

Technology's Stories: Past and Present

Hierarchies in the Circuitry: Women, Information Technology and Scholarship (WITS) at Illinois

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Starting in 1988, Jenny Barrett was a systems programmer at a research lab for computer-based education at the University of Illinois, Urbana-Champaign (UIUC). She noted that many aspects of “multiuser computing were actually developed at the lab such as email, forums, message boards, online testing, chat rooms, instant messaging, multiplayer games and remote screen sharing, but it was a male-dominated world. My first day at work I went looking for a women's room on my floor and found that it had been converted to a men's room with a makeshift ‘men's’ sign taped over the word ‘women,’ so I knew what I was getting into.... The closest women's room was two stories down near the secretary's office. Of course, the secretary was a woman.”

Three years later, in 1991, the Women, Information Technology and Scholarship (WITS) colloquium began at UIUC and Jenny Barrett was invited to join. For seven years, this group of female faculty and staff explored “the politics of information technologies processes,” asking how “gender, race and class hierarchies are made part of the circuitry in new information technologies” (Taylor et al. 1993, p. 3). The organizers launched WITS at the Center for Advanced Study (CAS), inspired by the campus visit of Australian author and educator Dale Spender. Spender’s public lecture, “Feminism Does Not Compute: The Computer Age—Implications for Feminism,” was a catalyst to focus on gender equity and information technology among various disciplines, both locally and globally. Cheri Kramer, then professor of Speech Communication at UIUC, and Jeanie Taylor, CAS Associate Director, together with Spender, recognized that “that many campus discussions about new information technologies are actually discussions about the reconstitution of race, sex and class hierarchies in the new systems” (Taylor et al. 1993, p. 3).

How did WITS try both to counter exclusions and to examine the ways in which hierarchies are part of the circuitry of information technologies? WITS member Ramona Curry recalled that “the group provided both rich emotional/social support and learning (together as we went) about the quickly evolving new technologies and their effects” (Email to author, March 16, 2013). Organizers made concerted efforts to invite staff (academic professionals like Barrett), varied disciplines, and pre-tenure faculty to join the group, so that there were different perspectives on pitfalls and potentials of IT. In terms of racialization and ethnicities, most WITS members were white, though there were South Asian, Asian American, Latina, and African American members. Thus WITS aimed to practice the inclusion that its members already had observed was absent in the IT world: inviting women into a welcoming space to network with, inform and support each other. WITS co-founder Kramer put it thus: “The challenge is to develop a more inclusive understanding of the social relations and ideologies of technological processes” (Kramer 1987, p. 7).

Kramerae recalled: “Within a year or so of our organizing, any computer-related group on campus knew to invite a WITS member to the committee” (Email to author, March 15, 2013). Thus, while educating each other about new information technologies, the group also constituted a feminist presence that drew the attention of administrators, providing a strong pool of candidates for campus-level IT work. Some WITS members were administrators, such as Leigh Estabrook, a sociologist who was Dean of the Graduate School of Library and Information Science from 1986-2007. Gail Hawisher, founding director of the Center for Writing Studies in 1990, organized a hands-on session in 1991 for fifteen WITS women to try out Daedalus InterChange, a synchronous program that ran on a local network and allowed people to “chat” in real time in a split screen layout. InterChange was used for writing classes to share and edit each others’ work, as well as brainstorming sessions like the one organized for WITS. Hawisher was a pioneer in the use of computers to teach writing, and she co-edited the journal (with Cynthia Selfe), *Computers and Composition: An International Journal*, from 1988 to 2011.

The Center for Advanced Study supported the WITS colloquium for five years, until 1996; the group then moved to the UIUC Graduate School of Library and Information Science (GSLIS) for another two years. Thus throughout the 1990s, a shifting group of about 35 women (I have found no evidence of other gender identities involved) shared their expertise, traveled to conferences and events, and provided support to each other on an increasingly networked campus. WITS member Colleen Bushell recalled a WITS presence--Jeanie Taylor and Cheris Kramerae--in April of 1991 at the Second International Conference on Cyberspace in Santa Cruz, CA: “Two 14 hour days of extremely fast talk,” according to one conference-goer (Email to author, August 1, 2013; Meyer 1991). By the second year, 1992, WITS had an advisory group, its own electronic mailing list, and T-shirts. In 1993, WITS published a small volume of short articles about, among other topics, WITS and gender inequities online, publishing in an electronic environment, and intellectual property issues.

