definition of performativity is widely discussed, but it is essentially the process of how gendered subjects are constituted by regulatory notions within a heterosexual matrix. Butler's elaborations on Foucault's subjection processes are vital to understanding performativity. Butler's interpretation of subjection is that Discourses,[7] as large sums of statements, render certain subject positions available. These subject positions are the basis on which identities are formed. In the hegemonic Discourse only certain subject positions in line with hegemonic ideals are seen as legitimate. Constructing only certain subject positions as viable regulates which subjects can be formed. The power of Discourses, therefore, stems from their ability to determine which subjects are produced (Butler, 1990: 1–2), or, put differently, the power lies in the fact that Discourses form and regulate the subjects of which they speak. The process of subjection, therefore, means that subjectivities are created on the basis of Discourse-determined subject positions.

For Butler gender identities are constituted by Discourse. Which kind of gender identities can be formed depends on which subject positions are opened up by Discourse. Thus, that we have a certain gender identity, or, better, that we have the feeling of self-identity, is a discursive effect of the operating regulatory framework (Butler, 1990: 16–17). Identity is, then, a way to maintain socially intelligible norms (1990: 16). The notion of intelligibility is particularly central to Butler's 2004 book *Undoing Gender*, in which she stresses that intelligibility is the consequence of being recognised vis-à-vis social norms (2004: 3). She argues

that we can be recognised as human beings only when we are readable within the normative framework, as otherwise we are denied existence. If one is not intelligible within social norms, then one becomes undone and one's existence is denied (2004: 41–42.). Butler argues that there is no gender identity that exists prior to and outside of Discourses, and that what we read as gender identity is constituted in Discourses and comes into existence only through naming it. Butler formulates this as follows: 'There is no gender identity behind the expressions of gender; that identity is performatively constituted by the very "expressions" that are said to be its results' (1990: 25). Butler is interested in the regulative processes which produce apparently coherent and therefore intelligible identities.

To theorise this desire to do gender and the processes of identification, Butler draws on psychoanalysis. In Freud's theories, identity is produced as the resolution of the object-cathexis. This means that a child desires one parent, but this desire is forbidden due to the incest taboo. Therefore, the child takes the object of desire into the ego, which is called introjection, and the object of this desire is preserved in the form of an identification. For Freud the child has an innate desire for the parent of the opposite sex. Butler challenges this notion of natural disposition in asserting that this disposition is itself an identification rather than innate. She assumes that there is a homosexuality taboo, the prohibited desire for the same sex, preceding the incest taboo. This would mean that a little girl desires the mother but, as a result of the homosexuality taboo, this desire is forbidden. The girl then introjects the object of the forbidden desire and identifies with it – in this case the mother. Butler takes this a step further in arguing that the melancholia, the disallowed grieving for an object of desire, is incorporated into and inscribed onto bodies. The body thus becomes the effect rather than the basis of desire and identification. In this way people incorporate the prohibited desired object into their bodies by enacting masculinity or femininity. One identifies with what one imagines to have lost and bears this in and on the body. Gender and sex are thus the result of the homosexuality taboo and are incorporated and identified with through enactments. Gender becomes the continual bodily enactment as the imagined loss of a forbidden desire and its incorporated object.

Having outlined the concepts of subjection and identification, we can elaborate on the concept of performativity. The term 'performativity' is linked to Austin's notion of the performative in speech act theory: 'a performative is that discursive practice that enacts or produces what it names' (Butler, 1993: 13). Although there is an active agent in Austin's

account, Butler reformulates performativity following Nietzsche in such a way that there is no doer behind the deed. She therefore draws on Derrida's concept of citationality. Citationality means that through the reference to one position in Discourse, power and intelligibility is unfolded. By referring to a norm, a legible subject is created. Butler uses the example of drag to explain what she means by performativity, but this does not mean that performativity refers solely to drag (1993: 230ff.). Drag means that cultural gender images are cited to create a gender identity which is readable within social norms. Yet performativity should not be seen as 'a single or deliberate "act", but, rather, as the reiterative and citational practice by which discourse produces the effects that it names' (1993: 2). But if performativity is not a deliberate act and a performance, what does this citational practice mean for the constitution of subjects?

To explore the subject constitution further, Butler uses Althusser's notion of *interpellation*. Althusser refers to interpellation as the process through which ideology addresses and calls upon individuals. In feeling addressed people identify with an ideology and become subjects. Althusser illustrates interpellation with the example of a policeman who calls a person on the street; only in reacting to this call does the addressed person come into being as a subject. Thus ideology forms the subjects it addresses. For Butler subjects are constituted by being hailed by Discourse and responding to it (1997: 25ff.). An illustration of this process is what Butler terms 'girling the girl'. A girl is named a girl in an ultrasound examination or at birth. This naming functions as a performative and creates the girl as a social reality. However, this process is not complete until the girl responds to the label 'girl' by citing subject positions which are deemed appropriate for girls. The girl needs to create herself constantly as a girl by citing gendered subject positions. Then, gender is a 'doing' but not a doing of free will.

The compulsory nature of gender is described by Butler as enforced (1993: 12–13, 231–232); without citing correctly one is unable to live (1993: 232) and one faces 'punitive consequences' (1990: 139). This becomes more evident in *Undoing Gender*, where Butler makes the point that we have a desire to be recognised and that in order to be recognised as human beings, we have to cite prevailing gender norms. If we do not cite correctly, our status as human being comes into question, as by not citing correctly one can face violence and even murder (2004: 35). Thereby, incorrect performance leads to a situation in which one is no longer recognised as human and becomes undone. Doing gender is, then, the enforced performance of doing gender, and we are doing

gender because we have a desire to be recognised as human. But this means that we have to cite positions of ideal masculinity and femininity within the heterosexual matrix.

If the subject is performed and constituted by Discourse as a regulatory frame, one may ask what happens to agency. Butler writes, 'If gender is a kind of a doing, an incessant activity performed, in part, without one's knowing and without one's willing, it is not for that reason automatic or mechanical' (2004: 1). Agency becomes apparent in that Butler uses performativity in a double sense. The first meaning entails the forcible performance of gender norms; the second meaning is the *performative use* of Discourse (1993: 231). The first meaning is in line with the Foucauldian conception, but Butler is also interested in the unpredictability of and failures in the subject constitution processes (Butler in Bell, 1999: 164). Discourses need to be cited, but the ideal formulations set out in the normative Discourses will never be met by actual performances (Butler, 1993: 237). Acts fall short of ideals, and this exposes the difference between act and ideal. In this process it comes to light that what is believed to be an ideal is in itself constructed. Butler says that it then comes to light that the act is only a copy of a copy and not an original. Agency lies within Discourses, as we need to cite Discourses, but how we cite is decidable (1990: 148ff.). The destabilisation of Discourses is called discursive displacement (1990: 146ff.). If the subject is formed through a fairly regulated process of repetition, agency lies in how one repeats. As gender needs to be cited in any situation, the constructedness of gender can be exposed and displaced by doing gender differently. Although we need to cite in order to live, according to Butler we can take transformative positions. Deviant subject positions are already present in Discourse but need to be taken up, or as Butler writes: 'Gender is the mechanism by which notions of masculinity and femininity are produced and naturalized, but gender might well be the apparatus by which such terms are deconstructed and denaturalized' (2004: 42).

Butler's theories are largely elaborated at a very abstract level, which leads to problems concerning how the processes of gender as a doing can be studied empirically (Jackson, 2004; McIlvenny, 2002; McNay, 1999; Speer, 2005). Although Butler offers a rich theory about how the process of doing gender should take place, how gender actually happens in concrete situations remains rather vague. This is linked to the problematic position of agency within Butler's work. It is assumed that we are constituted by Discourses and we have to be recognised by those Discourses, but there is room for change as it is possible to incorporate

the Discourses transformatively. What remains vague, however, is how people negotiate the Discourses and decide which ones they take on and which ones they reject. An account dealing with positioning and lived experience would be necessary for empirical research. Although Butler's approach seems to be suited to the study of literary texts, in empirical research one regularly relies on how people negotiate subject positions for instance in interviews. In the accounts people provide it is possible to see normative elements of what may be expected from them and also how they choose to present themselves, but these processes are not discussed in Butler's work. Evidently, Butler is first and foremost a philosopher and thus cannot be expected to provide the frameworks for socio-psychological studies, but this point is problematic if one tries to transfer Butler's concept into the framework of empirical research. The main problem with Butler's work is thus that it remains unclear how people negotiate subject positions in everyday situations.

For West and Zimmerman doing gender happens in social inter-actions, and psychological elements remain unconsidered. In Butler's work, in contrast, psychological processes are central, but she neglects concrete situations in which gender is done. Whereas Butler offers a concept of change through the creation of more intelligible subject positions, for West and Zimmerman it appears that change can happen only if gender as a social category loses its ability to structure society. For West and Zimmerman the main focus is gender-conformative behaviour, and they are thereby able to show how gender norms emerge from social interactions. Butler, in contrast, shows how Discourses and norms constitute subjects. The two concepts are markedly different, and Moloney and Fenstermaker rightly warn that they 'should not be used interchangeably or treated as synonymous with one another' (2002: 203). I agree that there are major theoretical differences and therefore that the two concepts are clearly not synonymous. At the same time, it seems that the two approaches look at similar processes of doing gender from different sides. As each approach has weaknesses the other approach could alleviate, I think it is useful carefully to combine both approaches. It may as a result be possible to see a fuller picture of what the concept of gender as a performance means.

The main areas for synergies are the resources available to do gender and the empirical application. The ethnomethodological approach has its strengths in showing in concrete situations how people are required to do gender in interactions. In contrast, it remains rather unclear how gender as a doing can be empirically traced in Butler's conceptualisation, as she does not provide a fine-grained analysis of situations. Butler's

strengths lie in her ability to theorise how Discourses are productive of gendered subjects and identities. One may say that whereas the ethno-methodological approach focuses on the production side (subject as producing norms), the discursive/poststructural approach explores the produced side (subject as produced by Discourses). Both sides are needed to understand which resources people are able to draw on in a situation to constitute their subjectivities. In this sense, one needs to illumin-ate which subject positions are opened by Discourses, which positions individuals decide to take on and how this produces norms. If we study only one side, our analysis of how gender is done in a situation may be incomplete. Neither the empirical detail of ethnomethodological analyses nor the philosophical sophistication of Butler's concept is suf-ficient to illuminate how performing gender happens in concrete situ-ations. The link between the production side and the produced side is viewing the positioning process as a central element of the study of the resources people draw on to construct their selves. To transform this epistemological basis into a workable methodology, I now turn to an approach which implicitly combines the discursive/poststructural and ethnomethodological approaches, though not through a concept of performing gender.

Discourse analysis

Although both approaches to gender as a doing are valuable in under-standing the processes of gender, they stand as rather separate. In this section I offer a way by which the two approaches could be combined through a discourse analysis (henceforth DA) as developed by Potter and Wetherell (1987). This is an important stepping stone to devel-oping a discourse analytic model of performing gender. D/discourse and D/discourse analysis are both contested terms, and divergent approaches lay claim to these terms (for a discussion of definitions see Parker, 1990a; Potter *et al*., 1990). The term D/discourse is thus 'wide-ranging and slippery' (Taylor, 2001a: 8). I refer to only one of these discursive struggles because it is central to some of the issues discussed in this work. In the poststructuralist and particularly the Foucauldian use of the term, Discourse denotes a group of transformative statements which are constitutive of practices (Potter, 1997; Potter *et al*., 1990).[8] Those large Discourses or 'dispositives' affect wider societal practices. In contrast, Potter and Wetherell, to whom I mainly refer in this section, use discourse to encompass 'all forms of spoken interaction, formal and informal, and written texts of all kinds' (1987: 7). Therefore, discourse

refers to talk or text in action, is localised and is context-specific. In addition to the speech act itself, in a DA the order and organisation of language and its function are analysed (Tonkiss, 1998: 247). Whereas a Foucauldian Discourse analysis would focus on larger and wider Discourses, a DA as developed by Potter and Wetherell is more, but not exclusively, concerned with the fine-grained analysis of language, its organisation and its functions. Therefore, in accordance with Alvesson (2002: 68),[9] I use 'Discourse' for the Foucauldian approach and 'discourse' for the approach of Potter and Wetherell. Potter and Wetherell were aware of these definitional problems but nevertheless opted for the term 'discourse analysis' (Potter *et al.*, 1990: 207). They define DA as follows: 'Discourse analysis focuses on talk and texts as social practices and on the resources that are drawn on to enable those practices' (Potter, 1996b: 129).

DA was developed in social psychology and is used in various fields, but it tends to be practised rather on the margins of a discipline, regularly blurring disciplinary boundaries (Potter, 1996b). DA draws on three main bodies of work: linguistic philosophy, ethnomethodology and poststructuralism (Gill, 1996; 2000; Potter and Wetherell, 1987; Wetherell *et al.*, 1987). Ideas taken from linguistic philosophy, and particularly from Austin, are linked to the consequential or performative nature of language. Ethnomethodologists – or conversation analysts, to be more specific – stress the functional orientation of language and take discourse as a topic in its own right, which is central for DA. From poststructuralist thought derives the notion of language as a constructive and non-neutral medium of transmitting meaning. Gill (2000) points out that one can include the rhetorical analysis based mainly on Billig's work (1978; Billig *et al.*, 1988) as an influencing factor for DA. Potter (1996a: 106), for instance, stresses that rhetoric is to be understood not only as a way to persuade others but also as a way through which a common understanding of and agreement on reality is achieved. This does not mean that one can just mix and match approaches which appear otherwise incompatible. Instead, different approaches, with their strengths and weaknesses, are evaluated, and a new approach is developed from this evaluation (Wetherell and Potter, 1988). This new approach can best be illustrated by looking at the tenets of a DA.

A DA could be described as having six overlapping tenets. First, in a DA discourse is seen as a *social practice*, as something people *do* that is socially meaningful. Second, discourse is a *topic in its own right* (Potter and Wetherell, 1987: 35). This means that discourse is not used as a proxy to tell us something about things that are situated beyond the

text (1987: 49). It is not a tool to establish what 'really' happened in a situation; the focus is on texts and their function in context. Therefore accounts should be taken not as accurate descriptions (1987: 67; see also Wetherell and Potter, 1988) but as ways in which subject positions are negotiated and taken on. Third, discourse is *constructed* and is *constructive* of the social world. In using language people construct one preferred version of the world (Potter and Wetherell, 1987: 33). As Potter and Wetherell point out, people use pre-existing linguistic resources for these constructions. There are various competing resources, and people select between them, which involves preference. The accounts people give have specific consequences, which do not have to be deliberate and intentional (1987: 34). Through this selection one version of the world is constructed; in other words, '[i]n a profound sense, accounts 'construct' reality' (1987: 34). One focus is, therefore, on how 'facts' are constructed or made to appear factual (Potter, 1996a).

Fourth, discourse is *action-oriented* and *functional*. This means that people *do* things with discourse (e.g. Potter and Wetherell, 1987: 6). By structuring discourse in one way, one version is preferred and others discounted, and those discourses have specific consequences. Inevitably, there are variations in the accounts people construct, because their function can vary. Therefore, in a DA variation is not reduced but employed to show which specific functions variations serve by revealing the organisation of discourse (1987: 64, 67). Fifth, discourse is *occasioned*. As accounts can vary widely, variation means that the functions of discourse can be evaluated only in relation to specific contexts. Potter and Wetherell specify that the context can be specific to an interview segment or global, such as that people tend to present themselves in interviews in a positive light. Finally, discourse is *rhetorically organised*. Discourse is organised to persuade and present one version as the most convincing one, often to reach a consensus on how reality is to be seen (1987: 47).

In a DA we ask how discourse is organised and structured, what consequences this organisation has and what this tells us about a wider system of sense making. The central questions of discourse analyses are 'how is participants' language constructed, and what are the consequences of different types of construction?' (Potter and Wetherell, 1987: 55). In a DA one questions how discourse is made convincing and which resources are used to create this convincing version (Potter, 1997). It is assumed that this construction of reality has specific consequences, as illustrated, for instance, in relation to racist inequality (Billig, 1978; Wetherell and Potter, 1992) or gender inequality (Gill, 1993; Peel, 2001; Riley, 2002; Wetherell *et al.*, 1987).

One of the key tools used to analyse discourse is the *interpretative repertoire*. Interpretative repertoires are repeatedly encountered constructions used in sense-making processes. Potter and Wetherell explain that '[i]nterpretative repertoires are recurrently used systems of terms used for characterizing and evaluating actions, events and other phenomena. A repertoire … is constituted through a limited range of terms used in particular stylistic and grammatical construction' (1987: 149; for a similar definition see Wetherell and Potter, 1988: 172). They describe the interpretative repertoire as a register or lexicon (1987: 138) and compare it to the repertoire of a ballet dancer, who can select between different moves to construct a certain meaning (Potter *et al.*, 1990: 212). An interpretative repertoire is part of 'commonsense' knowledge, a 'collectively shared social consensus', the 'winning argument' and an 'everyday explanation' (Edley and Wetherell, 2001; Potter, 1996b; Wetherell *et al.*, 1987). In other words, an interpretative repertoire is what is commonly referred to in accounting for a version of the world. An interpretative repertoire has an 'off-the-shelf' character and is like a building block, but it can be used flexibly in situations (Potter, 1996b). Apparently inconsistent repertoires are regularly deployed in different passages of a text and even together (Wetherell and Potter, 1988: 178). This variability is central to a DA, as it gives insight into which function the repertoire fulfils in a context.

To define interpretative repertoires Potter and Wetherell (1987: 146ff.) use Gilbert and Mulkay's work on scientists' discourse. Gilbert and Mulkay (1984) found that scientists draw on two different repertoires: in formal discourses, the scientists use an 'empiricist repertoire', presenting research as the logical outcome of the correct application of the neutral and impersonal scientific method; in informal situations, science is described as influenced by the researcher, speculative and dependent on personal interactions, which is the 'contingent repertoire'. Scientists adapt their versions of 'how it is' to the situation. For each of the repertoires recurring language constructions are used. The interpretative repertoire is often compared to the Discourses or dispositives in Foucauldian theories, but interpretative repertoires tend to be smaller and less monolithic and suggest more agency than is often implied in the Foucauldian notion of subjectification (Edley, 2001b). Interpretative repertoires are closely linked to subject positions (see later, particularly Potter *et al.*, 1990; Wetherell, 1998). In a poststructural understanding Discourses open subject positions, interpellate subjects and thereby create these subjects. Here, interpretative repertoires open subject positions, but only certain subject positions are allowed. People

then negotiate which subject positions they reject or take on, allowing for a more agentic perspective on subject constitution. Interpretative repertoires therefore refer to the resources on which people can draw in a given situation to construct themselves in a certain way.

A DA is, for instance, useful for exploring how categories are achieved and what purpose they serve (Potter and Wetherell, 1987: 116). In a DA categories are seen not as existing naturally but as socially constructed (1987: 116). In constructing a category certain features are included and others excluded, and categories need to be constantly reconstituted by doing boundary work. The construction of categories is action-oriented and functional, as they are used, for instance, to segregate society. The importance for gender studies is rather obvious, and Potter and Wetherell themselves state that a DA allows the constructedness of taken-for-granted categories such as gender to be shown (1987: 156). In another piece Wetherell (1997) proposes that discourses about femininity and masculinity are ideological practices. Masculinity and femininity appear as stable and natural precisely because of an operating gender ideology (1997: 149). Wetherell suggests,

> Gender … is not a matter of consistent unitary single identities, 'male' and 'female', but develops from contradictory and frequently fragmented pieces of discourse, repertoires, and accounting systems available to individuals to make sense of their position, and which historically and consistently have come to be marked as feminine and masculine responses. (1997: 150)

Consequently, gender categories are the product of a practised ideology. They are constructed and have specific effects; in this case they create the basis for inequality.

Practical ideologies are employed in everyday talk and are shared by certain groups to legitimate, for instance, inequality. Ideology is not used in the Marxist sense of a false consciousness but to describe certain relationships and effects (Parker, 1990a: 90). Ideology denotes that discourses satisfy the function to justify, maintain or challenge power relations in society. Wetherell, Stiven and Potter define practical ideologies as 'the often contradictory and fragmentary complexes of notions, norms and models which guide conduct and allow for its justification and rationalization' (1987: 60). In a study of final-year undergraduate students they show how these students see their employment prospects and how they make sense of gender (in)equality (1987). In particular, they stress how collectively shared practical ideologies lead to women

and men taking up the positions which society assigns to them. There is, for instance, an affirmation of liberal discourses which would allow for social change, but by referring to practical considerations, it appears unlikely that these social changes will happen. In another study, Gill (1993) traces how radio disc jockeys talk about the reasons there are so few women working on the microphone in radio stations. The aim is not to find the reasons for women's underrepresentation but to explore the sense-making processes people use and how these processes act in concert to 'justify injustice' and to perpetuate gender inequality. One last study which should be mentioned explored the resources men use to make sense of feminists and feminism (Edley and Wetherell, 2001). In this study feminists are constructed by research participants as either normal and following a reasonable goal or as unfeminine, extreme and monstrous. The research provides insight into the operation of ideology with regard to feminism and can be used to shed light on why feminism may be resisted in society. Practical ideologies are immensely helpful to show which functions discourses serve.

It is possible for interpretative repertoires to open subject positions which are conflicting. These situations in which the individual is faced with conflicting demands are termed *ideological dilemmas* (Billig *et al.*, 1988). As noted above, 'ideology' here does not refer to the Marxist use of the term as an intellectual ideology that is disguised from people. Billig and co-authors develop ideology as something that is lived, multiple and variable. The assumption is that commonsense knowledge contains various contradictory elements which people use to make sense of their selves. People can articulate the conflicting demands and need to find a position appropriate for a situation (1988: 8). One can illustrate this with a study of young men (Edley and Wetherell, 1999) who were trapped in an ideological dilemma around a 'theory/practice', or *'de jure/de facto'*, divide. In theory those young men support equal opportunities and they reject sexist subject positions. In practice they see that gender equality is difficult to achieve and often even unrealisable. The reasons they deploy to account for positions which could be named 'sexist' are linked to women's natural childbearing function or men's breadwinner function. Edley and Wetherell (1999) are able to show how two apparently inconsistent repertoires open contradicting subject positions, which is an ideological dilemma. In taking a position the discursive work the young men are doing leads to a justification and perpetuation of unequal gender relations which are, however, embedded in affirmations of gender inequality.

When people position themselves in relation to subject positions, they are doing *identity work*. As the DA developed by Potter and Wetherell is influenced by poststructuralism (1987: 102), their work does not aim at revealing the true nature of selves but shows instead how selves are constructed and presented as stable. The way in which a self is constructed is identity work (Antaki and Widdicombe, 1998; Edley and Wetherell, 2001; Wetherell *et al.*, 1987; particularly, Widdicombe, 1998). In the examples considered before, not only are the repertoires used shown, but it becomes clearer how people position themselves and create themselves as certain types of people (Edley and Wetherell, 1999; Wetherell *et al.*, 1987). In these interview situations the participants construct their selves, and the accounts they produce are made convincing and reasonable. Participants create their identities in this situation by drawing on interpretative repertoires and negotiating subject positions. Thus people construct their sense of self and are 'doing identity'. In the concepts of gender as a doing outlined earlier, not only is gender done, but people also construct gendered identities. As a DA illuminates precisely the process of adopting certain positions to construct an identity, a discourse analytic approach using the interwoven concepts of interpretative repertoire, subject position and ideological dilemma seems highly suitable for developing the model of doing gender further.

A discourse analytic understanding of performing gender

Having outlined the discourse analytic approach, I can now show how far a DA could function to link the ethnomethodological and discursive/ poststructural perspectives on gender as a performance. To summarise the previous arguments: the ethnomethodological approach shows how gender is done in interaction, but the exclusive focus on the interaction leaves little room to show which resources individuals can select between and which psychological processes are involved in doing gender. The discursive/poststructural approach is able to demonstrate the influence Discourses have on the formation of subjects, but it does not show how a 'doing gender' happens in concrete situations. Analysing these two sides seems to be vital to elucidate 'doing gender' processes, because only then it is possible to explore what it means to perform gender and to be performed by gender.

I am not the first person to attempt such a reconciliation. Maihofer (2004a; 2004b) discussed the different understandings of doing gender in an attempt to combine them, as did McIlvenny (2002). A similar understanding of gender as a process is used by Wetherell and Edley

(Edley, 2001b; Edley and Wetherell, 1999; 2001; Wetherell, 1998; Wetherell and Edley, 1998; 1999), but here the influences of ethno-methodological and discursive/poststructural perspectives on gender as a process are made less explicit. An explicit attempt to reconcile the two approaches to gender as a practice through a conversation analysis-inspired DA is provided by Speer (1999; 2001a; 2002a; 2002b; 2005; Speer and Potter, 2000; 2002). Speer's attempt is impressive and well argued. She first outlines how language and gender research often falls into the essentialist trap of proclaiming that gender is socially constructed and then treating gender as a variable (2005: ch. 2). She then moves to how Butler's, Garfinkel's and Kessler and McKenna's understandings of gender as a process could overcome this problem (2005: ch. 3). To combine the two approaches, Speer compares discursive psychology approaches such as DA with conversation analysis. Much of her work reads like a defence of why conversation analysis can be used for feminist goals, and she responds to feminist reservations about adopting conversation analytic method that appears to be positivist (Hollway, 1989) and to disallow political interventions (Wetherell, 1998). Speer argues convincingly that conversation analysis can and should be used for feminist goals as it pays close attention to the data collected rather than imposing a political agenda on the material. She refers in particular to discursive psychology and certain more poststructurally inspired versions of DA in outlining that one does not have to look beyond to see what the text achieves (2001a; 2005: ch. 5). She also argues that we do not have to look inside a participant's skull to understand heteronormativity in cultures (2005: ch. 6). Responding to the criticism of conversation analysis's apoliticalness, Speer (1999; 2005: 176ff.) argues that politics can follow the analysis but should not guide it. She makes a strong case for putting reflexivity into practice, mainly by considering the impact of the researcher on the material in better ways and using real-life material to show doing gender rather than relying on interviews (2002b; 2005: postcript). In all, Speer makes a convincing case for using a conversation analysis-aligned DA to show doing gender.

Although Speer is careful to avoid constructing conversation analysis as paradigmatic and to allow that different approaches may be used in different situations, she strongly proclaims that conversation analysis is a superior way of showing how gender is done in most research (2005: postscript). In her own work Speer treats academic texts like texts analysed with a conversation analysis or DA and regularly quotes snippets from texts which appear partly decontextualised. One of the aspects on Speer's work I find most problematic, however, is that she seems to

suggest that research should focus on more 'solid' and closer rather than wider interpretations of material. In proclaiming a participant-centred approach to study texts, she advocates interpreting the text through a close reading. She thereby leans towards the ethnomethodological side of understanding doing gender, and one is sometimes left wondering what happened to Butler's theories or the wider picture in general in the empirical re-analysis Speer provides. Butler's take on gender as a social practice and the consideration of a wider picture in general are vital for understanding how subjects are constituted. I make a case for giving equal weight to the discursive/poststructural side and the ethnomethodological side, as only then it is possible to understand doing gender in a fuller version. For argument's sake, I return to the basis of why a DA provides a useful way to research doing gender and specify my appropriation of some of the concepts discussed earlier.

The potential of transforming DA into a tool to analyse performing gender lies in the fact that a DA combines, on a formal level, the ethnomethodological and discursive/poststructural perspectives. Potter and Wetherell's DA is based on ethnomethodology, and particularly conversation analysis, speech act theory and poststructuralism. Even though Potter and Wetherell are inspired by ethnomethodology and poststructualism, they argue that neither approach is sufficient on its own to show the function of discourses in a context. Wetherell summarises the limitations of each approach as follows:

> If the problem with post-structuralist analysts is that they rarely focus on actual social interaction, then the problem with conversation analysts is that they rarely raise their eyes from the next turn in the conversation, and, further, this is not an entire conversation or sizeable slice of social life but usually a tiny fragment. (1998: 402)

Ethnomethodologists and conversation analysts are unable – and, indeed, unwilling – to elucidate broader elements such as the functioning of ideology, and although poststructural scholars regularly draw on broader social frames of meaning, they often fail to illustrate how those operate in concrete situations. This critique resembles my criticism of the 'doing gender' approaches and, as I do, Wetherell argues for a 'synthetic approach' (1998: 405) combining conversation analysis and poststructural thought in the form of a DA. A DA overcomes the individual limitations of the ethnomethodological and discursive/poststructural approaches because it combines the analysis of global frames of meaning and the situational accomplishment of identities.

One could grossly simplify the differences between the approaches of West and Zimmerman and Butler to the difference between focusing on sociological or psychological dimensions. In discursive psychology in general, of which DA is part, it was recognised some time ago that the social and the psychological perspectives have to be studied as intertwined (Henriques *et al.*, 1984). Only in studying how the social and psychological dimensions are related is it possible to make statements about subject formation. If we turn to the media, it is evident that the media construct an idealised femininity to which many women aspire (e.g. Kilbourne, 1995; MacDonald, 1995; Massoni, 2004; van Zoonen, 1994). These discourses provide the material on which the discursive position 'woman' can be articulated, and the discourses regulate what is normal behaviour for a woman. However, these discourses are never adopted one-to-one, as they are negotiated and selectively incorporated into an identity. People position themselves in relation to discourses and thereby create new versions of discourses. The idea of positioning is influenced by Davies and Harré (1990), whose work is complementary to DA (Wetherell, 1998). Davies and Harré (1990) argue that discourses provide subject positions, but that how the subject positions are taken up depends on the individual. Gavey (1997: 54), in particular, stresses the choice involved in this process; that is, one can take on one or the other position. One can add that one could also take on only parts of a discourse and reject others. However, in most situations, taking a position does not feel like much of a choice, as there seem to be social forces at work influencing people in their negotiation of subject positions.

The 'inner' and 'outer' worlds are linked through identities. Hall defines identity in the following way:

> I use 'identity' to refer to the meeting point, the point of suture, between on the one hand the discourses and practices, which attempt to 'interpellate', speak to us or hail us into place as the social subject of particular discourses, and on the other hand, the processes, which produce subjectivities, which construct us as subjects which can be 'spoken'. Identities are thus points of temporary attachment to the subject positions which discursive practices construct for us. (1996b: 5–6)

For Hall (1996b) identities are non-essentialist, multiple and fluid, and they are constituted through psychic processes relating to difference and the Other. Psychoanalysis proves helpful in elucidating identity formation and subject positioning further. Hollway (1984; 1989) and Walkerdine (1997; 2003; Walkerdine *et al.*, 2001)

have explored the links between inner and outer worlds in relation to gender by drawing on psychoanalysis and particularly the psycho-analysis developed by Melanie Klein. In Kleinian psychoanalysis the external world is linked to the internal world through defence mech-anisms such as introjection and splitting. Hollway (1984; 1989; Hollway and Jefferson, 2000) argues that the external world is split into desired and undesired characteristics and into elements that belong to one-self (I) and elements that belong to another person (Other). Elements which are thought to belong to another person are rejected or defended against as 'not me', whereas the others are introjected as identification. In a study of how people deal with anxiety related to crime, Hollway and Jefferson (2000: 23) show how people become defended subjects through investing in certain discourses which protect against anxiety and facilitate identification.

In her research on heterosexual couples, Hollway (1984; 1989) ana-lyses how gender-differentiated meaning is (re)produced in uncon-scious dynamics between people. She shows how the splitting works in the relationship between Will and Beverly to position Beverly as the one who does the 'feeling' and Will as the one who does the 'coping'. This splitting of characteristics functions as a way of con-structing Will's masculine gender subjectivity and Beverly's feminine gender subjectivity. It reproduces gender meaning through intersub-jective relations where certain characteristics are rejected and others are drawn into the self. To explain this process Hollway (1984: 251) coins the term 'investment', which is related to Freud's use of the term *Besetzung* (commonly translated as 'cathexis'). Hollway conveys thereby that taking on certain subject positions entails rewards, such as counting as a woman and defending against anxiety. One identifies with one subject position and adopts this subject position through introjection, but at the same one defends against subject positions not in line with one's own identification. To these subject positions are attached forms of anxiety, such as not counting as a 'proper man'.[10] Hollway writes that 'meaning is suppressed or expressed as a con-sequence of its effects on the subjective experience of vulnerability and power' (1989: 67). Thus, by enacting femininity or masculinity, a form of power unfolds. Walkerdine (1997) raises a similar point in relation to girls' and women's excellent performance. She argues that excelling in certain areas is often seen as something unfeminine, and therefore girls and women shy away from showing an excellent per-formance or reduce and minimise their abilities. In this case women defend against what is perceived as being not them and as belonging

to someone else. The psychoanalytic concept of gendered positioning would thus allow for seeing what drives people to adopt certain subject positions.

However, how much psychoanalysis can and should inform DA is highly contested (e.g. Hollway and Jefferson, 2005a; 2005b; Wetherell, 2005). Psychoanalysis appears to be helpful in understanding the gender subject constitution process as outlined by Butler. Hollway's work supplements this understanding. Hollway (with Jefferson) argues that we need to look at the 'histories of individuals' (2005b: 149) to understand their investments in particular forms of self-presentation. It is thus the individual history that explains certain investments in subject positions. Wetherell (2003; 2005) and other discourse analysts remain sceptical that one has to look at the history of people to understand their situational positioning. For Hollway (Hollway and Jefferson, 2005b) it is evident that an interviewee recounts a real event and this gives insight into unconscious processes, whereas Wetherell (2005) would look at the accounting structure a person uses in a certain situation such as an interview. The focus of the latter would be how people articulate the stakes they have in what they say and do and which language strategies they use to do so (Edwards, 2000; Pomerantz, 1986; Potter, 1996a: 124ff.; Speer, 2005: 162ff.). As outlined before, a discourse analyst assumes that these positions change with the discursive context and that different resources are mobilised in different situations. Wetherell (2003; 2005) sees looking at the history of people as individualising this person and his or her inner world while neglecting the social dimension of the account. Although psychoanalysis is helpful to understand the Butlerian gender constitution process, my interest is less in how histories shape individuals' investments in certain subject positions and more in how people take positions and do gender within a situation without necessarily making a statement about how previous events have shaped this positioning. Although I look mainly at how gender is done in a specific situation, I return to the importance of the histories of people in my conclusion (Chapter 7).

As I have argued so far, a DA is suited to the composition of a discourse analytic concept of performing gender because it combines how discourse is produced in a specific situation with how the larger frames of meaning influence the subject constitution. However, the latter point poses the problem of how much that lies outside the text itself can actually be included in the analysis. Most notably, Potter and Wetherell seem now to work in slightly different directions in this respect. Potter (1997; Speer and Potter, 2000) focuses more on participants' orientation.

Through looking at what research participants orient to, the researcher's influence and the risk of imposing the researcher's own ideology on the texts studied are reduced. However, this assertion is the subject of intense debate (Billig, 1999; Edley, 2001a; Schegloff, 1997; 1998; 1999; Speer, 2001b; Wetherell, 1998). Wetherell (Edley and Wetherell, 1999; 2001; Wetherell, 1998; Wetherell and Edley, 1998; 1999), in contrast, focuses more on how power and ideology influence and emerge from the participants' accounts.[11] Thus it is necessary to draw on wider ideological patterns which may not be voiced directly in a situation. This shows that a version of the ethnomethodological-poststructural split which has been prominent in much social science theory, particularly in relation to gender, recurs within DA itself.

This problem of whether to focus on ideology or participants' orientation in relation to gender has been the subject of a debate between Speer and Edley (Edley, 2001a; Speer, 2001a; 2001b). Speer (2001a; 2005) argues that researchers should stick with 'how' certain discursive functions are achieved rather than venture beyond the text itself to explain the 'why'. She re-analysed Edley and Wetherell's research material on hegemonic masculinity. For her Edley and Wetherell impose the concept of hegemonic masculinity onto the text. This is problematic for Speer, as the men interviewed seem to have different concepts of hegemonic masculinity and shift between them. Consequently, she argues that Edley and Wetherell impose their own terms of reference onto the material and thereby reify the notion of hegemonic masculinity rather than show how such a concept is used by the research participants. Would this mean, then, that researchers have to confine their analysis to what is said in the text itself to develop what people define as ideologies?

To shed some light on this question, it is necessary to clarify what one of the most contested terms in social theory, 'ideology', denotes. Ideologies could be understood in the pure Marxist sense (Marx and Engels, 1976) as false consciousness through which the ruling class controls people's minds and an external reality is disguised. In an Althusserian version of ideology (Althusser, 1984), individuals are transformed into subjects through institutions which reproduce the prevailing system. As discussed earlier in relation to Butler, this functions by interpellating people and constituting them as subject.[12] Both definitions influenced Hall's concept of ideology:

> the mental frameworks – the languages, the concepts, categories, imagery of thought, and the systems of representation – which different

classes and social groups deploy in order to make sense of, define, figure out and render intelligible the way society works. (1996a: 26)

If we return to Hall's concept of identity, the way in which ideology works is through creating subject positions. Ideologies thus function as a link between society and psychic structures. As such, ideologies are of major interest in DA, and particularly illuminating is Billig's work in this respect. As noted above, Billig does not use the term 'ideology' in the sense of a false consciousness but rather as a lived and practised ideology and as the sum of beliefs, values, ideas and practices existing in a society (Billig, 1991; Billig *et al.*, 1988).[13] According to Billig, ideologies are the 'unnoticed habits of life' (1999: 548) which are taken for granted and therefore often go unseen because they are so integral to everyday thinking and common sense. Here, ideology is infused with power relations, but not in the way in which the ruling class influences the sense making of society; rather, ideology is seen as rhetorical and paradoxical, which means that people have to navigate between different ideological dilemmas.

If one studies the commonsense structure of sense making, then it may be important to depart from studying only the text that emerges directly from a situation. It is, for instance, important to study what is not said in a situation and glossed over to avoid unfavourable subject positions (Billig, 1991; Gill, 1993). These silences can be studied by deducting what a person could be expected to have known but did not use in a situation (Huckin, 2002) or by looking at interpretative repertoires and subject positions which are used in other discursive contexts. This is comparable to what Chomsky (1965) has referred to as 'competence', the general ability to say something which is not performed in the utterance. In this situation it is necessary to depart from what is literally said in an utterance and include other material and exercise independent judgement (Billig, 1988).

