

## Chapter 5.12

# Gender and Technology: Mind the Gap!

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### ABSTRACT

*In this chapter the mutual shaping of the technology and gender is analyzed in relation to the phenomenon of gender digital divide. The discussion starts with the re-construction of the theoretical background, shedding light on different analytical approaches to technological development. The gender blind perspective of mainstream technology studies is uncovered; looking at theoretical contributes of feminist and gender studies. This positioning is aimed to consider the cultural and material aspects involved in the digital gender gap. The chapter leads to a general conclusion: it is of utmost importance that researchers, decision-makers and professionals in Information Technology field take into account that all spheres inhabited by human beings are inevitably gendered. The gender mainstreaming approach may inform the construction of a gender-aware research agenda and the identification of the following transformative actions. The synergy among researchers, practitioners and decision-makers at political and business level is crucial for a gender-sensitive and sustainable development.*

### INTRODUCTION

There is a large amount of writing that falls under the rubric of “technologies studies”. In their reflections on the end of the twentieth century and the beginning of the twenty-first, many social

scientists as well as popular commentators have given attention to tremendous power of technology to shape the identities, the public and private life, the social trends and transformations. Nevertheless, the sociological literature has failed for a long time to consider whether this technological revolution – that in this chapter will be associated to Information Communication Technology (ICT)

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and particularly to Internet – might be analyzed in a perspective of gender.

This “gender blindness” (Maddock & Parkin, 1993) arises from the myth of a neutral and pure technology, which is free from any sexual and gendered implication (and implications of race, class and so on, too). Nevertheless, if we take into account that technology evolves continually, involving new ways of doing, making and producing things (tools, appliances, machines), it becomes clear that technology is a fundamental part of social and everyday life. In this sense technology and the relations in which the social construction of a technology occurs are also inevitably gender relations. “Inevitably, because gender is one of the major structures of the social order and gender relations are found wherever people are found” (Cockburn & Ormrod, 1993, p. 155).

Feminist and gender studies have contributed to pinpoint the relation between gender and technology.<sup>1</sup> More precisely, within this growing stream of research it is useful to distinguish between gender *in* technology and gender *of* technology: in both cases the two-way mutual shaping relationship between gender and technology is emphasized.

*In the former case, gender relations are both embodied in and constructed or reinforced by artifacts to yield a very material form of the mutual shaping of gender and technology. In the latter, the gendering of artifacts is more by association than by material embodiment. In practice, various forms of gendering can be identified between these two scenarios. (Faulkner, 2001, p. 83)*

The idea of this mutual process benefits on one hand from the representation of gender as a relational play: gender identity is what people do, think and say about material and immaterial things *in relation to* other people conceived as sexed (Connell, 1987). On the other hand the reflections on this co-production arises from the concept of technology as relational too. As deployed in production, in everyday life, in the

household, technological artifacts *entail* relations. They embody “some” (those that went into their making); they prefigure “others” (those implied in their use, abuse or neglect) (Cockburn, 1992).

This chapter is based on a fundamental statement: it is difficult, if not obtuse, to attempt an understanding of technology, technological contexts and social networks – mainly in post-modern society or rather in the digital age – without taking account of gender. Technology can tell us something we need to know about gender identity. Gender identity can tell us something we need to know about technology.

The increasing importance of gender and technology studies in the international scenario is a result of the sociological and feminist research carried out in the 20<sup>th</sup> century. Thanks to important analysis on co-construction of gender and technology in organizational contexts (for instance: Cockburn & Ormrod, 1993; Cockburn, 1985; Coombs, Knights & Willmot, 1992; Haraway, 1988; 1997; Henwood, 1993; Stone, 1995; Turkle, 1984; 1995; Wajcman, 1991; 2004) we now work from the basis that neither masculinity, femininity nor technology are fixed, unitary categories, but that they are situated, they contain multiple possibilities and they are constructed in relation to each other. There are many academic groups<sup>2</sup> that focus on gender science and technology studies, with a specific attention to women status. For instance there is the Center for Women & Information Technology (University of Maryland, Baltimore), the Massachusetts Institute of Technology (MIT) Society of Women Engineers, the WICS: Women in Computer Science (Stanford), the WICSE: Women in Computer Science & Electrical Engineering (U.C. Berkeley), the WISE: Women in Applied Science and Engineering (Arizona State), the Women@SCS - Carnegie Mellon School of Computer Science, the Centro di Studi Interdisciplinari di Genere (Italy, Trento), the Nordic Research School in Interdisciplinary Gender Studies<sup>3</sup>. Besides there are many international refereed journals, also online, that serve as

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