



International Journal of Gender, Science and Technology

<http://genderandset.open.ac.uk>

**Review of Gender, Health and Information Technology
in Context. Edited by Ellen Balka, Eileen Green, and
Flis Henwood.**

Reviewed by Scout Calvert.

Wayne State University, Michigan, US.

PUBLICATION DETAILS

Date: 2009

Published by: Palgrave Macmillan

ISBN: 978-0230216341

REVIEW

**Forming Bodies and Reforming Healthcare: The Co-
Construction of Information Technologies and Bodies
through the Imperative for Self Care.**

Alongside a Detroit highway stands a large billboard advertisement for a unit of a large local medical center. The billboard features the slogan "The War on Error". A hand holding a barcode scanner appears below, with the promise of "100% Medication Scanning for Safer Patient Care." The promise is precision and quality through technoscience, an un-ironic response to depersonalized medicine at a moment when health care reform is finally up for rancorous debate in the United States.¹ Behind the slogan is an intensification of the use of information technologies in hospital settings, not just for administration but also for the routine gathering of patient data and the enforcement of labor protocols. This intensification reaches beyond hospital settings in the shape of "informed patient" discourses and consumer health information.



This journal uses Open Journal Systems 2.2.2.0, which is open source journal management and publishing software developed, supported, and freely distributed by the [Public Knowledge Project](#) under the GNU General Public License.

Health care, like care work generally, is heavily sex-segregated; not only is nursing traditionally still almost entirely female, but in pharmacy, once a male bastion, the pendulum has swung the other way. Now, roughly equally divided, pharmacy will continue to change in the foreseeable future as approximately two thirds of pharmacy school graduates are women. The scanner on the billboard is an important clue about the role of information technologies in feminized occupations and in consumer health rhetoric. Among other things, it tells us to look at deskilling and other processes that should make women suspicious of the story that integrating information technologies into work practices will bring with it the status semiotically associated with masculine high-tech.

Care work and technological work are markedly striated by sex; the sites where they overlap are few. What happens when the labor of care meets up with information technologies? It makes good methodological sense to look at largely feminized environments that are also increasingly technological. *Gender, Health, and Information Technology in Context*, edited and with contributions by Ellen Balka, Eileen Green, and Flis Henwood is a welcome contribution to the body of evidence about the socio-technical co-construction of technology, health, and gender. The volume houses nine studies, bookended by an astute introduction and conclusion by the editors. Each study brings empirical research to bear on technology and gender in health contexts. The studies originate from the United Kingdom, Canada, and Australia, and from multiple sites of practice, including clinics, hospitals, community centers, libraries, and health outreach.

Each of the nine chapters is based on theoretically-grounded qualitative research. The represented theoretical approaches make connections between computer supported cooperative work (CSCW); science and technology studies (STS); feminist epistemology; feminist science studies; labor studies; library and information science; and, care work. Thus this volume is of interest to multiple audiences. It is equally appropriate to nursing, health sciences, information studies, and labor studies. It is also a helpful resource for those looking at the labor of care, both in nursing and in other care-based or feminized professions, and particularly those facing transformation of work routines through new information technologies. Informants include patients, nurses, health intermediaries, social workers, and other hospital workers. This collection will be valuable to anyone looking for empirical examples and studies of the intersection of women's labor and technology, labor of care and technology, or gender and technology more broadly construed.

Each study is contextualized in a readable review of relevant literature, some of which is highly theoretical; these literature reviews are one of the collection's most important assets, especially in light of the interdisciplinary terrain covered. Each author also creates connections with broader discourses that will be especially helpful to those readers who are looking for empirical studies to ground theoretical work on bodies in technology, or

those who are reaching from other disciplines for methodological frameworks for original research of their own.

The introductory and concluding chapters situate the studies in relationship to wider discourses around health and technology, technology and gender, and gender and health, marking out its particular contribution to the overlap of all three of these areas. This commentary also illuminates multiple points of conversation between the chapters, creating linkages that allow a weakness in any one chapter to be ameliorated by other chapters.