WITS saw the opportunity to affect university policies about networked systems. The group’s recommendations included: women-only online forums (acknowledging the existence of imposters); training for moderators of online spaces to identify and manage disrespectful messages; education about safety on the Internet; provision of grievance procedures for online sexual harassment; periodic reports and assessments of how online networks were being used; clarification of what messages might be offensive in relation to freedom of expression; and ongoing specific efforts to address unequal access to computers. To help address the issue of unequal access, two faculty members in the library school (GSLIS), Ann Bishop, a WITS member, and Greg Newby, founded [Prairienet](#) in 1994, an early community computing system that helped people get online affordably and taught basic computer literacy across east central Illinois. The WITS group launched a website as well in 1995, called the WITS Policy Quilt, and other groups were invited to share their policy recommendations online.

WITS co-founder Kramerae had already given a good deal of thought to women’s

adoption of and adaptation to emerging technologies. In her edited volume, *Technology and Women's Voices: Keeping in Touch*, she stressed that technologies are social relations and social relationships are “organized and structured by technological systems which allow or encourage some kinds of interactions and prevent or discourage other kinds” (p. 2). WITS represented a concerted effort to consider “women’s social relations as essential to understanding technology” and to “put women at the center of analysis” (Kramerae 1987, pp. 6-7). In 1990 Ruth Perry and Lisa Greber wrote in a special issue of *Signs* that “as feminists we must decipher how and to what extent technologies reflect or reinforce the patriarchal order” (Perry & Greber, 76).

The WITS collaborations among disciplines created a visual presence as well: graphic designers Nan Goggin and Kathleen Chmelewski created a bright purple and blue logo for a brochure, which was then screened onto T-shirts. Goggin and Chmelewski wrote that they “consciously decided to avoid the mythology of the singular,” asking “what historical models could we use to represent a system of support and sharing?” (Goggin & Chmelewski 1993, p. 77) These images showed up at events, such as Cyberfest '97, and on the website. There was an analog watch as well that had an image of the Venus of Willendorf on the face, costing \$20, according to Curry. Further, she said: “The watches worked almost like secret symbols as we women, gradually integrated...onto university committees dealing with technology/electronic media, etc., could, with a flick of the wrist, signal solidarity with each other” (Email to author, March 15, 2013). Colleen Bushell was one of the younger members of WITS, and was also a graphic designer, with a 1985 degree from UIUC. Bushell worked on interface design at the National Center for Supercomputer Applications and gave a demonstration to WITS of Mosaic, the early graphical web browser developed in 1992 at UIUC and launched in 1993.

Readings like the 1990 *Signs* article by Perry and Greber on women and computers provided material for WITS discussion, as did out-of-town visitors, such as Judy Smith, coordinator of the Women and Technology Project in Missoula, Montana, who came to campus to talk about her organizing. In Kramerae’s edited book, Smith wrote of her talks with women

from small towns in Montana and Wyoming who tell me they want to do something on women’s issues but the hardest part is not having other feminist women around. Often they just stop talking about what’s important to them; they give up the expectation that change is possible. I think of all those resources we have in small towns and rural areas that aren’t used because we can’t offer the needed support (Smith 1987, p. 89).

