Gender and Technical Knowledge Spring 2016

History and Sociology of Science 528
Wednesday 2-5 pm
Prof. S. Lindee
mlindee@sas.upenn.edu

In this graduate reading seminar, we explore how technical knowledge systems have historically intersected with identity and social order.

The materials emphasize gender, but our discussions and readings will also engage at times with disability, race, class and other social categories that have shaped participation in technical endeavors and been the focus of technical study. Our goal is to understand how embodiment and expertise intersect. We will explore why certain kinds of people have been understood to be unreliable knowers, pathologically embodied, untrustworthy, or dangerously linked to emotion, incompetence or confusion, while other kinds of people have been socially marked as embodying reliability, trustworthiness, or epistemological neutrality. The underlying issues bear on the historical development of technical knowledge as a social system for the establishment of consensus about the nature of reliable truth. They are also relevant at many different levels to embodied social experiences of scientific information, personal health, reproduction and everyday technology. This course will give students the tools and insights needed to draw on feminist/gender/queer theory when it is useful to their research. That is the purpose of all of our readings.

We begin with an exploration of some key ideas in feminist scholarship of the last few decades. Then we turn to three broad, interconnected queries, relating to the social organization of science, technology and medicine (who has been excluded, who favored? What kinds of work have been understood to belong to different kinds of people?); to the intellectual content of expertise (how have experts made technical sense of social and bodily difference? How have technologies expressed and performed gender?); and to the philosophical debate about the nature of technical knowledge, particularly science, as a fundamentally gendered (masculine) endeavor which privileges hierarchical explanations in ways that mimic the social order.

Reading assignments as listed here are generally substantial, but we will break up the work and some of it will be deferred or shared. In some cases books are simply listed as a future resource. We will make choices together about what to emphasize. I do not recommend that anyone purchase all of the books listed in this syllabus. With this in mind, arranging to borrow them from the Penn library system, borrow direct, and other sources, and planning to share them might be a good idea.

Each student will be expected to:

Participate actively in each class discussion. All students are encouraged to bring to our attention perspectives from book reviews of materials we have read, or papers that respond to them, or other relevant materials. Googling is OK. Reading critiques that were not assigned is OK. Tracking down footnote sources is OK. This syllabus is an opening rather than a canon.

- Lead one week's class discussion. This involves briefly summarizing the key points in the assigned readings (15 minutes maximum) and then raising several questions for general discussion.
- Turn in a two-page single-spaced summary with questions/observations for each week's consensus readings, at the beginning of every class, every week when we have shared readings. *Your summaries can and should be incorporated into your final paper*. Remember your goal is to think about these texts and how they work; notice their sources and how they are used; consider how other scholars responded, etc. In your short summaries, try to present the key ideas of the assigned readings, and to bring up questions about the materials that permit comparison, analysis, etc.
- For presentation in class and to hand in, produce a short (5-7 page, double spaced) profile of an individual whose experiences as a technical expert illuminate some of the ways that social place has mattered in science, engineering or medicine. You will present this biography in class on March 23 and turn in your paper on that day. This profile can also, if you choose, become a part of your final paper.
- Produce a final paper, 7,000 to 9,000 words, about 18-22 pp., double spaced 12 point type, that engages with the literature we are reading. This can be a synthetic historiographical assessment of all or most of the materials we read, that explores the key themes and draws on the weekly summaries that you will be writing (as noted, you can use parts of your weekly essays in your final paper). Or, it can be an extension of your biographical study that embeds the story you have explored more completely in the broader literature. Or it can be a more focused comparison of different approaches to understanding expertise that you find particularly compelling. Finally, also possible is an essay explicating how the literature we have considered might shape your own evolving research. I will meet with each student to discuss this final paper in late March (with sign-up times for March 24 or 25).

This is a reading class so we will be covering quite a bit of ground and looking at a lot of books and articles. We will sometimes break up the reading, sometimes change our minds, sometimes add things.

WEEK 1 January 20

Sex/gender/history/science

* Nature commentary, December 2013. "Global Gender Disparities in Science."

Some classics: Read all carefully, track impact. Consider why these papers have been influential or enduring.

* Butler, J. 1988. "Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory" *Theatre Journal*, Vol. 40, No. 4, December. pp. 519-531.