This position opens simultaneously the opportunity to render the researcher visible in research rather than convey the image that the knowledge generated is created without the active participation of the researcher. Although Speer (2002b; 2005: postscript) considers the influence of the researcher on the creation of the research material, she is very careful to detach the researcher from the analysis of the material. The researcher is assumed to look only within the text and not to use his or her own frames of meaning. Only after analysing the text is the researcher able to infuse his or her own political interests into the research (2005: 176ff.). This rigorous and detached analysis is

one of the reasons feminist researchers perceive conversation analysis as positivist. What Speer seems to propose here but not in other parts of the research comes close to a god's view from nowhere and dislocates the researcher in the research (Code, 1993; Gill, 1998; Haraway, 1991; Harding, 1986; Rich, 1986). The researcher's own location influences not only the collection of the material but also every level of interpretation. Speer rightly asserts elsewhere that knowledge is always situated and partial but does not discuss that what one may notice in a text depends on one's own background. Much feminist research has been concerned with making one's own position visible in how texts are studied. Edley (2001a: 137) raises this point about what 'she [Speer] already knows' for situations when she interprets participants' talk using her own words. Speer (2001b) replies that changing words is a normal scholarly habit, but what she fails to mention is that these scholarly habits are influenced by her own location and that her own interpretation is situated and partial. The researcher can ultimately empower and discount perspectives (Gill, 1995; Parker, 1990b), but any readings of texts are interpretations and as such infused with the researcher's own background and open to interpretations by others (Parker, 1988). If this is taken seriously, then interpretations relating closely to the text as well as to ideological constructs will reflect my own location and there is no reason to focus solely on texts *per se*.

Indeed, focusing on larger frames of meaning can highlight elements linked to wider social theory that a close analysis of texts alone may not. To advance the discourse analytic model of performing gender, it is useful to take a closer look at how larger frames of meaning can be incorporated. Ideology is not consistent, and there are conflicting demands on individuals which result in ideological dilemmas (Billig *et al.*, 1988). In a study of how young men imagine their futures, Edley and Wetherell (1999) are able to show how these young men are caught in the dilemma of wanting to be gender egalitarian in theory but simultaneously acknowledging that this might be difficult to achieve in practice. Although Edley and Wetherell start from recent changes in men's identity constitution, one could probably take their findings a step further. The fact that young men confront a specific form of ideological dilemma is a result of changes in the ideology. It is no longer acceptable to display an openly sexist attitude where women are said to belong in the home. Instead, people portray themselves as believers in equality and try to adopt new subject positions which for them are not fully occupiable because of practical considerations. As such an ideological dilemma would probably not have existed when men in the 1950s were interviewed, changes in ideology

and society become visible through the accounts and there are changes in which subjects constitute themselves. Clearly, old ways of thinking may continue to exist, but there are also new ways in which sense is made of gender (Hollway, 1984). Thus changes in ideology and subject formation can be traced by exploring how these tendencies of change and continuity interact to create new frames of meaning. As this research is concerned with change and continuity in gender at work, studying subject positions themselves allows us to see how old frames of meaning exist alongside new ones and how new gender logic may emerge.

Therefore, it is vital for the aim of this study to incorporate wider frames of meaning, even though one may then have to move beyond the text created in the situation itself. Without doing so, it may be difficult to see changes and continuities in mental frames and how elements glossed over are nevertheless vital to understand the functioning of these frames of meaning. This does not mean that one returns to notions of false consciousness which people are unable to articulate; rather, through a DA one can show how people negotiate, adopt and challenge these ideologies. Lived ideologies are not opaque, and people can articulate them even though that may not choose the same words as the analyst – which is, indeed, very unlikely (Billig, 1999; Edley, 2001a). It also important to note that these ideological debates between conversation analysis-aligned DA and poststructurally inspired DA do not lead to a theoretical conservatism which privileges one version. Indeed, research may use different approaches looking either at the more local level through a conversation analysis-aligned DA or at a more global level through a poststructurally inspired DA depending on the aims of the research and the particular text at hand.

It could be argued that a potential limitation of DA in respect to the ethnomethodological and discursive/poststructural concept of performing gender is that the original approaches are theoretically not confined to spoken and written texts. Gestures, postures and dress are equally important elements through which gender is done. Therefore, if we focus on spoken discourse in a situation, many other relevant elements which are ways of doing gender are ignored. The danger is that the understanding of gender as a doing may be reduced to language in action, which may as a concept be unable to capture the subtleties of gender as a practice. The reasons to focus on discourse in action are that language is fairly accessible for research and that it allows subject constitution processes in a situation to be shown. Conversation analytic studies tend to focus on spoken or written texts; poststructurally inspired discourse analyses are less likely to see the boundaries of discourse as relating

only to spoken and written text. As Wetherell (2001: 390ff.) states, in Foucauldian studies no difference is made between material and linguistic practices, as they all draw on the same 'epistemic regime'. Thus, texts may also include semiotic texts (Fairclough, 2005).[14] Therefore, I use 'discourse' to refer to spoken, written and enacted texts. Making no distinction between material and verbal practices is overall more in tune with poststructurally inspired discourse analyses. Postures, gestures and the way one dresses are references to subject positions and draw on similar repertoires to language. Through observations these enacted texts may be included and could enrich a discourse analytic model of performing gender.

My research aims to show how changes at work and in gender interact by looking at how subject positions are negotiated. Thus it would be possible to define 'Discourse' or 'ideology' as the sum of different subject positions and interpretative repertoires existing in a society. However, within these Discourses and ideologies certain positions appear more acceptable in a situation than others, which would make them hegemonic. The current gender ideology means that subject positions are gender differentiated and, according to Butler, call gender-differentiated subjects into being. The emergence of these gender norms can be analysed by studying 'doing gender' in interactions, as West and Zimmerman are proposing. Therefore, it is possible to see how the gender binary is reinstated afresh in interactions and how the gender ideology is affirmed. Gender has to be done, as it is a basic organising principle of society, which may change when society itself changes. Doing gender is, then, the process by which individuals select among different subject positions in a situation, such as an interview. Subject positions are gendered, and by drawing on them people create themselves as men or women.[15] Subject positions can, however, be conflicting, which creates the potential for an ideological dilemma, but it is precisely through these ideological dilemmas that it becomes visible that there is a change in which subject positions are made available within Discourse. The discourse analytic model of doing gender is able to show how subjects are constituted in concrete situations by drawing on and creating gender by combining the insight of the ethnomethodological and discursive/poststructural models for performing gender.

Conclusion

In this chapter, I have discussed two prominent theories of gender as a social process, and I have shown that the ethnomethodological

approach highlights social interaction in which gender is enacted and how gender norms are produced; the poststructural/discursive approach engages with the psychic processes of how subjects are constituted by Discourse. The two approaches are highly useful for an understanding of gender, but I have pointed out that additional insight into gender as a social process and what it means to perform, and to be performed by, gender could derive from combining the two approaches. For this purpose a DA is particularly suitable, as it combines views of being produced by and being a producer of shared mental frames of meaning. As a DA does not look specifically at how gender is performed, I have developed a discourse analytic model of performing gender in which identities are linked through socio-psychic processes with frames of meaning. Thus it is possible to see how a 'doing' in a particular situation is influenced by and produces larger frames of meaning. By studying subject positioning processes it is possible to trace which resources people have access to and which ideological dilemmas they may confront. Ideological dilemmas are vital for this research as they allow us to see changes and continuities in thinking about gender and work.

4
Ideal Workers, Ideal Gender

As we saw in Chapter 2, there have been substantial changes in the world of work. With these changes, individuals are being encouraged to work flexibly and to operate like small firms (Beck, 2000b; Castells, 2004a; Pongratz and Voß, 2003; Sennett, 1998). Whereas in old employment relations the ideal worker was regularly conceptualised as masculine (e.g. Acker, 1990; Benschop and Doorewaard, 1998a; 1998b; Gherardi, 1995; Puwar, 2004; Wajcman, 1998), the new skills profile that is emerging appears to be saturated with femininity (Adkins, 2000; 2002; Castells, 2000: 12). This is also the case in technical work (Donato, 1990; Funken, 1998; Panteli *et al.*, 2001; Wright and Jacobs, 1995). However, as I argued in Chapter 2, the skills attribution and recognition process is a gendered one (Cockburn, 1983; Fletcher, 1999; Frenkel, 2008; Peterson, 2005; 2007; Phillips and Taylor, 1980; Woodfield, 2000; 2002). Therefore, I provide insight by exploring, first, how ICT workers themselves construct the ideal worker and, second, how they position themselves in relation to the ideal worker. Third, I show how flexibility is enshrined in the ICT labour process, before I explore, fourth, how skills in ICT work are gendered. I pay particular attention to how gender is performed by constructing the ideal worker and positioning oneself in relation to the ideal worker. I thus show how the work environment itself is changing and what these changes mean in terms of gender. Further detail on the companies discussed here and how the research was conducted can be found in Appendix 2.

Conceptualising the ideal ICT worker

To explore how the ideal ICT worker is conceptualised by ICT workers, I asked research participants which competencies their job required and

what one had to be good at. The most striking feature of the accounts was that the ideal worker was often described as having a mixture of two core competencies: on the one hand being technically competent and on the other hand being emotionally or socially competent. Charlotte (34, Redtech) describes this as a balance:

> *Elisabeth*: What does the ideal worker look like?
> *Charlotte*: Well, we have tried to identify that in seminars and what you need are things like big ears to hear what is going on, a big heart to feel and to have a nice atmosphere. Then of course the competence, well the technical rucksack, which everybody basically has and which he also needs, to do his work. And that is for everybody a personal balance between communication skills and his technical skills.

For Charlotte the ideal worker at Redtech has to mix social or communicative competence and technical competence. Technical competence is a prerequisite for doing the job properly, but it is also important to listen and to feel, and Charlotte uses a quasi-technical language to describe the function of organs: the heart to feel and the ears to hear. Similar metaphors recurred often at Redtech, suggesting that the way to talk about social competence was learnt during the seminars to which Charlotte refers. A similar competence framework was described at Greentech:

> *Elisabeth*: What do you think is important for your job? What do you have to do to do a good job?
> *Waltraud*: (0.6) There are two aspects. The first is the purely technical. You need to have a bit of a flair for this kind of thinking. As I said, or like a medical diagnosis (she compared her job earlier to that of a medical doctor who has to diagnose a disease). You need to have this aptitude. And obviously the training. And secondly, what is very important for my work is to deal with the customer, to make this relationship work.

Waltraud (52, Greentech) describes how, on the one hand, technical skills are crucial and, on the other hand, she has to deal with the customer to create a working relationship. Most people in both companies stressed in parts of the interviews the different skills needed for this type of work, and usually this was through structures such as 'on the one hand and on the other' or 'first and second'. Those sets of skills were usually kept separate, as either technical or social skills. This shows that

the skills were thought of as distinguishable yet both important. In this section I look at the characteristics that the ideal worker at Redtech and Greentech was said to possess, and I flesh out how the technical and social skills were constructed.

Technical competence

I start by looking at how technical competence in the ideal worker was conceptualised. Three repertoires were important here: first, flexibility in updating one's own technology knowledge; second, understanding technology or being able to abstract and apply a methodology; and third, not being a hacker.

One resource which was used regularly by people at Redtech and Greentech related to learning about new technology as a core skill:

> *Elisabeth*:   Which competencies are needed in your workplace?
> *Andrea*:   Which competencies? (-) Well, the most important, one of the most important things is certainly the technical know-how, you should keep that if possible, hold that up and learn and read always new things. Especially the willingness to learn new things.

Andrea (37, Redtech) talks here about willingness to update technical knowledge by learning new things, and she phrases this as a willingness, as if it requires openness not to learn new things about technologies to do the job.

> *Elisabeth*:   My next question is what one needs to be able to do in your profession?
> *Tim*:   Important skills. You have to be flexible. That is something important. (-) To be receptive to all the new things that come up. You basically (-) have to learn something new every year.

Tim (54, Greentech) uses the adjective 'flexible' to describe learning, and flexibility is equated with remaining mentally flexible, because something new to learn emerges regularly. Technical knowledge was seen as a prerequisite in both companies, but it was stressed that one has to learn to keep the knowledge up to date.

In terms of what these technical skills encompass, slightly different resources were used at Redtech and Greentech. At Greentech the emphasis was on understanding technology:

> *Elisabeth*:   In your opinion what would you say you should be able to do in your profession?

> *Vanessa*: (-) One needs to have a technical understanding, you need to enjoy electronics. Enjoy the operating system. Maybe being patient. It sometimes takes more time than you think and (-) the ability to keep going that is certainly a keyword.

For Vanessa (24, Greentech) it is important that one enjoys working with technology and has the stamina to solve a problem. A technical understanding or a flair for technology was seen as important by most people at Greentech. The main work at Greentech involved consulting with organisations about the implementation of new technologies, and thus selling already assembled technology, adapting it and solving problems that customers had with the technology. At Redtech the software an organisation needed was tailor-made, and it was the company's philosophy that university-trained people were better at this work. This is reflected and constructed in the more academic way people at Redtech talked about what skills were needed:

> *Elisabeth*: And which competencies do you need in this profession? What is important? (-) What one has to be able to do? (-) How has the ideal programmer to be?
> *Zacharias*: Difficult to say. Very (-) different abilities, I think. One of the most important things is certainly the ability to abstract, because, er, only then, well I would say that is at the core of our profession.

Zacharias (35, Redtech) explains that the ability to think in abstract terms is central, as it is the basis of software development.

> *Elisabeth*: And which abilities and competencies does one need in this profession?
> *Felix*: Well, abilities, er, (0.5) yes, one has to, one has to be able to think logically, really, well, logically, mathematical-logical, depending on how you define logical. One has to enjoy working with a non-person, the computer, that is not for everyone, to be in an office for most of the time, er (1.0) you need to be good at math or have at least a feeling for it.

Felix (36, Redtech) stresses the ability to think logically, and he specifies this as mathematical logic, the enjoyment of working with a machine and a feeling for maths. Marcel (29, Redtech) also uses academic terms

to express the core skills of software development:

> *Elisabeth*:   And which competencies are of special importance in the profession, what would you say?
> *Marcel*:   (-) Thinking analytically, understanding the problem. Then certainly the methodology, how to solve a problem.

Where Felix stressed the logic of software development, Marcel talks about thinking analytically, which is probably rather similar. Marcel adds that methodology, how to solve a problem, is central at Redtech. The different resources used at Redtech and Greentech reflected and constructed a difference between Redtech as a university-linked start-up and Greentech as a multinational company more distant from academic research.

A third resource used to conceptualise technology at Redtech was the metaphor '[silent] cubby hole'. People who were totally immersed in technology and not very sociable were said to be in their silent cubby holes, and many Redtech employees told me that people in cubby holes are not ideal ICT workers. ICT workers need to be 'proactive', as Andrea (37, Redtech) said, and to be able to approach customers and colleagues, which is diametrically opposed to being in a cubby hole. Esther (33, Redtech) provides a nice illustration of this:

> *Esther*:   Well, my computer is basically only a complicated lamp. If you push the switch and the light is not turned on, then you don't say stupid world, nasty lamp, but you think that the switch is out of order, or it (the lamp) is not plugged in or the bulb is broken. And with the computer you think in a similar way. Then you say that you now need to think about where you can narrow down the problem and you need to look in the middle if the problem is there already or (emerges) later. And you have to be intelligent enough to do that. It is hard for me to imagine but for some people this is difficult. HEHE. And secondly, which is really important, that you are able to communicate, that you are not retreating to a cubby hole and simply tinker (with technology), because then it goes wrong (inaud). Well, I think that is often underestimated that you have the idea, that there is an asocial type, who munches spaghetti in front of the PC. (...) You need to communicate a lot[1] with people, with customers, who work with you and so on. You really need to be good at that. You can also try to assemble something on your own but often this does not produce good programs.

The first thing one has to be good at, according to Esther, is tracing the problem, and she breaks that down for me using the example of the lamp. She refers to a problem that I am likely to have encountered to show me that her work is not very different. The technical skills, then, appear to be not something detached from everyday life but something that can be understood by a layperson such as I, without questioning my ability to understand these problems. Esther illustrates how methodology and problem-solving, which are seen as central skills, are put into practice.

The second important thing for Esther is communication. She distances herself from people in cubby holes who do not interact with other people. Her description of a solitary person sitting alone in front of the PC and eating spaghetti[2] seems to be in line with common perceptions of hackers. For her it is important to be in touch with people; otherwise, the product of the work will be of low quality. Low quality at Redtech means producing code that no other person is able to read, that the structure of the program is not well thought through and fits the programmers' demands rather than those of the customer. It appears that if one works in a cubby hole, one does not remember that others need to be able to read one's code. One should not program for one's own sake; one is employed to solve a particular problem. Hackers are portrayed as people who forget that their code is a way to communicate with others, and that is why working alone is said to produce bad code.

Social skills

The second central skill set, alongside technological skills, is emotional and social competence. People talked in great detail about which social skills one needed, largely by referring to either customer or team interactions, where emotional and social skills were said to be central.

> *Elisabeth*: And then I would be interested in which abilities and which knowledge is particularly relevant for your profession?
> *Charlotte*: Well, I think a part, which is sadly often forgotten is that you, er, really, need strong communicative skills. Well, that was not clear to me when I selected my degree, for instance it was not clear to me that you really are a service provider as an informatician (masculine form). One needs to have the ability to transfer customer needs into software. And for that you need a lot of communication. (...) And those are two different skills: on the one hand to understand to hear what people say and also to express how one could do that and on the other hand to really implement it. (...) Well, on the

one hand you have your core competency (technology), but you also need to be able to sell it, to promote it.[3]

Charlotte (34, Redtech) argues that communication is a central part of ICT work that is often glossed over in popular portrayals and in ICT education, but not at Redtech, where communication skills are widely seen as crucial. She stresses that technology is central but that one has to market the knowledge through communication, and she thus mobilises a market narrative to argue for the importance of communication skills. The ability to establish rapport with the customer is constructed as different from technological knowledge, but without this communicative ability one would be less well positioned in the market. Günther (32, Redtech) also stresses that ICT work means providing a service:

> *Elisabeth*:   And which abilities does one need in this job, what is important for the ideal employee?
> *Günther*:   HEHEHE. He (the ideal employee) does not exist. Er (-) I am convinced, well, maybe he exists after all, (-) I see that at Redtech services are the essential thing. That is how we make money and that is for me the contact with the customers, regardless of whether he asks stupid things from our perspective.

Günther appears hesitant at first about there being an ideal worker but then defines one as being service oriented, doing what the customer wants even though one may not agree with the customer's ideas. ICT work is essentially service work, and therefore ICT workers have to please customers. People from Greentech voiced similar ideas around customer service, but Laura (49, Greentech) specifically stresses listening as a crucial skill:

> *Elisabeth*:   And which competencies does one need in your job, what do you need to be able to do?
> *Laura*:   Listening (-) That is the main competence. Listening.
> *Elisabeth*:   To listen to the customer or to whom?
> *Laura*:   To listen to the customer. To understand the connections (why a technology is not working). To put something into the big picture. You certainly need an understanding of technology, of course, you need to know, what the products can do. I need to have basic knowledge in informatics. But I believe that listening and also the identifying problem areas, that is the main competence.

Listening to the customer to be able to understand problems is, for Laura, a key skill, but again bundled with technical knowledge. Oliver (37, Greentech) also points to customer relations as vital:

> *Oliver*:   Depending on the position (in the organisation) what is also important, if you have a lot of customer contact, is what you can describe as psychology of communications. That is very important at the moment. All the people who are in touch with the customer, have to talk to the customer. (...)
>
> *Elisabeth*:   Do you mean that it is no longer the classic hacker-type person, who just sits in front of the machine?
>
> *Oliver*:   Well, it is not the programmer, who gets his objectives and then codes and codes until he topples down or the other who tests and tests until he topples down, or the hardware technician, who runs to the customer and changes disks and, well, the hardware technician can do a lot wrong. If he goes to the customer and makes him nervous and does not give the impression of being calm, like 'well, no problem for me, I will take the disk and then leave', but says 'I never did that before', then the customer is getting nervous and he turns him away, even though he could have solved the problem. (...) In our service area it is important that we give the customer the feeling that we are there (for them), that we can do everything, even though this is not possible.
>
> *Elisabeth*:   In the direction of customer management?
>
> *Oliver*:   Exactly. That is fairly important and in this area women certainly have advantages because they do that sometimes intuitively better than men, who only focus on technology. This part of the job is very important.

Oliver points to the psychology of communication, which is central to certain jobs at Greentech. Although at first he wants to construct technical people such as programmers or hardware technicians as less in need of communication skills, he recognises that these skills are important if one is to be taken seriously by the customer. One has to give the customer confidence that one is able to solve any problem. Later at Greentech I encountered the expression 'customer engineering' to describe the relationship to the customer as something that can be constructed like technology. For Oliver this kind of customer management is important, and he goes on to point out that women are 'intuitively' better at this than men, who focus on technology. What Oliver appears to be doing here is gendering the skills involved in relating

to customers, and also the skills relating to technology. In doing so, he implicitly services the binary that men are better with technology and women have strengths in relating to people, such as customers. However, such a gendering of the ideal ICT worker was rare as a repertoire. In general, people talked about social, communicative and emotional skills as being important, but they did not talk about women or men being better in terms of these skills.

In this section I have highlighted how ICT workers voice social skills as being important for their work. Therefore, the theories discussed in Chapter 2 which stress that social skills are increasingly vital for knowledge work are supported. However, I have also argued that these social skills exist in binary opposition to technical skills. The ideal ICT worker is described as needing two central skills – technical and social competence – and I have shown how these skills come to life. Although social and technical skills are said to be important, they appear to be clearly distinguishable skill sets which have little in common. Technology is not seen as containing anything social in itself, and technology and the social seem to lead separate lives. While in much research in science and technology studies, society and technology are seen as a part from social interaction (Bijker *et al.*, 1987; Hughes, 1986; MacKenzie and Wajcman, 1999a), in ICT professionals' talk, technical skills have little to do with social skills, and the two are treated as different abilities the ideal ICT worker has to master. The technical is seen as something in which there is little room for social relations, and vice versa. This constructs technology as objective, neutral and abstract, whereas the social is seen as something interpersonal and subjective.[4]

Enacting the ideal

In addition to the definition of skills, I was particularly interested to see how people positioned themselves in relation to these skills – which ones they constructed as desirable for themselves and which not. This provides insight into who can enact these ideals, who claims those ideals, and who is thus able to match the ideals most closely. In the interviews, I therefore asked people what they saw as their main strengths and weaknesses.

Positioning oneself vis-à-vis the ideal

Three main subject positions regarding the ideal ICT worker were enacted in the interviews: first, being good with people and technology; second, being more socially competent; and third, being more

technically competent. However, these subject positions were unevenly distributed, with the majority of people clustered in the second and few people claiming the first or third subject position.

Claiming technical and social competence simultaneously was a subject position very rarely taken. Being good with technology and with people would match the template of the ideal ICT worker most closely, but most people seemed to refrain from describing themselves as an ideal ICT worker. Being good with technology and people was invoked indirectly by most people in this group. One example is from Kristian (36, Redtech):

> *Elisabeth*: What would you describe as your strengths and weaknesses?
>
> *Kristian*: Strengths (-) I am relatively flexible, curious, that I always need to look at changes and the newest things. (-) I am relatively communicative, that I like, I can listen and I am responsive to people. These are my strengths.

Kristian gives a fairly modest account of his own abilities. By stressing his flexibility in regard to learning Kristian shows his willingness to learn new technologies, which is central to how the ideal ICT worker is thought to deal with technology. He also describes himself as communicative, but again uses 'relatively' to avoid coming across as boastful. Although he portrays himself modestly in the interview as having technical and social competence, at Redtech he occupied a guru position and was seen as one of the people who knew most about technology. He was also seen as able to share his knowledge on technology and thus as a good communicator. By stressing flexibility and communication he struck the right note in selecting two elements which link back to technical and social competence.

A second way people constructed themselves was by stressing their social competence. The emphasis on social competence came not only through people literally saying that they were good at the emotional aspects of work but also through them stressing that they were not all that into technology.

> *Elisabeth*: How would you describe your personal strengths and weaknesses?
>
> *Günther*: (-) Er (-) I think that dealing with (-) customers, and maybe not easy customers, that is what I would describe as my strength and I could use this (dealing with difficult customers)

several times and for the better. And the interaction with people, colleagues and customers or anyone else. I like to observe people, if there are some people in a room, I like to do this. I am relatively good at this. Er, weaknesses (-) weakness rather in relation to informatics, persistence in solving problems in detail, that is not my thing.

The way Günther (32, Redtech) constructs himself is to downplay his technical competence by saying that his weakness lies in not focusing on details. His strength, in contrast, is in dealing with customers and interacting with people, which is the social part of ICT work. What he does here is to lessen the importance of technology skills by constructing social skills as central.

A strikingly similar construction is used by Steven (30, Greentech):

Steven:　The weakness I have, I cannot focus on a detail for very long or I rather do not like to concentrate (on a problem for a very long time). It depends a bit on what I am doing. (...) And strengths, I have the feeling that I can deal with people communicatively well and be responsive to their needs.

Like Günther, Steven says that concentrating on technical details does not interest him, and that he prefers communicating with customers. What appears to be happening here is that the men are distancing themselves from a form of masculinity for which technical competence is vital. In this discursive context a different 'doing gender' seems to be happening as these two men adopt subject positions that are otherwise considered feminine.[5]

Another way to stress social competence, which was only used once, is to talk about oneself as a 'catalyst' for social relations:

Danielle:　Strengths are for me clearly in the communicative area and then, yes, I feel a bit like a catalyst in the company. And I also got the feedback that it did good.
Elisabeth:　What do you mean by this? Is it to talk to people?
Danielle:　Yes, well, that I get on well with almost all co-workers.[6] (...) I simply have the feeling, and I mean also often got the feedback, that people tell me, that they cannot imagine how it was before, before I was here. That is always nice. And, er (0.6) I think I can keep a team together. Well, that is not very much the technical competence I just described, more social competencies.

Danielle (36, Redtech) describes a situation in which she became team leader after having first been a team member and another situation at Redtech where an 'uncanny dynamic' developed in the team. She describes how in both situations everybody enjoyed working in the team, and she links this to her leadership and team skills. However, rather than just saying that she did her job well, she refers to the feedback others gave her to legitimate her skills. She appears to have the ability to manage the feelings of others. As in other accounts, Danielle is not talking about technical skills, and she comments on this in the last sentence of the extract. She uses a technical term – 'catalyst', something that facilitates and accelerates actions – to describe a social function and to present herself as skilled in that respect.

Other people emphasised the pleasure they gained from working with customers. Laura (49, Greentech) said that her strengths lay in listening to customers, which she saw as central for her work. Laura also referred to herself in the interview as not 'hung-up on' technology when she explained that she liked technology to do what she wanted but was not someone who would try to find out all the gimmicky options technologies offer (see Chapter 5). This is comparable to Andrea's account (37, Redtech):

> *Andrea*:   Er, a weakness (-) certainly that I am not one of these persons who have the greatest technical know-how, because I am not a person, who, er, brings her job home and reads a lot there. (...) Well, I do that at work, but not at home, which means that I am not among the technically strongest people but in the good midfield. And strength would rather be in the area of social competence. I like to talk with customers on the phone about his needs (inaud). Because I used to be an industrial clerk (feminine form) I know the business workflow and I have the feeling that I have a flair for understanding the customer.

Andrea reduces her technical competence by distancing herself from people who have a lot of technical knowledge, as this would mean taking work home and reading 'a lot' at home. Through this extreme case formulation (see also Edwards, 2000; Pomerantz, 1986; Potter, 1996a), a device which people use to render a point more convincing, Andrea makes clear that to be technically the strongest person, one needs not merely to read at home but to read many books at home. If a requirement for being among the strongest in the area of technology is to read obsessively at home, this is not appealing to her, and she would rather

remain in the midfield in terms of technical knowledge. Being technically competent would mean living and breathing technology but also blurring the boundary between what one does professionally and what one does privately. This total immersion in technology comes close to how hackers and nerds are often perceived. Instead of being such a totally technology-focused person, Andrea sees her strengths as being in dealing with customers. This seems to demand less work at home, and she substantiates her skills using her previous employment as an industrial clerk. In these accounts it was not technical competence that was constructed as the key element of ICT work but social competence, along with a justification of why the participants were good at it.

The third subject position is being socially weak but technically competent. This position was also rarely voiced, and when it was used, it was used more by people who constructed themselves as fascinated by technology. Zacharias (35, Redtech) provides an example:

> *Elisabeth*: What are your personal strengths and weaknesses? What would you say you are good at and less good at?
> *Zacharias*: (-) I certainly have ample deficits especially in the soft skills area (1.2). Strengths is difficult to say, it is really the mixture of experience and searching for errors, ability to abstract and all these things, that have to come together (-) and much is experience in our profession.

Zacharias also draws on an extreme case formulation in talking about 'ample deficits'. He is referring not to social competencies, as most people did in stressing their strength in this area, but to soft skills. Soft skills stand in contrast to hard skills, which include technology skills. The binary soft/hard contains an evaluation insofar as soft elements are often undervalued and hard elements are seen as the really important ones, and insofar as the binary is also a gendered one. This means that when the words 'soft skills' are selected, these skills come pre-evaluated as less important. Zacharias' strength, which he gained through experience, lies in the hard area of abstraction, again a masculine-connoted element, and searching for errors. If soft skills are less important, it appears almost as if it does not matter that he is not well versed in displaying these soft skills. I was a little surprised that Zacharias selected this form of self-presentation for himself, as other people and I thought that his social competence was very well developed. Zacharias was very eloquent and a good listener; he also led some of the meetings when Günther, the team leader, was away and made sure that everybody felt

comfortable, often through little gestures such as having something to drink on the table. Having drinks on the table was not usual, and Zacharias brought the drinks himself from the kitchen. However, he chooses to present himself here as having 'deficits in soft skills' and thereby constructs these soft skills as possibly less valuable than the hard skills relating to technology.

Privileging technology skills is a subject position most closely associated with the image of the hacker:

> As they are represented in popular culture, the 'computer nerds' or 'hackers' are invariably male, usually in their late adolescence or early adulthood, and are typically portrayed as social misfits and spectacularly physically unattractive: wearing thick, unflattering spectacles, overweight pale, pimply skin, poor fashion sense. (Lupton, 1995: 102)

Against this rather unappealing popular portrayal, hackers are today no longer treated as 'distorted kids' but increasingly as serious criminals (Skibell, 2003). Even though the hacker is often seen as a myth that is in part upheld by social science research (Gansmo *et al.*, 2003), people in this research study actively oriented against this image of the hacker in an attempt to carve out different identities for themselves. They did not find the image of the hacker very appealing for their own identities.

The image of hackers suggests a neglect of appearance, but appearance was described as important in both companies. People attempted to dress appropriately for the situation – whether more formally when meeting clients or more informally when meeting colleagues, they always looked suitably dressed. At Redtech in particular keeping physically fit was of great importance, and people often went swimming or jogging during lunch breaks and had muesli rather than cold pizza for lunch; some of them even competed for the company in extreme sports events. Rather than people being disembodied, bodies got a great deal of attention at Redtech. This is in line with other research that has suggested that managing the body has increasingly become a professionally conducted task, like managing one's job (e.g. Connell and Wood, 2005; Tyler and Abbott, 1998). The emphasis on keeping fit and healthy and looking decent could also be understood as a way of counteracting the negative image that ICT workers are hackers who do not care about their appearances and bodies.

It was interesting to see that most people constructed themselves as socially competent while presenting themselves as not so very

interested in technology. One explanation for this is that everybody who was hired at Redtech and Greentech was expected to have technical competence, as they would otherwise not have been hired. Technical competence was the lowest common denominator and the basic skill needed. Therefore, technical competence possibly did not have to be stressed here. In addition, stressing technical competence could have meant associating oneself too much with the hacker image – presenting oneself as reading technical manuals obsessively at home or neglecting one's body – which most people were eager to distance themselves from. In contrast, most people pointed to social competencies as one of their strengths; everybody had to have technical competence, so it was more important to construct oneself as socially competent. Social competence seems to add value in this context, as one is then closer to the ideal technology worker. Most people appeared unable to construct themselves as competent simultaneously in technical and in social skills (which would represent the ideal worker) or as only technically competent (which would be closer to the hacker). The most common subject position entailed technical skills being seen as given but not constructed as a core strength, to avoid the association with the hacker, and social skills being seen as the added ones they had to offer. The way in which these subject positions were taken on seems to reflect and construct the binary that hard technical skills have little to do with soft social skills.

Competence at work

In the previous section I explored how people positioned themselves in relation to the ideal. I now look at some examples of how competence was enacted in customer and team interactions to illustrate how social and emotional competence and technical competence were displayed at work.

When I was able to observe interactions with customers, such as listening to telephone conversations or, in one case, attending a meeting with customers, it became clear that social and emotional competencies were crucial elements to perform the job. Telephone conversations with colleagues were very informal in both companies; people did not waste much time asking how others were but went, after a short joking salutation (such as 'Hey big boss'), straight to the problem. When people spoke to customers, courtesies were exchanged; they asked how the customer was and whether there were any problems; people were smiling into the telephone, and the pitch of their voice became slightly higher, both in men and in women. These scripts were very similar for men

and women and for workers at Redtech and at Greentech. Although one could argue that interactions with colleagues were close to camaraderie in style, which one could describe as masculine, whereas customer interactions were much more polite and possibly feminine, these scripts generally did not appear gendered to the research subjects.

Teamwork was a central way of organising work at Redtech and Greentech, and glancing at the elements entailed in teamwork makes it clear why the ideal worker was said to possess both technical competence and emotional/social competence. At Greentech interactions were often virtual. Although Greentech workers had a lot of contact with each other, they often worked on different projects and not as a team. It was also not uncommon for teams to work at a distance; for example, Ursula's (36, Greentech) team members for one project were located in Germany, and they had never met face to face. They were in touch via telephone, email or instant messaging. The instant messaging software made it possible to see whether one of the team members was at his or her desk. If the person was not there – or, rather, did not use an input device, which is how 'being there' was determined – the colour of the employee's name changed on screen, indicating inactivity. As far as I know these technologies were not used to check whether employees were working or to police whether colleagues were working hard enough. Often ICT workers are working with clients or sitting in meetings, so not moving the mouse does not mean one is not working. Email use was also heavy, but most people at Greentech complained about the sheer volume of messages they received in a day and how difficult it had become to select between important and unimportant email. Nevertheless, email was a major way of working together. Video conferencing was available, but it was more complicated to use than telephone conferencing. For telephone conferences everybody was given a special number to call that would link the participants and allow them to follow the same presentation on their computers. When I shadowed Laura, she had several of these telephone meetings, which meant that most of the time she sat silent in front of her PC on the telephone and only rarely made a comment. Interaction was key in all activities, and therefore it is not surprising that the ideal worker was expected to be socially competent in using various technologies to perform well in this environment.

The competencies of the ideal worker were also reflected in the method used at Redtech to write software programs, through which the emotional and social competence needed for the job became visible. This method is called *extreme programming* (Beck, 1999a; 1999b) and

entails writing software together as a team. In this collaborative programming two people sit in front of a single computer, and while one person thinks about and types the code, the other person thinks more tactically and strategically. The idea is that two brains are better than one at producing good, bug-free software.[7] Although programming itself was less often organized in pairs at Redtech, a version of extreme programming was used for solving problems. I observed such an interaction between Marcel (29, Redtech) and another Redtech worker. Marcel and the other worker had a problem and were discussing it in an office. The other person was writing or improving the code while Marcel provided creative input. Various other people stopped by to help with solving the problem. If two (or more) brains are used in an attempt to solve a software problem, speech communication has to facilitate the contact, because the brains are not connected through high-tech devices. Through communication it was believed that synergies would emerge and the problem would be solved more efficiently. Teamwork was used to enact what was believed to be the ideal ICT worker tackling problems in collaboration with others.

Another element of extreme programming is that one person reads the code written by another. This process is called a review. The reviewer pays attention to how clearly the code is written and whether there are any bugs or faults to ensure the quality of the code produced. It is important that the code can be read by another person in case there are later alterations, such as change requests from customers. In the project I observed at Redtech, Danielle was dubbed 'Miss Review'[8] because she had built herself a reputation in this task. The architect of an application, someone like Zacharias (35, Redtech), would visit Danielle in her office, and they would sit together to read Zacharias' code. I wondered why Danielle was chosen as a 'review buddy' by many, but no one could answer that other than to say that she had done it several times and was good at reading and helping others with their code. Being corrected by another person is opening oneself to criticism, and one would be expected to select a person who appeared supportive. One stereotype of women is that they are more empathic and can comfort people. Gender is indeed stressed in this situation through the choice of the gendered nickname 'Miss Review', even though other options, such as 'review buddy', which would be more gender neutral, could have been selected. It is possible that expectations about women's assumed competencies, such as empathy, were enshrined in selecting Danielle as 'Miss Review', and also that Danielle took up this subject position because it confirmed her status as a woman. Doing femininity as doing social

competence is an interplay between expectations, associations and ways of self-presentation.

In this section I have outlined how people position themselves in relation to the ideal worker and how this ideal is enshrined and enacted in everyday work situations such as customer interactions and team interactions. Most people did not claim both technical and social skills. Technical skills are a prerequisite for work in ICTs, and stressing them too much would bring people too close to identification with the hacker figure; in addition, social skills are seen as something that adds value to an already technically skilled worker. In looking at customer and team interactions, I have shown that although they were not described formally as gendered, they could be read as enacting femininity or masculinity. I stressed how people position themselves in relation to these new skill sets. This adds to our understanding of how the skills of the ideal worker are adopted in a work environment that is often hailed as the future of work.

Temporal and spatial flexibility

Flexibility is related primarily to flexibility in learning new technologies, yet there is a whole different area of flexibility: temporal and spatial flexibility. Temporal and spatial flexibility is often seen as a means to achieve the paradigmatic work/life balance and is in itself often constructed as a result of new technologies which supposedly allow for these flexible working practices (Baruch, 2000; Felstead *et al.*, 2002; Lewis, 2001; Robinson, 2005; Stanworth, 1998). There are two main understandings of flexibility in second modernity: on the one hand, seeing flexible working as a means to enhance gender equality and, on the other hand, the business case that allows employers to use labour power on demand (Sheridan and Conway, 2001). Although flexible working arrangements are heralded for their promise of work/life balance, they can also lead to an intensification of work as we are requested to work from anywhere and to be available whenever the company needs us. This changes the psychological contract at work, as individuals are now in charge of managing their own time flexibly and are often judged only by the output they produce. This intensification is also often linked to an extensification of work in that work extends temporally and spatially to realms that before were reserved for private and recreational time, leading to a re-spatialisation of work and private time (English-Lueck, 2002; Halford, 2005; Jarvis and Pratt, 2005). Flexible working practices are also often associated with gender (see Chapter 2). For instance, Smithson and

Stokoe (2005) show that although flexible working practices are constructed as gender neutral, the examples people give to illustrate flexible working arrangements relate to women. Given the importance of flexibility at work, I observed not only how people organised their days but also how people talked about these flexibilities which seem to be so vital for the new ideal worker.

