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The Problem of “Women in Computing”
Doctoral Thesis Review

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Abstract: Susan Sturman (2009) examines the specific socio-economic and socio-cultural conditions that produce and naturalize the construction of “women in computing” as a gendered discourse. She applies post-structuralist theorizing to a well-established method of feminist inquiry (Smith 1987 & elsewhere, a.o.) and creates a hybridized form of institutional ethnography (IE). Sturman thus presents novel empirical findings and also contributes to the fine-tuning of theoretical tools by combining multiple methodologies.

Keywords: computer science education, governmentality, institutional ethnography (IE), women in computing; critical theory, feminism, post-structuralism; Michel Foucault, Nikolas Rose, Dorothy Smith, Susan M. Sturman
1. Problematising the Problem

Even after more than twenty years of active feminist research that examines the low numbers of women in university Computer Science programs, there continues to be a lack of women entering that discipline. In her investigation into this ongoing “problem” of “women in computing”, Susan M. Sturman (2009) examines the specific socio-economic and socio-cultural conditions that produce and naturalize gendered exclusion, as well as shape knowledge about this group. Informed by Institutional Ethnography (IE) and by Michel Foucault’s work on governmentality, Sturman suggests that the “‘women in computing’ discourse frames the ‘problem’ as one of personal choice in a climate where ‘equal opportunity’ texts shape and delimit the choices made available to a variety of subjects marked by categories of difference” (p. 11).

Throughout her thesis, she highlights the contradictory subject positions produced by institutional and “women in computing” discourses and how these are taken up by female graduate students studying Computer Science at Canadian research universities. In other words, Sturman’s dissertation is not about how or why women are the problem – and thus does not offer suggestions how to solve it – but about the ways in which this (imagined) community of women in computing is produced, and how the corresponding lived experiences “complicate, contradict, and sometimes extend the iterative texts of the discourse” (p. 34).

As noted in Sturman’s literature review, previous work on women in computing is littered with liberal feminist studies that (re)produce the dominant reductive and binary understanding of gender. One is expected to talk about women in computing as if they were a unified or uniform group. Rather than re-tread the well-worn path of research methods and paradigms that are firmly rooted in a positivist regime of truth, Sturman opens up the making of the problem to inquiry. She shakes up a field that is currently experiencing a theoretical and methodological stasis by problematising the problem of women in computing. By making a complicated network of intersecting discourses visible, and including different and contradictory stories in her discussion, Sturman demonstrates how modernist narratives of progress and continuity, of cause and effect, and similar, are as inept now at framing questions about women in computing, as they were twenty years ago.
2. Rethinking Theories and Methods

The research under review here exemplifies the historical, productive working relationship between post-structuralist and feminist theories – a mutual, meta-theoretical cross-examination that has generated new developments for each of the two traditions. What is most interesting about Sturman’s dissertation is her methodological framework, in particular her modification of Institutional Ethnography (IE). Here, Sturman applies post-structuralist thinking to make visible the shortcomings of IE for her re-search project. That is, she critically examines the kind of knowledge that an IE framework, as put forward by Canadian feminist sociologist Dorothy E. Smith, produces.

IE as a mode of feminist inquiry generally avoids discussion of identity and pays little attention to how discourse shapes subjectivity. As these are central to her research question, Sturman deliberately parts ways with Smith’s notion of subjectivity, which she evaluates as pre-given and static, and replaces it with a post-structuralist, Foucauldian notion of subjectivity that is shaped at the intersection of knowledge and power at a particular historical moment.

Sturman also points to the absence of adequate methods in IE for analyzing how individuals govern themselves as active participants in a neoliberal institution. To do this pivotal work, Sturman makes Foucauldian theorist Nikolas Rose’s (1999) concept of “governing through community” a central part of the framework. Her dissertation addresses the absence of feminist understandings of community and activism in Rose’s work such as the second-wave feminism concept of “the personal is political”. She is thus using feminism to further inform the construction of a post-structuralist concept. Also notable is her use of an updated notion of how texts are produced in the domain of computing by following Marja Vehvilainen & Tuula Heiskanen’s (1999) proposal that IT/computing practices can change texts in ways that have been left unexplored in IE.

In sum, “Women in Computing” as Problematic: Gender, Ethics and Identity in University Computer Science Education makes contributions to the field both in terms of discussion and findings. It also contributes to the

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1 Sturman covers a number of Smith’s publications between 1987 and 2005, the earliest and latest of which are listed in References below.
mutually beneficial relation between post-structuralist and feminist theories in critical inquiry. Susan Sturman’s application of post-structuralist theorizing to a well-established method of feminist inquiry to create a hybridized form of IE models a practice of fine-tuning frameworks that we, as knowledge producers, should engage with more regularly. The dissertation is a good example of how a recognized methodology like Smith's can be productively incorporated in the realm of critical (feminist) inquiry.

Featured Publication

References


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