- * Scott, JW 1986. "Gender: A useful category of historical analysis." *The American Historical Review*, Vol. 91, No. 5 pp. 1053-1075.
- * Cohn, C. 1993. "Wars, wimps and women: Talking gender and thinking war." In M. Cooke and A. Woolacott, eds., *Gendering War Talk*. Princeton. Pp. 227-246.
- * Rose, H. 1983 "Hand, Brain and Heart: A feminist epistemology for the natural sciences." *Signs*, Vol. 9, No. 1. pp. 73-90.
- * Ortner, Sherry 1972. Is Female to Male as Nature is to Culture? *Feminist Studies*, Vol. 1, No. 2 (Autumn, 1972), pp. 5-31.
- * Martin, Emily. 1991. The Egg and the Sperm: How Science has constructed a romance based on stereotypical male-female roles. *Signs* 16:3, 485-501.

Further reading:

- * Butler, 1990. *Gender Trouble: Feminism and the Subversion of Identity* New York: Routledge.
- * Harding, Feminist Standpoint Theory Reader.
- * Hess, D. 2011. Bourdieu and Science and Technology Studies: Toward a Reflexive Sociology. *Minerva*. 49; 3, Special Issue: Beyond the Canon: Pierre Bourdieu and Science and Technology Studies. pp 333-348
- * Keller, EF. 1987 "The Gender/Science System: Or, Is Sex to Gender as Nature Is to Science?" *Hypatia*, Vol. 2, No. 3, Feminism & Science, 1 (Autumn, 1987), pp. 37-49.
- * Thorne, B and Hochschild, A.R. 1997. "Feeling at Home at Work: Life in Academic Departments" *Qualitative Sociology*, Vol. 20, No. 4. 517-520.

WEEK 2 January 27

Guest Lecturer Morris Low, 4-5 p.m.

Ladies and Gentlemen

- * Schiebinger, Londa 1987. "Maria Winckelmann at the Berlin Academy: A turning point for women in science." *Isis* 78:174-200.
- * Schiebinger, Londa 1993." Why Mammals are called Mammals: Gender politics in eighteenth-century natural history" *American Historical Review* April. pp. 382-411.
- * Logan, Gabriella Berti. 1994. "The desire to contribute: An Eighteenth Century Italian Woman of Science" *American Historical Review* 99:3, 785-812.
- * Shapin, Steve 1995 A Social History of Truth: Civility and Science in Seventeenth Century England University of Chicago Press. Chapters 6-8.
- * Cohen, Estelle. 1997. "What the women at all times would laugh at: Redefining equality and difference, circa 1660-1760." *Osiris.* 12:121-142.
- * Robert A. Nye 1997. "Medicine and science as masculine fields of honor" in Sally Kohlstedt and Helen Longino, eds. *Women, Gender and Science: New Directions Osiris* v. 12, pp 60-79.
- * Mazzotti, Massimo. 2001. "Maria Gaetana Agnesi: Mathematics and the Making of the Catholic Enlightenment". *Isis.* 92:657-683.

* Anderson, W. 1997. "The trespass speaks: White masculinity and colonial breakdown." *The American Historical Review* 102:5, 1343-70.

Further reading:

- * Findlen, Paula. 1993. Science as a career in Enlightenment Italy: The strategies of Laura Bassi. *Isis* 84:441-469.
- * Shteir, Ann B. 1996 *Cultivating women, cultivating science: Flora's daughters and botany in England, 1760-1860* Baltimore: Johns Hopkins University Press.
- * Gerald D. Meyer 1955 *The Scientific Lady in England, 1650-1760* Berkeley and Los Angeles: University of California Press.
- * Phillips, Patricia. 1990. *The Scientific Lady: A Social History of Woman's Scientific Interests, 1520-1918*_ London: Weidenfeld and Nicholson.
- * Alic, Margaret 1986. *Hypatia's Heritage: A History of women in Science from Antiquity through the Nineteenth Century* Boston: Beacon Press.
- * Schiebinger, L. 1996. "Gender and Natural History", in *Cultures of Natural History* eds. Nicholas Jardine, James Secord and Emma Spary, Cambridge, pp. 163-177.

4-5 pm, Visiting Professor Morris Low

School of Historical and Philosophical Inquiry

University of Queensland

"Science, Gender and US-Japan Relations"

Readings:

Low, 2015 "American Photography during the Allied Occupation of Japan: The Work of John W. Bennett" *History of Photography*, Volume 39, Number 3, August 2015.