At Redtech and Greentech flexibility was highly encouraged, if not assumed. People were provided with equipment to work from anywhere, be it at home, on the road or in the office. At Greentech and Redtech every employee could have a laptop, mobile phone and high-speed Internet at home which would give him or her access to the company's network. On the company network employees had access to various tools, including a virtual space where teams met and tasks were distributed and tools for tracking hours worked on projects, which were fed into one central location for project management purposes. In addition, facilities for video and telephone conferences could also be accessed from home. Technology was thus not only the service sold to customers but also something central to the labour process itself. There was also some flexibility in terms of how much people worked. Some people in both companies had reduced their working hours – for instance, from 100 to 90 or 80 per cent – because they wanted more spare time, but most people worked full time. The majority of people indicated in the questionnaire that they worked 40 to 45 hours per week if they were working full time. Only one person indicated working for 60 hours per week, but this person was self-employed and worked on various projects. Although the tools of the trade were similar in the two companies, there was a huge difference in the usage of these tools – or, rather, in how far the tools were used to allow working life to spill over into private life.

Office and home working

At Greentech it was common to work either at customers' premises, on the road or at home. For this reason only a few workers at Greentech had permanent workplaces, and for most desk-sharing was normal. When they worked in the company's offices, workers rolled their caddy to a free space, connected their laptop, logged into the telephone system and started working. In the new office building that was being constructed while I was doing my research, fewer workspaces were planned, as the assumption was that more people would work from home or elsewhere. Some workers, including Laura (49, Greentech), said that they worked one day a week at home but at the same time were aware that contact

with colleagues was vital because they exchanged ideas at work, which links back to how social competencies are used in ICT work. This 'face time' is generally seen as vital in organisations, particularly in more senior managerial functions (Robinson, 2005).

Most people were aware of the advantages and drawbacks of working remotely. Steven (30, Greentech) provides an example of this:

> *Elisabeth*:   You said that you work ten, sorry, fifteen to twenty per cent at home.
> *Steven*:   Yes, we have an ADSL[9] connection, which is paid by Greentech, and I can access all the systems. And if I have to write a report, then, because we work in open-plan offices, I like to do these things at home.
> *Elisabeth*:   To have more silence?
> *Steven*:   Yes, yes (-) and bit of a different environment. I can work in a track suit and that is no problem. (...)
> *Elisabeth*:   And do you think that there is a blurring of the private and work and is that a problem?
> *Steven*:   I think everybody has to get it under control. Maybe some people cannot do it because children are at home and when they know that daddy is home, then they are going to disturb him. These people obviously prefer to work from the office. And others, who have a long way to work, they prefer to work from home, because they do not have to commute.

For Steven one advantage of working at home is the informality, but he acknowledges some of the related problems. When I ask him about the blurring of the private and the public, he replies that fathers might be disturbed by children if they are at home and might therefore prefer to work in the office. For other people, including those with a long commute, working at home is an alternative. It is interesting that Steven selects working fathers who are 'disturbed' by children as a group of people who prefer to work in the office. One common discourse to promote remote working is that it allows people to spend more time with their family, and often home working is particularly advertised to women, as enabling them to combine paid and care work. However, children are presented by Steven as preventing the father from working effectively. Therefore, the father prefers to work in his office without being distracted by his children. This also assumes that someone else is home to look after the children. Steven thus inverts the common discourse deployed in relation to home working in two ways: first, he

assumes that it is a father and not a mother who works from home and, second, he uses children as an indicator of why one should not work from home. Home working and having a family are constructed as being incompatible, and this seems to confirm the assumption that the ideal worker is a man.

To explore the construction of the ideal in relation to temporal and spatial flexibility further, we can look at Nikolas (46, Greentech) as an interesting case study. Nikolas had three children and a wife who stayed at home. Nikolas was spatially flexible – he had worked in Germany, the United Kingdom and Switzerland – and this was possible because his family was willing to move countries with him. For him the emphasis is clearly on working life:

> *Nikolas*:   If you look at what I am doing, it's clear my job comes first and I neglect other areas (of life). I know that, yes, but that is just the price we have to pay, yes. My wife does not have to work, my children have an expensive education, I enjoy my job.

Nikolas prioritises his job, and he admits that this means he disregards other areas of life. But this is just part of the 'deal'. The deal is that the pay for the job is sufficient to ensure that the family enjoys a certain lifestyle. There is no financial need for his wife to be in paid employment, and this might also suggest that his wife prefers to work at home. The salary secures his children an expensive education. On top of all this, he enjoys what he is doing. He derives pleasure from his job, and therefore full commitment to the job is not problematic for him. Thus, the picture of the ideal worker that emerges from this account is of a husband who earns a breadwinner wage and is spatially and temporally flexible.

Nikolas had previously worked for a time as a freelancer, which meant that he was hired by an intermediary company and then hired out by this company to employers. In return the intermediary company received a percentage of his income. Although he was permanently employed by Greentech at the time of the interview, he compared his workday organisation to that of a freelancer who has to do what the customer wants. I asked him how his workday was organised:

> *Nikolas*:   That changes. It depends on (the situation) when I work with a customer for five days, and he expects me to be there at eight o'clock in the morning until five and I have a desk there, then I have a fixed working day. If I am not booked by a customer,

then I have nothing to do, that means I do not have billable services, and I have to spend the time differently. Or I prepare the implementation for a solution for a customer and I can do this at home. It depends on the circumstances and the customer. We are to be as efficient as possible and when I need some quietness and want to think for a day uninterruptedly than it happens that I lock myself in at home.

Elisabeth: You have more quietness at home?

Nikolas: Yes, one has (-) well what I love is simply that you have a lot of freedom. I worked freelance before and you can compare that.

For Nikolas fulfilling the demands of the customer in respect to where and how to work also seems to be part of the service. The freedom he has seems to originate from the fact that the company is happy as long as he brings in enough billable hours. Notable is how Nikolas says that he can think uninterruptedly at home and avoids disturbances by locking himself in a room, by which he means that he is not necessarily available for his family but has a space where he can work in peace. This seems very much in line with his model of the ideal worker as a breadwinner.

Nikolas embodies what one would describe as an intrapreneur (Pinchot, 1985) or entreployee (Pongratz and Voß, 2003), terms used for employees who are increasingly required to work like an entrepreneur by self-managing their time, but to do this within a company. This self-construction means that Nikolas is consumed by his work, and for him this means full devotion to the job and no other time commitments outside work. Although Nikolas clearly prioritises work, he also mentions that the freedom he has means that he can take an afternoon off when the weather is fine (although he then has to work longer another day). This sounds more like shifting leisure time than juggling paid and unpaid work.

Many people referred to the pressure of billable hours and also to solving urgent technical problems as soon as possible. Oliver (37, Greentech), for instance, referred to people who should be off sick but who try to stay at work by taking medication; he introduced a discourse of the 'tough worker', one who is forced to work regardless of ill health. One of his stories contained an interesting gender dimension. I asked Oliver whether he could imagine being in the body of the other gender for a day and what this would change:

Oliver: At work (1.0) er (-) I don't think too much. Maybe a different way to interact with customers, maybe, I don't know, if that much

would be demanded in terms of working times, you stay until it is finished and, er, I don't know.

Elisabeth: Why could that be different?

Oliver: (-) Just this weekend, we had (a migration of an operating system) er, and there was also a pregnant, very advanced pregnant, three weeks before birth, woman there for the migration and it was her, who drove the men to stay as long (as needed) and to, er, and really wanted every test and wanted to see it (working). Even though she was probably really strongly burdened. (...) And there was certainly a certain reservation or a certain protection from men, should not we move the project (to a different date), should we really do that and she really had to say that she wanted to do it.

From his previous comments I was expecting a story about a woman who had to leave a project early to be home with her children, but Oliver tells a story about a heavily pregnant woman who did not leave early but wanted to finish the project and who was the person keeping the men at work. This story contradicts common expectations about women having to leave early because of childcare responsibilities. The story was unexpected because Oliver started by saying that probably companies and co-workers would expect women to have to be home at certain times because of care issues. However, he constructs it as if women work even harder than men, especially when they are pregnant. This gives an almost heroic tone to the story. The woman becomes like an honorary man, more driven by business than her colleagues even when her bodily difference is very visible. Her colleagues are very understanding about her situation and appear not to be pushing her to do the migration from one system to another at this point, but the woman is portrayed as insisting that the migration be completed. The woman is constructed as being flexible for the company but not for her own private life. This strengthens the discourse of a 'tough worker' who sacrifices himself or herself for work and is fully devoted to work.

Oliver's initial comment that women are not made to stay as long as men appears to be a direct contradiction to the story he then tells. It is difficult to evaluate why this may have been the case, but one possible explanation is that he realised that such comments could be read by me as sexist. In asking him to specify what he meant, I might have brought his attention back to the interview situation and to me as the interviewer. This reading can be supported by the fact that he briefly hesitated before starting his story, which may indicate that he realised it would be better not to tell a stereotypical and potentially sexist

story to me. Thus the story he told became a story of a woman worker who works, even when pregnant, harder than most men. However, he repaired the account and restored a certain logic by referring to her male colleagues not expecting her to work even though she insisted on going ahead. The logic is, then, that colleagues understand that women may not work as much, although women may want to. So Oliver manufactured a politically correct and non-sexist account. Again, it should be noted that this story derives from the questions on gender, and such gendered stories were rarely told in relation to flexibility.

Children or other commitments external to work were rarely talked about in the context of flexibility. This is possibly because only seven people in this study (six men and one woman) had children. Thus, a low proportion of interviewees had children, and men were more likely to have children than women, consistent with other studies on ICT work (Henninger, 2001). The only woman who had children in this study was Quinta (42, Greentech), and she was also the only person who cited her children as the main reason she worked 60 per cent of the normal working hours. She worked in a technical position at the beginning of her career, moved into a sales job but changed into managing technical people. The rationale behind her change from sales into people management was that the sales job was inflexible and she often needed to rush to work to trouble-shoot on her days at home. Technology allowed her to work from home as she was connected to the system, checked her email every day and could be called any time at home.[10] She described her home-work co-ordination as follows:

> *Quinta*: Er (-) normally I work on Monday and Thursday and I have a woman (childminder/housekeeper) then. Well, my children leave at eight and we all go together and I have a woman, she comes at eleven and prepares food for the children and leaves either at five, when my husband comes, or at six, when I come. These are the two days which are planned. If I work on another day, then my parents-in-law come around or the children go to the neighbours. That means to organise. (...) Well, my experience is, I no longer plan for the long term. HEHE. Well, I ask, if I know that I have a meeting, a course or a meeting in two weeks' time, I don't ask anybody today. My children are older and they could stay home alone. I never did that except once, but I know that I have a reserve there. On the other hand it is my long-term experience, that I make people crazy because I have to move the date again. If the course or the meeting is moved I have to move things

around and then I need to ask people, the second (of a month) is not good would the third be okay for you. And you can do that a couple of times and then they ask if I am crazy. (...) It is difficult if I need to go away for a week, that is critical and generally every stay abroad, because I do not come home in the evening and my husband has to take care of the children in the morning and he works a hundred per cent and these are unpleasant things.

Quinta is orienting towards being thought a good mother and a good employee here. She describes how her two days at work are organised with a childminder/housekeeper, whom she describes as 'woman'.[11] For her, problems emerge when she has to leave the home apart from these two days, as she then needs to find people to take care of her children. As her children are older, she thinks they can stay alone at home in an emergency. Although she describes leaving her children home alone as a reserve, she constructs herself as a woman who does not do this often. Leaving children at home alone is often charged with the stereotype of the 'unnatural mother' who counteracts her assumed instincts and leaves children to their own fate.

It is interesting to note that Nikolas mobilised very different resources whereby he presented himself as the person who brought home the money; for him leaving the children alone was not a problem, as their mother was there. Whereas Nikolas could go abroad for short and long stays,[12] for Quinta this would have been a huge problem, because she would not have been at home for her children and would have needed to entrust her husband with more child care. It appears to have been a great burden to her husband if he had to care for the children, because he worked full time. Thus it was constructed as a fact that her husband could not be asked to care more for their children as he worked in full-time employment, and as she worked only 60 per cent, it was her responsibility to be there for the children. In Switzerland these relative percentages are often used to legitimise traditional care and work arrangements, with a male breadwinner and a female part-timer (Nentwich, 2004). The common logic is that because women spend fewer hours in paid employment, they have more time for child care. This accounting structure made Quinta appear much less able to give more time to the company, because she bore responsibility for her children. Working from home also had a very different connotation for Quinta: she did not talk about enjoying work wearing more relaxed attire at home, as Steven did; for her working at home was constructed as a way of juggling paid and care work.

The flexibility Greentech offers is thus used in two very different ways: on the one hand, it supports the work/life balance and the mixing of different tasks such as child care and paid work; on the other hand, flexibility can be used to support an intrapreneurial self, as flexibility allows an intensification and extensification of work. Whereas Nikolas used flexibility to earn as much as possible and had no other parameters which would influence his work, Quinta used flexibility to combine paid and unpaid employment. Both ways were encouraged by Greentech because employees worked like intrapreneurs and at the same time there was a strong emphasis on work/life balance. In most cases flexibility was used for mixed purposes, not only to become an entreployee or to combine work with other responsibilities. It is also important to note that these positions were not static but shifted over time; for instance, Nikolas wanted to earn a lot of money so that he could retire early, and Quinta's family arrangements had recently been questioned when her husband had been in danger of losing his job, in which case she would have worked full time to become the breadwinner.

Working and playing in the office

In comparison with Greentech, flexibility at work was conceptualised differently at Redtech. Whereas many workers at Greentech had regular customer contact, at Redtech people, other than the project leader, had to be available for the customer much less often. Theoretically, Redtech workers could work through the night, or whenever it suited them, as long as they got their work done. They could, in theory, also work at home, as it often mattered little whether they coded in the office or at home. However, I found that people at Redtech strongly resisted working at home. Most Redtech workers worked from the company premises and fairly regular office hours. Many people explained that they worked at work and relaxed at home and wanted to keep this boundary in place. Except for sporadically reading emails or sometimes a work-related book, most people claimed not to work from home.

Elisabeth: And do you work a lot from home or mainly in the company?

Charlotte: I mainly work in the company. Well, it can be that I write something over the weekend and we have the flexibility to do that, that you can work at home. But I prefer to work here (in the company). Well, on the one hand I find it difficult to work at home, well you have the silence but I tend to be distracted and you do this or that, but you can certainly organise it. That is a question of

> discipline and you can get on top of it, but I appreciate it to have the separation of spare time and work in the company and I also notice that it is good to be here as a contact person.

For Charlotte (34, Redtech) working at home requires organisation and discipline, and she prefers to do her work in the company offices. Her presence in the company is important, as she can act as a contact person, which is again a reference to the importance of interaction in ICT work. By making reference to the usefulness of being in the company, Charlotte legitimates her work/home separation.

Some people made use of the time flexibility to go to the office later. Yosef (33, Redtech), for instance, who had a small child, told me that he usually left home when his child and partner were still sleeping but that sometimes they had breakfast together and he started at Redtech later.[13] Pascal (33, Redtech) mentions a similar flexibility:

> *Pascal*:　In relation to time, I now have relatively regulated working times, if you look at it, but I obviously have the possibility to take a day off, that is easy, I can have long lunch breaks, if I go to do sports or do some jogging, I can adjust it (the working times). And I use that. I noticed that other people do not have that, this flexibility. That is great. Tomorrow afternoon I take the afternoon off, even though I do not use that too much. I am quite regular in the morning, I always turn up in the same time period. The other flexibility is overtime. Especially now if you have stress in the project, then you make overtime fairly quickly, (...) but you can then have one, two weeks' holiday. (-) I certainly use this flexibility.

Pascal's account is structured by two elements: on the one hand, he constructs himself as a very regular person; on the other hand, he appreciates the freedom he has. He can take an afternoon off to go shopping, take overtime as holidays or have extended lunch breaks. The extended lunch break was among the features I noticed frequently, because many people at Redtech did sports during their lunch breaks. One time, I was around just before a meeting started and was invited to have a coffee in the kitchen. A whole group of people, some with wet hair, were sitting there eating muesli and talking about good places to go for a swim. One expression used was that you need to 'do something, as otherwise you do nothing'. This reflects the idea that you need to keep physically fit, which is a nice parallel to keeping mentally up to date through learning. The temporal flexibility offered allowed people to keep their

bodies in shape. Strangely, this keeping in shape was simultaneously conceptualised as being a pleasure, as one enjoyed working out, and an obligation to keep in shape. The comments around 'do something, as otherwise you do nothing' could be interpreted as indicating that one needs to be active and to care for one's body but that the boundaries between obligation and pleasure were blurring, as people seemed to enjoy to exercise. Here disciplinary effects and enjoying this discipline were melding together.

Although people constructed themselves as free to set their own timings, at least in theory, some used resources to construct themselves as routine-driven people. Felix (36, Redtech) constructs the importance of routine as follows:

> *Elisabeth*: How long do you work or is that very variable?
>
> *Felix*: That is very variable. At the moment a bit longer, at the moment around nine to ten hours per day. Days off are not taken. Generally I am very regular. I come at eight or nine, round about. I am not doing too much overtime but I rarely take days off but I come every day at the same time. That is for me a question of discipline. Well, I need, (-) how should I put it, I need to test myself and make an effort as otherwise it gets out of hand and I come at twelve and need to stay longer and so on and I do not do that.
>
> *Elisabeth*: Discipline and routine?
>
> *Felix*: Yes, that's it. I work very much in a routine way. Yes.
>
> *Elisabeth*: And do you work from home?
>
> *Felix*: Very, very rarely. Very rarely. No, I try to switch off at home. That is for me work here. And I work here, I come here to work and at home, firstly, I find it hard to concentrate because there are too many distractions, er (-) and I try to separate work and spare time. And for me home is spare time.

We see in Felix's account many of the elements pointed to earlier. As for Charlotte, there are too many distractions at home and Felix likes to separate work and spare time. We also see that there are times when deadlines mean no time-off, which is similar to the point Pascal raised when he talked about how he accumulated overtime that he compensated for later. Compensating here means taking time off rather than being reimbursed for overtime. For Felix starting work at the same time every day is a question of routine, because he would otherwise come in late and have to stay longer. One could interpret this as self-imposed discipline to create paid work as work and distinguish it from spare time.

One could even speculate that this was a way by which people at Redtech resisted Anglo-American work tendencies such as home working or a long-hours culture. Redtech people may not have wanted to comply with international (often meaning US-influenced) attitudes towards working, and they insisted on working at work and not at home. As a Swiss company and not a local subsidiary of a multinational like Greentech, Redtech appeared to have different standards, and these standards seemed to include that you worked at the office and not at home. Whereas remote working is very common for high-tech companies in the United States (Conlin, 2005), for Swiss companies remote working may appear less attractive. The nature of the work may also influence this. As noted earlier, people at Redtech were often less involved with customers and emphasis was put on team interactions, for which being in the office is vital.

People at Redtech were also not too keen on long working hours and sacrificing private time. Deadlines were often pressing, and this meant that people had to give up spare time to finish the project but could 'compensate' this time later on. This meant that work life could sometimes dominate private life. However, even when deadlines were close, some people took holidays, which effectively meant that other people had to do the work for them, but there were surprisingly few hard feelings about this. It thus appeared as if working life would not take precedence over private life. One could imagine that working until a problem is solved or working long hours during the final phases of a project is hard to combine with caring for children (Hochschild, 1997); however, people at Redtech had either no caring responsibilities or another person to do the care for them.

Flexibility at Redtech was mainly used to integrate leisure activities such as sports into the working day to allow for a healthy lifestyle. This did not mean that people did not work hard and have fun but that work was something done in the office rather than at home. Although it was common that leisure flowed into the working day, there was less work flowing into leisure time. Most people did not want to work at home, as this was perceived as a space where they relaxed. Notions of intensification and extensification suggest that people work longer now, eroding the status of the home as a place where they can relax. If work invades the home, this poses new challenges for the organisation of what is work and what is not work. Surman (2002) shows how people construct these binaries in their lived experiences of working from home. These separate spheres of work and non-work were maintained because they were seen by people in the study as vital: an example of

this is that one person made tea only during the break and kept it warm on the stove rather than making tea whenever she wanted. Thus she maintained a binary between home and work.

Most people at Redtech resisted their work life flowing into their private life, as they wanted to keep the home as a place to relax. Some studies have shown boundaries being maintained to avoid compromising family life (Mirchandani, 1998); however, because most people at Redtech did not have a family, the boundary they were protecting was between work and non-work. For Redtech workers private time was seen as sacred and boundaries were maintained, which ignored the fact that the home is often also a place to do work: housework. Although working times were flexible, most people developed their own working routines, and in the end individuals had to finish their tasks. Even under tight deadlines, when work could have dominated people's lives, some people privileged private time, and this was surprisingly not singled out as something negative. It is important to keep in mind that most people were not the primary carer for dependants, and it would have been interesting to see how flexible the system would have been if someone had had to be home on time.

In this section I have looked at how flexibility is understood and practised in ICT work. I have shown how people at Redtech and Greentech were encouraged to use different kinds of temporal and spatial flexibilities. Whereas home working was not uncommon at Greentech, Redtech people preferred a separation of work and private time and made their work time flexible to allow for private activities. Although it sometimes appeared that work was made flexible to accommodate private life, the system was in general not challenged by inflexible care arrangements, and often the assumption was that people would work as long as it took to finish a project. The flexibility at Greentech was used rather differently, as home working was constructed as a way either to combine working with caring for the family or to allow an intensification and extensification of work for a worker to become more like an entreployee. Thus this section adds to our understanding of how flexibility can be used at work for very different purposes and of how practices often differ between companies.

The gendering of ICT skills

Except for the ideal worker and the customer always being talked about using the generic 'he', the construction of ICT skills seems to be gender neutral. From the generic 'he', one might conclude that there is a

masculine subtext in the accounts, but I am careful not to construct the gender subtext simply on the basis of the masculine pronoun. Even though 'he' is an indication that the masculine is equated with the general, there are more subtle indications of how the ideal worker's skills may be gendered. Indeed, more often than masculine, the constructions used in the research appear strictly gender neutral, but this apparent gender neutrality often masks a masculine gendering or masculine subtext (Acker, 1990; Alvesson and Billing, 1997; Bendl, 2008; Benschop and Doorewaard, 1998a; 1998b; Coleman, 1990; Collinson and Hearn, 1994; Witz and Savage, 1992).

Temporal and spatial flexibility appears in general accounts at first sight not to be very gendered. Given the preponderance of discussions around work/life balance and family-friendly policies in organisations and their association with women, it was unexpected that flexibility was rarely associated with having a family and with being a working mother. Care was not a resource mobilised when talking about work in general or flexibility in particular. For most people at Redtech and Greentech care was not an immediate issue, either because they did not have children or because someone else was the primary care giver. Some people reflected on how children might change their lives, including Oliver (37, Greentech) and Günther (32, Redtech), who suggested that they might consider working less. In most cases, the carer role was gendered feminine and the assumption was that women have to juggle paid and care work, whereas for most men it was more common to take the breadwinner role.[14] This was not addressed, however, in relation to flexibility. It is also possible that I was responsible for the fact that people did not talk much about care, as I did not ask specifically about care issues in this context. In the questionnaire I included an item on children, and I included family plans in the future question, but I did not have a question on family and care in the interviews. This was in part because I did not want to raise this topic in relation to gender, as this might have constructed the study as very traditional research where the only outcome is that it makes a difference that women have children. I also wanted to leave it as open as possible for the research participants to discuss other elements relating to gender which they felt might be important. However, in relation to flexibility most people did not think about caring roles, and generally they did not gender flexibility but presented it as gender neutral in their own work context.

What I found very interesting in this respect was that during one of the first interviews, Boris (34, Redtech) did not mention that with the birth of his first child he had reduced not only his coffee consumption

but also his working time, to 80 per cent, to spend more time with his child. One reason he did not mention it could have been that I did not give him the opportunity. Indeed, he mentioned in the interview that he used his home computer to check emails from time to time because he worked only 80 per cent, but he did not specify why he worked only 80 per cent, and I did not ask him about this. If I had asked, he might have replied that he had reduced his working hours because of his new-born child, but he did not mention it himself. One could assume that by reducing working time he would have been able to construct himself as a new man who took responsibilities at home, but he did not refer to this. He did not mention the rationale for his reduction of working hours as others did, either to have more private time or, like Quinta, to care for children. In thinking about this issue, I looked back not only at his interview but also at how other people reacted to questions about their home. For instance, I talked in the first interviews about how people used a computer at home and where the computer was placed, and most people felt a little strange answering these questions.

One explanation for this is that they were not used to talking about such intimate things and apparently felt that a biography was far less intimate – as they had told it so many times for job interviews – than telling me where there computer was at home. As these first interviews were at Redtech, where job and private time at home were constructed as very different, it is possible that I overstepped this binary construction in asking them about their home, which they felt had little to do with their work. They considered that I was interested only in their work and was interacting with them in the workplace and not privately. Questions about the home might have been perceived as breaking down this binary between home and work.[15] One explanation, then, might be that Boris felt it was inappropriate to mention his fatherhood in a work context, as children belong to the private realm and not to the professional work context (McDowell, 1998). It also might be possible, therefore, that Boris did not mention the reasons for his involvement at home because it appeared inappropriate to talk about the reasons behind his decision to reduce his working hours. Cooper (2000) found in her research that fathers in ICT work rarely talked about their own commitments at home and with their children and instead constructed their childcare duties as one-off emergency situations when talking to colleagues. These men who took caring responsibilities reduced their own involvement, possibly to appear like 'proper' men in front of their colleagues but also to appear like 'proper' ICT workers. An ICT worker is expected to be available for the company and to prioritise work over other aspects of life.

An ICT professional would not, then, talk much about his or her private life, as this might conflict with appearing to be an ideal ICT worker committed only to the job. In the same way that people felt it was strange when I asked them about the location of their computer at home, it might have seemed that talking about care and children was too private and not professional. In addition to my not asking about care and more private issues, this might in part explain why Boris did not mention the reason behind his working time reduction, as he might then have appeared to be a less committed ICT worker. Interestingly, it felt more appropriate for people to talk about private things such as doing sports over the break as it was part of the ethos of the company to remain bodily flexible and fit. However, being a carer does not seem to sit easily with the ideal worker construction. One element regularly used to make a masculine subtext visible is to look at how easily caring roles can be incorporated into work (Acker, 1990; Benschop and Doorewaard, 1998a; 1998b; for a slightly different approach see Fitzsimons, 2002). In this case, care – and phrasing flexibility in terms of care – does not seem to be a resource of choice, and even though other elements may play a key role here, it appears that this allows the ideal worker construction to appear masculine.

In addition to the silence around gender in relation to flexibility, it was also surprising that social skills were rarely gendered when people talked about the ideal worker. That gender was not mentioned in relation to social competence was striking because when people talked about gender and why there should be more women in ICT work, one argument regularly put forward was that women have superior social competence to men (see Chapter 6). If this construction were to be carried over when talking about the ideal ICT worker, women would stand out as the new ideal: technically educated women would bring technical and social competence to work and would match the ideal worker most closely. One may conclude that social competence is gendered feminine, yet not when talking about the ideal worker, where social competence was not constructed as gendered. Oliver's comment, discussed earlier, was exceptional in this respect. Therefore, it is interesting to explore the implications of the fact that the resources were kept separate and used in different discursive contexts.

If the construction of womanhood entails being socially competent, one may speculate that men might find it difficult to enact such a feminine subject position. However, when positioning themselves in relation to social competence, men and women claimed this position equally. The enactment of a subject position which was in other parts

of the interview constructed as feminine could potentially endanger the construction of a masculine gender identity. This was not the case simply because the resources were kept discursively separate in different parts of the interviews. When participants talked about the ideal worker, social competence was gender neutral, which allowed everybody to claim those skills.

However, if we look in more detail at how gender was made relevant in relation to the ideal worker, the consequences for enacting social competence seem to be different for men and women. One illustration could be the example of Danielle as 'Miss Review'. Danielle was dubbed 'Miss Review' because she had a reputation for being good at reading other people's code to improve it. She was constructed as helpful, non-threatening and empathic, skills often stereotyped as being more typical of women. By enacting these skills Danielle literally became 'Miss Review', and her gender[16] was embedded in and confirmed through the title. Danielle was doing what seems to come almost naturally to women in helping others, and by enacting this social competence she became a woman.

There was no 'Mr Review' at Redtech; Marcel, for instance, displayed social competence in solving problems collaboratively, but he did not get a nickname for this. Marcel also displayed empathy and emotional competence in situations, which is something which could theoretically be labelled 'doing femininity', potentially in conflict with a masculine gender identity. However, as emotionality is constructed in this context not as something feminine but as something that is a must-have for the ideal ICT worker, everybody can enact the ideal. Thus, whereas Danielle became a woman by enacting social competence read as femininity, Marcel was not gendered, as he did only what was expected of him on the basis of the methodology of extreme programming. Danielle seemed to do what comes naturally to women. The skills she displayed are seen as linked to her being a woman, and they are recognised as feminine skills. She did get credit for these skills – but as a woman for whom it comes naturally to display these skills, and not as a worker who displays skills as part of the job and who is remunerated for it. This is similar to what Fletcher (1999) found in her study of engineering work, where women were expected to enact social competence but were not valued for this competence. When Marcel enacted social competence, this was apparently not interpreted within a gender frame but seen as an expression of what the ideal worker does.

For technical competence a different picture emerges. Theoretically women should be rewarded for displaying what is often said not to

come naturally to them: technical competence, which is commonly gendered masculine. But women who show a skill such as technical competence are not necessarily rewarded in this environment, as technical competence is simply the basis for the job. Men, in contrast, display an atypical behaviour by being emotional which adds value. Whereas the atypical skills that women perform – here, technical competence – do not have exchange value in this context, emotional competence, a more atypical skill for men, does have exchange value.

These differences in evaluation have consequences for who is better equipped to be the ideal worker. Where men are able to enact social competence as an atypical behaviour, they are valued for their gender flexibility and they thus come closer to the ideal worker. Women, in contrast, do not get special credit for enacting social competence but are constructed as women. Women's behaviour is always interpreted on the basis of gender, whereas men disappear in the neutrality of skills set out in talking about the ideal ICT worker. Through the construction of the ideal ICT worker as gender neutral, the way in which gendered behaviour is read means that men are more likely to appear to be the ideal ICT worker despite being gendered feminine in different parts of the interviews. Through the gender-neutral construction of the ideal ICT worker it appears that everybody can be the ideal ICT worker, yet looking more closely at the silences reveals that it is men rather than women who, by enacting social competence, come closer to the ideal worker. This is due to the underlying but unspoken masculinity which is embodied in the ideal.

When participants talked about and enacted the ideal worker, the emerging portrayal appeared gender neutral because flexibility and social and technical competence were constructed as being open to all. In this section the gender-neutral construction of the ideal worker was put under scrutiny by looking at the silences in relation to flexibility and social and technical competencies. For various reasons flexibility was not gendered, but one strong indicator is that talking about flexibility in relation to gender would involve seeing private life as interwoven with professional life, although most people did not select such representations. Even though social competence was strongly gendered feminine in other parts of the interview, social competence was seen as gender neutral when talking about the ideal worker. In looking at how people enacted social and technical competence it became clear, however, that women are read as women when doing social competence, whereas men come closer to the ideal worker. In both cases the underlying masculinity or the masculine subtext of the ideal worker became visible.

Conclusion

In this chapter I have looked at new work relationships in general and at how gender becomes relevant or irrelevant within these new work environments. I have shown how work in ICT companies is organised and how skills relating to social and technical competence, as well as flexibility at work, are discursively constructed and enacted. I have also pointed out how people position themselves in relation to these new and old skills, which is rarely a focus of studies on new work environments. To conceptualise the gendering of ICT work, I framed this chapter on the basis of how the ideal ICT worker is said to be. In theory one can argue that the world of work is currently undergoing a feminisation as skills associated with femininity gain value (Adkins, 2000; 2002). This became visible in the fact that the ideal ICT worker is no longer assumed to be an antisocial hacker but is now a socially competent person. However, people constructed the skills of the ideal worker on the basis of a dyad between technical and social competence and thus did not see technology as containing social elements as well. People reflectively adopted these skills in their identities by constructing certain skills as more desirable and 'more them' than others. As everybody working in ICT could be expected to have technology skills, much of the construction work went into stressing social competence, which was perceived to carry added value. Flexibility was used in different ways at Redtech and Greentech. Although in both companies it was generally expected that people would work as long as it took to finish a project, Redtech employees resisted an extensification of work by rarely working at home, whereas for Greentech employees working from home was often preferred to working in noisy open-plan offices.

Social skills and the ability to be flexible have been gendered feminine in many discussions, and one could argue that the prominence of these skills might represent a feminisation of ICT work. However, gender connotations were staggeringly absent from most discussions of these skills, which were talked about as if they were gender neutral. Previous research has shown that social skills are often not valued in women (Fletcher, 1999; Woodfield, 2000), but when the ideal worker was discussed, these skills were rarely seen as feminine at all. This was different in another part of the interviews where social skills were used to argue that women are particularly suited to ICT work and are not discriminated against. The assumed gender neutrality of social skills allowed everybody, men and women, to claim these skills. Similarly, flexibility was often seen as having no relation to gender and was

constructed as a gender-neutral element of ICT work, even though flexibility is in common discussions of the work context seen as gendered. Because these skills are explicitly not gendered, ICT work appears gender neutral. However, when I looked more closely at how competence was constructed, it became clear that it was easier for men to claim the gender-neutral ICT worker position than for women to do so, which is similar to what other studies have found (Eisenhart and Finkel, 1998; Jorgensen, 2002; Peterson, 2005; 2007; Woodfield, 2000). Women's abilities were read through gender and interpreted on a gendered basis, whereas men were much more able to pass as gender-neutral ICT workers. Thereby, gender 'sticks' (a term adapted from Ahmed, 2004) more to women than to men.

5
Performing Gendered Work Biographies

Individualisation as an ability to craft one's own life path should have been nowhere more explicit than in the way ICT workers narrated their biographies in this study. In current academic and popular discussions it is often emphasised that individuals are now in the driving seat in terms of shaping their own biographies. Through self-improvement, adaptability and becoming an entrepreneur of the self, people's lives are said to be becoming increasingly organised on the basis of market values (Beck, 2000b; Pongratz and Voß, 2003; Sennett, 1998). This entrepreneurial self has been heralded as the new model for the neoliberal subject (Lemke *et al.*, 2000). Although some claim that traditional markers of life courses such as gender, class and race are less important in the constitution of neoliberal subjects, gender continues to structure life courses (McDowell, 1997; 2002; Skeggs, 1997; Walkerdine *et al.*, 2001; Wetterer, 2003). One way of studying how gender influences the life course is to explore how gender matters in people's lives over time. Dausien (1998) theorised this by describing how individual enactments of gender 'add up' over the life course to form gendered biographies. However, the gender dimension of neoliberal subject constitution processes in relation to biography can also be conceptualised in another way.

Performing gender happens not only over time in biographies but also when the biography is narrated (Dausien, 1998; Lucius-Hoene and Deppermann, 2000; Wortham, 2000). Narration, like 'doing gender', is a social practice. In Butler's work (2004) doing gender in relation to certain norms is a way of rendering the individual readable as a human being. Many researchers have highlighted how narration is a process through which societal intelligibility is created, as it is an attempt to render one's life meaningful and interpretable by others (Bruner,

1986; 1991; Gare, 2002; K.J. Gergen, 1994). These processes are not gender free; through telling certain stories one also constructs oneself as a socially intelligible man or woman.

How gender is done through narration has been analysed by studying the stories children write in a classroom situation, where girls tended to invent stories about Barbies, and boys stories about dinosaurs and knights (Änggård, 2005). Adults seem to draw on a similar set of subject positions when they tell their lives in autobiographies, for instance (M.M. Gergen, 1994). In this study men presented their lives as individual struggles where the lone hero succeeded, whereas women attributed their success to the help of others. Thus common gender associations are used to create the protagonists of the autobiographies as men or women. In this chapter I show how different gendered subject positions and repertoires are used when narrating one's own biography and how this process is interwoven with market narratives.

The chapter is organised as follows: first, I analyse how the entry into ICT work is narrated; second, I explore how career development is related; and finally, I outline the resources used to talk about the future. I contribute to the general understanding of how new work biographies take shape, and I also show when gender is said to matter and when not in these new work biographies. I thus focus on how gender is done by narrating a biography.

Entering ICT professions

In the interviews, I asked people to tell me about their entry into ICT work. Whereas the self is often conceptualised in academic research as shifting and changing, people in this study, as in other studies (Hollway and Jefferson, 2000; McDowell, 1998), largely conformed to the convention of telling their stories as coherent. In doing so most people drew on two prominent yet different resources. The first was that they were always interested in technology, and therefore the entry into ICT work was a logical development. The second was structured around the fact that people somehow ended up in ICT work but this career path was not clear or predetermined. The way in which the entry into ICT professions was narrated was closely linked to how the relationship to technology was constructed.

Always interested in technologies

A large group of people accounted for their entry into ICT work by saying that they had always been interested in technologies, and

particularly computing technologies. These people usually constructed it as if their interest in technologies was sparked in early childhood and this led them to enter an ICT profession.

Xavier (36, Redtech) worked as a freelancer for various companies and was employed by Redtech's client company at the time of the interview. We join this extract as I wondered how he had received his education in software, because software development had not been part of his university education (he completed a degree in general engineering).

> *Elisabeth*:   But you don't have a software development education?
> *Xavier*:   Not at all.
> *Elisabeth*:   How did you get this?
> *Xavier*:   Er, (-) I was inside, I had a computer since I was nine years old.
> *Elisabeth*:   You were always into programming?
> *Xavier*:   Yeah. I think I wrote my first program when I was eleven.
> *Elisabeth*:   It was a childhood fascination that turned out to be your later job?
> *Xavier*:   Yeah, I guess. I just liked playing games. Er, when I was sixteen I wrote a program for (company name) and that earned me quite a bit of money. And I thought I could make a lot more money on this and I made that.

When I ask Xavier how he gained knowledge of software development, he replies that he did not gain this knowledge at university but by being 'into computing'. He had a computer from the age of nine and created his first program at the age of eleven, which substantiates his claim to have knowledge, albeit informal knowledge, of software. Although he mentions that he liked playing games, he counteracts the impression that he was a typical gaming kid by saying that he sold one of his programs to a company, thus discovering the earning potential of ICTs. Thus he constructs his personal interests as valued and saleable on the market. His fascination with technology appeared to be linked to making money, and when I asked him what technology meant for him, he asserted that it meant little:

> *Elisabeth*:   But you had some fascination when you were younger to play games and so on.
> *Xavier*:   Yes, I am an absolute gadget freak, you know. I still have the flash smart when it comes out and things like that. (-) It tends to actually have to fulfil a use now as well as just being a gadget.