Although in the introduction, Henwood, Green, and Balka deploy an analysis of the co-construction of gender and technology, this largely is understood to mean women's gender specifically throughout the text. Implicit and explicit definitions of gender shift from chapter to chapter. Though the introduction and some chapters set up nuanced definitions of gender, most of the studies take for granted a sex and gender matchup. For example, Simpson, Hall, and Leggett (Chapter 2) attempt to disaggregate the usual pairing of technology with masculinity and men, and care with femininity and women. In so doing, they use a language of femininities and masculinities that allows them to disconnect technology from men and care from women. Unfortunately, in what is otherwise an insightful and compelling study, the language also appears to reify associated traits as masculine and feminine.

In Chapter 1, Henwood and Wyatt offer a case study that looks at both men and women patients' complicated response to ICTs and health information seeking. This is the only study that directly examines the co-constructions of men's gendered identities alongside women's. Other chapters demonstrate awareness of the constructedness of all gender, but typically allow 'gender' to refer to women's experience in the course of their discussions, and focus on women as the preferred site for investigating the production of gender and technology. The volume might, then, aptly replace 'gender' with 'women' in its title. Too often, in efforts to show the historically and culturally specific features of women's experience, scholars leave untouched the factors that produce male subjects *as men*. Though studies of women as women are important correctives to years of medical research that treated male bodies as natural and neutral pattern for humans, this presumed neutrality is left intact when it is allowed to go unmarked as a gendered and historically specific configuration. Each study would probably look a little different if the construction of men's gendered identities was kept in tension, but the contributions of the text remain significant. While a chapter attending specifically to men's constructions of gendered selves in relation to health and technology would be welcome, this is the only missing component of the volume.

The studies look to a wide variety of health-related sites of practices, from community centers and outreach, to hospitals and government departments. Some of the studies show awareness of the class and race intersections of women's work in health contexts. Although fully intersectional approaches

are not in evidence, the choice of sites and informants keeps matters of class and racialization near to hand as a tension for future work in the area of gender, technology, and health. These sites also demonstrate that the knot of gender, technology, and health exceeds the hospital. This is particularly crucial for understanding the particular ways women's invisible and usually unpaid care labor subsidizes profits in the health care industry. The 'measure and control' management philosophy that cuts costs in health care settings does so by shifting those costs onto women in second and third shift work, and through technologically abetted deskilling processes which enable portions of women's professional work to be outsourced, as in Armstrong, Armstrong, and Messing's (Chapter 7) discussion of the use of workload data to identify and exclude hospital cleaning work. The studies here provide an important clue for researchers who are curious about why the division of labor in the home has reversed course away from equity in the last decade.

Technology is kept complicated in the volume, and the types and definitions of technology vary widely from chapter to chapter. Some authors mean, straightforwardly, desktop computers, software applications, and the internet. Other chapters, however, look at these plus others, including flip charts and other portable technologies for health education; particular forms of data that function as information technologies; databases, forms, and statistics; and, imaging technologies. In Chapter 5, Sharman looks at patient care information systems (PCIS) and how nurses both resist these and use them to separate themselves from feminized administrative workers. Likewise, in Chapter 6, Balka's study of the installation of new technologies in a nursing unit shows how flattened definitions of technology obscure the causes of technological failures, as decision makers blame users who are women. Balka's vignettes illustrate the technological assemblages in which specific tools are one actor in a network; the gendered aspects of technology are the more crucial because this flattening also obscures women's use of technology.

