
Introduction

Gender

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One of the great debates of our time concerns how gender enfolds with everyday life: how it is enacted through practice, for instance, or how the category prefigures our social lives. STS scholars have embraced both arguments as they have developed tools for analyzing gender in the field. On the one hand, scholars examine the ways in which people produce, sustain, and challenge gender identity within the fields of—or using the tools of—science and technology. Studying science in practice, they trace how gendered norms shape and circumscribe scientific insights (Haraway 1984; Schiebinger 1991; Fausto-Sterling 2000; Milam and Nye 2015). Or, examining technology in context, they reveal how we co-construct gendered identities using technologies or technical orientations (Bardzell 2018; Perez-Bustos 2018; Wajcman 1991; van Oost 2003; Dunbar-Hester 2008), often in connection with alignments of race and class (Amrute 2016; Brock 2011; Gray 2012; Noble 2018; Nyugen 2018; Pham 2015). Influential feminist theories in STS have developed alongside these studies, including the concept of situated knowledge that produces insights into—and alternatives to—the “god’s eye view” of scientific “objectivity” (Haraway 1988; Longino 1990; Suchman 2011).

On the other hand, STS scholars also explore how gender categories generate variations in experience that produce—or further entrench—structural inequalities in the STEM fields. Scholars in this vein may chart women’s exclusion from developments in science and technology, or aim to recover women’s work and contributions to the field (Rossiter 1993; Kline and Pinch 1996; Cowan 2011). Gendered narratives of the history of computer engineering especially haunt and extend STS’s ideas of technological belonging: from establishing the Jacquard loom as a precursor to the Babbage Analytical Engine to recalling that the first “computers” were young women (Light 1999; Ensmenger 2010; Abbate 2012). STS scholars have therefore attended to the history of gender in computing in particular, and to undermining the oft-repeated “gendered and normative oppositions between the active and passive audience, from the male wireless amateur versus the distracted housewife in the 1920s, to the degraded ‘couch potato’ versus the heroic internet surfer of the 1990s” (Boddy 2004, 43, quoted in Hu 2015, 120). Such examples demonstrate how certain gendered norms govern technical participation and how other gendered identities are left out, producing continuing absences in the field.

Across these perspectives, gender is both a powerful analytical tool and a site for analytical work as scholars describe the situated articulation of difference and inequalities, often in the shadow of acclaimed scientific and technical developments.

The chapters in this section deftly apply these multivariant perspectives on gender and technology to the realm of digital culture. In doing so, they bring forward new ways of thinking about digital tools, their circumscriptions, narratives, cultures, and silences. Dunbar-Hester vividly cuts to the heart of gender issues embedded within computing cultures by exploring questions of “diversity” tied to FLOSS and hackerspace projects. Drawing from ethnographic fieldwork within these sites, she reveals a wide array of motivations behind diversity programs. In doing so, she assesses the potential of such projects for political intervention, foregrounding the placement of technology at the center of social empowerment initiatives. The result of this work is a profound recognition of the continued gulf between rhetorics of plurality and claims to social power.

Kerasidou asks, “Whose visions are the field of ubiquitous computing?” Weaving together the futurist discourse of Mark Weiser with a speculative feminist rewriting, Kerasidou examines the theoretical lines drawn (and redrawn) between human, machine, and nature. Her analysis illustrates different possibilities for material and semiotic intervention: retelling stories that, after Donna Haraway, may produce new, potent modes of world making. She ultimately uses her standpoint to recover legacies of ubiquitous computing that dominant historical narratives typically suppress.

Stark offers an extensive review of the literature on emotion in the world of silicon and bits, arguing that human affect is a powerful driver of agency and action. Tracing developments across fields of human-computer interaction, informatics, psychology, and science and technology studies, he highlights how contemporary approaches to the study of emotion offer different analytic tools for examining the interaction between computing and emotion. Introducing the notion of an *emotive actant*, he charts the ways digital actors may in fact intensify the experience and expression of human feelings within the theater of digital culture.

Finally, Couture addresses questions of gender and computing by examining the definitions people give to source code while developing software. He explores how people stabilize and contest those definitions while writing PHP, a language not requiring a compilation phase. Women’s work, he argues, becomes less visible and valued in part due to the form it takes within a given project (text, image, or particular programming language, for example). This leads to local definitions of source code that exclude female contributions. He points to this legitimization process as deserving central attention as STS approaches the study of software in development.

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