Elisabeth: And what is this fascination all about? Is it just to have the new thing?

Xavier: (-) Er, (-) I guess, I never buy anything that I can't program in a sense. So, I need to know how it works. (-) Yeah, I like to, I like to think, yeah I could make something there (-) I could program or create a program for this tool and then I am interested.

Elisabeth: Is it the creating bit?

Xavier: No, it is the making money bit.

Xavier casts himself as a gadget freak who always has to have the newest technical gadgets. When I ask him whether he is fascinated by the gadget's newness, he points out that he needs to be able to program technology. He describes himself as wanting to know how technology works, which was a response commonly used by participants to explain their relationship to technology. Robert (46, Greentech) talked about his fascination with how steam engines and planes function, and this 'understanding how technology works' rationale was used regularly to explain an interest in technology. In Xavier's case this was bundled with a business interest, as he wanted to understand technology to create a saleable product. He accounted for his entry into ICT work in such a way that his pleasure from creating technology turned out to be something that the current economy valued and that he could turn into money.

Xavier was one of the few people who referred to money-making as a central aspect of their decision to enter ICT work, whereas an early fascination with technology was a commonly recurring resource used to account for the entry into ICT work. Felix (36, Redtech), for example, talked in the following way about how he came to work in ICTs:

Felix: I started with computers when I was about sixteen to seventeen years old, I think, (...) we needed to buy a programmable pocket calculator for school, I liked to play with it, to tell a machine what to do, which is followed rigorously. And then came the C64 (...) also a computer for gaming and I actually played a lot of games. And through gaming I learned a lot about the PC etc. (...) I and some friends exchanged information on this and then we found out that you can study it.

Felix constructs his interest in technology as resulting from learning to program a pocket calculator in school. He enjoyed programming, and particularly 'telling a machine what to do'. Thus, Felix gave orders that were 'rigorously' followed, and this appeared to give him power to

control his environment. This command-and-execution thinking and the ability to exert control over the environment also shone through in comments that Yosef (33, Redtech) made when he discussed how, through being able to program ISDN[1] telephones, he was able to control his environment and how this provided him with the feeling of being in charge.

Controlling the environment or nature through technology or culture is often associated with a form of masculinity (Ortner, 1996; Wajcman, 1991). The nature/culture binary seems to be referred to in these extracts when the technology relationship is described. Playing computer games and then starting to program was seen by Felix, as in Xavier's account, as a route into ICT work. As mentioned earlier, Felix also referred to himself in the interview as a gadget freak who liked to have the newest technologies. Playing computer games was thus constructed as a way of creating familiarity with the technology and then starting to play with the technology itself. In Felix's account it appeared that his friends were also into computing, and when they found out that one can study this subject, the future appeared clear and evident to Felix. The skills Felix earned through his hobbyist engagement with the computer could be used to enter ICT work. Although money did not seem to be central here, the ability to make use of skills gained while playing with the computer was constructed as important.

The idea that many people seemed to orient towards was that of turning a hobby into a profession. This was used as an explicit resource by Marcel (29, Redtech). Here, Marcel talks about how he went from studying theoretical physics at ETH[2] to working in ICTs:

> *Marcel*:   That (theoretical physics) was very theoretical and detached from real problems and then I thought after my studies, well, I would really like to DO something now. And then I turned my hobby, I had programmed things on the computer for a long time, into my profession.

Marcel describes how he needed a change from a very theoretical subject to something more practical, which becomes clear in his emphasis on the word 'do'. There was little talk about what Marcel would otherwise have done, and he constructs it as if it was evident he would enter ICTs, as if there was little doubt which career path he would take.

Many people presented it as if their career path had been clear for a long time and as if they were just doing professionally what they had done privately before. In these accounts the affinity towards technology

and being a gadget freak was regularly used to construct it as obvious that they would enter ICT work. In talk of these career paths, many references were made to standard associations with masculinity, such as being able to control things through technology or constructing oneself as a gamer. This position is closely associated with boys getting pleasure from technology (Brice and Rutter, 2002; Crawford and Gosling, 2005; Faulkner, 2000a; Kleif and Faulkner, 2002). Indeed, only one woman talked about enjoying games: Vanessa (24, Greentech). Although enjoying games and technology could be read as doing masculinity, for Vanessa this enjoyment appeared not to be in conflict with being a woman. One can talk here about enacting gender in a non-conforming way. A linked element resembling traditional scripts of masculinity is that it is not left to chance what one does professionally; rather, it appears that the professional career is a logical development of interests and skills. Often masculinity is thought to mean that one knows what one wants and that one is sure of one's own skills. People in my research seemed to use similar accounts to narrate their entry into ICT work. By presenting one's interest in technology as natural and as leading logically to work in ICTs, the social, economic and political dimensions of skills are disguised. A move into ICTs is also a move into an area which is deemed increasingly important in society. By presenting their pleasure in technology as long-standing and natural, people not only account for their entry into ICT work but also appear rational and self-directed, which resonates with a certain form of techno-rational masculinity. This does not mean that any career narrative in which linearity and sense of purpose are drawn upon is doing masculinity. However, in this context and in combination with an interest in technology, resources which are often associated with masculinity appear to be utilised.

Ending up in ICTs

Another group of people narrated their entry into ICTs using very different resources. In these cases, people presented it as if they more or less 'ended up' in ICTs. Günther (32, Redtech) uses such a resource when I ask him why he studied informatics:

> *Elisabeth*:   And why did you study informatics?
> *Günther*:   HAHA. That was coincidence, pure coincidence. Well, er, around the time when I did my A-Levels,[3] I obviously thought about studying and in which direction it should go and for me product design, ergonomy and such things were interesting.

He goes on to explain the different options he had and how he decided to start studying business and production sciences at ETH but failed his intermediate exams after two years and then decided to shift to informatics:

> *Günther*:   And, still with the idea of business and production sciences in the back of my head, I changed to informatics and I stayed there, because I liked it. Up until then I had really no, well, relatively little interest in informatics, for me it was somehow too one-sided, too dry but this did not prove true.

Günther describes as pure coincidence how he started to study informatics because he failed his exams. He constructs himself as not too interested in informatics, as he thought that it was boring. He also distances himself from the popular nerdy and geeky image which is attached to being a gamer or hacker and to being totally fascinated by technology. I asked him whether he was fascinated by it:

> *Günther*:   (-) There is a certain fascination. I am just not, well I am just not, I am just not the (0.5) not the tech-, not the technology freak, especially in informatics. What fascinates me about technology, and this relates to informatics to some extent, is maybe the automatic vacuum cleaner, the vacuum cleaner that I do not use at home. That is for me from my educational background interesting, how this is done, but the most interesting thing is the problem that it solves, that I do not have to do it myself. HEHEHE

Günther acknowledges a certain fascination with technology but searches a long time for words to convey that he is not a technology freak. He cites the example of an automatic vacuum cleaner, which is interesting not only technologically but also because it makes household tasks easier. It is a very interesting example because he picks a problem that is often more associated with women, vacuum cleaning the house, to show how technology can make life easier. Other people associated technology mainly with boys' toys, from steam engines to computer games. Günther also makes clear that he does not use the automatic vacuum cleaner and implies that he does the vacuum cleaning at home. He had mentioned earlier that he lived with his girlfriend, and by claiming to do the vacuum cleaning he constructs himself as a modern man who does his fair share of housework. Günther seemed not to find the image of a technology freak

appealing, and for him technology had to solve everyday problems rather than be an end in itself.

A similar reference to solving practical problems was made by Esther (33, Redtech). Esther told me that she had many interests as a child but was always drawn to natural sciences. After studying biology at university, she changed her degree to informatics. She describes her way into ICTs in the 1990s as follows:

> *Esther*:   And then it was pure coincidence, because the father of my then boyfriend was working for a management consultancy and that is how I heard about informatics and that was for me a TV and a typewriter combined and I knew that this is the future but I had a large educational gap there. (...) I also read a report on lift malfunctions, that you have to think about how the lift should not crash if one person enters the lift on level five and presses level five.

Like Günther, she uses 'pure coincidence' to describe her entry into ICTs, but in contrast to Günther, Esther was influenced by another person, the father of her then boyfriend. She explains that her decision to enter ICTs was a decision to learn about something that was seen as increasingly important. This contrasts with much of what was said by people who constructed themselves as having always been interested in ICTs, where the rising importance of ICTs was not linked to the decision to enter the ICT profession. Esther's interest was strengthened when she understood the applications technology was used for, like lifts, and could thus relate technology to common problems and not to a 'career' as a teenage computer gamer. The computer is, then, no longer just a machine executing orders, as in Felix's case, but a useful technology for everyday life. She thus did not appear technology driven but as wanting to solve real-life problems with technology, like Günther.

Waltraud (52, Greentech) mobilised many of the resources discussed above when describing her entry into ICT work:

> *Waltraud*:   I did my A-levels in business[4] and, well, my favourite subjects were mathematics and in this area. Well, business administration and such things. That is rather my cup of tea. And then by pure coincidence someone told me about programming and about Greentech. And I did not have a clear understanding what that is. But it captured me somehow. (-) If you

look at it from the outside, it was really pure coincidence. And then I looked in the phonebook and I found somewhere a company with the name Greentech. HEHE. I wrote to them and I was employed.

Waltraud, again, draws on 'pure coincidence' to account for her career, and she uses this expression twice in this extract. She also claims to have had little previous knowledge of technology and to have been referred to Greentech by a friend, so a third person was used to explain her entry into ICT work. This third person alerted her to the opportunities in programming, and as Waltraud had always liked working on mathematics and business administration, it seemed appealing to her.

Laura (49, Greentech) did not draw on the coincidence argument when talking of her entry into ICT work, but she did use a very similar argument. From childhood, Laura wanted to become a chemist (she used the masculine form), but she could not study chemistry as she had not done enough Latin. She decided to do an apprenticeship as a chemical laboratory assistant instead. She was soon bored by the job and thought about quitting her apprenticeship:

> *Laura*:   And I have to say I was lucky, my taskmaster called me one day and asked 'Are you bored?',[5] he literally said it that way, and I said 'Yes, I don't know but I think I'll quit.' Then he said, his colleague from EDV,[6] no clue what EDV is, then, they look for young programmers. Programmer, I never heard this, no idea what is was, really. (He said that) I am good in logical thinking, and he thought that I should do that.

She took up this offer, worked a few days a week in EDV and was able to finish her apprenticeship. Laura does not refer to 'pure coincidence'; instead, she describes her entry into ICT work as 'lucky'. She presents herself as only a little knowledgeable about technology and proficient in programming. She also refers to a male third person who opened her eyes about ICTs, her taskmaster. By directly quoting his words, Laura avoids claiming that she can think logically but still presents herself as good at logical thinking. This pattern of saying that one has little knowledge of ICTs, that the entry was lucky or a coincidence and that another person introduced one to ICTs functions as a claim that ICT work was not something she had thought about. Through these references, people appear more remote from technology.

Laura refers to herself as not much taken with technology. We join this extract when I had asked Laura about her relationship with technology, and she replied that it is only a tool to get the job done:

> *Elisabeth*:   Is there a fascination (with technology)?
> *Laura*:   No, for that I am not enough hung-up on[7] technology.
> *Elisabeth*:   What does it mean to be hung-up (on technology)?
> *Laura*:   I am not technology-horny[8] or something.

She then pointed to her mobile phone and explained why she needed it because it made her job easier:

> *Laura*:   For me it is a necessary evil. I need it (the mobile phone), and I find it practical. But I am not that I have to explore all (the functions).

Laura denies being fascinated by technology. Like Günther, she denies being totally into technologies and explains that she needs technology when it helps her but she is not an 'explorer' who wants to learn all about these technologies and all their little functions. Laura constructs herself as definitely not a gadget freak like Felix. It was very common to draw on the resource of not being totally fascinated by technology, and other people, including Danielle (36, Redtech) and Charlotte (34, Redtech), used very similar resources to construct themselves as more remote from technology.

Knowing little about technologies before entering ICTs is a subject position closely associated with femininity, and all the women in this study except Vanessa (24, Greentech) claimed to have known little about ICTs before entering the profession. However, there were also men, including Günther, who used such accounts. Another example was Nikolas (46, Greentech), who trained and subsequently worked as a civil servant for several years:

> *Nikolas*:   I worked hard to get a diploma in administrative science and then, at twenty-six, I achieved the lateral entry into EDV, or maybe not achieved but it was offered to me. And I wanted to do this, although I hadn't had many points of contact with EDV, except as a user.

At first Nikolas tries to explain his entry into ICT as being through his own agency, in that he 'achieved' the lateral entry, but he then corrects

himself and states that it was 'offered' to him. Nevertheless, he reinvigorates his own agency by stressing that he was keen on working with technology. Although the statement about previous knowledge of technology is carefully framed, it could be read as indicating that he knew very little about ICTs. Nikolas also describes himself as not fascinated by technology, as using it only as a tool to get his work done. In contrast to many earlier accounts, Nikolas does not refer to luck or coincidence here but constructs his career path as much more self-directed, insofar as he wanted to take this path rather than ending up there passively. Although one could say that the entry stories of Laura and Nikolas are rather similar in their structure, through the resources used Nikolas appeared more in control and as having had more agency in his career. This may be an instance where gender is done in a subtle way, as Laura appeared, through the repertoires she used, to have been much more passive in her career than Nikolas.

Günther's self-construction was slightly different in that he very clearly mobilised the pure coincidence resource, and, indeed, he did not appear very active when he told me how he had failed his preliminary exams. Günther was not only distancing himself from being technology driven; he also drew on examples which let him appear to be a new man who, for instance, vacuum cleans the house. Whereas Nikolas fell into a rather gender-stereotypical pattern, Günther seemed through the use of these discursive resources to be challenging traditional gender associations. Remoteness from technology was constructed through not having any natural interest in technology, through being in ICTs by pure coincidence and through being introduced to ICTs by another person. On the basis of common gender associations, one could say that such a construction resonates more with traditional forms of femininity. However, Günther appeared very comfortable with drawing on some of these resources – except for the influence of other people – to narrate his entry into ICT work. This shows that gender constructions can be more flexible, undoing common gender associations, although such instances were rare.

Not only do men and women position themselves differently in relation to technology, but there is also considerable variability among men and women in doing so (Henwood, 2000; Stepulevage and Plumeridge, 1998). It is striking that two different interpretative repertoires were used by the participants to account for their own entry into ICT work. Through one interpretative repertoire, the career appears to be a logical development from private interests and closeness to technology. When the other interpretative repertoire is used, people appear more remote

from technology, and their careers seem to be shaped by coincidences and other people. Nevertheless, through the latter repertoire gender could be done by giving the account a more active and self-directed slant. The first interpretative repertoire seems much more useful as a way to present oneself as a self-directed and rationally calculating economic agent, which seems to be a requirement for being a neoliberal subject at work.

Gender as (no) career development resource

One of the fundamental changes in organisations in recent years has been the move away from bureaucratic hierarchies to flat and flexible hierarchies. With these changes, the career structure itself has supposedly changed from being linear to being more network-like. Bureaucratic careers are built on the assumption of gradual career progress, climbing a career ladder with small pay rises. This gradual progression is no longer assumed in flat and flexible careers, where work is characterised by project-based work, portfolio employability and much more irregular pay (e.g. Barley and Kunda, 2004; Blair, 2001; Jones, 1996; Pratt, 2000). In my study, although Greentech careers shared more similarities with bureaucratic careers and Redtech careers with flat and flexible careers, they did not comply with these career types in their purest form. After delayering, Greentech's career ladder rungs had been significantly reduced, and at Redtech employees did not carry the full burden of self-employment and the portfolio employment lifestyle. In this section I explore how the career trajectories in the two companies were described and what role gender played.

Increasing responsibility

At Greentech ICT workers had the choice between two career models: they could stay on a professional track, continuing to work closely with technology, or they could move into a managerial function. The two career tracks were organised into different bands, and at each higher band the leadership and skills demanded increased. Most people in this study were on the professional track, focusing on technology, but a move onto the managerial track was possible at any time. Much of the talk about career development at Greentech was geared towards accounting for why one wanted to stay in the technical area.

Tim (54, Greentech) joined Greentech after an apprenticeship as an electronic mechanic and after working for various other companies. He

remained in the technical stream at Greentech, and he accounted for this as follows:

> *Tim*: I prefer this (the technical side), that is certain. I'm rather the type who solves and analyses technical problems, rather than leading people or more administrative tasks. I don't like that very much.

Tim points to his personal preference for solving technical problems as a reason for staying on the technical track. A management career denotes for him mainly managing people and administration, areas which he does not want to move into. Again we see how pleasure in dealing with technology is put forward to account not only for the entry into ICT work but also for the decisions taken after entering this work.

If one stayed in the technical area, then one's responsibility increased with length of service. Many people talked to me about the different functions they had fulfilled in the course of their ICT careers. An example was Steven (30, Greentech):

> *Steven*: I started in 199X as systems technician for large frame machines. Er, I did that for two years and then I had the feeling I needed a new challenge and the opportunity came up to enter a project team and to become project leader later on.

After two years at Greentech, Steven says, he looked for a new 'challenge'. The language of challenge was used regularly, reflecting the official career development policy of Greentech, where new challenges featured prominently. Greentech was proud of giving its employees the opportunity for self-development. The new challenge Steven took on was to join a project team, first as a team member. We again see the notion of rising responsibility slipping in, as he soon moved up the hierarchical career ladder by becoming a project leader. There was a strong discourse on this rising responsibility and on moving up the career ladder at Greentech, and people constructed themselves as improving their career position with each rung of the career ladder they climbed.

However, the hierarchical career ladder was not emphasised in all accounts. For instance, Quinta (42, Greentech) did not talk much about her own career development within ICTs, but in the questionnaire she indicated that she had worked first as a systems engineer, then as a product manager and subsequently in sales. She did talk about her recent career change from sales into people management, but this was in the

context of flexibility at work (see Chapter 4). In her account she constructed Greentech as giving her the opportunity to adjust her working hours and times to suit her own needs. Here, having family responsibilities was used to account for Quinta's career changes.

Gender was frequently made relevant in relation to why it was allegedly easier for women to have a management career. Waltraud (52, Greentech) talked about her career development when we discussed gender at work:

> *Waltraud*:   Earlier I was far and away[9] the only woman. And there was a time when all was about promoting women. (...) And Greentech was always fairly progressive and early with this kind of thinking, and they would have liked to have women in managerial positions. I'm sure that at that time it would have been easier for women than for men to get a management position. (...) Because one was afraid of pushing her back. Maybe because one was afraid of disadvantaging them, one advantaged them.

Waltraud recalls a time when she was the only woman at Greentech, and when promoting women was top of the agenda. After saying that Greentech was early in promoting women, she refers to the fact that 'they' (the managers at that time) would have 'liked' to have seen more women promoted. This suggests a strong aim to have women in leading positions at Greentech, and this desire is translated by Waltraud to mean that women would have found it easier to get into management, because women would have been promoted to avoid the impression that they were disadvantaged. One could get the impression that gender, not performance, was the criterion for promotion. Women also appeared to function as the symbolic benchmark for the progressiveness of the company, and thus any woman – regardless of how good or bad she was – could have 'made it'.

Laura (49, Greentech) also referred to the link between being a woman and a management career. We were talking about quotas for women at work, and she explained why she was against them:

> *Elisabeth*:   And how does this (quotas) relate to promotion?
> *Laura*:   In relation to promotion, it was clearly easier for women (to get) a management career. I had to fight against it for years to become a manager. Because they absolutely wanted me, that was in technology services, only two women in all and one of them a manager that would have been a dream to them. My then

       manager and all of them always wanted to make me a manager but I said 'No, if I see what you do (-) that does not interest me at all. Way too many administrative things and I don't want this.' I can lead people, I had so many small teams, like project teams, where I needed to lead, I can do that, and I don't dislike this, (...) but the administrative things.

Elisabeth: And why was there this wish to have a woman as manager?

Laura: Because it is the trend of the time to promote women. That looks good. At the moment that is declining, I feel, but between (19)85 and 2000 it was very much a trend to promote women.

Laura asserts that it was easier for women to get into a management career at that time and that she had to 'fight' against being shifted into a management career. The notion of fighting underscores the point that her managers wanted her to become a manager and that she had to resist this career change. She appears, like Tim, to dislike the administrative tasks that come with a management career. However, in contrast to Tim, Laura constructs herself as much more pushed into management, simply because it would have looked good to have a woman manager. When asked why the managers wanted a woman as manager, she replies that it was the *Zeitgeist* to promote women, because it looked good. Like Waltraud in the earlier extract, Laura constructs it as if a climate of promoting women had been prevalent, although this had changed. However, rather than this promotion of women being constructed as creating a gender-egalitarian society, it is seen as something that 'looked good', which implies that the company's image was thus improved.

   This leads back to the question of why Laura was so strongly against a management career. On the one hand, she argued that she did not like the administrative tasks; on the other hand, the talk was generated in the context of arguing against quotas for women. Laura earlier stated how she did not understand why more women were not in ICTs, because she thought women were good at ICTs. She continued:

Laura: Apart from this, I have to make it quite clear, that I am against women quotas (-). Because I have the opinion that I have the job, because I can do it. And not only, because I am a quota woman and when we have quota women, then the standard decreases, then the standard could decrease. And then it is suddenly said, well, (that is because of) the quota women. And I don't want this.

This makes it evident that although Laura constructs herself as being in favour of women in ICTs, she does not support increasing the number of women through women-only quotas. This would have meant hiring and promoting women because they were women, and Laura does not want to be seen as a person who has a particular job because she is a woman. Instead, she wants to be seen as a competent worker and as able to do the job. She also alleges that the quality of work deteriorates if a company moves from a meritocratic organisation to an organisation which promotes people on the basis of gender. She makes it clear that the behaviour of one woman tends to be generalised to all women, and that if one woman who is hired and promoted because of her gender rather than her competence is not particularly good, then Laura will appear less competent because she will also be perceived as a woman promoted due to a quota. Thus, Laura dislikes not only the administration which comes with a management job but also being constructed as a woman who has not earned her place and who is implicitly less qualified than men doing the same job. Furthermore, the accounts of Waltraud and Laura construct women as being channelled away from working with technology to working in more administrative positions. It appears as if women who have decided to work closely with technology are pulled away from technology because it is more important to have women in managerial positions.

The idea that careers are chains of increasing responsibility remained a strong feature of how people accounted for their careers at Greentech. This increasing responsibility could be realised either in a managerial stream or in a technical stream through different positions and titles. It becomes clear that older forms of more traditional careers continue to exist even though companies are now less hierarchical. An impression held by some was that women had it particularly easy when it came to making it in a management career because Greentech would appear progressive. This move into management was resisted by women not only because management jobs were less appealing to them but also because they carried the stigma of being there as women and not because they were qualified for the job. Kanter (1977) described this as tokenism, insofar as women in minority positions are tokens, and individual competence is transferred to all women. In this specific situation, this means that the impression exists that men can 'safely' take a management career path, as they are generally assumed to be there as a result of competence, whereas the respective resource for women seems to suggest that women are not there because of merit but because of positive discrimination. This is an

expression of the current gender ideology whereby women ought not to be disadvantaged.

Positioning oneself

Redtech was far less hierarchical than Greentech, and people working at Redtech were either among the large group of programmers or in the small management team. Sometimes programmers could take on leadership roles by becoming team leader for a project, but this status was only temporary, as this team leader function rotated. In this environment the notion of career took a new form more akin to positioning oneself as a node in a network. As Redtech careers were different from classic careers, much discursive work was done by Redtech employees to justify why they had decided against a more formal career in a large organisation and preferred to be where they were.

This special way of organising at Redtech was expressed by Pascal (33, Redtech) when he talked about the difference between his former employer, a large bank, and Redtech:

> *Pascal*: Er, yes, well, Redtech (is) a relative small company, you know everyone, er, hierarchies are in a sense not very strong, clearly we have the management and the project leader, which is officially not an own hierarchical level, but (she/he) has to make decisions and has to lead the team. That is for me the major difference, the missing hierarchies. (...) That is the big difference. It is all much more direct than at (bank name), one builds strongly on personal responsibilities, people take the competencies[10] they need, they want and well, you just take them in advance (before one does something) and you are not punished for what you have done but that is what is expected.

One of the advantages of Redtech for Pascal is the lack of formal hierarchies. First, Pascal acknowledges that there are differences in the formal hierarchy between programmers and management, and he adds that project leaders have special responsibilities which give them power over others, although this is not a formal hierarchical level. Pascal constructs it as if one has to ask permission in a larger organisation, whereas at Redtech it is expected that one will just do things, as this competence or authority is assumed. In this account Redtech is constructed as a company structured only marginally by hierarchies where people are given the authority to do whatever they feel is necessary to get the job done.

Although there were few official hierarchies, there were forms of differentiation that led to an informal internal hierarchy: first, how long one had worked in ICTs and for Redtech, which also influenced pay level; second, being a project leader. As Pascal suggested, project leaders, especially on larger projects, had special authority in that they were able to allocate people to tasks, mediate the contact between the team and the customer and pay bonuses. Günther (32, Redtech) mentioned that he took on a project leader role as a career move to position himself for future employers.

A third way in which an internal hierarchy was constructed was through becoming technologically recognised. Some people occupied 'guru' positions by securing a reputation for excellence in technology. A fourth way to position oneself within the company was participation in particular projects. Redtech creating technology for a well-known company conferred prestige on those who developed that technology. The importance of the projects one worked on was clear from the company's website: most employees had personal homepages where they briefly introduced themselves, and a large part of these pages was filled with information on the projects and functions they had worked in. Projects were thus a way to showcase people's skills and experience.

Interestingly, in the interviews most people at Redtech defended not working for larger companies with more classic career paths, and most people linked this to their own career path in ICTs. A first repertoire regularly cited was the long working hours needed to climb the career ladder in larger companies. Danielle (36, Redtech) answered as follows when I asked her what role climbing a career ladder had for her:

> *Danielle*: I do not look too much at the career ladder. I have seen it and I know how that works. That would simply mean to work from seven (a.m.) to eleven (p.m.) without a break and when I look at these people they have all somehow a destroyed social life. That is not my goal, I always try to have some balance. I could not imagine myself either just doing the job, working for eight hours and going home. I sometimes take something home, to read something or so. I try to take a middle path. And that is hard to reconcile with a classic career. Well, I need to be happy and I do not want to sell myself.

Danielle denies wanting a classic career and refers to her own experience of working in a large bank. She rejects a classic career because it

would mean having no private life, and this is not attractive to her. This comment could be construed as an indication that Danielle wants an easy job not a stressful one. To counteract this portrayal, she says that she is not a person who works for just eight hours and then goes home, although she also does read at home. But this 'middle path' between working long hours and doing just the required hours is seen by her as not sitting well with a classic career. What she constructs here is a healthy work/life balance incompatible with a classic career, and she therefore prefers for the time being to work in a company where networks rather than hierarchies dominate working life.

People who decided not to have a classic career in this study also justified their decision with reference to the meetings they would have been required to attend. At Redtech I found that people disliked meetings, and the general view was that people preferred doing things rather than just sitting in meetings talking. This became evident in comments made in the team meetings I observed, whose common theme was that one does not achieve very much in meetings; the general impression voiced at Redtech was that in larger companies meetings are necessary for one's career. Linked to meetings are other political decisions one has to accept, and many people voiced discomfort with these politics. Pascal (33, Redtech) used office politics as one reason for not wanting to have a classic career:

> *Pascal*:   I think that one has to do (-) many things simply due to career (...) and I don't want this.
> *Elisabeth*:   What kind of things?
> *Pascal*:   To accept political decisions, subordinate myself (-) make decisions which don't make sense and to try to please certain people, simply so that (-) one is considered by them when the next promotions are due. I don't want this.

What emerges from this justification is that a classic career requires certain politics and that Pascal does not want to play this game just to make his career. This sounds similar to Danielle's use of 'selling oneself', discussed earlier, as one would be expected to subsume one's personality under a fake personality to make a career. Redtech workers commonly used this strategy to construct themselves as individuals with an identity that was not flexible just to make a career. This singularity was almost worshipped at Redtech, in that everybody was said to be equal and to have the authority to do what he or she thought the job required. This is much more in line with the spirit of working in a

start-up atmosphere. I found an expression that Esther (33, Redtech) used very insightful in this respect. Esther talked about the advantages of Redtech:

> *Esther*:   I think it is a bit like having set up a business collectively.[11] We share the risk and we share the profit. (...) One has the feeling of being a part of it and not simply of being a slave, who is kept as cheaply as possible, but you really belong to the company.

The idea of 'collectively setting up a business' is what many people were expressing implicitly in their accounts. Esther feels herself 'a part of' the company. The notion of the 'slave' sounds exploitative and like having no individual identity, like being an anonymous person who labours for the well-being of the company but never gets the fruits of this hard work. At Redtech the labour one did was reflected in company results, and employees received bonuses for their performance. Employees referred to how they felt valued, trusted and accepted at Redtech. Having the feeling of freedom, earning well but not having too many risks, is what attracted people to Redtech, and for most people the decision for Redtech was a decision for its working climate and against larger companies and classic careers. The belief in 'collective individuality' offered by Redtech was among the most common features of people's descriptions of their career paths within ICTs, and this collective individuality gave them the opportunity to become entrepreneurs of the self.

This praising of equality at work through being accepted as an individual was often translated into the idea that all people are the same. For example, Redtech advertised on its website that work was done in 'small homogeneous teams'. Homogeneity and sameness are here seen as positive factors, in contrast to Greentech and many other large companies where the mantra of 'diversity' is a huge buzzword. It was exactly this focus on diversity which was used at Greentech to argue that more women should work in technology professions because women were said to bring a special perspective. However, at Redtech feeling different in an atmosphere of homogeneity was sometimes perceived as problematic. We join the following extract as Danielle (36, Redtech) talked about how she came to work for Redtech. She had been working for a larger company and was being given increasing responsibility:

> *Danielle*:   I looked primarily for another company and not another job. And then I found Redtech. (...) It is a very flat hierarchy and we are all somehow positioned as equals. I was attracted by the

extremely high competence of the employees here, most have a degree from ETH and I did not know if I could keep up to this (the standard of the people). And then as a woman, I think that was one motif why I was hired.[12]

She constructs it as if she was attracted to Redtech because hierarchies are flat and because everyone is constructed as equal. The other element she adds is the 'high competence' of Redtech employees. She elaborates on this competence by referring to the fact that most people hold ETH degrees, and she adds almost seamlessly that this caused her to doubt her own competence, saying that she did not know whether she would be able to keep up with these excellent people. This seems to be related to her being a woman: when she adds that being a woman was one reason she was hired, one could read this statement as saying she was hired because of her gender rather than her competence. That she refers to being a woman is somehow strange, because it constructs being a woman as having consequences for how competent one is, feels or is perceived to be. She does not specify why it should matter that she is a woman, but leaves us with the suggestion that being a woman could matter. She does not construct herself by, for instance, referring to the work she has done previously which might explain why she was hired; she constructs it as if she was hired as a woman.

This notion of being hired because one is a woman came up several times at Redtech. Charlotte (34, Redtech) was responsible for hiring at Redtech, and she talked here about hiring procedures and policies:

> *Elisabeth*:   As there are so few women do you do anything special to recruit more women?
> *Charlotte*:   Mh. We don't really do anything special. I always try to catch a girl (...) as apprentice, but I am not too successful in that (...).
> *Elisabeth*:   Do women actually have good chances of finding a job?
> *Charlotte*:   I think that this is the case. A goodwill is certainly there. I did, well, I have to confess, that I invited girls, despite them being weaker in those aptitude tests. (...) I am certainly not very neutral as a woman in that position. Certainly.

This extract is fascinating because of the apparent contradictions. I ask Charlotte directly what Redtech does to increase the percentage of women there. Her initial reply is that Redtech does nothing special, but then she says that she always tries to recruit girls as apprentices. Doing nothing special to increase the percentage of women and trying to 'catch

a girl' are two apparently conflicting resources, and in the course of the extract Charlotte 'confesses' that she invites women who are weaker in terms of formal qualification to see whether they would be suitable for Redtech. The notion of 'confession' suggests that Charlotte is doing something that is somehow not right or fair towards the boys and men who are not invited because a girl or woman with weaker performance is given the opportunity of a job interview. She justifies this by reference to being a woman, which seems to suggest that she is not neutral in her position. This conveys the impression that she is naturally interested in getting more women into ICTs. One can thereby also account for the apparent contradiction in the initial statement between not doing anything special and 'catching a girl'. She knows that her behaviour could be read as unfair and as not treating everybody equally, and therefore she first tries to say that Redtech is not doing anything to promote women, but after this implicit disclaimer starts to talk about what she personally does to increase the percentage of women at Redtech. In this way Charlotte deals with the ideological dilemma of appearing to be a fair person in hiring people but also doing something to increase the percentage of women at Redtech.

This discourse of positive discrimination and affirmative action was also commented on by Yosef (33, Redtech) after the interview. Although we had a rather slow start to the interview, he was hard to stop when the topic of gender came up, and we continued to talk about it over coffee after the interview. He vented his anger about what he characterised as Redtech's approach to gender by saying that it was irrational to hire women just because they were women and were not as good as others and that it would only be rational to hire the best people and leave gender aside. He complained that the otherwise rational company was in this case very irrational, and he attributed this to that fact that Charlotte 'felt alone' and therefore wanted more women. He suggested that being one of a few women increased the feeling of being alone, even though these women might not have felt this way and might have identified with being a worker rather than a woman at work (see Chapter 6). It was clear for Yosef that it was Charlotte's irrationality as a woman which led to this irrational behaviour, which he perceived as unfair to men. This was one of the few instances where a man talked implicitly about how he felt treated unfairly, but instead of voicing this directly he presented it as irrational that women were given preferential treatment.

Feeling different came up several times in the interviews, and Andrea (37, Redtech) talked about how she was made to feel different by people who had attended ETH – the majority at Redtech – which she had not.

She pointed to a subtle but effective language strategy: people gave themselves the label 'engineer' and attached themselves to it. This label was exclusionary, as one had to have taken a certain degree course to claim it. Those who went elsewhere for their education could not refer to this label. Furthermore, this group of people was constructed through having similar stories about the good old times, which excluded others. This is an instance where difference was constructed by constructing certain identities. Here titles were used to construct a certain form of shared background and to assert competence, which constructed those who did not share the background as different. These subtle mechanisms are also likely to be used in relation to gender. I talked with Danielle about being from another university:

> *Elisabeth*:   Is it a bit unusual to be one of the persons who does not have this (ETH) background?
> *Danielle*:   Yes. Certainly. Well, I made certain experiences here at Redtech in the company and its environment, er (-) I think I am a bit more sensitive as well and then you think, what is the reason. One the one hand it is being a woman, one always has to achieve a bit more, and the others could just do the things and on the other hand not the same degree.

When asked about difference at Redtech, Danielle is quick to respond that being different matters at Redtech. She constructs herself as more sensitive and feels different because she is a woman and did not attend the same university. She uses both aspects to suggest that she has to work harder than others, who can rely on either the right university or the right gender. However, Danielle says that she has accepted her 'exotic' status and also that she sees the advantages of it. Danielle seems to accept this as part of her identity and recognises that she has to work harder to show her competence. In a company where homogeneity is key, being different seems to be difficult for those who are singled out as different. In these circumstances, people recognise themselves as other and are made to feel other by co-workers.

Careers at Redtech and Greentech appeared diametrically opposed insofar as Greentech used a system of increasing responsibility with each step up the career ladder. At Redtech the advantages of working for Redtech rather than a larger company were singled out to account for one's career. Thus it became clear how diverse career paths within ICTs could be, and this adds to our understanding of the shape careers take in the new economy. However, in terms of gender the two companies appeared rather

similar. Neither in Redtech nor in Greentech was being a man central to career development; indeed, few men talked about themselves as gendered. In contrast, women at Redtech and Greentech constructed their career development as relating to being gendered: they explained that they were hired or promoted as a woman in a climate where women should be advanced. Women had internalised this rhetoric of 'advancing women' and used it to account for their own career development, which was missing among the men. Men constructed their career development mainly through the official company rhetoric of either increasing responsibility or positioning oneself. Women also drew on these resources but used being a woman as an additional justification for their career development insofar as they oriented towards being hired and promoted as women. Women also reduced the impression that they had succeeded because they were good. Minimising one's own achievements is a common way in which femininity is constructed (Walkerdine, 1997). Whereas men construct themselves largely as being in charge of their careers, which are due to their own competence, for women the resource of being hired and promoted as a woman limits their ability to appear to be an entrepreneurial self and the architect of their own fortune.

Talking about the future

In the following section I look at the resources available to people to talk about their future lives. A similar strategy was used by Edley and Wetherell (1999) when they asked young men how they expected their lives to take shape in relation to families. They were thus able to highlight which options the gender ideologies seem to offer and how these young men negotiated these options. In my research I was interested in people's projected working life, but it became clear that although gendered resources were mobilised in relation to the past, these resources appeared to be missing when people talked about the future. When people talked about their futures, gender rarely played a role. This is particularly striking when the past seems to have gendered structures.

Uncertainty and life plans

When participants were asked what they planned to do in five or ten years' time, a very common repertoire was that they had little idea of the shape their life might take:

> *Zacharias*:   (Exhaling) For god's sake, I don't even know what I will
> do in one year's time. HEHE.

Zacharias (35, Redtech) appears somewhat overwhelmed by the question; he first exhales and then starts with an exclamation that he cannot even plan one year in advance, but he finds this comment funny somehow and starts to laugh.

> *Pascal*:   What I would like to do in five years time, I don't really know. I cannot tell. I don't plan that long in advance.

Pascal (33, Redtech) points out that his time frame has shrunk to only short-term planning. Participants also often stressed that the inability to plan the future was linked to the pace of change in ICTs and that they just did not know what technology would look like in five or ten years' time. Most of the time, however, this unpredictability was seen not as threatening but as part of ICT work, and people were optimistic that they would find their place in ICTs even though technology would change. Having no idea about the future seems to have become a part of today's workplace experience, as the new forms of career seem to be planned in the short term and not the long term. The unpredictability of one's future is, as Sennett (1998) stresses, symptomatic of new work biographies. Yet people do not seem to experience this as threatening their sense of self; rather, they accept this insecurity as part of their jobs and their selves.

