# Technology & Gender

INFO I-590 • Spring 2017

In this seminar we will explore the literature on the history of gender and technology, with a particular focus on information technology. From the "computer girls" of the early 20th century to the hyper-masculine culture of contemporary computing, ideas about gender have reflected and transformed our understanding of sexuality and gender. Our goal in this seminar is to survey the best of the emerging literature on gender and computing, with an eye towards the practical application of gender theory into your future research projects.

Professor Nathan Ensmenger nensmeng@indiana.edu

Revision Date: February 23, 2017

## **Course Schedule:**

In addition to doing the required readings and preparing for discussions, you will be responsible for writing a short (1-2 pg) reading response paper each week.

The supplementary readings and extended bibliography are meant to make you aware of the larger literature, and to provide a guide for those of you who need further preparation for your qualifying exams or dissertation research.

A note on books: all of the articles listed below will be made available electronically. The books you are responsible for borrowing, purchasing, or otherwise acquiring. I did not order them via the bookstore, as in most cases you can find better bargains elsewhere.

# I January 11

Introduction and in-class primary source exercise. Turkle, "Hackers: Loving the Machine for Itself"

#### II January 18

Scott, "Gender: A Useful Category of Historical Analysis"; Cowan, "The "Industrial Revolution" in the home: household technology and social change in the 20th century"; Oldenziel, "Boys and their toys: The Fisher Body Craftsman's Guild, 1930-1968, and the making of a male technical domain"

#### Supplemental Readings

For further development of her argument on the (lack of) industrialization in female domestic work, see Cowan, *More Work for Mother: The Ironies of Household Technologies from the Open Hearth to the Microwave*. Lerman, Mohun, and Oldenziel, "Versatile tools: Gender analysis and the history of technology" provides an introduction to their influential special issue of *Technology & Culture* on women and technology in which the Oldenziel article above first appeared.

#### III January 25

Bray, "Gender and Technology"; Kleif and Faulkner, ""I'm No Athlete [but] I Can Make This Thing Dance!" Men's Pleasures in Technology"; Fischer, "Gender and the Residential Telephone, 1890-1940: Technologies of Sociability"

#### Supplemental Readings

Wajcman, "Reflections on Gender and Technology: In What State is the Art?"; Bray, Technology and Gender; Edwards, "The Army and the Microworld: Computers and the Politics of Gender Identity"; Pirsig, Zen and the art of motorcycle maintenance: an inquiry into values; Ullman, Close to the machine: technophilia and its discontents: a memoir; Florman, The Existential Pleasures of Engineering

## **IV** February 1

Oldenziel, Making Technology Masculine: Men, Women and Modern Machines in America, 1870-1945

## Supplemental Readings

Maines, The technology of orgasm: "hysteria," the vibrator, and women's sexual satisfaction; Rossiter, Women scientists in America: struggles and strategies to 1940, Tichi, Shifting Gears: Technology, Literature, Culture in Modernist America; Hacker, Pleasure, Power and Technology: Some tales of Gender, Engineering, and the Cooperative Workplace

#### V February 8

Strom, Beyond the typewriter: gender, class, and the origins of modern American office work, 1900-1930

## Supplemental Readings

Davies, Woman's place is at the typewriter: office work and office workers, 1870-1930 focuses on the typewriter as a gendered technology. Milkman, Gender at work: the dynamics of job segregation by sex during World

War II argues that women do not replace men during war; new and gendered positions are created for them. Benson, Counter Cultures describes women's work in retail. Tone, Devices and desires: a history of contraceptives in America is a history of birth control, and includes a section on female entrepreneurs in this technology.

#### VI February 15

Hicks, Programmed Inequality

# Supplemental Readings

Both Ensmenger, *The Computer Boys Take Over* and Abbate, *Recoding Gender* cover the analogous story of the development of computer programming in the United States during this period. Agar, *The Government Machine: A Revolutionary History of the Computer*, while not explicitly about gender, provides the context for the turn towards "machinic" thinking in the British Civil Service.

#### VII February 22

Nakamura, "Indigenous Circuits: Navajo Women and the Racialization of Early Electronic Manufacture"; Ensmenger, "Making Programming Masculine"; Haraway, "Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century"; Bernstein et al., "Silicon Valley: Paradise or Paradox"

#### Supplemental Readings

For other accounts of the roles that women played in the early computer industry, see Shetterly, Hidden Figures: The Untold Story of the African American Women Who Helped Win the Space Race, Grier, When computers were human, and Goyal, "Women's contributions to early computing at the National Bureau of Standards."

#### VIII March 1

Hackers: Heroes of the Computer Revolution, (selected excerpts); Eglash, "Race, Sex, and Nerds: From Black Geeks to Asian American Hipsters"; Lagesen, "A cyberfeminist utopia? Perceptions of gender and computer science among Malaysian women computer science students and faculty"; Ensmenger, ""Beards, Sandals, and Other Signs of Rugged Individualism": Masculine Culture within the Computing Professions"

#### Supplemental Readings

Kidder, *The Soul of a New Machine* was awarded the Pulitzer Prize for its gripping tale of computer engineers as Wild West heroes. Kocurek, *Coin-Operated Americans: Rebooting Boyhood at the Video Game Arcade* provides the larger context for understanding masculinity and video games. Losse, *The Boy Kings* updates these narratives for the Facebook era. If you have trouble understanding Haraway, read Gibson, *Neuromancer*, which covers some of the same territory in the form cyberpunk science fiction. In fact, read the Gibson anyway. It is beautiful, insightful, and powerfully influential in its own right.