

***Application for a Research Grant by the WSIS Gender Caucus  
for the Research Program: Engendering ICT Policy***

Name of Applicant: Elisabeth K. Kelan<sup>1</sup>

Project Title: Gender, employment and ICTs in the information society: An analysis of gender subject constitution processes in ICT work

Applicant's status: Young Scholar. The research is part of a doctoral thesis, which is supervised by Dr. Rosalind Gill and will be submitted to the London School of Economics and Political Science (United Kingdom)

**Statement of the Problem**

The new economy is widely celebrated as providing equal chances to all. Yet when flipping through major business journals one may notice that 'it is rare to see a female face among the dot.com millionaires' (Wajcman, 2004:111). There seems to be a mismatch between the make-believe that everybody can be successful in the new economy and a situation where women are hard to see at all in high-level information communication technology (ICT) work. This research explores this mismatch by looking at how the changes in the economic mode of production are cross-referenced with gender in high-level ICT work in the West.

The development into an information and knowledge society implies profound changes in the mode of economic production. The economic engine is now fuelled by the application of knowledge on information, a process which is facilitated by new ICTs (Castells, 1996). These transformations also require the workforce to change. The new economy workers are expected to be flexible in terms of when, how and how long they work, need to up-date their skills constantly and have to self-manage their work. It is commonly assumed that in this new world of work old social inequalities, like class, race and gender, will no longer play a role. It is now up to the individual to shape the own biography, but this leads at the same time to new burdens for the individual (Beck, 2000; Beck *et al.*, 1994; Castells, 1996; Sennett, 1998).

The new inequalities will be structured to a large extent around the ability to use ICTs in the knowledge creating process. Those, who are able to profit from the potential of ICTs, will become the new elites, while those who lack the required ability will fall behind (Castells, 1996; 2000). The 'winners' of the new economy often work in the prototypical new economy organisations: organisations, which produce and sell ICTs. The work in ICT organisations is generally dominated by those tendencies, which are said to constitute the new work experiences: project-based work with quasi-entrepreneurial responsibility and the constant updating of skills and competence bundled with ever increasing workplace insecurity. The new work is flexible, knowledge-intensive, non-hierarchical and commonly seen as egalitarian.

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<sup>1</sup> Contact details: electronic correspondence: e.kelan@gmx.net; postal correspondence: Elisabeth Kelan, Gundelfinger Weg 30, D-79194 Gundelfingen-Wildtal, Germany.

Despite this egalitarian image, this praised ICT culture is predominantly constituted by white, middle class men. While women are overrepresented in generic poorly paid ICT work, women are starkly underrepresented in knowledge-intensive, high status ICT work at the core of the new economy. Women thereby not only miss the chance to be at the forefront of technological change but also to be positioned in lucrative jobs. There is a potential danger that economic and social inequality is perpetuated through this division.

A central question therefore is why women are absent from these jobs. In Europe access to ICT education is open to women, various policy activities and as well as ICT companies (e.g. IBM, Hewlett Packard or Microsoft) are actively trying to recruit women into ICT jobs. Yet, despite these excellent terms and conditions, very few women decide to enter and stay in ICT professions. A common explanatory model draws on the symbolical gendering of ICTs as masculine (Faulkner, 2001; 2002)<sup>2</sup>. As most ICTs are gendered masculine, women reject those technologies to construct a feminine gender identity (Turkle, 1988). Technologies are then used as a way of doing gender identity (Gill and Grint, 1995). Doing gender is linked to the overarching belief system of how men and women ought to be, the gender ideology, which varies over time and place. Gender ideologies can however actively be changed through drawing attention to how women working in high-level ICTs construct their gender identities. Therefore policy measures, if they ought to be effective, should address the construction of subjectivities.

It is evident that these women and men who work in high-level ICT work in the West are privileged in many ways. However, this should not disguise that gender may matter in these professions. This is a particularly pressing issue since high-level ICT workplaces are often portrayed as being the future of work in the information society (Castells, 1996). If these workplaces contain gendering dynamics, it needs to be explored how these become visible in a work context. It needs to be studied in what respects the new flexible working conditions of the new economy contain a gender dimension (Henninger, 2001). Furthermore it is often assumed by leading social theorists that biographies of elites are the results of 'free choices', but it is commonly neglected how these free choices are embedded in traditional expectations about gender (Skeggs, 1997; Walkerdine *et al.*, 2001). Therefore it is important to theorise in what ways the biographies of the new techno elites are gendered. Finally, it needs to be explored how people in these future-oriented work field think about gender and in what ways they make gender inequality visible or invisible (Gill, 2002; 2003). Only through the inclusion of the gender ideology people use in everyday life it is possible to alter the gender ideology. In this study the gendering of ICT workplaces is shown through studying gender subjectivities.