There were some groups of people who had more concrete plans. Some people at Greentech had planned their retirement, including Tim (54, Greentech), Waltraud (52, Greentech) and Laura (49, Greentech), but in these instances retirement meant not stopping paid employment completely but working less and on different projects. A second future plan related to opening one's own business. This dream was more common at Redtech, possibly because Redtech was a more entrepreneurial company and attracted people who liked this work environment. Marcel (29, Redtech), Zacharias (35, Redtech) and Kristian (36, Redtech) referred to this dream of entrepreneurship, and for the most part presented it in terms of waiting for the right opportunity. Being responsible for their own projects was something Redtech workers stressed as a reason for wanting to work there. Having even more responsibility as an entrepreneur with one's own company takes this a little further. This position was voiced mainly by men at Redtech, and one can speculate that being an entrepreneur, which is often conceptualised as being heroic, independent and self-reliant, is a subject position that is frequently perceived as more masculine (Ahl, 2004; Benschop and Doorewaard, 1998b; Bruni *et al.*, 2004; Ogbor, 2000).

In the case of starting up a technology company, being an entrepreneur and being into technology come together. This position seemed to be less available to women in both companies and to people at Greentech.

One subject position which is traditionally more related to femininity is taking on caring or family responsibilities (see Chapter 4). Yet when they talked about their future, this was not a subject position people regularly related to. This may be because I did not ask specifically about family plans, but it may also indicate that people did not see family as relevant to the discussion, either because it was not on their mind or because they felt that family had no place in talking about their professional future. Only in two cases did men mention that they might want to reduce hours when they had children, and only one of them in relation to the future. For women this topic seemed to be taboo; indeed, for most people talking about private plans did not appear relevant to their professional future. Thus people may enact a certain form of professionalism wherein children have no space. One possible reason for this lies in a strong form of individualism that was evident when people talked about the future and deserves further exploration.

Learning as a necessary condition

When I asked people about their future, the interviewees or I often raised issues around learning, because the future path in an ICT profession seems to depend on the ability to adapt to an ever-changing environment. As ICT skills change rapidly, ICT workers have to constantly update their skills and reinvent themselves (Kotamraju, 2002). Learning was described by most ICT workers as a necessary condition for mastering the fast-changing ICT environment. Kristian (36, Redtech) stressed in particular the change component of ICT workplaces:

Elisabeth: In your area of work, it appears that one always has to learn new things when new technologies emerge.

Kristian: Of course. But that is just part of informatics. And that is a big danger that one says, I know that, I do that, and I do not want to learn new things. That is not possible. And here we don't have jobs that stay always the same, but it is really the case that someone calls and then okay new office, new team, new work, full stop. (-) That is it and that is not the case everywhere.

Kristian constructs change as an integral part of informatics and states that one is never able to rest on what one has achieved, as in the next moment one might have to work on a new project with new people. This change is constructed as requiring people to be flexible.

The resource remaining flexible as a personal responsibility was also used by Steven (30, Greentech) when we were talking about his future and how important learning is:

> *Steven*:   What is new today is old tomorrow and that requires that one trains oneself further and further.

He draws on a repertoire that constructs times as changing quickly in ICTs, and the consequence for him is the need to learn new things to stay on the ball. It is up to the individual to make sure that he or she gets the appropriate training. This repertoire suggests that it is no longer a company that wants well-trained employees but oneself who has to find ways to remain up to date. This process was sometimes said to be tiring:

> *Esther*:   In informatics it changes so quickly that you sometimes have the feeling, er, learning new names again, a new company there, a new product there and a new abbreviation and I sometimes find this tiring, but principally, if you focus on your core competency, then this is no problem.

Esther (33, Redtech) describes it as sometimes tedious to learn things, but constructs this as less problematic if one sticks with one's core competencies. Core competencies are part of the current management jargon, but they are usually applied to companies that focus on their strengths (Prahalad and Hamel, 1994). Here, this management language is transferred to the individual, who becomes similar to a company.[13] The repertoire Esther uses constructs individuals as similar to companies insofar as they have to manage their own skills like a company manages its resources. Market narratives were thus adopted and used by individuals to describe their own competencies.

Interviewees discussed various ways in which people kept their knowledge up to date. First, people attended courses – at Greentech, mainly in-house; at Redtech, with other providers, subsidised by the company. Second, there was an ample supply of technical journals in both companies, and people also used websites to learn about new developments.

Third, on-the-job training was used a great deal. When asked how he learnt new technology, Xavier (36, Redtech) replied:

> *Xavier*:   I read about and write a few simple programs with the technology and wait until I see an opportunity to use it in work, and if I see an opportunity, then I'll use it.

The repertoire Xavier uses here is that one learns about technology by applying it initially to write small programs and then, more important, using it in projects. Thus, learning does not take place on one's own time, and one can bill this learning to customers because it becomes part of the project.

Another learning resource was friends and colleagues, as Nikolas (46, Greentech), among others, stressed:

> *Nikolas*:   That you nourish a network that is important. I mean people, with whom you can meet. A colleague of mine in Germany has used a nice expression 'meeting regularly, to fertilise one another', how he called it. That brings amazingly much.

'Fertilising one another' means bouncing ideas off other people, and such face-to-face contact was cited by people at Redtech and Greentech as a way of learning. Wittel (2001b) described this in new media work as 'network sociality': social relations appear to be increasingly commercialised because one of the main purposes of friendships seems to be to create knowledge which one can use to sell oneself on the market.[14] Here Nikolas uses a similar resource to describe how personal relationships provide a market value because they can be used to learn new things. It was common for interviewees to talk about personal relationships in one form or another as relating to learning new skills, and a few people also acknowledged that personal and business interests meld into one another here and become hard to distinguish. However, gender does not seem to play a role in these networks. Even though research has suggested that gender may be relevant in networks (Groysberg, 2008; Ibarra, 1992; 1993; Tierney, 1995), networks were talked about here as gender neutral.

Using friends to stay in business leads directly to how learning was conceptualised in many accounts – as a way to create market value:

> *Robert*:   There is no other way. (...) If you participate in the whole development, I have the feeling and I think, that you keep your value on the market. Well, if we assume that I have learnt a

profession and I work in this profession and don't train myself fur-
ther and then this area of work no longer exists and I end up on
the street (lose my job) then it is difficult to find another job. But
when you always did something (learnt something), then you are
à jour[15] and (-) I think I can enhance my chances on the markets.

Robert (46, Greentech) constructs learning as a prerequisite for having
a strong position in the market, as no one would hire a person with out-
dated skills. If one has trained oneself and has the newest skills, it seems
much easier to find new work. Robert conveys the impression that stag-
nation is not tolerated, as it exposes one to failure. Being on the move
and being flexible are the abilities that are encouraged. Everything has
to be in motion and in flux to adapt to new knowledge; otherwise, one's
own life is not in tune with the changing market. New knowledge is
of major importance if one is to keep one's market position. Thus, a
market narrative entered into how people talked about their futures, as
learning enabled them to retain their market value. Their market value
seemed important to their future.

Often market requirements seemed to become one with personal
interests such as the interest in technology. It was regularly voiced that
staying up to date was not tedious and made work interesting:

> *Elisabeth*:   Always learning something new, isn't that very tiring in
> the long run?
> *Tim*:   I would not say that. It is really a positive effect, because then
> you are not in the daily grind, (...) where all just continues as it is.

My question implies that learning new technologies could be perceived
as tedious and tiring, but Tim (54, Greentech) counters this by stressing
the 'positive effect' that one is then never bored with one's job, as the
job is transformed every day. Here it is not only that the market requires
one to be up to date; one also enjoys this process. People may indeed
have incorporated what the market demands into their own experience
of what they enjoy. Subject constitution processes under neoliberalism
seem to be characterised by the internalisation of the market inasmuch
as becoming flexible and market-like is experienced as pleasurable.

Most of the discursive resources were used equally by workers at
Redtech and at Greentech, but one issue was predominant at Redtech –
ageing as a process whereby one is no longer able to learn:

> *Andrea*:   It (technology) is what makes your work interesting.
> Especially in our area, in informatics, it changes quickly and there

are many hypes, what is modern and which technology one should use. That means that one has constantly to learn new things. Well, I don't know how long I can do this job. Until now I still find it interesting, interesting to catch the latest hype, but in this area, developing software, one always has to know the newest things. I assume that I cannot do this until I am 60, until I retire.

Here Andrea (37, Redtech) uses the same repertoires as other people relating to how interesting a change technology made to her workplace. Then she suggests that at one point one may no longer be able to do the job because one has to 'catch the latest hype', and this seems to imply learning new things. Yet the ability to learn new things seems to diminish with age for Andrea, as she cannot imagine doing the job until she is 60 and retires. Here age seems to put an expiry date after which one is no longer able or no longer wants to learn new things. Andrea does not mention here that she might not want to update her knowledge constantly by reading obsessively at home (see Chapter 4), but one can assume that to stay on top of the game one has to devote a great deal of time to learning new skills. Similar concerns were raised by Zacharias (35, Redtech) when I asked him how he saw the relationship between ageing and learning:

> *Zacharias*:   That is a thing that frightens me a bit because on the one hand one becomes more valuable through experience, as long as you are able to make new experiences. (...) On the other hand technology develops rapidly and in concrete projects one has almost no time to enhance one's own technical abilities, that means that my further education happens almost entirely in my private time. That is not too great because one would need to make a stronger distinction between work and private life, but you cannot do it otherwise. And additionally, as long as one is young, one enjoys exploring new things and new opportunities. But I think that there will be a point in time where you say, I've seen it, I don't want to learn the I-don't-know-how-many programming language, again a new library and again wading through thick books and to start again as nobody, because there is someone from the university, he is half-baked, but he knows this new technology much, much better than you. (...) You lose your standing. At the moment I don't have a problem with that.

For Zacharias learning and ageing seem to endanger his future some-how. He acknowledges that one needs to learn to stay up to date, but says that he learns in his private time, as he finds no time to learn during projects. One could assume that he might want to do different things in his private time, such as caring for a family, but he does not mention this. What he says is that he should distinguish between work and private life a little more, but that then he would not have enough time to learn new skills. Another thing that may endanger learning, as indicated by the 'additionally', is ageing. Rather than an inability to learn things, Zacharias constructs ageing as though one simply becomes less interested in newer technology as one ages and is then quickly over-taken by younger people. These young people are presented, through an extreme formulation, as much better at certain technologies than older people. In an environment where only the latest hype is valued, not being able to learn puts one into a dead-end position (Sennett, 1998), and one needs time to update knowledge. If one has other commit-ments during one's private time, such as raising a family, it can become difficult to 'keep one's standing'. This seems to invoke the popular per-ception that one's commitment to work decreases if one raises a family. One may then want to do other things during one's private time than updating one's knowledge. However, Zacharias also constructs it as if one loses interest in the newness and does not want to struggle every day to defend one's market position. This account undermines the idea that Zacharias initially cites that one becomes more valuable with experience.

Whereas at Redtech most people imagined their future to be struc-tured around no longer being able to learn, at Greentech older people regularly voiced that they were no longer as interested in technology. Tim (54, Greentech), for instance, used this resource in conflict with his previous comment that the changes in technology made his work inter-esting. Waltraud (52, Greentech) also referred to being overwhelmed by the changes in technology and less interested in them in another part of the interview when I asked her whether she was fascinated with the changes in technology:

> *Waltraud*:   (0.6) I think yes, maybe earlier a bit more. I'm not sure why this is, whether it is partly the age. If you are young, you are made for the new. But today it goes too fast. Today it is too fast. Today it would be better to be slower. (...) You are flooded with new things (to a degree) that you almost dislike it.
>
> *Elisabeth*:   Do you dislike something new?

> *Waltraud*:   Yes. Again and again. Yes. That you cannot keep up, to experience every step in detail and to realise it. To adapt. Yes.

Waltraud replies that she liked the newness of technology more when she was younger because she was then 'made for the new'. But she constructs the changes today as a little too fast for her, and all the newness leads her to dislike technology. It appears that she cannot stay up to date and adapt to the ever-changing environment. She reflects many of the assumptions circulating in society that older people are less able or willing to learn and are less flexible; she takes up these assumptions and articulates her own experience through them. Whereas previously, as Zacharias remarked, experience on the job would secure one a good position, this has changed, and now only the latest experience is in demand. Learning was thus constructed as key for ICT professionals' future development and treated as an investment in their future. The ability to invest time in learning was often seen as being threatened by ageing and developing other interests in life. The market narrative most people tended to adopt when talking about their future was thus endangered by the inability to remain flexible and adapt to the changing market. Overall, there was little mention of gender when people reflected upon learning, and the ability and time to learn thus seemed to have little to do with gender.

'Security, I erased that word'

The perception of job security seems to have changed dramatically. During the dot.com boom ICT work gained an image as lucrative and fairly secure; even though this image may never have reflected people's experiences, the common perception is that ICT work has become more insecure because the market now appears to be saturated and even in decline. When asked about their perception of insecurity, most people replied by referring to the 'times got worse but not hopelessly worse' interpretative repertoire. Pascal (33, Redtech) said the following:

> *Pascal*:   Only because you work in informatics and have a university degree, this does not mean that you will get a job. (-) For a time, it was almost like the idea, I can go out and say that I am looking for a job and 20 companies will queue.

Here Pascal constructs it as if he could have chosen between many jobs a couple of years earlier, but those times seem to be over, suggesting that a degree and working in ICTs is not enough to be sure to find a job,

as the skills are no longer so much in demand that employers would 'queue' to hire him. Most people spoke as if their perception of security had changed in recent years. For instance, Yosef (33, Redtech) talked about how companies which once offered secure and stable employment were now making thousands of people redundant.

> *Yosef*:   It is then the question, what does security mean today. Well, I think, security, I erased this word. I'm just looking at my own future and if I see that it is getting too insecure, I look for a more secure workplace. But (-) I don't expect that I will find a work contract somewhere, where it says, we guarantee you for five years a job. HEHE. With increasing income. HEHE

Yosef alleges that security is a word he no longer actively uses in relation to employment. He adopts an egoistic stance towards security in simply trying to find a position that appears relatively secure. The idea that some company would offer him a five-year contract with increasing salary appears laughable to him, indicating that this would be an unrealistic assumption. It is likely that people at Redtech never expected to have secure employment, as they would otherwise have joined not a smaller start-up company but a well-established company. Xavier (36, Redtech) was very articulate about this when he talked of how he saw the climate changing at the bank where he worked as a freelancer:

> *Xavier*:   I always thought that (bank) had an implicit bargain with their employees. 'We'll pay you good salary but you know you could earn more freelancing but the bargain is that you have job security.' And then this year they got rid of a thousand people. And a lot of them came from the IT group. And I think they broke their implicit bargain. You see that a lot in old companies. And I don't think you gain extra security. (...) So, I don't think a company would give me any security.

The 'implicit bargain' Xavier describes is that employees traded the extra money they could earn by freelancing for job security, but this security no longer seems to be available. Xavier made the decision to work freelance earlier and has thus forgone the security larger companies are often assumed to offer. He is now re-evaluating his decision to go freelance in light of the fact that larger companies are not only paying less money but also no longer offering job security. Xavier constructs himself as not relying on a company to give him any form of security; he

relies on himself to earn as much as he can by being a freelancer while the good times last. Here, it becomes visible that it is the individual who appears to be in charge of shaping his or her own life.

Similar accounts were mobilised at Greentech:

> *Robert*:   From this time on (when Greentech cut 30% of its staff) I have a bit of a different relationship to work. Well, I assume that I'm employed for at least three months, that is the notice period. You live well with this.

Robert (46, Greentech) constructs it as if his perception of security changed when Greentech cut 30 per cent of its jobs, as he no longer assumed he had a safe job. This resulted in short-termism: believing he would work for Greentech for at least three months, but without any long-term job security. He constructs himself as having come to terms with this short-termism. He gives the impression that one has to assume one will be made redundant soon, and he, like Xavier, appears not to trust the company to keep him in employment. This account could be read as saying that one might also be less committed to work and give less. However, such behaviour would have been penalised in this short-term-oriented environment. If he does not give 100 per cent, he might be at even higher risk of being made redundant.

The responses to the perceived employment insecurity were, overall, rather similar in the two companies. One of the most common answers was to accept the insecurity of working in ICTs and also to take responsibility for holding on to a job:

> *Yosef*:   You never have security in that sense, that means that you just have to ensure that you are great and that I can always find a job. Then you have security.

Yosef (33, Redtech) continues his earlier statement by saying that the only form of security one has is to be good at one's job. The only guarantee of remaining in employment or finding a new job is to work on one's own competence. The implication is that someone who is made redundant cannot be very good, despite the fact that many redundancies are due not to personal performance but to the market. By giving himself agency in this situation, Yosef seems in control of his future employment prospects. Yosef thereby constructs it that only he can ensure his employment, and he has internalised this discourse of being responsible for one's own security.

A similar form of agency was expressed by Nikolas (46, Greentech):

> *Nikolas*:   The Buddhist (he told me about him earlier) told me that the biggest mistake is to stay somewhere, where you believe you are secure. And I tried to do that in the last years. You have to keep in motion.

Nikolas refers to a friend when saying that security is generally a false belief, and he therefore tries to be dynamic and to change jobs. He talks about security in such a way that the individual appears to be the agent, who has to stay in motion and by being in motion can avoid his or her job. This resource suggests that the individual has to be active to avoid being the passive victim of redundancy.

Most people appeared to have accepted the risk of being made redundant, but Hugo (29, Redtech) was one of the few who had experienced redundancy. He had lost his job when the dot.com bubble burst. He had been among the first to go, because he had no family and thus, it was presumed, no responsibilities. He had also been one of the youngest, and therefore probably believed that finding a new job would be easy. It is interesting to compare Hugo's experience with Waltraud's (52, Greentech). Her team had been reduced significantly in the mid-1990s, and most of the men in the team had taken early retirement. She had not been offered early retirement, possibly because she could retire in her mid-fifties anyway, as women who entered Greentech in the 1960s and 1970s were given this privilege of early retirement. Yet gender was rarely made relevant in relation to redundancy, and only Laura (49, Greentech) had a gender-specific view on being made redundant. Laura talked about why she did not think she was in the group at risk of being made redundant:

> *Laura*:   I have the feeling I do a good job and I am not on the risk list. It may be an advantage to be a woman, so that I am not on the risk list.
> *Elisabeth*:   Because one wants to keep women as a figurehead?
> *Laura*:   That one does not, well, if. As long as I do the job, if I don't do the job well then not, but as long as I do my job well, I'm not very much at risk.

One reason Laura does not believe she is on the risk list is that she is a woman. I ask her directly whether she functioned as a figurehead and whether it might just look good to have a woman, as she had suggested

earlier. She does not really reply to my question; instead, she tries to express the idea that she is fairly safe as long as she does her job well. Again, we see here the use of the repertoire of being responsible for job security by performing well to avoid redundancy. Yet here being a woman is added as a resource. One reason Laura refers to good performance here could be that she wants to counteract the impression that she can hold on to her job only because she is a woman and that there is a form of positive discrimination at work. Therefore, she emphasises that her performance is important. Although one could talk here about a gendered dimension of risk, being a woman was used only by Laura – and somewhat hesitantly; no other person talked about risk in a gendered way. This suggests that gender does not seem to play a role in thinking through insecurity at work. Laura's comment – and, indeed, Hugo's and Waltraud's experiences – may indicate that a gender dimension is relevant to how working lives are shaped and accounted for, but that this dimension is commonly invisible and insecurity appears non-gendered.

One reason gender is invisible when talking about the future could relate to the future being phrased mainly in terms of responsibility for oneself. One has to learn and update one's own knowledge and skills continuously, and this was constructed as an individual liability. Otherwise, one loses market value, and by being made redundant one no longer has 'assets' of value to the labour market. Most people stated that they enjoyed working for their company, but that they did not rely on the company to offer them job security. Job security could result, in their view, only from being valued on the market and retaining this market value through learning. Kanter (1995) refers to this as 'employability security', as the security of finding a new job by keeping one's knowledge up to date.

Connell (1998; 2000; Connell and Wood, 2005) talks in this light of a new form of transnational business masculinity replacing the former bourgeois masculinity. This transnational business masculinity is characterised by organising life like an enterprise, using new technologies to enhance human capabilities and having no long-term commitments and only conditional loyalties. People operate, like *Homo economicus*, as rational agents in the market and embody the same egoistic stance of looking only after their own economic well-being. In this rational, egoistic and individualistic self-conceptualisation, no one else is responsible for one's success. This logic is incompatible with any form of collectivism; the interviewees expressed the opinion that one is responsible only for oneself. Other shared elements which may position one as different,

such as gender, are generally avoided, as they would conflict with being the self-directional, self-responsible agent. Categories and groups would suggest that one is not self-responsible and that other elements may structure one's success, although this was disallowed in the accounts.

This is particularly intriguing because categories such as being a woman were mobilised in relation to how the past was told. Whereas the past was saturated with gender, the future was not as clearly influenced by gender. Rather than gender, it appeared that one is ultimately responsible for creating one's future. It is here that individualism as a category becomes particularly visible, as the idealised future is thought of as gender free, whereas the past is riddled with gender. The worker in the new economy is supposed to able to shape his or her own biography, and, as I have shown in this section, this is possible by staying on top of one's game to remain employable. Biographies appear to be planned in the short time; there are no long-term loyalties, and risk and self-renewal are accepted as normal and even pleasurable elements of neoliberal subjectivities. The self-commodification prescribed by the market narratives constructed through the accounts does not provide resources for talking about a gendered dimension of the future, as this would counteract the individualism that was so dominant in the accounts.

Conclusion

In this chapter I have looked at the resources people drew on to tell their past and future in ICT work and how gender was done through these accounts. I thus contributed to an understanding of how new work biographies in general take shape and what role gender plays. The relative distance from technology was singled out as a way to do gender when talking about the entry into ICT work. I have also shown how careers paths within ICTs were different between the two companies and how varied careers can be in the new economy. Regardless of these differences, being a woman was used as a way to account for one's career, whereas being a man was not. When the interviewees looked at the future, it was staggering that most constructed themselves in terms of market-driven neoliberal subjectivities and accepted insecurity as part of their job and saw self-renewal as a way to preserve their market value. When they talked about the future, gender was not made relevant; rather, it was constructed as if one is responsible for one's own future through the ability to mould oneself into a neoliberal subject.

Individualisation in the sociological sense is explicitly not to be understood in terms of the neoliberal individualisation of the rational deciding subject (Beck and Beck-Gernsheim, 2002b). However, in this research it became apparent that this neoliberal conceptualisation of a rational deciding subject played a key role, albeit in a new version (see also Bröckling, 2000; Holtgrewe, 2003; Moldaschl and Voß, 2002; Wajcman and Martin, 2002). This new version of *Homo economicus* is market-driven and self-directional yet constructed as gender neutral and as more an economic person than an economic man. Although the economic person or knowledge worker *per se* is no longer defined as a man, traditional associations such as agency and self-directionality appear more suitable for constructing oneself as an entrepreneur of the self. Connell expresses this as follows: 'The "individual" of neoliberal theory has the attributes and interests of a male entrepreneur' (2000: 51). Thus the gendered dimension of neoliberal subjectivities also becomes visible.

As the past was so clearly gendered yet the future was not, one may conclude that we see a clash between lived experience, where gender matters, and rhetoric about a future in which everybody can make it and gender is not relevant. Rather than constructing this as a clash between lived experience and ideology, we can see the conflicting resources people used as the expression of a single logic. People feel and act like men and women, and by telling their lives in gendered ways people create themselves as gendered. At the same time, there is a strong neoliberal economic discourse constructing individuals as egoistic and in charge of managing their own labour resources. This discourse does not offer gender-differentiated positions, because success is related to one's own performance not gender.[16] Gendered discourses for the future are missing because the neoliberal subject is kept gender free; only with lived experience – that is, the demand to be either a man or a woman – do people narrate their biographies as gendered. Ideology is dilemmatic (Billig *et al.*, 1988): people are requested to do gender to construct themselves as gendered subjects, but at the same time they are asked to be gender-neutral neoliberal, self-directed workers, which does not allow room to articulate gender. The resources used to tell one's own life and future are thus an expression of a current ideological dilemma in which the self-entrepreneurial knowledge worker is constructed as gender neutral but the lived experience of knowledge workers is gendered.

6
Gender as an Ideological Dilemma

On the one hand, gender relations appear to be in flux; on the other hand, they seem to have changed little. Institutional gender discrimination is supposedly a thing of the past in most parts of the Western world (Beck, 2002; Beck and Beck-Gernsheim, 2002a; Castells, 2000; 2004a; 2004b). As success at work is now allegedly based on individual abilities rather than gender, it is often asserted that gender matters less there. Most people talk about their work environment as gender egalitarian and downplay the importance of gender (Benschop and Doorewaard, 1998b; Gill, 2002; Henwood, 1998; Jorgensen, 2002; Korvajärvi, 1998). Gender seems to be passé, and feminist claims appear to have been incorporated into the modern world. However, Gill (2007; 2008) analyses how feminist claims are not only incorporated but also repudiated and rendered ineffective by current media discourses. As I show in this chapter, this tendency can also be observed in the work context.

Although gender appears to have lost its binding power in some areas, it seems to be as important as ever in more popular presentations of gender differences (Gray, 1992; Pease and Pease, 1999; Tannen, 1990) and in workplace literature (Cook and Rothwell, 2000; Helgesen, 1990; Rosener, 1990; Wittenberg-Cox and Maitland, 2008). Cameron (2007) analyses how the idea that men are from Mars and women are from Venus has shaped and influenced linguistic research and fed the belief in gender difference. In the work context it has been argued that women and men speak different languages and that organisations need to become gender bilingual (Wittenberg-Cox and Maitland, 2008), but also that women are particularly suited to a changing work context (Rosener, 1990).

These competing interpretations have also been found in previous academic research. Managers and employees talk about flexible working

practices as if they were gender neutral, but then give examples of women using flexible working to combine their different roles, suggesting that gender does play a role in flexible working (Smithson and Stokoe, 2005). In relation to technology design, people talk about women being either equally good designers as men or better designers than men because they understand customers better (Styhre *et al.*, 2005). Nentwich (2004) illustrates how people adopt discourses around either gender sameness or gender difference when they talk about equal opportunities. That gender is simultaneously said to matter and not to matter does not seem theoretically conflicting to them.

In this chapter I look at the interpretative repertoires people had access to when talking about gender. First, I explore the strategies people use to account for the scarcity of women in ICT work. Second, I show why the scarcity of women is regretted. Third, I shift focus to the resources ICT workers have available to talk about gender discrimination, and, fourth, I trace why gender is said to be unimportant. In the accounts people shift between making gender relevant and making it irrelevant, indicating that gender is for most an ideological dilemma (Billig *et al.*, 1988) where two truth claims about gender appear to co-exist in common knowledge.

'I Don't Know Why': Accounting for the scarcity of women in ICT work

In the interviews I asked people whether they saw ICT work as a masculine environment. If people appeared hesitant in answering, I added that few women work in ICTs. In most cases people started their replies with 'I don't know'.

> *Günther*:   I don't know. I see that (-) there are few women. (-) Also at ETH[1] etc. I don't know why.
> *Elisabeth*:   No idea?
> *Günther*:   I thought, I don't know (-) we discussed that sometimes at ETH as well, I don't know. Because, it is not just informatics but engineering professions at large. I don't know. (-) No clue, really.

Günther's (32, Redtech) account is littered with 'I don't know' segments. He appears aware that there are few women in ICT work and that this is somehow problematic, but he uses 'I don't know' to indicate that he has no explanation for the scarcity of women in ICT work. 'I don't know's were used strikingly often when talking about gender, and they

were combined with various interpretative repertoires to account for the scarcity of women.

Deflecting from the company

One interpretative repertoire which was commonly used did not offer a reason for women's absence but made clear that it was not the company's fault. It was common at Redtech and Greentech alike to stress that the scarcity of women in their workplaces was not a result of the company discriminating against women.

> *Robert*:   But I don't think it is due to the company that we have no women in this area (technology). Greentech is very open in this respect. There were two women in the software area who did the same job as me.

Robert (46, Greentech) emphasises that Greentech is not to blame for women's scarcity, as Greentech is 'open in this respect'. To bolster his claim he stresses that there were two women – not just one – who worked in the same area as he. By referring to these two women he implies there were many women around Greentech, which means that women cannot be discriminated against.

A similar expression was used by Marcel (29, Redtech) when we talked about whether being a man or a woman makes a difference at work.

> *Elisabeth*:   Does it matter to be a man or a woman in professional life?
> *Marcel*:   I don't have the feeling it matters. (...) I have the feeling it doesn't play a big role. Here at Redtech certainly not. It is the case that we have fewer women here in Switzerland on the market and consequently we have few women in the company. But I don't think they are disadvantaged in anyway.
> *Elisabeth*:   It does not make a difference generally?
> *Marcel*:   No, not really. But I have to say, I have the feeling that one or two people are sometimes a bit macho. (...) But I don't have the feeling that this is accepted at Redtech, because, I think, Redtech tries very hard to be really neutral, er, what concerns gender[2] and stuff. We also have a woman in a senior position (...) and she would complain.

Here Redtech is also portrayed as a company that does not discriminate against women. First, Marcel supports this by saying gender does not play a role at Redtech. There may be few women on the market. Although

he points out that there are some sexist people at Redtech, Marcel portrays this behaviour as not being tolerated, because Redtech is 'really neutral', which implies being neither for or against women or men. To strengthen the point that women are not disadvantaged, he also refers to a woman, a senior woman in this case. This senior woman is the symbol of the gender neutrality of Redtech, showing that women can be successful. The woman functions simultaneously as the guarantee that there is no sexism. The pattern that gender equality exists at work but gender inequality happens outside work is common in research (Benschop and Doorewaard, 1998b; Bergvall, 1996; Henwood, 1998; Jorgensen, 2002; Korvajärvi, 1998). The function this account fulfils in this context is that both companies are presented as gender egalitarian.

Socialisation and culture

One interpretative repertoire used to account for the scarcity of women was phrased in terms of socialisation and culture. One might assume that in a technological environment, which leans towards natural science explanations of the world, the recent prominence of popular biologically-derived explanations of gender differences would mean that such resources would be used by ICT workers to explain the scarcity of women. However, rather than gender being seen as a direct expression of nature or genes, it surprised me that biology, nature and genes were not the flavour of the month among most ICT professionals when they made sense of gender. Most people drew on lay theories of socialisation to explain why there were few women in ICT work. Hugo (29, Redtech) said the following:

> *Hugo*: And I think that it has to do with how women grow up and are brought up. If you look at toys alone for women and girls, men play with electronic and technical things, remotely controlled cars, game consoles, and women have dolls and Barbies and then somehow the technical world is closer to men than to women, and that is from childhood on.

Gender difference is presented here as resulting from childhood play, which is constructed as leading to a kind of socialisation whereby men are closer to technology.

Zacharias (35, Redtech) also referred to the different toys children are given by relatives through which gender is constructed. I asked Zacharias his views on the male domination of ICT work.

> *Zacharias*: And I think there are (-) there are probably different factors, on the one hand it is certainly simply in the heads, er, simply

from the parents, from the grandparents, well, the girl gets the doll and the boy gets somehow I don't know the toy car or the construction kit and, er, even if it is no longer as bad as ten years or twenty years ago, but it just has to grow out of people's head. And it will take damn long until it really vanishes from the last head.

Zacharias also refers to socialisation as a reason for gender difference, and he maintains that the situation has improved but that it takes a long time to change people's mindset.

Socialisation was regularly linked to culture and how things are organised in different societies or national cultures. Swiss culture was regularly portrayed as 'backward' and far behind more 'progressive' countries such as the United States and Germany. Marcel (29, Redtech) constructed Switzerland as lagging behind; when I asked him what he meant, he responded:

> *Marcel*:   No idea, ultraconservative, rather right wing, special case Switzerland, I don't know exactly. I have the feeling that one is very conservative here in Switzerland. (...) And that has effects everywhere, also in the family image and that women rather look for classic women's professions. It must have to do with that, but frankly speaking I don't know.

Marcel constructs Switzerland as 'ultraconservative' and uses this extreme case formulation as the reason for women's scarcity in ICT work. Ultraconservatism reflects a traditional family image, which possibly means a male breadwinner, a female homemaker and part-time earner, but also that women opt for 'women's professions'. Marcel disclaims competence to answer this question: 'I don't know.'

Steven (30, Greentech) used a similar repertoire when talking about gender:

> *Steven*:   Well, I was in America for two years and there it was totally different. And gender equality[3] is there a much bigger topic, maybe not a much bigger topic, but much more progressed than here in Switzerland, isn't it? And I would say, that should not sound chauvinist, but that if the woman does not want to work she does not have to. Because the man, if the man has a certain position in a company, he can be the breadwinner and the woman does not have to work. If she wants to that is another issue. It is a luxury that the woman can be with the child, which is not possible in America.

Steven claims to know about gender equality in the United States because he has lived there. Although he says that America is more advanced in this respect, whether it is a true advancement is questioned by the way the account is constructed. He starts with the disclaimer 'that should not sound chauvinist', indicating that what follows could be read as chauvinist. He explains that women in Switzerland do not have to work, as they can rely on a husband's salary, which is sufficient in Switzerland but not in the United States. He thus constructs women working in the United States as an economic necessity, but this seems to have little to do with gender equality or women's desire for their own income. Steven seems aware of second-wave feminists' arguments that women's dependence on a husband's income is problematic, as he defends against being read as sexist. Yet he phrases it as a 'luxury' that the woman – or better the mother – can be with the child, and for him it does not seem to be an option that a father might also find it a luxury to be with his child. Women's income thus appears supplemental to a full breadwinner wage; the woman may choose to work or to stay home with the child, but there is no economic necessity for a woman to work. We find here a neoliberal choice discourse in which a woman, not a man, is free to choose but the choice is restricted to earning a supplemental income or being a homemaker. What he may be suggesting here is that women drop out of ICT work for children because they can rely on a breadwinner wage, but he hesitates to spell this out as it could be read as sexist.

Although few people phrased it in biological terms that women are not good at technology, the majority of people adopted repertoires in which gender difference was the result of socialisation and culture. Socialisation and culture appeared fairly static and resilient to change; they took positions similar to biology, in which gender is static but changes over longer time periods. Thus people seemed to substitute biology as an explanation for gender with culture and socialisation, introducing a form of cultural essentialism into the argument (Franklin *et al.*, 2000). In calling on socialisation and culture, people use constructs that appear more flexible, which is important to avoid being read as gender inegalitarian. Culture and socialisation appear more flexible and changeable, but the way these concepts are thought of reveals that they are fairly static. What is commonly achieved through reference to biology, then, is achieved through reference to socialisation and culture.

Biology

Biology and the natural difference between men and women were rarely used to explain women's scarcity in technology work. Only in a very

few cases was it voiced that men and women are different in respect of biology. An example where women's biological functions are implicitly referred to was provided by Nikolas (46, Greentech):

> *Elisabeth*:   Do you think it makes a difference at work if you are[4] a man or a woman? (...)
>
> *Nikolas*:   Well, I could imagine it, but I have never experienced that, but, er, maybe it heard about it, yes. (-) It is possible, I think it is possible that one does not get access to certain positions on the career ladder, yes. You could compare that to a man, who is homosexual, I would say. Maybe that is it, er, if you know, well whatever, then, er, maybe it is for some men, among some bosses or managers subliminally anchored, that, er, a woman is maybe biologically disadvantaged, because she simply has under certain circumstances to care for a family.
>
> *Elisabeth*:   Biological would be primarily to give birth but caring could be a different issue theoretically, couldn't it?
>
> *Nikolas*:   Yes, but that is not that simple, I think, it is not that simple. It is damn easy, damn difficult, if you have to take care for both, family and career, that is damn difficult. Er, except if the man stays home or helps a lot, then it is possible if you share it, but then you cannot focus fully on the job. Both cannot do that, I would think. And it is a shame for the children, I think, because children are very thankful to you, even if they never say thank you, but they are thankful if you have time for them. And, er, some managers may think, 'I don't want a woman in this position, she stays three years and then (-) or she does not care like man', that would be possible. Our manager isn't like that.

Nikolas discusses why women may be disadvantaged when it comes to climbing a career ladder and compares that to the discrimination homosexual men may encounter, but he does not go into the detail of what he means. Nikolas constructs managers and bosses as having an image of women as 'biologically disadvantaged' because they have to care for children. He is careful to make clear that this is their view not his. I intervene, but Nikolas maintains that even if biology and care are two issues, it is 'damn difficult' and not 'damn easy', as he started with, to combine family and a career. He argues that the man has either to be a househusband or to do 'a lot' at home using an extreme case formulation. These options do not appear viable: neither of the parents in this case can have a 'proper' career, as bringing up children takes time. The

idea here is that if the mother works, she is not available for the children. This resonates with the ideas of the unnatural mother. The father staying home seems to be an unlikely option in his account. He uses this to justify this conservative perspective, which is carefully phrased as not his own. In this account, bearing children and caring for them are equated and used to explain why women may confront problems at work.

An extension of this argument may be that women drop out of ICT work, although this was mentioned explicitly only once in the interviews. In this extract Yosef (33, Redtech) talks about the scarcity of women in ICT work. After saying that few women study ICTs he continued:

> *Yosef*: Maybe some drop out due to children, and then there are even fewer. (Exhales) I don't know. I don't see myself as competent HEHE to answer this somehow.
>
> *Elisabeth*: Did it ever happen that a woman dropped out because she got a child?
>
> *Yosef*: Well, I don't think here, but I could imagine that. Or, I, Redtech maybe not the typical company, where (-) women, who children, well women who get children, well, I don't know, if it really, if you can say it that way, but Redtech is just very interesting and women, who are here, they often say 'I want to work now, I want to do it now, that is important to me' and based on this it may be, women who have children work elsewhere. But I don't know this exactly. There are many clichés and many things you hear and read. But I cannot say anything, I don't know about this.

The answer ties in with the overall structure of accounting for the scarcity of women, and there are many 'I don't know' segments in the extract. The reasons put forward differ, however, in that Yosef alleges that women drop out as a result of having children. Asked about it, he says that it does not happen at Redtech, as he constructs Redtech as a very interesting company and the women at Redtech as definitely wanting to work and not wanting to have children. This means that he, like Nikolas, does not see it as possible that a woman with children works at Redtech, although he does not use biological reasons for it. He constructs some women as less interested in work and therefore as having children as if this would relieve them from the boredom at work. The resource Yosef mobilises is that Redtech women are different from other women and Redtech women seem the exception rather than the rule.

We join the next extract, from the interview with Waltraud (52, Greentech), after she first draws on socialisation to explain the scarcity of women but then comes to a second account, relating to biology:

Waltraud: And secondly, I think, it plays a role, because the women are not the same as the men. One can emancipate and do what you want, they are not same.

Elisabeth: What do you mean by this?