In the 1993 WITS book that Taylor, Kramerae, and Maureen Eben edited, Smith wrote about Women’s Opportunity and Resource Development, Inc. (WORD), an organization in Missoula, Montana, that was founded to address the isolation and subsequent resignation of women around the state. There was also an essay about the Electronic Salon at Lewis and Clark College, held in April 1992, an early example of a “cyberspace of our own.” Writing by WITS members also noted that “very little of the research on women and minorities is included in existing and developing electronic databases of the humanities and social and behavioral sciences.... If women aren’t involved in the

classification systems of the new electronic publishing, women will be excluded not only in the texts but also in the meta-texts” (Ebben & Kramer 1993, p. 23). Jo Kibbee, who went to England in 1992 to research the Joint Academic Network (JANET) there, noted the importance of WITS in studying this early electronic network, providing “an enthusiastic and supportive environment in which intellectual (and technological) curiosity can prosper.” JANET was “one of the first networks to target libraries,” according to Kibbee (Kibbee 1993, p. 75). In 1994 several WITS women joined with women in Chicago to prepare for the UN Conference on Women in Beijing in September of 1995.

Scholars such as the feminist philosopher of science, Sandra Harding, have long promoted thinking about diverse ways of knowing among various groups of people—from everyday concerns to “expert” knowledge, from indigenous wisdom to modern scientific approaches. Harding seeks ways to bridge these discrete areas, aiming for respectful dialogue across boundaries. WITS was one example of an attempt to live within, observe, and intervene in these technological and social webs. By attending to the exclusions and inclusions of infrastructures, WITS helped shape ICTs. How are teaching and learning across geographic, disciplinary, and cultural boundaries altered by information and communication technologies? In turn, how are these machines and infrastructures altered by the various people using them? These questions continue to challenge us while Massive Open Online Courses (MOOCs) proliferate and generate megabytes of mostly uncritical attention.

WITS co-founder H. Jeanie Taylor noted that “one of the great things about WITS is that it continued to have impact beyond those years--WITS folks serving on university technology committees and books published...” (Email to author, March 6, 2013). The enduring impact of WITS is certainly true for me now. Along with Professors C. L. Cole and Sharra Vostral, this fall I am teaching a graduate seminar at the University of Illinois called “Dialogues on Feminism and Technology.” Our seminar is part of a Distributed Open Collaborative Course (DOCC) launched by FemTechNet <http://femtechnet.newschool.edu/>. The DOCC builds on WITS-like networks and also provides an innovative response to MOOCs. Rather than a single expert transmitting information to massive number of people online, the DOCC emphasizes distributed and varied expertise shared multi-directionally. The seminar offered at UIUC is one of eighteen FemTechNet courses offered across the United States and Canada that is an effort to “combine feminist cultural theory with the development of new media in the service of feminist pedagogy” (Hocks & Balsamo 2003, p. 193). DOCC instructors and students are creating content, sharing curricular plans, testing platforms, and responding to each others’ activities. A set of recorded dialogues with pre-eminent thinkers and artists concerning feminisms and technologies is currently in production; the first Video Dialogue on Labor with Judy Wacjman went live on September 23 and you may watch it here: <http://vimeo.com/channels/femtechnetdialogues> FemTechNet has also launched dialogues about technology and feminisms in relation to sexualities, race, machine, difference, systems, and place, available for viewing at the same link.

Inspired by FemTechNet efforts, I organized a conversation among four former WITS members—Jenny Barrett, Leigh Estabrook, Gail Hawisher, and Angharad Valdivia. I have added it to the shared FemTechNet resources.

<http://sharonirish.org/2013/11/20/women-information-technology-and-scholarship-wits-revisited/> Some members of the FemTechNet collective recently shared dinner in Claremont, California; we pondered the connections between the online activities of feminists in the 1990s and the apparent resurgence of energy in the last several years around networked feminisms. Liz Losh of the University of California, San Diego, suggested that the Internet offers many of us “a larger intellectual room” to address the processes and implications of emerging technologies together. Given the always-changing conditions of information and communications technologies and the necessity to challenge ongoing, often-oppressive, social structures replicated online, we must continue assess components of the conceptually all-encompassing “seamless” web, naming some of them as contributors to hierarchies in the circuitry (Hughes 1986, pp. 286, 291). Groups like WITS and FemTechNet will continue to organize, cohere, and reweave the webs for more equitable technologies and social structures.