Of particular interest to scholars looking at the socio-medical construction of selfhood are the chapters contributing to an understanding of the operations of 'informed patient discourses'. The informed patient is an idealized medical citizen who has interiorized in a mode of self-making, willingly fulfills the obligation to seek out and abide by health information, as a means of 'taking responsibility' for individual health; this imperative reads a lot like Foucaultian governmentality. Contemporary governance is effected through the management of populations rather than individuals. Foucault argued that the 'instrumentality of economic knowledge' was necessary to this management (1994, p. 221). Informed patients internalize health imperatives as individuals that will eventually register as statistics for the National Institute of Health or in the insurance agent's actuarial table.

Though not every chapter addresses informed patient discourses directly, each contributes to a picture of gendered medical subjectivity. Health care intermediaries, including librarians (Harris, Chapter 4), are charged with

bridging the gap between the digital divide, conceived unidimensionally as access to micro-computers and the internet, and forms of literacy, including basic literacy, computer literacy, and health information literacy (Simpson, Hall, and Leggett, Chapter 2). As we learn from these chapters, women often serve as proxy health information seekers and translators for their social and domestic networks, internalizing these discourses and relaying them to others, thereby also increasing a burden on their non-paid labor time.

These health care imperatives are largely the topic of Chapter 4. Harris foregrounds her theoretical informants and uses her case studies to punctuate the reasons to be concerned about the growing emphasis on the model informed patient. Harris troubles the idea of the 'empowered' patient who is actually just empowered to take care of herself, by herself. She makes clear connections between the highly gendered and highly technological care-saturated profession of nursing, and library science, another pink collar profession in which women's technological work goes unnoticed. In the concept of 'health info(r)mediation', we understand the seeker of health information to be an appropriate citizen who self manages health and wellbeing. This shifts responsibility onto women as informal care providers in family and social networks, and illustrates some of the complications in this patient-as-consumer rationality. It is risky for policy makers to presume this kind of rationality because patients may decline the role of informed health shopper and its 'buyer beware' logic. Patients often understand relating health and medical information to be the role of their physician and perceive information seeking to be a threat to the authority of the physician, and hence to a working doctor-patient relationship. Moreover, rather than leading to understanding and certainty about medical procedures, patients often experienced increased uncertainty after finding other health information. Harris reminds us that even when reliable and findable health care information is provided, 'information . . . is not a proxy for care' (p. 87). This assertion is at the core of understanding the context for the technologically-aided deskilling of women's care work and the construction of a good citizen as one who self-manages the body.

The fraught relationship between patient, physician, and technology is evident in the final study by Green, Griffiths, and Lindenmeyer (Chapter 9), which looks at how doctors and patients often treat imaging technologies as though they were objective and self-evident. This conceals the professional judgment that is required to make images from bone scans and mammograms meaningful, and approaches women's bodies as a sum of discrete parts. Women then come to understand their aging bodies as risky and fragmented, rather than simply undergoing the aging process. When the operations and ambiguities of technologies are made visible, we see that technologies are constructed too, that they exist in relation to people and sites of practice in assemblages or networks.

All nine chapters, plus the contextual material by the editors, are worthy contributions to the study of bodies in technology. Each chapter can be read

on its own, but taken as a whole, the varied approaches and theoretical understandings in the volume are in conversation, expansively, and serve as a fine casebook of empirical studies for interdisciplinary work of the tightly knotted complex that is also the title of the collection.

REFERENCE

Foucault, M. (1994) *Power: Essential Works of Foucault, 1954-1984, Volume Three*, New York, The New Press.

¹Healthcare reform was one of the first priorities of President Barack Obama's administration when he was inaugurated in January 2009. The United States has limited guaranteed health care for the elderly, called Medicare. All others must pay for health care out of pocket or purchase private insurance if they do not have employer-provided insurance. With the costs of for-profit health services soaring and large numbers of US citizens remaining uninsured, reform is an absolute necessity. Still, public debate at times has billed those advocating for a single payer system as socialist and anti-American. Opponents call for technological advances, personal accountability, and tort reform as strategies to contain health care costs. Some senators and congressional representatives who voted in favor of Obama's plan have received death threats, while Obama has been compared to Hitler for his work on healthcare reform.