Waltraud: That is probably pure biology HE and, er, based on the psychology of women[5] it is the case, that under women there is larger proportion, who is not interested in technology. That is routed in the essence[6] of women. (-)

Elisabeth: Biologically?

Waltraud: Yes, biologically, HE, yes.

Elisabeth: And in your case, well, do you see it as a contradiction to be in technology and a woman?

Waltraud: No, otherwise I would be very unhappy.[7] HEHE

Elisabeth: HEHE.

Waltraud: No, no. There are obviously always normal fluctuation margins and there is the normal and the frayed margins, they are still in the normal but some are more left and others more right. I just think that round about eighty per cent are maybe not technical (-) are not on the technical line. That just happens.

This, first, indicates that socialisation and biology are not seen as strictly separate, as here Waltraud draws on both resources without seeing them as conflicting. Waltraud argues that men and women are essentially and naturally different and that emancipation is futile, because one can never erase this difference. Emancipation appears to be a misguided attempt to make men and women alike despite biology. In the interview I was surprised that biology was voiced directly, and I therefore addressed Waltraud explicitly as a woman to explore how she positions herself. She draws on fluctuating margins in saying the some women are not the ideal norm and not abnormal, just more interested in technology.

What was emphasised in particular in the accounts of Yosef and Waltraud is that women in technology are not like other women and are thus exceptional. These references function in such a way that the presence of women in technology work and the women themselves are constructed as exceptional and not normal. As Henwood and co-authors (2000: 74) stress, this leaves the category of normal women who are not

interested in technology intact by saying that women in technology are different. The category 'woman' is constructed through the claim that women in technology are somehow different from other women. Waltraud's account differs from the others in this section as here the biology of women is used to explain a lesser interest in technology, whereas before the scarcity was related to biology in the sense that women bear children and ought to care for them. Only a few accounts engaged with women as biologically different at all, and only one of them offered the view that women and men are different in terms of their natural interest in technology.

Lack of interest in mathematics and technology

Women having no interest in technology was a resource regularly drawn upon. It differs here in that no reason was given for why women are different from men; this difference was just taken for granted and not explained. Hugo (29, Redtech) mobilised such an account:

> *Elisabeth*: Informatics is a fairly masculine work environment (-), with few women. Why do you think is that the case?
> *Hugo*: Uff, yes, HEHE, I don't know. I think women tend to be attracted to jobs which are less technical, more in the direction of languages and such things. Why, I don't know, er, I think it is a pity, but I think it will change in the future, because, yes, I know few women, who have maths as their favourite subject and most women think that informatics has much to do with mathematics.

The explanation Hugo offers here is that women are 'attracted' to less technical jobs and choose subjects such as languages. Hugo claims that he does not know why this is the case, but he regrets it – a resource I discuss below. The reason Hugo offers is that women dislike maths and therefore also informatics. This links to the assumed remoteness of women from mathematics (Mendick, 2005; Walkerdine, 1998) and constructs ICT work as based on maths. The connection between maths, informatics and gender was often drawn upon to account for women's scarcity in ICT professions:

> *Elisabeth*: And why do you think that is (there are few women working here)?
> *Felix*: (exhaling) I believe, it is mathematics, I believe. And this arises early (-) in a sense. Er, I was in the Gymnasium or Kantonsschule,[8] I did type C,[9] and we were only boys in the class and I think

> that this is the main reason. Maybe women are, to avoid getting totally sexist, er, more, rather interested in the social (-) in interpersonal interaction. And a computer is for many women simply a machine. Many women, and you see that with children as well, most, I mean children, most who play on the computer are still boys. Because for us, I don't know, we have maybe fewer problems with a machine. I often heard from women that it is just a machine, why do you spend the whole day with a machine.

In this account it appears that women are less interested in technical professions because of IT's proximity to mathematics. To justify his claim, Felix (36, Redtech) cites his own experiences in school, where there were no girls in the natural science/mathematics stream, and this is constructed as meaning women do not choose ICT professions. Felix appears aware of the sexist tendencies of his statement and therefore adds the disclaimer 'to avoid getting totally sexist'. By using this disclaimer he gets away with this stereotypical portrayal in which women do not want to engage with a machine and prefer social interaction. Women here appear as having no interest in the machine, and a similar repertoire was used by others, including Yosef (33, Redtech):

> *Elisabeth*:   And why are there already so few women in education?
> *Yosef*:   Similar reasons, which I cannot comment on. I mean it is women who should know what they want to study.

After Yosef says he has no clue why there are so few women at Redtech and refers to this being the case in education also, I ask him how he explains this, but again he does not seem to have an explanation to offer and says women should make up their own mind what they want to study. It is suggested here that women have a free choice of study, and if they are not interested in studying ICTs, then this is an expression of their own will and in a way their problem. No reference is made to different upbringings or different genes; instead, a neoliberal choice discourse enters the picture and glosses over socialisation or biology. This is interesting because Yosef also referred to biology to account for gender difference in the account quoted above. Here Yosef refers not to biology but to choice and constructs women's scarcity from ICT work implicitly as their own fault, as they are just not interested.

Women are seen as able to make their own decisions but are also personally responsible for them. There seem to be few social structures and institutions that restrict individual choices. It is also not mentioned that

people may feel more drawn to certain things than to others because they want to count as a certain gender, and none of these things seems to matter in the individualised choice accounts. It becomes evident that it is individual agency determining which route one takes and that if women are just not interested in maths and technology, then it is implied that it is women's decision to stay clear of ICTs. Women have in this repertoire achieved full subject status and can take charge of their own lives, and consequently it is their responsibility if they decide to work in other areas.

The ubiquity of 'I don't know's is insightful in terms of understanding the conceptualisation of gender today. In contrast to earlier times, when explanations of why there were no women in certain professional groups referred to static structures, today gender is no longer a basis for formal occupational segregation, in that theoretically women can enter these jobs. People felt uncomfortable answering this question because they did not want it to seem as if women have no agency in deciding what they are interested in, yet did not want to blame women for not entering ICT professions. It is first made clear that it is not the company itself discriminating against women but socialisation and culture leading women away from technology. Biological reasons are rarely referred to, but when they are it is more in relation to children than to different interests. These were largely explained by women having agency and choosing different interests and, later, professions. Women are no longer passive recipients of socialisation and culture but are active individualised agents who are responsible for their own decisions, and if they have no interest in maths and technology and decide to work in other areas, it is implicitly their own choice. By saying 'I don't know', people construct themselves as incompetent to interpret gender and cover themselves against being read as sexist either by blaming women for having chosen the wrong interests or by seeing women as passive victims of fairly unchangeable biology or socialisation. Gender is for these people complicated and in need of explanation, but here they jockey for position to avoid being seen as sexist.

'It's a Pity': Women as adding value

When people talked about the scarcity of women, this scarcity was regularly regretted, not necessarily for reasons of social fairness but rather because women enrich the business world. When asked why ICT work is male dominated, Pascal (33, Redtech) replied as follows:

> *Pascal*:   I think it's a pity, that it (ICT work) is (-) so strongly dominated by men, if you want to put it like that. I think it is really a

pity, because (-) I think (-) it is certainly enriching, if more women work in informatics.

Here Pascal constructs it as a 'pity' that there are so few women in ICT work, as women 'enrich' the work environment. In what follows, I trace how this was commonly conceptualised.

Enhancing the work atmosphere

One way in which women are said to enrich the work environment is by enhancing the 'climate'. The notion of climate was drawn upon frequently to denote the atmosphere at work. This repertoire was used by many people at Redtech and Greentech alike. Oliver (37, Greentech), for example, said the following:

> *Oliver*:   You see few women (in ICT professions). (-) It is a pity, because it does not always produce the best climate.

Women are entrusted with producing a better working environment. If women are absent, this consequently will not produce the best climate, although Oliver did not specify in what respect. Steven (30, Greentech) elaborated what this repertoire seems to suggest:

> *Steven*:   Greentech wants to hire as many women as possible, because it leads to a different climate. Especially, if you have a meeting, in which very (-) critical topics are discussed, if there is a woman present, then one communicates differently as when there are only men. That is a huge advantage.
> *Elisabeth*:   How does the climate change?
> *Steven*:   Men talk differently, yes. The tone is not as rough.
> *Elisabeth*:   What do you mean by a rough tone?
> *Steven*:   More respect for the other person, because you should not behave like this in front of a woman.

In trying to make a point about why Greentech wants to hire women, Steven cites the better climate which women bring. He refers to a form of chivalry in men when women are present, and this leads to the idea that men are more polite in the company of women. He thus suggests that men behave themselves better when women enter the picture; however, rather than women doing anything, it is women's presence alone that changes the atmosphere and the men. The stereotypes Steven refers to here are not repudiated in any way, giving the impression that all men

are in macho mode in men-only meetings but that chivalry towards women changes that mode when women are present. Steven apparently does not see this image of men behaving chivalrously to women as sexist or negative in any way; rather, he uses these stereotypes to construct the changes women bring to work as positive.

At Redtech Jean (41, Redtech) employed a staggeringly similar portrayal of how work changes if women are present. He was talking about climate changes when the first woman was hired:

> *Jean*:   I remember well when we hired the first woman. It is amazing how the climate changed. How discussions got calmer. Much more concrete. Earlier it was from time to time a bit, how can I put this, if men discuss among each other, then they quickly, er, (-) confront each other (-). They are no longer searching for the best solution, they only figure out who is the stronger one. And you notice that as soon as a woman is in a project (team), it gets calmer.

In this account women are constructed as bringing calm to work, and Jean refers again to meetings in which men act in a confrontational manner and lose sight of the problem, suggesting that egos rather than problems are central. He struggles to find an expression for the men's behaviour but then comes up with the confrontational style, which sounds less explicit than the rough behaviour of men in Steven's account. This unproductive behaviour is subverted by women being there. Women are here presented as bringing good things to work and making the workflow better, helping the business. They should therefore be hired.

To stress the benefits of women, men have to be portrayed as unproductive in team situations. This is not a particularly charming portrayal, but it supports stereotypes about men's behaviour, which are apparently required to allow women to be presented in a positive light. In these accounts there are few disclaimers in relation to these stereotypes of men and women, which differs from the previous accounts where sexism was disclaimed. One explanation for this may be that in these accounts women are presented as positive, whereas in the previous accounts women's alleged behaviour could be understood as negative. Sexism may need to be disclaimed only if women's behaviour can be read as negative, and this does not seem to be the case here. Sexism also does not seem to apply to the behaviour of men.

One element glossed over in the previous accounts is that men's behaviour is not necessarily perceived as a bad thing by all, as it is a way of male bonding:

> *Elisabeth*: Would there be advantages if more women were in informatics?
>
> *Boris*: (0.7) Yes, I think the climate changes. Well, women in meetings (-) if women are in a meeting or not that changes the climate.
>
> *Elisabeth*: How does it change? (-) Could you give me an example?
>
> *Boris*: Well, I would say, that if men are among themselves, they talk differently (-) one says (different things?) (-) as if women are there. (-) Well, men, when men have a meeting, one does not only talk about the (topic of the) meeting, for instance there are, (-) men sit around an office table, for instance a good looking woman passes by and men look at her and say something and they would not say that if a woman is in the room. And if men, regardless of their level (position in the hierarchy) I guess, if they see a nice woman passing by, three of five take a look and one says something stupid (-) that makes a difference. I don't know how it would be if women would be in a meeting and a handsome men passes by, I obviously don't know that, but men would (-) have a laugh and this relaxes the meeting. (...)
>
> *Elisabeth*: Does this change the climate?
>
> *Boris*: It is about the climate, really. But it (the climate) does not have to be, that has nothing to do with, well, the climate can also be good if women are at the table, that has nothing to do with it. It is just, I would say, we men (-), er, we would not make the same comments, we would make comments, but maybe not to this degree.

I ask Boris directly what advantages women would bring to the work environment, and he refers, like Jean and Steven, to how the climate in meetings changes. His argument, which was initially tailored to support more women in ICTs, gets a bit out of hand as he carries on to stress the positive effects of male homosocial bonding through sexist comments about women. He no longer argues for women but presents me with an explanation of how relaxing sexist talk is for men's groups, and he does not repair his account until later.

This extract was difficult to translate and read because Boris starts many sentences without finishing them and seems to search a long

time for the appropriate words. He refers to a situation that appears both fictive and hypothetical but also plausible to convey the impression that men like to make comments about good-looking women and this changes when women are there. Then different comments would be made, because – although he does not spell it out – this talk could offend women. He does not seem to see this behaviour as negative and appears to suggest that women could react similarly if a handsome man passed by. He constructs himself as being knowledgeable only about groups of men and not about groups of women. This account obviously did not fulfil the discursive function of explaining the advantages of women in ICT work. Boris does not seem to condemn these sexist jokes, which would be the politically correct response, but stresses the social function of sexist talk. However, he is also careful to point out that the climate can also be good with women. Boris constructs this sexist masculine behaviour at work as having the important function of bonding men together, and from this account one may instead conclude that women endanger this climate, because bonding would then need to take place in a different way. Such comments were, however, extremely rare.

Women as socially competent

Although in the repertoire of 'women enhancing the climate', women appear rather passive, it became clearer how the climate enhancement is assumed to take place through another resource. The repertoire of women as socially competent was largely used to support the climate-enhancing argument discussed in the previous section, but with a different meaning attached. Most commonly, women were constructed as doing better in interactions and creating a friendly work environment, which is associated with women creating a cosy home where the husband can relax from the drudgery of paid work.

> *Elisabeth*: Does it make a difference whether you are a man or woman at work?
> *Zacharias*: I don't know where it should make a difference. Well, it certainly makes a difference, if you work in a men-only group or team or if women are there as well. That is more a social difference, which you also find in school classes, that people say it is somehow different.
> *Elisabeth*: How it is somehow different?
> *Zacharias*: I find it difficult to pin that down. Simply the atmosphere. Well, supposedly, women are the more social beings and

could then, er, (-) how should I put it, er (-) it has an influence (-) on the not so social beings.

In German 'social' is often used to refer to being good with people, and Zacharias (35, Redtech) uses the term here in this sense. Zacharias constructs women as more 'social' than men, which rubs off on men, who then become more 'social'.

A similar expression of being social was used by Laura (49, Greentech). She talked about why she was a team leader; the first point she made was her seniority, and she then also cited gender:

> *Laura*: Maybe it is as well my way of doing it. I'd say social competence in the broadest sense, that I care for people. (...) We ARE a team and that has certainly to do with the fact that a woman is in the team.
>
> *Elisabeth*: Why is this?
>
> *Laura*: Women have more social competence, I'm certain of that. It is more of a social texture,[10] that one asks more, not professional, but also personal things. 'What is wrong? Are you not feeling well?' (...) Women are more sensitive to that and notice that more.

Laura claims she is a good team leader because of her social competence. For her social competence means caring for people and asking how they are and whether they have any private problems. This is reflected in the climate of her team compared with that of other teams. The repertoire Laura uses constructs women as socially competent, and this has consequences for team interaction and could also lead to such climate changes, although Laura does not make this explicit here.

Women's social competence was also constructed as beneficial in dealing with customers. Steven (30, Greentech) talked about the advantages women bring to work; this extract followed the 'enhancing the climate' extract quoted earlier:

> *Steven*: Also the way of thinking, we have (-) colleagues (feminine form) in our project team, who sometimes have ideas, which I never would have. Also the human side of it. They (women), feel, from my perspective, more, what the situation is with the customer, they notice tensions between customer employees and that clarifies a lot for us, and such things. For me I would very much welcome it, if more women worked for Greentech.

Steven adds a whole list of benefits women bring, from having a special way of thinking to having a 'feeling' for the situation. It appears here that women have an empathic understanding of interacting with customers, which is good for Greentech because one is thereby better able to understand the customer. Women's special abilities are thus good for business. In this account Steven praises women for how they contribute to the work climate and simultaneously constructs himself as being in favour of women in ICT work because of all the benefits women bring.

The way in which women's social competence is said to transform the technology workplace becomes explicit through the figure of the 'snooper'.[11] The snooper is used at Redtech as the symbol for technology nerds who sit in their cubby holes totally immersed in technology and cannot talk about anything other than technology. Danielle (36, Redtech) described snoopers as follows:

> *Danielle*:   For me these snoopers are introverted, quixotic figures, who notice at one point in time that there are two genders[12] or who are just not very suitable for everyday life. (...) They are those people who continue programming during lunch time and with whom you cannot talk about anything else than technology. (...) They are dead happy about things, which the next person does not understand. I mean what they did like moving a bit[13] somewhere and being very happy about it. But then when you tell him an anecdote from everyday life, he is flabbergasted.

Snoopers seem to be, by definition, men who are absorbed by technology but are overwhelmed by other parts of life. Danielle thus supports the stereotype that hacker-like people have little contact with the other sex, which makes them appear heterosexually incompetent. Women at Redtech had the naming power to label a man a 'snooper', and men tried not to be snoopers. There was even an informal, unofficial award, the 'golden snooper', which women could give to a person they regarded as a snooper. Felix (36, Redtech) told me that one person received the 'golden snooper' award for writing an email when he was sick in which he said that viruses had bypassed his virus detection software. When viruses bypass virus detection software, a computer is no longer protected against viruses, leading to problems for the computer system. The 'golden snooper' was, then, awarded for transferring computer metaphors to the human body and thereby 'technicising' human life. This is probably what Danielle means when she refers to snoopers being detached from real life and being able to articulate real life only through the

language of technology. Here we see how women are actively portrayed as changing an antisocial culture at work by discouraging such behaviour. Through the metaphor of the snooper women associate themselves and are associated with valuing social aspects at work. Women thereby figuratively bring social competence to the ICT workplace.[14]

It is interesting that women are constructed as transforming the workplace in positive ways in these different accounts. ICT workplaces without women thus appear antisocial, nerdy and unfriendly. This is in sharp contrast to how Redtech was described by people who worked there even before the first woman was hired. From the accounts I had the impression that Redtech was always a rather friendly company where decisions were taken in true start-up style over the kitchen table and caring for others seemed always to have been important at Redtech. One reason ICT work might be described as antisocial before the arrival of women could be that it allows women to stand out. Only by describing the environment as antisocial before the advent of women can women be described as enhancing the climate at work.

The absence of women in ICT work is regretted, as women are constructed as adding something important to ICT work. Women are in this discursive context constructed as bringing social competence to the ICT workplace. As outlined in Chapter 4, social competence was seen as one of the key skills of the ideal ICT worker, although in this discursive context social competence was not gendered feminine. Social competence, which women are said to bring, is constructed as positive for the social climate, in turn making business more effective. This instrumental use of women's assumed skills for business purposes has been critiqued in the academic literature (Billing and Alvesson, 2000; Calás and Smircich, 1993). In my interviews this link to business became less explicit, and only when I looked more closely at why this social climate is important, as I did in Chapter 4, did it become clear that the scarcity of women was regretted not because of arguments around social fairness but because women enhance the work atmosphere. In turn this enhances the competitiveness of the organisation. This portrayal constructs women in a very positive light and suggests that it makes little business sense to discriminate against women.

'That Could Not Happen Today': Dealing with gender discrimination

In the previous sections I have shown how much discursive work is done to indicate that women are not discriminated against in ICT work.

Therefore it is insightful to explore how cases in which gender discrimination took place were accounted for – and here gender discrimination applies only to women. It should be noted that the word 'discrimination' was rarely used either by me or by people in the interviews. Discrimination does not have as strong as sense of 'differentiation' in German; it is used mainly to mean being discriminated against in a negative way. If I had asked about discrimination, I would have received only comments about discrimination not happening, as it is seen as so negative. This would have prevented any other accounts from emerging. I therefore asked about negative experiences and not being accepted, as I then got less defensive responses and people appeared more willing to engage with the topic. However, for the analysis I reverted to the use of 'discrimination' because this captures what most people talked about in relation to negative experiences. There were two main interpretative repertoires drawn upon when talking about gender discrimination.

Overcoming discrimination

The first interpretative repertoire was based on the idea that negative discrimination against women can be overcome. Even though most people said that discrimination against women is not a dominant feature of modern ICT workplaces, most people acknowledged that there is always potential for discrimination. Andrea (37, Redtech) talked about discrimination as follows:

> *Elisabeth*:   And does it make a difference if one acts as a man or a woman, well, in the company or relating to customers?
> *Andrea*:   Well, (-) it can ALWAYS happen, that women are not accepted at work. On the customer's side and in the company. But I'd say that these are absolute exceptions.

For Andrea there always seems to be room for discrimination against women, and this means for her that women are not accepted as equal. She seems to suggest that women have high visibility as a non-norm and are therefore more prone to discrimination (Frehill, 1997; Kanter, 1977; Puwar, 2004). She relativises this by saying that these are 'absolute exceptions'. In saying that discrimination is exceptional, one makes clear that it does not happen often, but Andrea adds the extreme case formulation that these are 'absolute exceptions', showing that discrimination rarely if ever happens, which minimises the occurrence of any incidents (Potter, 1996a). Discrimination was thus discursively constructed in this and many other accounts as highly exceptional.

Danielle (36, Redtech) took a similar position when she talked about gender at Redtech:

> *Elisabeth*: And does it make a difference at work if you act as a man or a woman?
>
> *Danielle*: Er, well, I made really very, very few negative experiences. And if, then generally, with male colleagues who are very insecure in themselves and want to downplay this. (...) I mean that are generally macho types, who are really very insecure in themselves. And, er, there are, there are some men, who have some problems with it, because they are simply not used to that, but that depends, I think, more on education. Often it are men who are a bit Latin[15] or are just a generation behind (-). But otherwise I have really, well, it is really rare that I (-)
>
> *Elisabeth*: In the company?
>
> *Danielle*: In the company (-) I don't think (-) no, really, well, once I had an experience.
>
> *Elisabeth*: What was that exactly?
>
> *Danielle*: Yes, that was once, I have the feeling, that he has somehow problems with women. Er, and I, er, er, had to do something but did not know the (virtual) environment and I asked 'could you help me quickly and show me how this works?' and he said something strange like 'but you know how to write that, don't you?' Well, and then he started to dictate me word by word, with full stop and comma and I, then I felt very stupid. Er, it was relatively in the beginning, and er, in the beginning I was fairly insecure and, er, I can now deal with these things okay.

As in Andrea's account, Danielle minimises her negative experiences in relation to gender by saying that she had 'really very, very few negative experiences' – using 'really' to convey that she is being truthful, saying 'very' twice and adding 'few' to downplay the occurrence of negative experiences. She first attributes discrimination to insecure macho men who have to prove themselves. But she constructs the sexism she confronted as not their fault because they were just raised differently and are not used to seeing women at work. Danielle sees these men as tending to be Latin, linking to the use of the term 'macho', or as just lagging behind by a generation, possibly because the emancipation of women has not progressed enough. She mobilises racist discourses about Latin macho men or backward men who live in different gender arrangements, and she does not disclaim this racist reading.

When I ask Danielle about gender at work she seems to start by saying that it does not matter at work, but she then appears to remember an incident. The incident is reported as singular. Danielle asked a colleague for help but he treated her like an idiot and dictated the code to her. Danielle remembers feeling stupid in this situation; however, she simultaneously seems to find fault with her own behaviour: in being new and insecure. She presents herself as having overcome this today. Although she sees some men as not used to women and as a bit backward, men in this account do not seem to be responsible, as that is just what they have learnt in life. Danielle appears in the account to be responsible, because she states that she was insecure at that time but that she is now much more sure of herself, which helps, as she seems to suggest, to avoid a similar incident taking place again or to have a better reaction to it. Danielle becomes personally responsible for avoiding discrimination against her and seems to identify the fault in herself rather than someone else. The man who caused the incident and who made her feel stupid is not given any responsibility for his behaviour and is not constructed as the problem here; rather, the problem is that Danielle was not strong enough to counteract this behaviour. Danielle individualises her treatment insofar as she is personally responsible for overcoming it. One could speculate that individualisation is a common way to deal with gender discrimination. Women construct themselves as active agents who can avoid confronting gender discrimination by making themselves responsible for overcoming it. This topic recurred in my research, and other researchers, including Henwood (1996), have indicated that similar mechanisms of individualisation are prevalent in other contexts. Therefore, individualisation of experience seems to be a common strategy to construct the workplace as gender neutral.

Although discrimination within the company was presented as rarely possible, it was a little more common to assume that discrimination happens with customers. My interviewees commonly noted two possible ways in which customers respond to women in technical positions: most people are pleasantly surprised and give women extra credit, but in some cases there are reservations about women and their technical abilities which then have to be overcome. Laura (49, Greentech) and Ursula (36, Greentech), for instance, remembered that they were mistaken for secretaries or 'call centre ladies'[16] when they answered the phone, but both of them insisted that this had happened a long time ago, when women in technical positions were even rarer. Laura and Ursula distanced themselves from these technically less able women and constructed themselves as different. Surprisingly similar stories in

which women had to overcome a certain scepticism were told by Laura and Waltraud (52, Greentech). They remembered the lack of acceptance they initially confronted when visiting customers:

> *Laura*:   When I started at Greentech and the customers did not know me, I always had to prove myself. (-) I remember I was once sent to a bank because the responsible person was off sick (-) and they did not even want to let me in.
>
> *Elisabeth*:   No!
>
> *Laura*:   Then I said, that I am the only person who can solve this problem now and either I do it or you have to live with the problem.

She goes on to tell me how she asked one person to change a technical detail and after initial resistance he did it and the problem was solved:

> *Laura*:   They told this to all customers in Switzerland (who worked with the same product) and that was my breakthrough.

After this breakthrough Laura felt accepted by all customers, but she maintains:

> *Laura*:   That was pure chance. I mean, you have to be lucky to fix problems so quickly. That is not simply knowledge.

Here Laura tells a story of how she overcame scepticism which was so strong that the client company did not even want to let her into the bank offices because the assumption was that she was unable, as a woman, to solve the problem. However, Laura solved the problem and built herself a reputation; instead of taking the merit for this achievement, however, she attributes it to 'pure chance'. The same reference to luck is also found in Waltraud's story of not being accepted by a customer at first:

> *Waltraud*:   That was a lucky draw. HEHE. And very beneficial for my career. I was young and had just started to work in this technical job. A customer reported a fault and I searched and searched a lot. Several days. (...) We found a solution but with great difficulty.

Shortly after solving this tricky problem, she was called to a different customer and was seated in a small office to find the fault:

> *Waltraud*:   My heart was fluttering because all the senior managers were there (as the problem was very critical) and then I looked

at the fault and it was in the same area which was so difficult to crack some weeks earlier and I knew all by heart.

She solved the problem very quickly and afterwards everybody knew her name:

> *Waltraud*:   I got a good name through it, but I know that it was a lucky draw. A lucky draw.
> *Elisabeth*:   But you had learnt a lot about the problem earlier.
> *Waltraud*:   Yes, of course. But for the other problem I needed a week.

Waltraud starts her account by saying that it was a lucky draw that she solved a problem. Instead of presenting it as knowledge she had acquired over time, she states that it was only luck, and, like Laura, she does not take the merit for her achievement. Through the incident Waltraud became well known after overcoming initial scepticism that she could do the job. The way Laura and Waltraud presented the stories could lead us to assume that one has to solve one major problem to be accepted regardless of whether one is a woman or a man. During my fieldwork I never heard a story about a man who had had to overcome a similar hurdle or a man describing the solution of a problem as luck. One repertoire that men at Redtech and Greentech tended to use was that they worked very hard and very long hours to get an impossible-sounding task done. Yosef (33, Redtech) related the following story when I asked him about positive and negative experiences at work:

> *Yosef*:   I had a very positive experience when we once finished a project in one week which was scheduled to take four weeks, because the customer thought he would need it (the tool) the next week. Although the people who decide were on vacation, we decided to do it anyway. And then we were huge heroes at the end.

Yosef tells me a typically heroic story about brave software programmers who go out and conquer the world by finishing a project in an almost impossible time span. Yosef and others took the decision to finish the project even though the decision-makers were not there. What he does not mention is that they probably had to work hard to get the tool finished, as he refers only to them being treated as heroes in the end. Yosef does not describe it as luck that they completed the project so swiftly; it appears to be the result of dedication and simply the ability to do it.

In these accounts gender discrimination, understood as discrimination against women, is discounted by referring to its being very rare. If it happened, then it was in the past and only once. Although I have quoted mainly women in this section, men equally disclaimed that discrimination happens, although women seemed to furnish their accounts in more detail. In these accounts women constructed themselves as responsible for overcoming discrimination, either by excelling at work or by reacting in an appropriate way. Gender discrimination appears, then, to be not a structural but an individual problem that individual women have to deal with.

Stumbling over discrimination

Often women talked about overcoming initial hurdles, but in some cases these hurdles proved to be quite solid barriers. At Redtech one particular story was quoted in relation to gender discrimination. Boris (34, Redtech) told it as follows:

> *Elisabeth*: For example in customer contact I could imagine that there, I mean, for example if a woman is with a customer she may be perceived differently?
>
> *Boris*: Yes, I think that this is the case. Well, we had once, I have an example. A client came to us and Charlotte was in the meeting as well, she has exactly the same education as we do, and the client said, really bad, that was five years ago, he said 'who takes notes that is clear'. (...) And she was really there to talk about technical things. Well that is, (-) it was not her fault, basically. (...) It is not her fault. (-) But I think if the customer reacts in this way, this is a bad start for good customer relations.
>
> *Elisabeth*: And what do you do in these cases?
>
> *Boris*: If there are problems with the customer, then we exchange people. It can also happen to men, if they do not get on and there are problems on a personal level. (...) It was clearly the fault of the man.

Boris constructs Charlotte as equal to men at Redtech as she has the same education and is an engineer. She went to a customer to talk about technology but was effectively treated like a secretary who takes notes. Boris stresses several times that it was not her fault and indeed says later that it was the fault of the customer. In the end Charlotte appears to have been removed from the project because the client's reaction would have endangered the success of the project. Boris draws parallels between this incident and men having to be replaced because of

interpersonal problems. Thus being degraded to a secretary is equated to just not getting on with a person. Being a woman becomes like a personal characteristic that one either likes or dislikes working with. As in most other accounts Boris avoids calling this discrimination, and it is indeed not presented as such; Boris prefers to say that one person does not get on well with another person and thus it is an individual problem.

Charlotte (34, Redtech) gave her version of this story a different slant:

> *Elisabeth*:　And are there any negative experiences if one is with the customer?
>
> *Charlotte*:　Well, it only happened once, but it was in a bank and it was a bit of a conservative environment. There I sensed some prejudice but later at work this was no longer a problem.
>
> *Elisabeth*:　What kind of prejudices?
>
> *Charlotte*:　Mainly critical questions and so on. Jean went with me to the first meeting and they, they did not really spell it out, but it was latently noticeable and there was a gentleman, he was not the project leader but a bit higher, with whom never a warm relationship developed. (...) It was not voiced directly, because I think no one dares. You cannot do that in 2003.

Charlotte recounts the same customer incident as Boris, but in her version discrimination was noticeable and not voiced directly.[17] Charlotte presents this as happening in a conservative environment, but as with the previous cases I have discussed, such a thing happens only once and is later solved at work. It was, according to Charlotte, 'latently noticeable' that something was wrong, and she describes the relationship with the customer as never really warm. In Boris' story Charlotte stopped working on this project, but Charlotte here constructs the working relationship as later becoming fine. She also suggests that gender as a problem was never voiced directly, and she attributes this to political correctness.

The accounts seem to fulfil a different function, respectively, for Boris and Charlotte. Boris tells me the story to show that being a woman can be a problem with customers; Charlotte does the same but safeguards her identity more. She does not mention that she perhaps discontinued working on the project, and she tells me it all blew over. If she had told me that she was removed from the project, this would have constructed being a woman as a severe problem in ICT work. In the course of the

interview she was very careful to stress that gender equality is generally achieved in ICT work, and especially at Redtech. She was also keen to point out carefully that she tried to support the introduction of more women into ICT work (see Chapter 5). Much of her discursive work went into constructing ICT work as a good place for women to be, and I think that this was related to me so it would reflect in my academic work.

In a way Charlotte may have become an insider and developed a vested interest in presenting the profession in an egalitarian light (Eisenhart and Finkel, 1998; Puwar, 2004). Given this interest, it is likely that she did not want to construct ICT work as potentially resulting in negative experiences for women. As in the other cases Charlotte individualised her experience and did not attribute it to structural problems. It is also possible that Charlotte felt personally obliged to overcome discrimination but was unable to do so, and therefore created for herself a situation in which gender was in the end no longer problematic because the issue petered out. What she was defending against would have been that she was individually unable to overcome this gender discrimination, which was perceived by others as central to constructing discrimination as a thing of the past. This is not to suggest that Boris and other people who told different versions of the event are in any way less correct but simply that the two versions seem to fulfil different objectives.

Although some research has argued that people may be too immersed in the common egalitarian ideology to articulate gender discrimination (Gorelick, 1991; Marshall, 1984), in the accounts I have referred to people could 'see' discrimination but handled it in an interesting way. A first strategy was to locate the events firmly in the past in such a way that the same incidents could not happen today. Discrimination was described as a hurdle that has to be overcome once. A second strategy was to individualise the accounts by saying that the only systematic characteristic of discrimination is that it occurs very rarely. Women also felt individually responsible for developing mechanisms to overcome these hurdles. They did not talk much about who else was responsible for the discrimination, but the women were responsible for dealing with discrimination.

What was staggering was the systematic nature of this discrimination. Laura's and Waltraud's stories were very similar, suggesting that discrimination is not an isolated experience that happened in the past. Women seem to lack the resources to talk about this as a systematic and category-based experience (Henwood, 1996). The experiences of discrimination were downgraded and not seen as structural gender inequality. Young (1995: 192) argues that liberal individualism

builds on the idea that groups do not exist and thus either the victim is responsible for being discriminated against or other individuals are made responsible for being discriminatory. Both tendencies were visible in this research, but particularly striking was that women made themselves responsible for dealing with being gendered at work to avoid discrimination. Although it would have been possible that men felt discriminated against when women were promoted as a result of affirmative action (see Chapter 5), gender discrimination was generally understood as relating to women. The insistence on constructing discrimination against women as extremely rare and as a single event that can be overcome by women themselves functions in this context to show that discrimination against women is not a real problem in ICT workplaces.

'We Normally Don't Talk About Such Things': Making gender invisible

Talking about gender does not seem to be on the agenda for most people in ICT work. After one of the first interviews I conducted, which was with Charlotte, she prepared me by saying that most people at Redtech would find it 'awkward' to talk about gender issues. In this section I explore how similar resources were deployed in ICT work and what they achieved.

Downplaying the relevance of gender

I mentioned earlier that Charlotte (34, Redtech) was very careful to construct ICT work as a good place for women to work, and in Chapter 5 I analysed how she talked about getting more women into ICT work. Although she appeared to be aware that being a woman matters, she told me after the interview that she had never joined a women's group at university and had socialised with men on her degree course because she never felt it was important to engage in women-centred activities. Although this may sound like a mundane and insignificant detail, the rejection of women's issues as being important was a strong feature of the accounts produced by ICT workers. Thus being a woman, being a man and gender as such were made irrelevant by ICT workers at Redtech and Greentech.

Nikolas (46, Greentech) said the following about women at work:

> *Nikolas*:   I think, well, if I worked with women in project work, I
>   have seen like with male colleagues strengths and weaknesses,

that is normal, nothing special. One cannot say, that it does not work with women, that is rubbish, yes, er.

Elisabeth: Fairly mixed?

Nikolas: Mixed, yes and if women join us, then there is no difference. At least not for me. (...) I think, when you have to talk about it, (I mean) men and women, then you cease to have emancipation. I think if you have to talk about emancipation, then it (emancipation) has already disappeared. (...)

Elisabeth: What do you mean?

Nikolas: If I have to talk about it, then I have a problem with it (-) or the company or whoever has to pay attention that there is emancipation between men and women. Then there must be a reason for this. If you had it (emancipation), then you would not need to care about it.

We were talking here about why it does not make a difference to the work environment when women are in the team, and he makes the argument that team interaction can be good or bad but this has nothing to do with women *per se*, suggesting that the difference is people. He denies that one cannot work well with women, and the reason for him seems to be that he works with people, not men and women. This resource is in conflict with that used to argue for more women, where team interaction was said to be improved because of women's higher social competence, as discussed earlier. Nikolas maintains that gender does not make a difference for him in the work context and that a 'problem' arises only if there are special mechanisms to ensure that women are positioned as equal to men. He refers here implicitly to the equal opportunity officers common in Swiss and German companies, but he uses the very existence of this position to argue that gender is a problem. He suggests that it is necessary to pay attention to equal opportunities only if there are none. For him this appears unnecessary, as he makes no distinction between men and women at work; both are just 'people'. The consequence of not stressing gender is thus to avoid discrimination.

One could also understand the following extract as not stressing being a woman:

Danielle: It happened that a colleague (feminine form)[18] asked me 'Let's occupy an office together, a women's office' but I told her that I don't want that. I don't think that it is good for the climate to have a women-only office. It is better for the climate if it is mixed.

Danielle (36, Redtech) here recounts an incident where a female colleague wanted to have a women-only office, but Danielle constructs herself as strongly against having one, and she justifies this with reference to the climate at work. This seems to suggest that although women are often said to improve the climate in ICT work, too many women may not be good. This comment was made in a context where Danielle was talking about 'women's bitchiness' at work and why she disliked working in a women-only environment. Danielle distances herself from images of women that she sees as not beneficial. This is similar to what Jorgensen (2002) found when women used different strategies to distance themselves from other women through images of women chatting, bitching and painting their nails, which is also a form of sexism. Danielle does not talk about this in a way to avoid strengthening the category 'woman', but one can speculate that having a women's office would make being a woman more visible and would stress gender. This emphasis on being a woman could open women to the dangers of sexism.

One way in which gender was expressed was through what men and women wore at work. For men at Greentech and Redtech the classic suit was required only for official meetings with clients; generally, more relaxed versions of a shirt and suit trousers were common at Greentech and T-shirts and jeans at Redtech. For women it was also usual to dress more formally when meeting clients, but generally they too wore more relaxed clothing. Rather than adopting a more masculine style of dress, most women opted for a tuned-down feminine version. By 'tuned-down' I mean that women wore not only the pencil skirts usual for the office but even more floral ones, trousers or even jeans, with Greentech being slightly more formal. It was common to wear a blouse or a shirt with a cardigan, but a women's suit was not an option selected by women. Laura (49, Greentech) mentioned that this was to avoid becoming 'masculinised' by adopting the female version of the male suit, and for her it was important that women remain women at work – otherwise, one could hire men instead.

