

## Chapter 2

# New Gender Relations in the Transforming IT- Industry of Malaysia

Ulf Mellström

*Luleå University of Technology, Sweden*

### ABSTRACT

*This chapter investigates how and why computer science in Malaysia is dominated by women. Drawing on recent critical interventions in gender and technology studies the paper aims at opening up for more culturally situated analyses of the gendering of technology or the technology of gendering with the Malaysian case exemplifying the core of the argument. The paper argues along four different strands of critical thought: (1) A critique of the 'black-boxing' of gender in gender and technology studies; (2) A critique of the Anglo-centric bias of gender and technology studies advocating more of context sensitivity and focus on the cultural embeddedness of gender and technology relations; (3) In line with that, also paying more attention to spatial practices and body politics in regard to race, class, and gender in gender and technology relations; (4) A critique of 'western' positional notions of gender configurations and opening up for more fluid constructions of gender identity including the many crossovers between relational and positional definitions of femininity and masculinity.*

### INTRODUCTION

This article addresses an old concern about the inclusion of women in science and engineering. Women's participation in science and engineering varies a good deal around the globe, but there still seems to exist, as Lagesen (2005, p. 19) states, a lingering notion of an all-encompassing masculine

culture of science and engineering transcending time and space. By using empirical data from Malaysia in the context of computer science this paper generally aims at opening up for more culturally situated analyses of the gendering of technology that serve to undermine any notion of a global masculine culture of science and engineering that transcends cultural and national differences. Inspired by recent critical interventions and new analytical openings in gender and technology studies, (cf. Landström

DOI: 10.4018/978-1-61520-813-5.ch002

2007, Lagesen 2005, 2007a, 2007b, Rommes 2007, Bray 2007) this paper points to the Anglo-centric Western bias of gender and technology studies and argues for cross-cultural work and, intersectional understandings including race, class, age, and sexuality. With the Malaysian case exemplifying the core of the argument, I argue more specifically that as a consequence of a broader intersectional framework gender and technology studies need to investigate configurations of masculinity and femininity in a cross-cultural perspective more thoroughly. The focus in this article will stay on the relational dependence of male and female categorisations in gender relations, underlining that gender and technology relations are always deeply embedded in cultural contexts shaping the use, design and production of technologies and its co-production of gender and technology. In this it draws on earlier closely related work (Lagesen 2005, 2007b) but it also differs in focus in so far that my aim is to explicitly draw in aspects of Malaysian culture, society, and history in relation to my empirical data to illustrate the cultural embeddedness of gender and technology relations. However, the Malaysian situation within computer science is in this paper primarily used as an example to highlight how an intersectional analysis take form rather than a full-fledged critical analysis of the multifaceted and divergent power dimensions of the Malaysian society.

The article has three substantive parts. I will first present the so called “woman problem” (Lagesen 2005) in gender and technology studies and contemporary critical thought in feminist technology studies, invoking the theoretical tenets that possibly succeed this critique and how this feeds into the Malaysian situation. Secondly, I will present my case in terms of material, method, and the cultural specificities of computer science in Malaysia. Thirdly, a discussion of the empirical case follows in which I argue that the gender relations of computer in Malaysia must to be understood in relation to five strands of intersecting explanations (1) Quotas, ethnicity, and gender;

(2) A situated body politics; (3) Techno-optimism and techno-nationalism; (4) Under achieving men; and (5) A critical mass of women and a shortage of computer professionals.

## **The “Woman Problem” in Gender and Technology Studies**

The so called “woman problem” within gender and technology studies, meaning the exclusion of women in science and engineering, has been thoroughly investigated. In spite of the fact that women are becoming the majority of the student population in most academic settings around the world, the relative absence of women from science and engineering is puzzling (Quinn 2003, Lagesen 2005). This is not in the least so as regards information technology (hereafter IT). Although far from being a universal pattern similar explanations describe the “woman problem”. Women’s non-use is seen as deviant and men regarded as the norm (Kramer and Lehman 1990). Learning environments are non-friendly to women (Siann 1997, Henwood 2000). Computer science technology grew out of the military complex and it’s aura of combat and war has never attracted women (Mörtberg 1987, Edwards 1990) and so forth. In reviewing the literature Lagesen concludes that the “woman problem” in computer science mainly has been understood as an issue of exclusion and little is known about the women who actually decide to study computer science (Sørensen 2002, Lagesen 2005, 2007a). The history of gender and computer science as well as IT in general seems to follow a well-known theme in western history of technology. Throughout this history, men have centred themselves in central positions and technology has been associated with masculine values and at the core of masculinity in a number of ways whether it concerns machinery or digital technologies (cf. Cockburn 1983, 1985, Hacker 1989, 1990, Mellström 1995, 2002, 2003, 2004, Oldenzil 1999, Salminen-Karlsson 1999, Faulkner 2000, 2001, Lie 2003, Wajcman 1991, 2000, 2004).

21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/new-gender-relations-transforming-industry/42487](http://www.igi-global.com/chapter/new-gender-relations-transforming-industry/42487)

## Related Content

---

### Women and Nigerian ICT Policy: The Inevitability of Gender Mainstreaming

Nuhu D. Gapsiso and Rahila Jibrin (2016). *Overcoming Gender Inequalities through Technology Integration* (pp. 260-272).

[www.irma-international.org/chapter/women-and-nigerian-ict-policy/145071](http://www.irma-international.org/chapter/women-and-nigerian-ict-policy/145071)

### Structural Context and Influencing Factors

(2014). *Women in IT in the New Social Era: A Critical Evidence-Based Review of Gender Inequality and the Potential for Change* (pp. 127-157).

[www.irma-international.org/chapter/structural-context-and-influencing-factors/105218](http://www.irma-international.org/chapter/structural-context-and-influencing-factors/105218)

### Gender, Education, and Video Games

Anna Escofet Roig and Ma José Rubio Hurtado (2006). *Encyclopedia of Gender and Information Technology* (pp. 682-686).

[www.irma-international.org/chapter/gender-education-video-games/12810](http://www.irma-international.org/chapter/gender-education-video-games/12810)

### Progression Aspirations and Leadership

(2013). *Gendered Occupational Differences in Science, Engineering, and Technology Careers* (pp. 192-215).

[www.irma-international.org/chapter/progression-aspirations-leadership/69606](http://www.irma-international.org/chapter/progression-aspirations-leadership/69606)

### Cyber/Ecofeminism

Kaarina Kailo (2006). *Encyclopedia of Gender and Information Technology* (pp. 172-177).

[www.irma-international.org/chapter/cyber-ecofeminism/12733](http://www.irma-international.org/chapter/cyber-ecofeminism/12733)