In order to develop a differentiated understanding of the information and knowledge society across the world, it is vital to cast light on gender, ICT and work relations in various localities. It was decided for this research to study high-level ICT work in a society, which has long built its economy on knowledge-intensive services and which is often seen as having rather conservative gender arrangements: Switzerland and more specifically Zürich in Switzerland. Although Zürich is no European Silicon-Valley, it is a viable European ICT location in its own right (NZZ., 2004). Many local and multinational ICT companies are based in Zürich, but it is notable that there are very few women working in those ICT companies (BfS, 2002; Funken, 2002). Despite this scarcity of women in ICT professions, there are few studies, which engage with the gender-ICT relation in a work

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<sup>2</sup> This assumes that gender and technology are mutually constitutive and co-constructed in that expectations about gender enter technology design but also influence their use (Wajzman, 1991; Lie and Sorensen, 1996; Faulkner, 2001).

context in Switzerland. As locally-specific accounts are needed to make sense of a changing global world, in this study gender relations in high-level ICT work in Switzerland are explored.

In order to comprehend the gender-technology relation to a fuller extent, it is eminent that workplace relations and subjectivity constructions are critically studied. This would help to understand how women can construct identities in ICT professions, but it would also provide details about how the future workplaces could be gendered. Only by adding this additional dimension to the understanding of the gender-technology relation, it is possible to design policies, which could strengthen gender equality.

### Research Aims and Objectives

The aim of this research is to understand the current dynamics between gender and ICTs at work through analysing gender ideologies in ICT workplaces in Switzerland. This is expected to provide insight into how new economy workplaces in the West are gendered but also how the gender ideology can be modified to allow for more equal gender relations. In order to achieve this three interlinked questions are raised.

- (a) how do ICT workers make sense of the new working arrangements characterised by risk, constant learning and self-management?
- (b) on which resources do ICT workers draw to account for their careers and life trajectories in respect to past and future?
- (c) which gender concepts are constructed in ICT workplaces?

While only in the third question gender is addressed explicitly, in the first two questions a gender dimension is central. As outlined above it is vital to explore in what ways new economy workplaces are gendered and in what ways gender plays a role in the construction of elite biographies. With the knowledge gained through these questions appropriate theories, which help to understand the gender-technology-work nexus, should be developed. This knowledge can in turn be used to elaborate on policies, which address gender and ICTs in a work context.

### Methodology, Material Collection and Analysis

The construction of gender identities is conceptualised in this research as a 'doing gender'. The two dominant tendencies in theorising gender as a doing are an ethnomethodological (West and Zimmerman, 1987) and a discursive/poststructural (Butler, 1990; 1993) approach. As both approaches have strengths and weaknesses in different areas, in this research the two approaches are combined in a version of a discourse analysis (DA) (Potter and Wetherell, 1987). Through this adapted version of a DA it is possible to show gender subject constitution processes and thereby how a gender ideology is practiced in concrete situations.

In order to shed light on the gender and ICT dynamics at work, an organisational ethnography consisting of observations and interviews in two ICT companies in Switzerland is conducted. In order to reflect a wide array of employment experiences, two companies of different sizes were selected for this study. One company is a local company employing about 50 persons and is producing mainly Internet-related software; the other company is the subsidiary of a multinational enterprise with over 3,000 employees in Switzerland alone. The latter company offers a range of services from hard- over software to ICT consultancy. In both companies in total 26 interviews are conducted. Those interviews follow an open structure and cover the topics work, biography,

technology, competence, gender and future plans. 16 people are job shadowed for several hours. The observations are noted and the interviews are audio-taped and transcribed completely. For the analysis of the material, the transcriptions and notes are coded into broad areas, which are then further sub-coded into finer areas using a qualitative software programme. Subsequently, it is analysed how meaning about different topics is created and which identities are thereby constructed.

### Timetable

The research project is part of a doctoral thesis. The structure of the thesis is as follows: in the first four chapters of this thesis theoretical and methodological aspects are considered. The first chapter introduces the topic and in the second chapter current theories about the changing society are critically interrogated in respect to gender. In chapter three the dominant approaches of seeing gender as a doing are reviewed and thereof the epistemology and methodology for this study is developed. In the fourth chapter the practical proceedings for the material collection are described. Chapter five to eight lay down the interpretations of the field research by discussing in each chapter work, biography and gender. Finally, some conclusions are offered and areas of further research are indicated.

The thesis started in autumn 2002 and by August 2004 the first four chapters of the thesis have been written in draft versions. The fieldwork in Switzerland is finished and the interviews and fieldnotes have been coded into subject areas and the analysis of the individual areas has begun. It is planned to finish the remaining chapters until early Summer 2004. The thesis is then revised and it is aimed at submitting the thesis in autumn 2005. Parts of the grant would be used for repaying a loan taken out for the external transcription of about half of the interviews. The remainder of the grant would support the analysis and the writing stages of this thesis. The timetable implies that it would be possible to provide a final report of this research project with the key findings in time for the Second World Summit on the Information Society in November 2005.

### Summary and conclusion

In the common rhetoric of the new economy gender inequality seems to have no place. High-level ICT workplaces appears as open to all to make their fortunes. Despite the overtly egalitarian rhetoric, women's underrepresentation in high-level ICT work is stark, which could potentially aggravate gender inequalities. In order to understand the gender, ICT and work relationship, this study set out to explore how elite ICT workers in Switzerland construct their gender subjectivities by studying their work context, their biographies and their gender conceptualisations. Without analysing the gendering dynamics in these new work relations, an understanding and shaping of the new world of work and more generally society is not possible. This project would contribute a theoretical understanding of gendering dynamics in high-level ICT workplaces, which is needed to develop appropriate and effective policies, which seek to foster gender equality.

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