It becomes clear here that women were accountable for appearing as a normal woman (West and Zimmerman, 1987), but at the same time not too much of a woman, as forms of hyper-femininity were not adopted in dress. By hyper-femininity I understand femininity that is stressed through sexualised dress such as very short skirts or push-up cleavage, which is a more common dress code among women low in the hierarchy of advertising agencies (Alvesson, 1998). In both companies women had more typically feminine attributes such as long hair and more feminine

clothing, although there were personal differences in that some women had shorter hair and would not think of wearing a skirt but usually still dressed differently than men. Women were not doing masculinity by emulating a masculine style of clothing; they dressed more 'feminine', yet not 'too feminine'. As I illustrate later, being too feminine is something that puts one in danger of being perceived mainly as a woman and not as a worker. Not stressing gender too much – doing neither extreme masculinity nor extreme femininity through dress – could be seen as a way to downplay the importance of gender at work. Professional women have to perform heterosexual femininity and at the same time have to fulfil the supposedly gender-neutral standards of professional work, which are, however, saturated with masculinity (Bergvall, 1996; Eisenhart and Finkel, 1998; Gherardi, 1995; McDowell, 1997; Wajcman, 1998). Thus women have to appear feminine but not too feminine to avoid being seen no longer as a professional worker, an idea to which I return in the next section.

Gender neutrality rules

The second interpretative resource in this context is again phrased only slightly differently but it adds to why gender is important. This interpretative repertoire was again used regularly by people at Redtech and Greentech.

> *Elisabeth*: And is there for instance something that you would describe as a typically feminine behaviour, for instance that a woman reacted in a certain way. Is there something?
>
> *Steven*: Well, I see the person as person and I don't classify them as man or woman,[19] if I (-) no, because I know too many women here at Greentech who are a hundred times better than I am and have achieved a hundred times more.

I ask directly about so-called feminine behaviour, but Steven in his reply denies that he classifies people as men or women; rather, he sees all people as people, and this notion does not seem to contain a gender dimension. This is because he does not want it to appear as if women are devalued because they are women, as he knows women who are better and have done more than he. To stress this point he uses the exaggeration 'a hundred times'. The very existence of these good women seems to mean that gender does not make a difference for him. However, if he did see all people as people, he could not have noticed that women can also be good, as it would have been only ungendered people who were

better than he. He seems to operate with gender categories but denies that they have any implications for work.

A similar denial of the importance of being a woman can be found in the following comment made by Pascal (33, Redtech):

> *Elisabeth*:   And do you think it plays a role, if you act as man or woman in this area, well, in the professional life?
>
> *Pascal*:   Difficult to say as a man HEHE. I can just say how I relate to women. I accept women in this job as I would or would not accept a man, I hope I do that, at least I want to treat everybody according to his or her merits and not according to their gender.[20]

Pascal here orients towards being a man and suggests that he has little competence to handle this question, which he interprets as being about women. He claims that he accepts women like men on the job. This shows that men are the norm against which women are compared. For him treating men and women alike and on the basis of merit is perceived as something positive, and if ICT work is merit-based then gender does not seem important at work.

Treating people as if they were ungendered was a common resource used in the interviews. A particularly intriguing example was provided by Waltraud (52, Greentech):

> *Waltraud*:   From the beginning on when I was at work (-) I never was there as a woman. Only as a person. You have to be careful not to invoke this difference all the time. You have to feel as a worker[21] when at work. Then there are none of these battles of the sexes[22] and whatever. It ceases to be relevant. I never had problems with that. One is accepted as a colleague (masculine form), not as a woman.
>
> *Elisabeth*:   Is that better then?
>
> *Waltraud*:   If you want to do well, yes. I think that it is almost a condition. (-) I have observed this with a younger colleague (feminine form), (...) she was a very attractive woman, and those are actually more at risk, HEHEHE, for these things, blonde, slim and so on. During the break, she was always surrounded by men. Not a big surprise. And when there was a job vacancy, someone put her forward (...) (but) nobody wanted her. Everybody thought, nice woman, nice to talk with during coffee break but working with her is a different story.[23] If you want to do well, you should not do it this way. You have to feel as a worker[24] and

have to act like one and or a man. (...) I think, one should not bring it to the foreground that one is a woman. Yes. And (-) one has to feel and move like a person among persons. And then there is no discrimination. Neither on the positive nor on the negative side.

In this account Waltraud appears to be clear that she sees herself as a worker but not as a gendered worker, and she points to how she downplays being a woman. If gender is not invoked, there are no gender problems and no 'battle of the sexes'. Then one is just a worker and no longer a woman. She illustrates this with an example of a beautiful woman who, by stressing her feminine attributes, is seen as a woman and not as a worker. Beauty functions as a signifier for women and also for heterosexuality. For Waltraud by being a worker not a woman one can avoid discrimination, and it appears to be women's own responsibility to downplay gender. She does not even try to articulate the idea that discrimination and sexism could be challenged; the responsibility is on women not to provoke this behaviour.

Waltraud continues speaking about a news report on sexual harassment:

Waltraud: They said, sexual harassment at work happens from top to bottom. That means from the boss to the dependent secretary. But there is also a battle on the same level between colleagues (masculine form). But this happens differently. Men want to eliminate the competition of their colleague (feminine form) through making her a woman. (-) By not accepting her as a professional colleague (masculine form) but as a woman. And if the woman responds accordingly, that is as Eve, then she is no longer a professional.

Elisabeth: What does it mean exactly to react as Eve?

Waltraud: (0.6) They used the example of a meeting or someone has to deliver a speech, accidentally it is the colleague (feminine form), then she is standing there in front of everybody and one of the men comments on her nice legs or whatever, something typically feminine. And if the woman reacts in a feminine way (-), then the game continues, then they are men and women.

Waltraud gives a very interesting account of how gender discrimination happens, and for her it is a way for men to eliminate competition by constructing women as women through subtle comments. In the way Waltraud presents it, it again falls on the woman to counteract this sexism

by not responding in a feminine way. Only if the woman constructs herself as non-gendered is she able to be perceived as a professional.

There are many things to be said about this account, but the most striking element is the assumption that being perceived as a woman excludes being perceived as a professional. This shows that although the portrayal of the ideal ICT worker is constructed as gender neutral, women have difficulties fitting into this template, which exposes the androcentricity of the ideal worker construction. Being a professional is implicitly equated with being a man. The repertoire that there are only people at work, and not men and women, means that being a woman is in conflict with being a professional ICT worker because the ideal ICT worker is conceptualised as a man. For men, engaging in the battle of the sexes does not seem to carry negative implications, as they are constructed as able to win only by eliminating competition from women. For women, in contrast, appearing as too much a woman means apparently being professionally incompetent. Therefore, if people assert that they are only a person at work, they counteract the idea that being a woman is relevant and being a woman can have negative implications such as sexism and discrimination.

Avoiding being made a woman was evident in some of my observations. There was a particular incident at Redtech where after a meeting people brought the glasses used during the meeting into the kitchen. Everybody carried some glasses and put the glasses into the dishwasher. Andrea (37, Redtech) did the same and was leaving the kitchen when Hugo (29, Redtech) attempted to give her the glasses he was carrying and said 'hey' to indicate that she should put those glasses in the dishwasher. Andrea did not take the glasses and said, 'I know these men's tricks all too well.' Thus Andrea did only her share of cleaning the table after the meeting and resisted filling the dishwasher with glasses for the whole group. When I talked to her later about the incident, she told me that 'one has to be careful to not do everything for them [the men in the company]'. In this situation Hugo expected Andrea to help with his glasses and to appropriate a technology often perceived as feminine: the dishwasher. Most certainly Andrea would have ended up putting all the glasses the other people were carrying into the dishwasher. Thus she would have accepted a role which is closely related to women: doing housework and helping others. Andrea's resistance can therefore be read as resisting being made a woman by doing a certain femininity.

This may, however, pose problems, as many elements like helping others are now part and parcel of ICT work, and I illustrated in Chapter 4 how Danielle became gendered feminine as 'Miss Review'

by helping others with their coding. Women have to strike a balance between being an ideal ICT worker and performing these soft skills, being careful not to do too much as they might then be constructed as women, which would lay them open to sexism and discrimination. For men, being gendered did not seem to pose problems, in part because they were equated with the professional image of an ideal ICT worker.

By not joining women's groups, by not having women's offices, by not being either too masculine or too feminine, by not filling up the dishwasher and by acting as a worker, women construct themselves and are constructed by others as people and explicitly not as women at work. Sometimes it appears that women would like it to be forgotten that they are women to avoid being discriminated against. This is related to two subject positions available: either being a professional or being a woman. Women could achieve this professional status only by downplaying their femininity by not being perceived as too much of a woman. Performing gender thus works through making gender less relevant by enacting gender in a weaker version. By not invoking gender it is hoped that discrimination can be avoided. As there are only people and not men and women in ICT work, there cannot be gender discrimination. Therefore, making gender irrelevant is another strategy to construct the ICT work environment as gender egalitarian.

Conclusion

In this chapter the focus was on how ICT workers talk about and enact gender, and it appears that gender is conceptualised in a conflicting way as either not mattering in a merit-based and egalitarian work environment or being important because women bring the required skills to ICT work. Steven (30, Greentech) illustrated the dilemmatic nature of gender:

> *Elisabeth*: Do you think it matters if one appears like a man or a woman in this profession?
> *Steven*: Not at all. (-) In an IT-related environment, which is dominated by men, it is certainly an advantage. I think a woman has many advantages that she could use if she wanted to.

On first sight it appears illogical that gender is said not to matter and at the same time women are said to have advantages as women, which means that gender must matter. This extract encapsulates many of the elements discussed in this chapter. The scarcity of women in ICT work

is, for many, inexplicable: men and women have the same chances to enter ICT work as there is no formal exclusion. The absence of women from ICT work is regretted, as women are said to add something important to ICT work. The importance of gender is denied in relation to gender discrimination constructed as rare and not really important, as it is up to the individual to avoid or respond appropriately to such behaviour. Gender was constructed as irrelevant and made invisible when people talked about how they did not differentiate between men and women at work and wanted only to be workers at work. The way in which gender is understood is clearly conflicting and as such poses a dilemma when people shift between gender relevance and irrelevance. This ideological dilemma consists of people not wanting women to be disadvantaged in ICT work, and therefore gender is made irrelevant. Yet it is said to be relevant when it is an advantage to be a woman. Being a man was never discussed in this context, and gender seems to apply only to women (Calás and Smircich, 1991). As the extract from the interview with Steven illustrates, gender was constructed in such a way that being a woman is not important and is an advantage.

How gender is made sense of in ICT work thus reflects and constitutes recent changes in gender and society. Gender relations have changed, and sexist subject positions are no longer tenable (Billig, 1991). However, people find new ways to express sexism through structures that appear non-sexist but serve sexist and, indeed, heterosexist functions. This form of heterosexism is far more subtle and mundane than earlier versions of sexism, and it is so effective because it appears to be gender egalitarian (Benokraitis, 1997; Peel, 2001; Riley, 2002; Wetherell *et al.*, 1987). The conceptualisation of gender also shows a radical individualism. Women have achieved individual subjecthood, but this means that drawing on group- or category-based explanations is not desirable, as it undermines the individual subject status (Koppert and Selders, 2003). People in this study wanted to be seen as individuals who are in charge of their own destiny but at the same time draw on resources which construct women as a group as particularly suitable for ICT work. Gender is perceived as an ideological dilemma, and this dilemma is dealt with by drawing on resources which make gender more relevant or less relevant to support the logic that women cannot be disadvantaged in ICT work. This is either because gender is not important as all people are just workers or because women are particularly wanted as ICT workers for the skills attributed to them. Most people drew on all these repertoires and wove them together, ignoring the potential conflict between them. Gherardi (1994; 1995) provides useful examples of such ways of

doing gender: women in professional life get the collegial slap on the back as honorary men and the door is held open for them to treat them like ladies. Thus gender is invoked and ignored, and in so doing people refer to the gender binary between men and women in different ways by stressing it or making it irrelevant. They orient towards the gender binary while performing gender.

7
Conclusions

It is now time to weave the different threads together. This book started with the aim of showing how changes in the workplace and changes in gender relations are intertwined. Gender was seen as something that is done and performed but also as something that is performing people. To study performing gender, I developed a discourse analytic model for performing gender and applied it to ICT work. In this concluding chapter I summarise the approach and the key contributions of the book. I also take a look at how the area of gender, technology and work might develop in the future.

Approach and key contributions

The relationship between changes in gender and changes in modes of production has been the focus this book. I began with how changes at work and in gender relations are interwoven. As most social theories either ignore gender or treat gender as static, I argued that one needs to conceive gender as a process and as fluid to better understand the relationship to changes at work. The example I selected for knowledge work was high-end ICT work. ICT work is emblematic of the new economy, but it also embodies many elements that are characteristic of the changing workplace, such as constant learning, flexibility and self-management. Despite the egalitarian image which is often conveyed in the media, ICT work is strongly dominated by men, which makes it an interesting case study of gender at work. This new economic formation is visible not only in areas such as Silicon Valley but also in other parts of the world. I therefore looked at ICT workplaces in Switzerland as an example of a Northern industrialised economy.

After introducing the overarching topic, I looked at how leading social theorists theorise work and gender. Although these theories account for the changing nature of work, they either fail to deal explicitly with gender or see gender as central to change in society. Alternative approaches to gender use notions of cultural feminisation, in which femininity gains value as a currency, and the de-institutionalisation of gender, the idea that gender discrimination is becoming less and less enshrined in formal regulations yet needs to be done. In most of the social theories discussed, gender is seen as a property of people. In current studies on gender, organisations and technology, however, gender is seen as performative and procedural. Such an approach, in which gender, organisations and technology are mutually constitutive, appeared particularly useful to study the changes and continuities in gender at work.

The first contribution of the research lies in the approach developed towards gender as a performance. After critiquing some social theorists for glossing over the process dimension of gender, I developed a framework for studying gender at work as procedural. I analysed two important frameworks for gender as a practice: the ethnomethodological view of West and Zimmerman and the discursive/poststructural view of Butler. Although it is often assumed that these approaches are mutually exclusive, taken together they provide a more comprehensive understanding of gender as a 'doing'. To combine the two approaches I used a discourse analysis in the version of Potter and Wetherell. I adapted the discourse analysis to show how gender is done.

A second contribution of the research is that the alleged feminisation of work does not itself make women the new ideal ICT workers. Widely connoted feminine skills, such as social skills and flexibility, are key competencies for ICT workers, and this should have led to a more feminine portrayal of the ideal ICT worker. The ideal ICT worker was constructed by the research participants as technically and socially competent. As technical competence was assumed to be the basis for the job, most people stressed their social competence, which was perceived as the value-add. Flexibility was central to the work context but rarely talked about in relation to the ideal worker. In the accounts the research participants deployed, neither social and emotional skills nor flexibility was associated with gender. However, in other parts of the interviews, namely when the positive effects of women on the ICT work environment were stressed, these links between women's social skills and flexibility were more often made. I then looked at the dynamic at work that leads to men appearing closer to the ideal worker despite the ideal new skills often being attributed to women. This dynamic functions

to construct the ideal worker as gender neutral. Yet men can claim this apparently neutral position more easily than women, because women tend to be perceived as women and not just as workers. Thus the debates around the feminisation of work are made more complex.

The third contribution of this research relates to the gendering of biographies in the past and future. By looking at how the entry into and career path in ICTs were narrated, it became clear that these accounts were narrated in a gendered way. Women attributed their techno-biographies to serendipity and the influence of other people more often than men, who usually attributed their careers to a natural interest in technology and logical career progress. Although career paths at Redtech and Greentech were markedly different, what they had in common was that being a woman featured in the accounts as a career resource, whereas being a man was rarely discussed. The fact that women talked about their career as a resource is interesting, because being a woman was not seen as a disadvantage. When they talked about future plans, gender did not appear to matter for ICT workers. This was interpreted as being linked to the individualisation ideology, in which gender is said not to matter. Thereby the past appeared gendered, whereas the future was imagined as not gendered.

The fourth contribution concerns current gender ideology, which seems to entail that women cannot be disadvantaged in ICT work. On first sight it appeared contradictory that gender is simultaneously said to matter and yet not to matter in ICT workplaces. Most people said that they did not know why women are scarce in ICT employment. They often insisted that there should be more women in ICT work because women bring the social and emotional skills the new technology workplace needs. The view that gender – and here gender refers only to women – does not matter was clear in how instances of discrimination against women were treated. These instances were seen as singular events which had happened in the past but could not happen today. It was also common to construct the ICT workplace as gender neutral by referring to the fact that it does not matter whether one is a man or a woman at work. This flexible gender conceptualisation supports an egalitarian gender ideology, in which much discursive work is done to disallow that women could be disadvantaged in ICT work.

A final contribution throughout the book is a new way to think about some of the issues relating to work in the information and knowledge society. In relation to work I showed how skills such as social and technical competence are discursively constructed and enacted, and how people position themselves vis-à-vis those skills. I also contributed to

the debates around work/life balance and the intensification and extensification of work by showing the different approaches used at Redtech and Greentech. In relation to biography, I highlighted how work biographies take shape in the new economy and how varied this process is. I also discussed how people adopt market-driven neoliberal subjectivities when talking about their futures. They accept insecurity and constant self-renewal as part of their job. This contributes to debates on the changes in work and biographies in general in the new economy.

Conclusion and further research

This research is obviously only a small piece of the changing society jigsaw. There are many interesting aspects I have not looked at in detail but which may guide further research. First, the study focused on work, and on Switzerland. The relationship between work and gender may be different in other parts of the world. However, at least in Western countries, it appears that similar gender patterns are visible in other geographical areas and also in different professions. It would, therefore, be interesting to explore how far gender constructions differ or are similar in other contexts, and what we may conclude from this in terms of changes and continuities of gender at work. I decided to explore the change and continuity of gender in relation to the world of work, but I have not looked in detail at other spheres of life, such as leisure or the home. In doing so I have privileged paid employment over other spheres of life where changes are also visible.

Second, and related, the research gives gender priority over other ways in which the material could have been analysed, such as 'race', class or sexuality. Indeed, similar research could have been done without looking at gender at all. In this research most people were white, and Switzerland in general is much more ethnically homogeneous than, for instance, the United Kingdom. The differences between white people largely centred on nationality, and these differences could be explored further to deconstruct whiteness. The research was also located in a class-specific context. Although theorists such as Castells argue that these high-end ICT workers are among the winners in the new form of society, I complicated this image by also referring to the pressures inherent in this work context. Nevertheless, these high-end ICT workers are much better off than data-entry ICT workers, for example, who face very different challenges. Another aspect that I did not explore in detail was the heteronormativity underlying the work context. The gender binary includes the predicament of being heterosexual, as this is a central

mechanism of the gender binary. However, in the end, I did not have room to explore some implications of the research material further. For example, it was the case that women–men relations were constructed as always being potentially sexual. However, relations among men and among women were never seen as being potentially sexual. This underlying heteronormativity at work could be investigated further.

Third, I developed a discourse analysis which focused specifically on gender and included enacted texts. The attention to detail which is one of the main strengths of a discourse analysis is very helpful when working with empirical material, even though the written presentation of enacted discourse often falls short of the richness of the original text. In hindsight, it might have been better to develop more appropriate tools to present enacted discourses. At the same time, my focus was not on performing gender in the work context as such but on the positioning processes in relation to work, biography and gender. For this purpose I still believe that interviews were the most appropriate tool to gather material for this research. If the research question had been to look at gender at work in general it might have been necessary to collect material on observations using video recording. Or if the question had been how people position themselves in relation to certain topics such as sexuality at work, group interviews and focus groups might have provided useful insight. In any case, I would have had very different material to work with, which would have influenced the results of this book. To explore how doing gender happens through a discourse analysis, more studies using different material collection techniques and focusing on different research questions are needed.

Fourth, in this book I worked mainly with a dynamic model of gender. I looked at gender as something that is performed. This is in contrast to how most people perceive gender, because in the popular imagination gender is something static. I have shown how the fluidity of gender becomes rigid through the binary model. Seeing gender as a performance with people performing and being performed by gender is a useful tool to understand how gender happens. However, that does not mean that there is no room for static elements in gender. At a procedural level the gender binary in this study was done and undone, but at the level of being, the gender binary was firmly in place. This is because the performance of gender and gender identity do not seem to match each other as firmly as one might believe. Explaining rigidity of gender is important on two grounds. First, it is important politically; otherwise, people who seem to offer much easier explanations of gender based on the perceived permanence of gender are able to occupy

the meaning-making around gender.[1] Second, seeing that gender is also static and fixed could help us to understand the functioning of the gender binary better and to theorise change and continuity in respect to gender.

Social theorists such as Maihofer (1995; 2002; 2004a; 2004b) have started to develop non-essentialist ways of explaining the fluidity (gender as hegemonic discourse) and rigidity (gender as a way of existence). The gendered being is shaped for Maihofer (2002) by the ontoformative power of gender. She refers to Kosík's (1970) notion of ontoformative power and transfers it to gender in that performing gender sediments or crystallises in people. For Maihofer becoming and being are part of the same process, in that we become gendered but also *are* gendered, and feel and act in a gendered way. Such approaches might be useful to take the notion of performing and being performed by gender further to include elements that are not fluid but rigid and static.

Finally, in this book I have argued that there is a chasm between women and technology. Being a woman and being good with technology are often assumed not to go well together. It has been argued that this is one of the main reasons women are underrepresented in ICT work. However, in recent years the stereotype about women and technology seems to have been redefined. *Newsweek* reported on a group of women who call themselves 'nerdettes' and who combine pink stilettos with being a geek (Bennett and Yabroff, 2008). Sarah Blow has set up Girl Geek Dinners, which are now held in various locations around the world. During these Girl Geek Dinners, women who work in technology come together to share their experience and dinner. New TV programmes and websites on women as users of technology are being made (GirlGeekChic.com, 2008) and I myself contribute to the LadyGeek blog (LadyGeek, 2008). Many of these redefinitions of what it means to be a geek or nerd play with stereotypical feminine associations such as pink. This is one way of widening and redefining what a geek or nerd is, but it perpetuates another stereotype: that women like pink. Many consumer technology producers have woken up to the fact that women are a major target market and have followed exactly this route. They have made their phones and technical devices pink. However, the Lady Geek research (LadyGeek, 2008) actually shows that only 9 per cent of women would like to buy this 'pinked-up' technology. Although feminising the geek changes many stereotypes, some stereotypes persist.

However, there are even more exciting trends in recent times that suggest that the gender and technology relationship might change. First, women are no longer lagging behind men in Internet usage

(Fallows, 2005). This has much to do with the move from the first Web to Web 2.0, which focuses on content creation and relationship building. Women have been shown to frequent social networking sites much more than men, leading to a social media gap in favour of women (Hoffman, 2008). One can expect that with the move to the semantic Web, when relationships and collaborative knowledge creation become more important, women will be even more attracted to online technologies. New areas of employment in the ICT area will emerge to provide new employment opportunities for women (Webster, 2006).

It will clearly take a while until women's newly found enthusiasm for technology filters through to the workplace. However, some media reports have claimed that women are in the starting blocks to take on leading positions in the tech world and that role models are there (Lacy, 2008a; 2008b; Swartz, 2008). These recent trends show that the gender–technology relationship is shaped by society and can in consequence be reshaped. Gender is often thought of as rigid, static and solidified, but in this book I have shown that gender can be flowing, flexible and dynamic. In the future it might be possible to create a union between binaries that appear irreconcilable and to understand that gender is performed in rigid as well as fluid ways.

Appendix 1: Participants

Name	Age[a]	Company	Work activity rate (%)[b]	Years of ICT work experience[c]	Children
Andrea	37	Redtech	90	7	No
Boris	34	Redtech	80	8	Yes
Charlotte	34	Redtech	100	9	No
Danielle	36	Redtech	100	7	No
Esther	33	Redtech	100	6	No
Felix	36	Redtech	100	15	No
Günther	32	Redtech	100	6	No
Hugo	29	Redtech	100	8	No
Iris	56	Greentech	100	29	No
Jean	41	Redtech	100	16	Yes
Kristian	36	Redtech	100	7	No
Laura	49	Greentech	100	30	No
Marcel	29	Redtech	100	6	No
Nikolas	46	Greentech	100	18	Yes
Oliver	37	Greentech	100	4	No
Pascal	33	Redtech	100	6	No
Quinta	42	Greentech	60	15	Yes
Robert	46	Greentech	100	22	Yes
Steven	30	Greentech	100	6	No
Tim	54	Greentech	100	29	No
Ursula	36	Greentech	80	16	No
Vanessa	24	Greentech	100	2	No
Waltraud	52	Greentech	80	32	No
Xavier	36	Redtech	100	13	Yes
Yosef	33	Redtech	100	5	Yes
Zacharias	35	Redtech	100	5	No

[a] Age at the time of the interview.
[b] Percentage of full-time employment.
[c] Some people included time of technical apprenticeships, whereas others accounted only for the time they had spent working in the area of informatics and ICTs.

Appendix 2:
Studying Gender as Performance

In the main body of the text I discussed how gender and work are performed as intertwined. In this appendix, I provide more details on how the research was conducted.

Research aims and questions

In Chapter 2 I argued that major social theories of the transformation of work neglect the complex nature of gender and that these accounts could be enriched by seeing gender as procedural. This is a prominent view in gender studies and has been used in organisational and technology studies. Therefore, I developed in Chapter 3 a model for how performing gender could be analysed through a discourse analytic understanding in which wider frames of sense-making are related to written, spoken and enacted texts. These steps brought me closer to the aim of the research: to show how gender is enacted in contemporary ICT work and to evaluate how gender dynamics are central to the understanding of new work relations. Central to this aim are subject constitution processes, and instead of referring to abstract notions of subjectivities, my research aim is more in line with what Gavey describes as:

> identifying the social discourses available to women and men in a given culture and society at a given time. These discourses provide subject positions, constituting our subjectivities, and reproducing or challenging existing gender relations. (1997: 56)

My aim is to show how gendered subjects are constituted by performing gender in ICT work in times when gender and work are changing. My main interest is in the interpretative repertoires and subject positions people adopt when talking about work, biography and gender. Performing gender is understood as the process by which people selectively make gender relevant or irrelevant through the interpretative repertoires they use and how through the adoption of certain subject positions gendered identities are constructed.

In line with more general qualitative research (e.g. Alvesson, 2002; Denzin and Lincoln, 2000; Flick, 2002; Hammersley and Atkinson,

1995; Mayring, 1999) and specialised ethnographic research (Toren, 1996) and discourse analyses (Potter, 1996b; 1997), my research questions were not selected before the field research or carved in stone. They shifted and changed over the course of the research. However, throughout the research my interest was in the areas of work, biography, technology and gender. Those areas were refined over the course of the research into the following questions:

1. How is the ideal ICT worker conceptualised by ICT workers?
2. On which resources do ICT workers draw to account for their careers and life trajectories in respect to the past and the future?
3. How is gender conceptualised in ICT workplaces?

With respect to the ideal ICT worker, I am interested in how the ideal ICT worker is constructed in relation to skills and flexibilities. As skills and flexibility are resources often associated with femininity, the question is how far the ideal worker is becoming 'feminised' through these new skills and how ICT workers position themselves in relation to these skills. Second, because biographies and careers are said to be in flux, my interest is in whether and how these stories are told in a gendered way. Third, as gender relations appear to have changed greatly and yet simultaneously very little, it is insightful to explore how ICT workers themselves see gender and how this knowledge is rhetorically organised. By answering these questions I also make a contribution to knowledge of how work and biographies in general are changing. These questions reflect major theoretical concerns raised in the literature review, but they were also significantly shaped by the experience of being in the field.

Studying enactments through ethnography

Ethnographic research is burgeoning in various fields of social research. Although originally used in anthropology to study 'foreign' people, ethnography was adopted in sociology, mainly by the Chicago School, to study people 'at home', who were difficult to study using other means. Ethnography as a research method was reinvigorated by the influence of postmodern and poststructural theories in which a cultural perspective on studying and writing on social settings became crucial (Alvesson, 2002: 134–135). Today, 'ethnography' as a term is applied to various and quite divergent approaches in a range of disciplines. With the wide adoption and differentiated use of the term, it became increasingly

unclear what an ethnography entails. Some studies which refer only to interviews label themselves 'ethnographic', whereas in other studies the term 'ethnography' denotes an extended period of living with the people the researcher is studying.

The beauty of ethnographic research is that is allows us to analyse how versions of the world are constructed and sustained through mundane, everyday activities. This has rendered ethnography a useful research tool in both organisational research (Coffey, 1999: 28ff.; Collinson, 1992; Czarniawska, 1992; 1998; Leidner, 1991; Monaghan, 2002; van Maanen, 1979) and technology research (Cockburn and Ormrod, 1993; Knorr-Cetina, 1981; Woolgar, 1991). As technology construction usually takes place in organisational settings, some studies have combined technology creation and workplace studies to show how gender is constructed in technology workplaces (Faulkner, 2000b; Fletcher, 1999; Woodfield, 2000). However, my interest is neither in showing the functioning of organisations nor in how technologies are constructed as such, but in how gender is done by selectively drawing on interpretative repertoires and subject positions in relation to work, biography and gender. This has major implications for how the research is conducted.

Ethnographic research usually entails observations, interviews or focus groups. Observations give insights into how mundane workplace interactions may be related to gender. Therefore, these 'naturally occurring interactions' – as a conversation analyst may label them – show how gender is done day to day. Although this is certainly a component of my research, my main interest is not in workplace interactions but in which interpretative repertoires and subject positions are adopted in relation to certain topics. My main interests are how the ideal worker is constructed, how biographies are told and how gender is conceptualised, and although I may capture some of these topics in everyday work interactions, it seems very unlikely that these topics would be covered extensively. For these sense-making processes it seems worthwhile not to study the workplace interactions as such but to explore how people make sense of their work environment, biographies and gender (for a similar approach, see Kitzinger and Frith, 1999). I therefore decided against a long-term observation of workplace interactions, which other researchers have conducted (Coffey, 1999; Kondo, 1990; Leidner, 1991). In light of the research questions, it seemed more *appropriate* (Lofland and Lofland, 1984: 13–14) to visit workplaces for a shorter time to get some insight into everyday work practices. As I did not have enough knowledge to work alongside programmers like other researchers have

done (Ó'Riain, 2000; 2002), I decided that the best way to get insight into everyday working practices would be to shadow people while they were doing their job. In job shadowing one follows a person around. However, to answer the research questions, other means of research were required.

Interviews could supplement the material collection. Interviews are not only a favourite means of collecting material in the social sciences (Fontana and Frey, 2000; Gubrium and Holstein, 2001; Holstein and Gubrium, 1997; Rubin and Rubin, 1995; Witzel, 2000); they have also long been viewed as particularly useful for feminist research (Acker *et al.*, 1983; Gorelick, 1991; Heyl, 2002; Maynard, 1994; Oakley, 1981; Reinharz and Davidman, 1992). The assumption behind the feminist adoption of interviews is that through interviews women can voice and express themselves in their own terms, which will in turn have a liberatory effect. The research subjects are thought not only to be women but also to be in fairly powerless positions. These assumptions do not hold true in my case: first, I interviewed men *and* women, because doing gender constitutes both men and women; second, my research subjects were not *per se* powerless but rather belonged to an elite (McDowell, 1998; Odendahl and Shaw, 2001; Puwar, 1997) which did not have to be empowered by me as a researcher. Interviews are also often afflicted with 'discovering the real self' of people, but I see interviews as a way of creating the self in the interview situation (Atkinson and Silverman, 1997; Hammersley, 2003). Thus it is important to recall that selves are created in an interview situation vis-à-vis the researcher (Cassell, 2005; Holstein and Gubrium, 1997; Lucius-Hoene and Deppermann, 2000; McDowell, 1998; Nentwich, 2003; Ortiz, 2005; Wortham, 2000). Cassell (2005) refers to how it reflected in the interviews when she was eight months pregnant. Interviewees saw her as 'only jobbing' and as having no long-term interest in the project, and she had little interest in challenging their assumptions as she wanted to return home. Cassell uses this as an example of how mutual assumptions and constructions of interviewer and interviewee are relevant in negotiating meaning. In this context interviews allow us to focus on which interpretative repertoires and subject positions people adopt in doing gender in relation to work, biography and gender. This makes interviews an ideal research tool for my research.

In addition to interviews it would have been possible to collect material through group interviews in general and focus groups in particular. Focus groups are a particularly popular method of collecting material on how everyday knowledge is negotiated. It is commonly assumed that

the researcher then has less impact on the material created (but see Speer, 2002b). This would certainly be useful to explore how gender and the ideal worker are conceptualised, but the biographical elements seem to be more suited to individual interviews. Focus groups are suitable for analysing how meaning is negotiated in groups, but this also brings new concerns about confidentiality, for instance, and about the extent to which certain things are oriented towards other people in the groups, which is different from an interview situation, where only two people interact. Moreover, if I had decided to use focus groups, I would have needed to conduct interviews on top of focus groups to cover the biographical area. This would have meant that the companies would have had to give me much more of their employees' working time. I would have needed to ask for one hour of interview time plus one to two hours of focus group time per employee. Given that 'time is money' in the business world, it is very unlikely that I would have gained access to companies if I had asked for several hours of employees' time. As focus groups were not required for this research, I decided to focus on interviews alongside the observations.

A commonsense reason to use observations and interviews is the assumption that speech and action differ, sometimes with ideas about finding out how people 'really are' by observing them. From a discourse analytic perspective such a separation makes little sense because a basic assumption is that discourse fulfils different functions in different contexts (see chapter three). The interest in a discourse analysis is clearly not in finding the truth about a person but in how meaning is negotiated, and this may differ among and between interviews and observations. A more fruitful approach is to see interviews and observations as *complementary*:

> A conclusion must therefore be that there is no dramatic difference between the material collected via observation and the material collected via interviews, that they complement one another and ought in turn to be complemented by many other techniques. (Czarniawska, 1998: 31)

In addition to seeing observations and interviews as complementary and as another way of collecting data, in a discourse analysis it is often fruitful to explore which resources are drawn upon and which not in a given situation. Then observations become another written, spoken and enacted text that is analysed alongside text created in interviews to see how ideologies manifest themselves. In sum, interviews and

observations allow the collection of material on how people position themselves in relation to certain topics and how they do their work.

The companies: Redtech and Greentech

In selecting the companies for this study, I used the criteria outlined in Chapter 2 as an orientation. I was interested in finding companies complying with the 'ideal' for knowledge work, for example that the workers should regularly update their skills and manage their work themselves. As I was based in Zürich, Switzerland, at the time, I decided to conduct my fieldwork there.

It is often assumed that access negotiations with business organisations are long and difficult (Lofland and Lofland, 1984: ch. 3; Smith, 2001; Wittel, 2001a). Companies, particularly in the technology sector, may agree to interviews but often deny entry to people who want to observe their labour process (Fitzsimons, 2002: appendix). This could have been a particular issue in 2003, as the ICT sector was supposedly in crisis and many companies were forced to lay off staff or had staff sitting around waiting for new work, which was not the ideal time to conduct fieldwork. However, my access negotiations went very smoothly. Most companies I approached were interested in the research topic and would in theory have supported the research. It is difficult to speculate why this was the case, but I had the impression that most companies appeared to want to support academic research and were interested in my research questions. The 'added value' of a brief report with research findings was seen as appropriate return. It was also important that I was not asking for too much of employees' time – just an hour for an interview and time to observe while people continued to work were seen as reasonable by most companies. Only one company declined access because, it claimed, its ICT workers were away most of the time and not in the office for long enough to conduct an interview, and another company decided not to grant access because it was restructuring the ICT department. These were, however, exceptions, and most companies were very open to my research.

I entered the first company after talking to the CEO on the phone and sending a written request via email. For reasons of anonymity the first company is given the pseudonym Redtech. Redtech was founded in the early 1980s by graduates from the renowned Eidgenössisch Technische Hochschule Zürich (Swiss Federal Institute of Technology Zürich, or ETH). The company is therefore not part of the technology hype of the late 1990s. The credo of the company is to see innovation as a challenge.

The product of Redtech is tailor-made software: instead of adapting existing software to specific needs, the company produces individual solutions based on newly developed software. Redtech operates in three main areas: the financial markets (e.g. e-banking, e-brokerage), services for telecommunication companies (mainly billing services) and mobile devices (e.g. mobile phones).

Redtech is dominated by what one could describe as an equality mindset. The idea is that only when people feel equal will they be able to use all their abilities to create the best software. There are only two main hierarchical levels: the management and the programmers. There are a few administrative staff and apprentices, who were not included in the study. The management consisted, at the beginning of the study, of six people, who covered areas including marketing, general management and technology management. One of these six people is a woman. The company employs around fifty-five programmers, who are all at the same level in the hierarchy. Eighty per cent hold an ETH degree, although not all in computer sciences. The company employs four women in total, of whom three are at the programmer level. Most of the people are in their thirties, but management positions were held by slightly older people. Highly qualified people are seen as an asset at Redtech, and the high qualification of employees is ensured by employing mainly graduates from leading technical universities, as these candidates are thought to have learnt the appropriate methodologies to solve problems and acquire new technical knowledge.

The work itself is done in small, homogeneous teams (company website). It is common for people to volunteer to work in a project team, and these teams need to manage themselves. In larger projects, there is a team leader, but this function rotates among people. The team leader organises the contact with the client, timetables, tasks and bonus distributions. Theoretically, employees are free to decide their own working times. One could, for instance, come in at midday and work until the evening, but there are practical constraints on this, such as being in a team meeting at a certain time. Employees self-report their working time, and usually an annual working time is contractually agreed. If they work longer than their agreed hours, the overtime can be compensated by taking days off, and if someone works too long it is not uncommon for a member of the management team to investigate why. This is a way through which long hours are discouraged. I never heard of a situation where a person did not work long enough, but I could imagine that the person would also be interrogated by the management team about this. Problems within teams are generally solved internally,

but there is a support structure in place to deal with conflicts. The pay system is transparent, which means that people know what others earn, which is otherwise a taboo topic in Switzerland. People are paid on the basis of years of experience in ICTs.

Physically, Redtech was, at the beginning of the study, in three different locations in Zürich. The company was then centralised in one building situated in one of the creative quarters of Zürich. Employees usually work with one or two other people in an office. The senior managers have individual offices. The older buildings were converted flats, and the individual offices were separated by brick and mortar walls. The offices in the new building are also separated by walls and doors, but these are made of glass so that one can see through them. The building is decorated in a modern style, with black, white, strong red and blue. The offices and desks are individually decorated. It should be noted that people regularly move to different offices and change their desks depending on the project they are working on. In some of the meeting rooms the company has copies of ICT journals, and this space is used regularly for internal and external events. The kitchen areas on each floor or in each house offer refreshments from fruits over ice cream, muesli and various kinds of chocolate to coffee, soft drinks and even beer. Employees have free access to these refreshments (i.e. they are not charged directly for them). The company offers a certain lifestyle whereby people are able to self-manage their work on projects in an environment that most people described as 'cool'. Redtech has much of the flair of a new economy start-up, where equality is written in bold letters.