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References Cited

Barrett, Jenny, Leigh Estabrook, Gail Hawisher, and Angharad Valdivia. “Women, Information Technology and Scholarship.” Produced and edited by John Tubbs. Directed by Sharon Irish. University of Illinois, Urbana-Champaign, September 2013.

<http://sharonirish.org/2013/11/20/women-information-technology-and-scholarship-wits-revisited/> Accessed November 20, 2013.

Curry, Ramona. “WITS Poses IAQs [Infrequently Asked Questions!]” Flier. March 1997. Personal Archives, Ramona Curry.

Ebben, Maureen, and Cheris Kramerae. “Women and Information Technologies: Creating a Cyberspace of Our Own.” Pp. 15-27. *WITS: Women, Information Technology, and Scholarship*. H. Jeanie Taylor, Cheris Kramerae, and Maureen Eben, eds. Urbana, IL: Center for Advanced Study/University of Illinois, 1993.

Goggin, Nan, and Kathleen Chmielewski. “Designing a Visual Identity: Empathic Response to Content.” Pp. 76-77. *WITS: Women, Information Technology, and Scholarship*. H. Jeanie Taylor, Cheris Kramerae, and Maureen Eben, eds. Urbana, IL: Center for Advanced Study/University of Illinois, 1993.

Hocks, Mary E. “Feminist Interventions in Electronic Environments.” *Computers and Composition* 16(1999), 107-119.

Hocks, Mary E., and Anne Balsamo. "Women Making Multimedia: Possibilities for Feminist Activism." Pp. 192-214. In *Virtual Publics: Policy and Community in an Electronic Age*. Beth Kolko, ed. New York: Columbia University Press, 2003.

Hughes, Thomas P. "The Seamless Web: Technology, Science, Etcetera, Etcetera." *Social Studies of Science* 16(May 1986), 281-292.

Juhasz, Alexandra and Anne Balsamo, "An Idea Whose Time Is Here: FemTechNet, a Distributed Online Collaborative Course (DOCC)." *Ada: Journal of Gender, New Media and Technology* 1:1(November 2012) <http://ada.fembotcollective.org/2012/11/issue1-juhasz> Accessed August 15, 2013.

Kestenbaum, David S. "Cyberfest Celebrates HAL in Urbana." *Wired* (March 17, 1997) <http://www.wired.com/culture/lifestyle/news/1997/03/2593> Accessed September 22, 2013

Kibbee, Jo. "WITS and the Joint Academic Network (JANET)." P. 75. *WITS: Women, Information Technology, and Scholarship*. H. Jeanie Taylor, Cheris Kramerae, and Maureen Eben, eds. Urbana, IL: Center for Advanced Study/University of Illinois, 1993.

Kramerae, Cheris. "Gotta Go Myrtle, Technology's at the Door." Pp. 1-14. In *Technology and Women's Voices: Keeping in Touch*. Cheris Kramerae, ed. New York: Routledge and Kegan Paul, 1988.

Kruger, Betsy, and Jo Kibbee. "The Women, Information Technology, and Scholarship (WITS) Colloquium at UIUC: A Feminist Model for Education and Activism on Campus." *Feminist Collections* 17:2(Winter 1996), 38-39.

Meyer, Kenny. Science Forums: Report on Cyberspace Conference 2 (April 28, 1991). <http://www.science-bbs.com/199-virtual-worlds/ea7e2cc19963b097.htm> Accessed September 21, 2013.

Smith, Judy, and Ellen Balka. "Chatting on a Feminist Computer Network." Pp. 82-97. In *Technology and Women's Voices: Keeping in Touch*. Cheris Kramerae, ed. New York: Routledge and Kegan Paul, 1988.

Taylor, H. Jeanie, Cheris Kramerae, and Maureen Eben, eds. *WITS: Women, Information Technology, and Scholarship*. Urbana, IL: Center for Advanced Study/University of Illinois, 1993.

Vicic, Shannon. "Cyberfest '97 Kicks Off March 10." *Inside Illinois* (February 20, 1997) <http://news.illinois.edu/ii/97/970220/cyberfest.html> Accessed September 20, 2013.