The second company is the Swiss subsidiary of one of the big US technology corporations, which I call Greentech. Greentech provides technology services in relation to hardware and software for business and private applications. The company has acquired the technology business of a consulting company to establish a strong standing in the lucrative tech-consulting market. As products are globally standardised, very little programming is done in Switzerland. ICT services provided in Switzerland include technology consultancy, sales, implementation and maintenance.

One of the self-declared strengths of Greentech is its culture in which every employee is a 'winner'. Those winners are talented people who constantly take on 'new challenges' and are so well equipped with the required skills that they succeed. Greentech requires its employees to keep up to date and acquire skills, competencies and knowledge to be able to take on these new challenges. In contrast to Redtech,

where homogeneity is key, Greentech sees heterogeneity and diversity as crucial. Greentech's employees are managed – or, rather, manage themselves – by objectives, and the achievement of objectives is reflected in the salary. The work process is largely organised in teams, which often meet only virtually. Certain employees are irregularly in the head office; they work directly with the customers or at home. Work/life balance is strongly encouraged, which means that part-time work and telework are offered and every employee can have his or her own laptop, broadband Internet access and other equipment to be able to work from home. The company also offers health courses such as stress relief, ergonomic counselling, fitness programmes and the like to keep its employees healthy. Those sessions are either free of charge or offered at a minimal charge. The official weekly working time is forty hours,[1] and although there are core times, the working time is not checked as long as the work gets done.

Because Greentech is a large multinational corporation, the professions and tasks are highly functionally separated. This means in practice that whereas at Redtech the person who wrote the code would help customers with problems, at Greentech the customer goes through various call centres to a technology support unit where someone tries to determine the fault and, only if no solution can be found, are the programmers contacted. The main functional areas at Greentech are administration, sales, technology and management. In terms of career the company offers two career tracks: a management track with increasing staff responsibility and a technology track where technology remains the focus of work. The different functional and hierarchical levels are globally standardised to allow employees to transfer to other locations. The company is able to dispatch employees to locations where the specific skills are needed at the time, but it is more common that employees ask to be moved to another location.

Greentech's branch in Zürich was located at the time of the study in two main office blocks on the outskirts of the city. The buildings are high-security blocks, and each employee needs to present or swipe a card to get access to the building, to operate the lift and doors, and to get a parking space. I usually had to wear a visitor badge and I needed, theoretically, to be accompanied by a Greentech employee at all times. In Zürich the company had about 2,500 employees, but not all employees worked permanently in the company offices, as it is common to work on customers' premises or at home.[2] The workspace is organised into large open-plan offices. In most of those office spaces about fifty-six desks are spread out, of which more than half are shared by

employees 'hot desking'. Between some desks physical barriers in the form of cupboards, shelving units and screens are put up. There is usually one path in the middle splitting the office in two, with cupboards on the left and right. The desks are arranged in groups of four, with two desks facing another two desks. As half of the desks are used for hot desking, there are mobile cupboards/caddies with the folders and office material that people need to work. When hot desking employees come in, they take their caddy and roll it to their place, plug in their laptop, log into the phone system and work. Only the top management have individual offices. There are meeting rooms on each floor, but it is often difficult to reserve a room as demand exceeds supply. I was told that there are fewer meeting rooms than the company actually needs and that this was a way to keep meetings short and focused, as new people would occupy the room when the time was up. However, I found that many room reservations were token reservations, as 'booked' rooms were often effectively empty. It is common for most meetings to be held in the cafeteria. Each of the two main buildings has its own cafeteria where meals and light snacks are served. In addition, each floor has a refreshment area with tea, coffee, cold drinks and snack machines. Employees need to pay for refreshments with their swipe cards.

Sampling research participants

After selecting the two companies, I needed to recruit a sample of employees. In ethnographic research and in discourse analyses samples are generally not selected on the basis of representativeness. As interviews are analysed in great depth, samples in discourse analysis tend to be smaller than in other research (Potter and Wetherell, 1987: ch. 8). Whereas ethnographers select a sample that allows them to learn as much as possible about the setting (Toren, 1996), discourse analysts aim to learn as much as possible about variations in accounts (Potter and Wetherell, 1987: ch. 8).

In sampling research participants, one way to achieve variation is to sample for rather 'obvious' differences. Often this sampling on the basis of obvious gender differences leads to studies in which gender is assumed rather than shown (Alvesson and Billing, 1997; 2002; Cameron, 1995; Hagemann-White, 1994; 1995). For this study I sampled men and women, but not in equal numbers, as my interest was not in how they are different or the same but in how men and women construct themselves as different and the same. The sample should also allow different positionings among men and women to be seen. For this purpose

I found the concept of 'theoretical sampling', used in grounded theory (Strauss and Corbin, 1990), useful. The assumption here is that in selecting a diverse sample one is potentially able to collect more diverse research material. This allows more dimensions of comparison, but it must be kept in mind that these differences have to be demonstrated in the research through analysis.

As I did not know the companies well enough to make an informed decision about whom to include, I drafted a sampling strategy for the gatekeepers in the organisations. I pointed out that research participants should be in the core technological areas of the companies and not in support functions such as human resources. Furthermore, I made it clear that I wanted to research people who differed in terms of hierarchical level, education, part-time/full-time work, age, nationality, gender/sex[3] and any other elements the gatekeepers felt could be of importance in their organisational setting.

It is difficult to determine when the research material and sampling are complete, but I found the concept of 'data saturation', used in grounded theory (Strauss and Corbin, 1990), helpful. Data saturation denotes that at a certain point of the research few new insights are gained from additional material collection. If the aim in a discourse analysis is to find patterns and variations in discourse, then a logical endpoint of sampling could be when few new patterns emerge. At a certain point during my research very similar patterns seemed to come up, and I interpreted this as a sign that I was starting to make sense of the material and that certain patterns had started to emerge. I then drew the sampling to a close. However, Potter and Wetherell rightly stress that there is no ' "natural" boundary line' (1987: 162) which can be crossed to make a sample complete. Therefore, I kept the option of returning if more material was needed.

I ended up with a sample similar in many respects but with differences in terms of age and years of experience (although there was much more homogeneity at Redtech). It is also notable that only seven people had children and most people were in full-time employment. In the empirical chapters I show how these similarities and differences may have overemphasised some subject positions and downplayed others.

Material collection

Although sampling and material collection went hand in hand, it is useful to specify in more detail how the material was collected. The material on Redtech was gathered from May to September 2003. The

research on Greentech started in December 2003 and ended in April 2004. Most of the observational material was collected through meeting observations and job shadowing, in which I accompanied some of the research participants for two to five hours. I selected the people mainly in relation to their availability and willingness to be shadowed. At Redtech seven people – three women and four men – were shadowed, and I accompanied nine people – six women and three men – at Greentech. At Redtech I was able to observe ten one-hour-long meetings of a project team and one meeting in a client company. At Greentech such regular meetings were less common, and I observed only meetings in which people I shadowed were involved. I conducted about sixty-two hours of structured observation, of which thirty-two hours took place at Redtech and thirty hours at Greentech. Notes were taken during and after the observations.

For the job shadowing, I made sure to visit the companies at different times of the day to see who was working when and how (Hammersley and Atkinson, 1995: 46ff.). As the meetings were agreed in advance, the research participants usually knew only that they would be in the company at that time but not what they would be doing. This gave me some variations in what I was able to observe. I asked the participants that the work should be as regular as possible to avoid them setting up a special 'programme' for me. During the job shadowing I sat behind them or followed them through the company. I carried paper and pen with me, but I noted only important terms used and certain observations. Some explained what they were doing; others were silent and I asked questions sporadically. When one has little knowledge of coding, sitting behind someone who codes for three hours may not always be especially exciting. Nevertheless, I did try to remain attentive all the time. In general, the insight into how work is done was fascinating and enjoyable. As I followed some people for several hours, it was common to take a break either for coffee or for lunch together. This gave me the opportunity to find out more things about their work and they asked me about my work and life. In these instances I conducted casual interviews (see Lofland and Lofland, 1984: 48) and I did discuss both myself and my work.

I interviewed twenty-six people: sixteen men and ten women (see Appendix 1). At Redtech fifteen people – eleven men and four women – were interviewed. Two of the men are employed by the client company, a bank, but worked at Redtech at the time of the project. At Greentech eleven interviews with six women and five men were conducted. Whereas at Redtech the interviewees were either at the management

level or programmers, at Greentech people were working in technology consulting, in technology support and in maintenance functions. The interviews lasted from forty-five to ninety minutes, with an average interview taking about sixty minutes. Interviews were audiotaped.

The interviews were conducted in Swiss High German, except for four in High German and one in English. It is crucial that I asked the Swiss research participants to speak Swiss High German and not Swiss German during the interviews. In Switzerland a particular dialect of German is spoken. Although Swiss High German is different from High German only in intonation and in some vocabulary, Swiss German is a dialect that I initially struggled with because I speak mainly High German. Although my understanding of Swiss German improved immensely during the course of the study, it was easier to conduct and transcribe interviews in Swiss High German. The use of Swiss High German is not unproblematic. Swiss High German is spoken on the television news and at school and university, and it is more an official language. When the interviews were conducted in Swiss High German some became more formal than I would have liked. However, Swiss people assured me that it was no problem for them to do the interviews in a 'foreign' language, and only two voiced slight, half-joking concern. I aimed to reduce their fear of making 'mistakes' by stressing that my command of High German was poor because I had been abroad for so long and that I did not mind if Swiss words slipped into their talk. Asking them to speak Swiss High German could have been read by the research participants as a kind of imperialism: the arrogant German person is unable to adapt to the local Swiss culture and imposes her own language. I did not get the impression that people were seeing me that way, in part because most people felt comfortable speaking Swiss High German. Outside the interviews Swiss German was spoken, and although most people continued to talk to me in Swiss High German, others used Swiss German as soon as they were sure that I would comprehend it.

Whereas much interviewing research treats participants as a 'speaking questionnaire' (Potter and Wetherell, 1987: 165), the interview in a discourse analysis is seen as a conversational encounter in which the interviewee is an active agent (see also Holstein and Gubrium, 1995; 1997). Therefore, the interview was designed to create discussion around topics which provided insight into how people navigated between different positions. The main aim was to keep the research participants talking, but I interrupted with partially critical and clarificatory questions, probes or topic changes (e.g. Lofland and Lofland, 1984: 60). The interview guide was designed to elicit different views on a range of

topics linked to the main research questions. Although the questions did not change significantly, the interview guide was refined throughout the research. After the interviews I noted elements I could recall from the interview which might be relevant for the interpretation and I also added spontaneous interpretations. In addition to these interviews I emailed short questionnaires to the participants either before or after the interviews. Those were designed to collect biographical and work-related background information.

During the research I paid attention to what Hammersley and Atkinson (1995: 99) describe as managing one's own identity in the field. One obvious way was to adapt to the local dress code. At Redtech the dress code was more casual, and it was more formal at Greentech. Managing my own identity also touches upon the fact that I am originally from Germany and German–Swiss relations are sometimes problematic. From my experience it seems that Swiss people feel at the same time inferior and superior to Germans: inferior because Switzerland is a small country in comparison with Germany, and superior because Swiss people are well aware that many things are much better in Switzerland than in Germany. However, I think that I constructed an identity for myself that was not simply German; for instance, I talked more about the United Kingdom than about Germany. I never experienced my not being Swiss as problematic, but at the same time a Swiss researcher might have been treated slightly differently. Having no background in technology enabled me in a way to act as an 'incompetent' learner (Lofland and Lofland, 1984: 26) and potentially to experience how women are treated in ICTs. One might expect Swiss people or people perceived as men to have been treated differently, and therefore the material I was able to collect is infused with me as a gendered, nationalised and multiply-categorised researcher. One always needs to keep this in mind when analysing the material, which is part of making the self visible in research (Fonow and Cook, 1991; Stanley and Wise, 1993).

General remarks on analysing the material

Strictly speaking, the material collection and analysis was a simultaneous rather than linear process, which meant that while I collected new material I was already analysing older material and used it to guide my research. Part of the analysis was the logging of fieldnotes, which is a skill in its own right (Lofland and Lofland, 1984: 62ff.). After the observations I noted my experiences in fieldnotes, which could take from an hour to a couple of hours, depending on what I had observed.

I listened to the interviews shortly after the interview itself, in part to improve my interviewing techniques and in part to familiarise myself with the language constructions used. Then the interviews were transcribed. I transcribed fourteen interviews myself, and twelve were transcribed by a secretary. I made sure that I proofread the transcripts twice, not to check the accuracy but mainly to see in what instances I had heard or remembered things differently. I decided to use a strongly simplified transcription system (see Appendix 3). This meant that I lost much of the additional interactional detail and that my transcripts ran the risk of looking 'cleaned' and 'idealised' (Potter, 1996b); indeed, they are just that. The rationale was that my prime interest was in the resources deployed and less in intonation and silences, and for this purpose simplified transcripts are much easier to read (Hollway, 1989: 21). I also considered that the text extracts had to be translated from Swiss High German into English and many elements of language, such as intonation, do not translate well. This means that I adapted the detail of the notation system to the requirements of this research, which is not uncommon in discourse analytic research (Taylor, 2001a: 37) and research in general.

In addition to transcriptions and fieldnotes, I wrote short summaries of the people I had interviewed, inspired by the pen portraits Hollway and Jefferson (2000) use. These short summaries included the questionnaire material, such as biographical data, and the points I found particularly intriguing about the interviews and observations. I used these pen portraits when I analysed the interviews and observational material, and particularly when I wrote the empirical chapters, to have details of people at hand. For further analysis I coded the interviews into different topic areas. I divided the interviews into the broad areas of work, biography and gender and then subcoded the material into smaller areas. The coding was inclusive and overlapping, which means that I had many text extracts with more than one code. For this process I used the qualitative software program TAMS Analyzer.[4] This program is less 'invasive' than many other qualitative software programs (Barry, 1998; Flick, 2002; Kelle, 1997; Mayring, 1999; Weitzman, 2000). It allows one to tag a selected segment using a mark-up language; these segments can then be searched, and the search results can be saved as files. At this stage I also coded parts of my observational material into the topic areas of work and gender (there was not much on biography). Even though this 'chopping' technique was useful for rendering talk on different subjects more open to analysis, I often found it difficult to use this technique, as it appeared to decontextualise the interviews. Even

though my chunks of texts were rather large, I often found myself working with the individual interviews so that I could consider the material in context (Hollway, 1989; Hollway and Jefferson, 2000). I thus had files with the personal summaries and interviews and files with coded interviews and partially coded fieldnotes. In analysing the material I drew on the complete interviews as well as the utterances on topic areas.

The analysis of interviews and fieldnotes is, in contrast to much academic work, not reading for sense (Potter and Wetherell, 1987: 168); rather, one needs to suspend belief in what is usually taken for granted (see also Hammersley and Atkinson, 1995; Lofland and Lofland, 1984; Potter and Wetherell, 1987: 104). In this process it may appear that what one finds is obvious, but as Wetherell states, 'This is not surprising given that the aim is to examine the structure of everyday thought' (1997: 165). She adds, 'By making the banal and commonsensical strange through analysis, it is possible to see in a new way something of how ideologies operate' (1997: 165). To render the banal strange, one can employ various analytic strategies. I worked with three key questions: what reality is constructed, how is this reality constructed, and what are implications of this construction? First, I explored what reality talk and actions constructed, which meant that I looked for patterns in texts (Potter and Wetherell, 1987: 168). In this step I analysed how research participants expressed themselves in their own terms. This means that I was working mainly with an emic understanding of the research participants (Fielding and Fielding, 1986: 21). In the second step, I explored how this reality was constructed through, for instance, what participants left out or glossed over. Silences (Huckin, 2002) proved to be particularly helpful in this step. Third, I looked at which functions the constructions fulfilled (Potter and Wetherell, 1987: 168). This step follows logically from step two: if there are, for instance, certain silences, these usually fulfil a function such as discounting an alternative view. I always tried to reflect in this process the interview or observation situation, in that a certain form of identity was constructed for me and in relation to me as the interviewer, and I allowed certain identity constructions and disallowed others (Lee and Roth, 2004; Nentwich, 2003).

As highlighted throughout this book, it is a central concern to study how gender happens rather than to start with the result of this process – that there are two and only two genders. Hagemann-White (1994; 1995) proposes a process of 'gender alienation', where belonging to a gender category is put into question and has to be shown through the research material, and Alvesson and Billing (2002) distinguish between gender actions which means to perform masculinities and femininities, and

the outcome of this process which is to be a man or a woman. Although these approaches take the social construction of gender seriously, the analytic methods leave much to be desired. A more detailed approach is inspired by conversation analysis, where the emphasis is on analysing how gender is made relevant in texts and gender is thereby constructed (Speer, 2005; Stokoe and Smithson, 2001). These approaches provide an analytically sophisticated way to explore how gender is practised, yet they seem less suitable to address the central concerns of this research, as their focus is too much on talk itself and larger frames of meaning are not made productive in the analysis (see Chapter 3).

In line with the discourse analytic model of performing gender developed in Chapter 3, I analysed the subject positions that were available and how, by drawing on certain subject positions, one could construct oneself as a man or a woman. I did this by working with what is associated with and what one would expect from women and men, that is, what the gender ideology prescribes. This often became visible in the accounts themselves, but sometimes gender assumptions seem to be more silent and I then had to revert to more general assumptions about men and women to which people may orient. These assumptions about what people could have oriented to but did not say explicitly could sometimes be substantiated by what people said in other parts of the interviews or – and this is more speculative – by what a person in this situation could be expected to know but did not say. This relates back to the competence question (Chomsky, 1965) discussed in Chapter 3. Another technique which I tried to employ to show silent gender assumptions was an 'inversion' technique, where I exchanged the gender assumptions. For instance, I asked what happens if one exchanges something that appears to be gender neutral in one context but is potentially gendered masculine with something that is connoted feminine. I tried to be careful not to reify gender notions but to show how they are mobilised or silenced in a situation and what implications this has.

This inclusion in the analysis of something that is not actually oriented to is intensely debated in conversation analysis and discourse analysis (Billig, 1999; Schegloff, 1997; 1998; 1999; Speer, 2005; Stokoe and Smithson, 2001; Wetherell, 1998). My aim was to show how gendered subjects are constituted by performing gender at a time when gender and work are changing, which meant that it was important to refer to these larger frames of sense-making. Therefore, in addition to the three analytic steps outlined above, I included a view of the larger frames of sense-making in the analysis. Language and interaction are

not used purely as topics of research in their own right but are seen as a resource for saying something about how subjectification processes take shape (Taylor, 2001a).

Material presentation

In terms of material presentation, it is, first, important to address how I named the people in this research. They were given pseudonyms to distinguish them and to provide anonymity. I selected the pseudonyms on the basis of the letters used in the transcription from A to Z. I chose Swiss-sounding names which reflected the gender of the original name. To reflect the difference in age and company, I include this information in parentheses after the name of the person in the empirical chapters. Other relevant information is included in the text.

I mentioned earlier that I see observational and interview material as supplemental, but the relationship between different texts became more complicated when writing about the fieldwork. In writing the book, I found that I relied much more on interview material than on observations. This was the case because the interviews were much more focused on the topics I wanted to research, whereas only a few of the observations related directly to the research questions. Even though I did not include as many observations as I could have done, the observations enriched my understanding of the work context considerably. Indeed, much of what I observed influenced how I interpreted the interview material. I came to embody this knowledge and used it as a resource in the research process. Although I do not quote directly from the work context observations, my additions and my interpretations are influenced by what I learnt by observing people. There is little theory about this embodied knowledge the researcher acquires during the course of the research, but this embodied knowledge influences the interpretation, analysis and writing enormously.

One of the major hurdles to writing the book was the problem of translation to present the interview material in the book. This was in effect a second translation. The first translation was from the spoken to the written text; the second translation required was to another language (Finnegan, 1992; Moerman, 1996). Unfortunately, there is not much literature on translating a discourse analysis from a foreign language, and I therefore tried to find a way that worked for my research. In my search for an appropriate approach to translating the texts, the area of translation studies, which is a field in its own right, proved helpful. There are many different, hotly contested traditions of translation, ranging from

literal translation to translations in which the cultural and even ideological context is included. The problem with literal translations is best illustrated by looking at some of the major language blunders which are often referred to in management studies to show the importance of culture. Those blunders range from a hair curling iron for which the English name, 'Mist-Stick', was used when the iron was introduced on to the German market, with little attention to the fact that 'Mist' is German for 'excrement' (Hill, 1998), to Pepsi Cola's 'come alive' campaign, which literally translates to 'come out of the grave' in German (Janssens *et al.*, 2004). The cultural context of language often does not translate well, and it tends to be asserted that one has to be a native speaker of both languages to produce a translation which comes closest to the original meaning. However, even then linguistic details such as intonation are lost. In the course of the translation the translated text is often also influenced by the translator's own ideology, in that he or she may unconsciously use the active rather than the passive voice or make causal relations more explicit, which alters the text (Puurtinen, 2003; Schäffner, 2002). However, a change from a passive to an active voice may not always be related to an ideological influence; it may also reflect the structure of the language. It is, for instance, common in German to use a passive form where it would sound rather strange in English.

With all these dilemmas in mind, the process of finding an appropriate form of presentation was lengthy. My first attempt to represent the text, particularly from the interviews, was to use reported speech. I translated the texts as if I was reporting an incident, but this form of presentation was very artificial. The original text was not included, which meant that readers could not check the original text to develop their own reading. In my second attempt I tried to stick very closely to the text and provided a close translation from the Swiss High German original into English. This word-by-word translation did not work very well simply because the resulting English was hard to understand and often did not make much sense. In the third attempt I tried to convey as much as possible about the context and connotation of an utterance and to produce an easily readable English. This in a way presents the interviews as if they were conducted in English, which (with the exception of one) was not the case. The text extracts are already doubly translated, and much of the original utterance is lost in the process, such as the intonation mentioned earlier. In light of the research questions, this seems less problematic. More relevant is that many of the German-language specifics such as the masculine, feminine and gender-neutral word endings are lost. I tried to indicate this in the text, and I also

marked segments which were difficult to translate and where the original conveyed more meaning than the translation. This is important, because often the meaning in German was clear to me, but this meaning did not come across in the translation. This approach appeared the most suitable to present the material, but it is clearly limited by my ability to translate the extracts appropriately.

Quality and ethics

Since much qualitative research is context dependent, reliability and the reproducibility of research findings is usually not a quality criterion for qualitative research, but validity is given more emphasis. In my analysis I aimed at considering key criteria for discourse analysis (Antaki *et al.*, 2003; Burman, 2004; Potter, 1996b; Potter and Wetherell, 1987; Taylor, 2001b), with some reservations linked to the context of my research.

The main considerations are related to the specificity of my research and feminist epistemology. First, although I agree that summarising loses the rhetorical details of language, through the double translation many of the elements were already lost. A German extract may convey a rhetorical structure which I was sometimes not able to reproduce in English, but in summarising the utterances I was often more able to translate what an utterance could imply. Second, any research is infused with the historical, social and cultural context in which it takes place (Haraway, 1991; Reinharz and Davidman, 1992), and by living in Switzerland and with these people, I gained an insight into the historical, cultural and social specificity of the research context. Therefore, I embody parts of the knowledge, and this should become visible through my own position within the research (Burman, 2004; Gill, 1995). This includes reflecting upon my own co-construction of what is said in interviews and done in observations, but it also includes drawing on my own understanding of what could be associated with gender.

Another point relates to the question of how to present research subjects. While analysing the material I critically interrogated and deconstructed the resources people use to construct their realities. However, my aim is not to critique these people, who were so willing to share their lives with me, but to look at the accounting structures and enactments they used to understand how gender and work are changing in current times. One way of avoiding critiquing people is to number extracts to show that it is the accounting structure which is at stake rather than people themselves. At the same time I found that numbering extracts rather than talking about people who interacted with

me was de-personalising people and not giving them voice. 'Having voice' is central in feminist methodologies (e.g. Gilligan, 1982; Irigaray, 1985a; Spivak, 1988), but in the context of a voiceless position coming to voice. I thus decided to avoid referring to people's talk as 'extract one'. Although it then becomes more difficult to track extracts, I felt that it would sound less technical and more personal. However, I struggled with this dilemma between not critiquing people and not treating people simply as material providers throughout the empirical chapters.

Another important aspect of validity are readers' evaluations, as the evidence provided in the report needs to convince the reader of its validity. In his analysis of ethnographic work Atkinson (1990; also Coffey, 1999: ch. 7) argues that ethnographic research is a critical reflection of the researcher's own experiences and that the activity of writing a report is the researcher's own construction of a reality; writing has to convince the reader that the account is accurate (Atkinson, 1990: 36ff.). Therefore, rhetorical work by me as a writer is needed to convince the reader that my analysis is plausible, although there may be many ways in which the material can be read.

Appendix 3: Transcription System

The transcription system used in this book is an adapted and simplified version of the Jefferson system (Antaki, 2005; Atkinson and Heritage, 1984; Baron, 2001; Edley and Wetherell, 1999; Hutchby and Wooffitt, 1998; Nentwich, 2004; Wetherell and Potter, 1992). The notation system was adapted in line with the overall aims and research questions, and readability was stressed. The acknowledging elements ('mmhs') were not transcribed. Most of the intonations were not noted, except when the emphases were very strong or words were extremely stretched out and when intonations were important to end or continue sentences. To some extent, commas, question marks and full stops were added in the translation from Swiss High German to English to increase readability. During the translation grammatical errors were corrected and speech peculiarities such as stammering were not translated.

(-)	short, notable pause
(0.9)	exactly timed longer pause (more than 5 seconds; here 9 seconds)
(inaud)	inaudible
(text)	transcriber clarification of unclear parts of the tape or additional clarification such as gender of German word
(...)	material deliberately omitted
.	falling or ending intonation or ending sentence
,	continuing intonation or continuing sentence
?	rising intonation or question sentences
'...'	direct speech reported by interviewee
wor-	sharp cut-off
HAHA	loud laughter
HEHE	laughter
TEXT	strong emphasis

Notes

1 Introduction

1. Conventionally an 'and' is used between 'information' and 'communication'. This suggests that information technologies and communication technologies are different. However, it is increasingly difficult today to separate the two, as we see a convergence between them. To stress the convergence, I have dropped the 'and', following other researchers (Bryant, 2000: 21).
2. I use 'new economy' to mean the new way of organising the economy, rather than Internet start-ups.
3. An example is Google's offices (www.google.com/jobs).
4. Although women from lower classes have always worked outside the home.

2 Changes at Work and in Gender Relations

1. As a result of such statements, Castells has often been critiqued as leaning towards technological determinism (van Dijk, 1999).
2. This view contrasts with neoliberal economic theories, where individualisation is linked to an egocentric individual making rational decisions (Beck and Beck-Gernsheim, 2002b).
3. Although some theorists assume that paid work is in decline, Voß (1999) talks about a flexible hyperwork society. The polarisation between those who have work and those who do not will become starker. Those in employment will see that work will influence the whole organisation of life.
4. Many studies explore the new emerging work relations, often including a discussion of new careers and flexibilities (Arthur and Rousseau, 1996; Baines, 1999; Barley and Kunda, 2004; Batt *et al.*, 2001; Blair, 2001; Contu and Willmott, 2004; English-Lueck *et al.*, 2002; Flores and Gray, 2000; Fraser and Gold, 2001; Girard and Stark, 2002; Gottschall and Henninger, 2004; Grabher, 2002; Jones, 1996; Leadbeater and Oakley, 1999; Ó'Riain, 2000; Pratt, 2000; 2002; Seltzer and Bentley, 1999). I refer here only to those which discuss gender in detail.
5. In most studies on work/life balance the focus is on mothers rather than women. It therefore becomes clear that being a woman is often equated with being a mother, and a more reflexive consideration of the type of women may confront these problems of paid work and child care would be helpful (Alvesson and Billing, 1997). Otherwise, women are constructed as a homogeneous group, though one can reasonably expect that a woman without caring responsibilities would have different experiences of homeworking.
6. Heterosexuality seems to be key to understanding household arrangements, as lesbian couples often find more balanced arrangements (Dunne, 1998).
7. Although designers can provide these scripts, scripts can be challenged by users (Akrich, 2000).

8. This tendency can also been found in relation to the scarcity of girl gamers (Brice and Rutter, 2002; Buchanan, 2000; Crawford and Gosling, 2005; Zaremba, 2004).

9. For a study of how people position themselves vis-à-vis dualistic resources in mathematics see Mendick (2005).

10. An example are the 'ENIAC (Electronic Numerical Integrator and Computer) girls' (Panteli *et al.*, 2001; Perry and Gerber, 1990; Wright, 1996).

11. For the discursive gendering of jobs see also Hodgson (2003) and Kennelly (2002).

12. There are, indeed, disparities in what different researchers understand by performing gender and how it can be researched, with some, for instance, seeing identity as stable and constructed before entering the workplace, and others seeing it as constructed through work. Instead of discussing these different understandings, I refer to the original approaches in Chapter 3 and develop from these a methodology for this study.

13. Men in particular in Henninger's research (2001).

14. This is also sometimes referred to as 'geosourcing'.

15. The flexibility of the gendering of jobs also varies spatially; for instance, in Asia more women work in higher-level ICT jobs (Galpin, 2002; Lagesen, 2008).

16. This includes various ICT professions and not only high-level ones. In high-end ICT work the percentage of women is much smaller, at around 10 per cent.

3 Theorising Performing Gender

1. The term 'constructionist' is used by Gergen (1985: 266) and other social psychologists to mark a difference from the artistic movement called 'constructivism'. 'Constructivism' is the term of choice in much of the social study of science research (Knorr-Cetina, 1989), but as I am referring mainly to social psychology literature here, I use the term 'constructionism'.

2. For reviews see Hutchby and Wooffitt (1998) and Ten Have (1999).

3. Goffman includes more structural and institutional elements in his theories.

4. For a discussion of the internalised gaze see, for instance, Berger's and Mulvey's work (Berger, 1972; Mulvey, 1975).

5. Although naming this approach 'discursive' would have been a possibility, this could lead to confusion with the discourse analysis developed in discursive psychology, introduced later in this chapter.

6. This is noted, for instance, by Epstein (1994).

7. As explained later I use 'Discourse' for the Foucauldian term and 'discourse' for the discourse analytic term.

8. In addition to the many studies which draw on Foucault and are also named Discourse analysis, there are numerous other forms of discourse analyses, such as critical discourse analysis (CDA) (Fairclough, 1992; 1995; 2005) and poststructural discourse analysis (PDA) (Baxter, 2002; 2003), to which I do not refer in this section. For a review of different traditions see Wetherell (2001).

9. The use of 'Discourse' and 'discourse' has, for instance, been critiqued by Fairclough (2005). He argued that it is difficult to establish where the one starts and the other ends, which is a valid point. However, as 'D/discourse' is such a contested term, it is useful to make different interpretations visible through capitalisation, even though in the end similar moments may be studied.

10. In a very interesting case study Hollway (1989: 61ff.) shows how Jim engages in the discourse of the male sexual drive, which purports that men naturally need sex with as many people as possible whereas women are rather careful about whom they engage in sexual relations with. Jim asserts he is 'sexually pushy with girls' because he wants to see how much they fancy him. In this way he feels like a real man. At the same time he is afraid of being rejected, as this spoils this masculine identity construction. He is pushy, therefore, only when he feels that he has a chance of 'succeeding'.

11. However, depending on the topic at hand Wetherell also focuses in a more conversation analytic way on the organisation of texts (Antaki and Wetherell, 1999).

12. For a detailed discussion of the Marxist and Althusserian concept of ideology in comparison to the Foucauldian notion of Discourse see Barrett (1991).

13. Another discussion of ideology from a different discourse analytic perspective can be found in van Dijk (1998).

14. There are also conversation analytic studies, which have included material practices (Toerian, 2004, as referred to by Speer, 2005: ch. 7), and Speer concludes from this that conversation analysis-inspired discourse analysis can also include non-verbal practices. Thus one may, indeed, include more Butler-type discursive elements.

15. In psychoanalytic terms one may understand this process on the basis that people have investments in subject positions and by performing gender the object-cathexis is discharged. In this study the focus is, however, the positioning process itself.

4 Ideal Workers, Ideal Gender

1. 'Erstaunlich viel' contains a stronger emphasis in German than the English translation conveys.

2. Commonly, hackers are thought to eat pizza not spaghetti noodles. This could be either a slip of tongue or a local adaptation – although I never encountered it again.

3. 'An den Mann bringen' means to sell something.

4. Interestingly, this seems to map on to another gender binary of the objective, neutral and abstract versus the impersonal and subjective, but this is not voiced directly.

5. I return to this in Chapter 6.

6. 'Mitarbeiter' means literally a subordinate but seems here to be used to refer to all employees regardless of their hierarchical position.

7. Extreme programming also entails working less obsessively than a hacker ('only' forty hours per week) and it is also described by its founder Kent

Beck as an emotional experience: " 'Extreme programming is an emotional experience,' he [Beck] maintains. 'When you feel it, you understand.' Then he adds a typically cheeky metaphor. 'Talking about XP and trying it are two different things – like reading *The Joy of Sex* versus losing your virginity.' " (Baer, 2003). Extreme programming is portrayed in the literature as primarily an ultra-masculine endeavour, and this 'cheeky' example is another case thereof. In my research, however, such comments were not made, because it would be very unlikely for such comments to be made vis-à-vis women, especially in Switzerland.

8. The English term was used.
9. Asymmetric digital subscriber line.
10. This sometimes came across as if she was available for the company full time but paid only for part-time work.
11. Referring to a 'woman' for a childminder/housekeeper is very uncommon in German and would be commonly read as devaling. However, the use of 'woman' by Quinta in the interview did not sound this way; rather, it sounded as if she could not think of a better word for this childminder/housekeeper.
12. He was just leaving for the UK to work there for three months when I interviewed him.
13. Having breakfast is, however, quite different from having main caring responsibilities.
14. The only exception was Laura (49, Greentech), who said that she would have worked less and her husband would have stayed home if they had had children, but they did not.
15. I might have received different constructions if I had conducted the interviews in people's homes. One of my pilot interviews with a freelance ICT worker was actually at home, and in this environment it appeared much easier to address more private issues.
16. And even marital status.

5 Performing Gendered Work Biographies

1. Integrated services digital network.
2. Swiss Federal Institute of Technology at Zürich.
3. 'Matura' – higher secondary school leaving diploma.
4. 'Handelsmatura' – secondary school degree with a focus on commerce, trade and business.
5. Laura used a more colloquial expression, 'Stinkt es dir?'
6. 'Elektronische Datenverarbeitung', which translates as electronic data management.
7. 'Angefressen' could also be translated as 'eroded'.
8. 'Technologie-geil' is a common German colloquial expression to express being 'into' technology (without literally being sexually attracted to technology).
9. 'Allein auf weiter Flur' literally means 'alone and no one else in sight'.
10. Competencies refer in German very strongly to the formal right and authority to do something.

11. Esther used the expression 'sich kollektiv selbstständig machen', which means to set up a business and to become an entrepreneur, not individually but with a group of people.
12. The German original implies that the rationale for employing her was that she was a woman.
13. Beck (2000b) describes how people are encouraged to seem themselves as companies by adopting a Me & Co. mindset, which is part of the individualisation process society is said to be undergoing.
14. These networks are also important ways to find new work (Ó'Riain, 2000; Tierney, 1995).
15. 'A jour' is a French word used in Swiss High German for 'up to date'.
16. That there is no room to articulate gender within this neoliberal rhetoric does not mean that the consequences of these discourses are ungendered (Pühl, 2003; Pühl and Sauer, 2004).

6 Gender as an Ideological Dilemma

1. Swiss Federal Institute of Technology at Zürich.
2. 'Geschlecht' is the German word for 'sex' and 'gender'; that is, there is no differentiation between sex and gender in German.
3. 'Gleichstellung von Mann und Frau' means that men and women should not be disadvantaged in any way.
4. 'Auftreten' in German literally means 'performing'.
5. 'Frauenpsychologisch' could be either the psychology of women or women's psychology.
6. The German word 'Wesen' was used, which could mean nature, character or essence.
7. She used 'todunglücklich', which literally means 'dead unhappy' and is an extreme case formulation.
8. 'Kantonsschule' is equivalent to 'Gymnasium', but different terms are used in different Swiss states ('Kantone'). The schools can be compared to secondary schools leading to A-levels.
9. Type C means focusing on natural sciences and mathematics.
10. 'Soziales Gefüge', which could also be translated as 'social structure' or 'arrangement'.
11. A 'Nasenbär' is a coati and an expression used in German to denote computer freaks. A popular student newspaper is, for instance, entitled '*Coati*, the student snooper at the institute for informatics' (Nasenbär, 2005). I selected 'snooper' instead of 'coati' because it sounded more appropriate in English.
12. 'Geschlechter', see above n. 2.
13. Technology 'bit'.
14. This could also, however, be seen as an antisocial behaviour, because one excludes people.
15. 'Südländisch' means Southern or Latin and often refers to Mediterranean men.
16. Call centre ladies were, like secretaries, commonly constructed as technically unskilled women.

17. In Boris' story the customer comes to Redtech, whereas in Charlotte's story she visits the client. Charlotte places her story at the time of the interview 2003, whereas in Boris' account the incident happened five years ago. Judging from the material, Charlotte and Boris were talking about the same customer but at different meetings.
18. In German nouns show the gender of the person. As this cannot be properly reflected in English, I have noted feminine form in parentheses. I did not indicate the masculine form, as in German the noun is generically masculine; that is, only the feminine as deviance from the norm is indicated.
19. 'Männlich' and 'weiblich', which could also be translated as 'masculine' and 'feminine'.
20. 'Geschlecht' see above n. 2.
21. In German the word 'Arbeitskraft' was used, which refers to 'labour power'.
22. 'Geschlechterkämpfe', which could be translated either as 'battle between the sexes' or as 'battle between the genders'.
23. She said 'aber bei der Arbeit ist es dann nichts'.
24. 'Arbeitskraft' see above n. 21.

7 Conclusions

1. Evolutionary biologists, for example, get a lot of media attention for their simpler versions of gender than those current gender theories have to offer. Some accounts of gender in evolutionary biology are, however, more reflexive (Roughgarden, 2004; Vandermassen, 2004).

Appendix 2: Studying Gender as Performance

1. The standard working time in Switzerland is forty-two hours per week.
2. I also visited Greentech's office in Basel to interview and shadow one research participant.
3. 'Geschlecht', which applies to both sex and gender, as there is no distinction in German between 'sex' and 'gender'.
4. Written by Matthew Weinstein and freely available from http://tamsys. sourceforge.net.

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