Read about the Hiroshima Maidens:

http://intersections.anu.edu.au/issue24/jacobs.htm.

Finally, the case of Haruko OBOKATA as can be seen in *The Guardian* newspaper article: http://www.theguardian.com/science/2015/feb/18/haruko-obokata-stap-cells-controversy-scientists-lie

WEEK 3 February 3

The death of nature, the masculine birth of science

Merchant, C. 1980 *The death of nature: Women, ecology and the scientific revolution* San Francisco. Try to absorb as much as this rather dense and wideranging text as you can. Find at least one review of this book on JSTOR and bring to class. Be prepared to discuss its impact (immediate and long-term).

Also read:

- * Bordo, Susan 1986. "The Cartesian Masculinization of Thought" *Signs*, Vol. 11, No. 3, Spring: pp. 439-456.
- * Merchant 2006. "The Scientific Revolution and the Death of Nature." *Isis.* 97:513-533.

- * Park, Katherine 2006. "Women, gender and utopia: The Death of Nature and the historiography of Early Modern Science." *Isis.* 97:487-495.
- * Golinski, J. 2002. "The Care of the Self and the Masculine Birth of Science" *History of Science* 40: 125-145.

Further reading:

- * Noble, David. 1992. A World Without Women: The Christian Clerical Culture of Western Science. Oxford. Pp. 163-286.
- * Merchant, C. 1989 *Ecological Revolutions: Nature, Gender and Science in New England.* Chapel Hill: University of North Carolina Press.
- * Floyd-Wilson, Mary. 2013 Occult Knowledge, Science and Gender on the Shakespearian Stage. Cambridge University Press.
- * Jansen, Sue Curry 1990. Is Science a Man? New Feminist Epistemologies and Reconstructions of Knowledge. *Theory and Society*, Vol. 19, No. 2 (Apr., 1990), pp. 235-246.
- * Cadden, J. 1993. *Meanings of Sex Difference in the Middle Ages: Medicine, Science and Culture*. Cambridge.

WEEK 4 February 10

Women Scientists in America

Read the 1982 volume carefully; read 1995 and 2012 more rapidly, scanning quickly for themes, content, focus, sources, methods.

- * Margaret Rossiter 1982 *Women Scientists in America: Struggles and Strategies to 1940* Baltimore: Johns Hopkins University Press.
- * Margaret Rossiter 1995 Women Scientists in America: Before Affirmative Action, 1940-1972 Baltimore: Johns Hopkins University Press.
- * Margaret Rossiter. 2012 Women Sciences in America: Forging a New World Since 1972. Baltimore: Johns Hopkins University Press.

Also:

- * Bergwik, S. 2014. An Assemblage of Science and Home: The Gendered Lifestyle of Svante Arrhenius and Early Twentieth-Century Physical Chemistry *Isis* 105:2, 265-291.
- * Cote, J. 2013 "The West Point of the Philanthropic Service": Reconsidering Social Work's Welcome to Women in the Early Twentieth Century. *Social Service Review* 87:1, 131-157.

Further reading:

- * Abir-Am Pnina, 1989. Synergy or Clash: Disciplinary and Marital Strategies in the Career of Mathematical Biologist Dorothy Wrinch in Abir-Am and Dorinda Outram, eds., 1989. *Uneasy careers and intimate lives: Women in science, 1789-1979*. Rutgers U. Press. Pp.239-280.
- * Tuchman, Arlene 2004 "Situating Gender: Marie E. Zakrzewska and the Place of Science in Women's Medical Education" *Isis* 95:34-57.
- * Roth, WD and Sonnert, G. 2010. "The Costs and Benefits of 'Red Tape': Anti-Bureaucratic Structure and Gender Inequity in Science Research Organization." *Social Studies of Science*. 41(3), 385-409.

* Cech, E.A., and Blair-Loy, M. 2010. "Perceiving Glass Ceilings? Meritocratic versus Structural Explanations of Gender Inequality among Women in Science and Technology" *Social Problems*, 3(August), 371-97.

WEEK 5 February 17 Honorary men? Focus on McClintock, Mead and Meitner

- *Keller, Evelyn Fox 1983 A feeling for the organism: The life and work of Barbara McClintock New York: Freeman.
- * Comfort, Nathaniel 2003. *The Tangled Field: Barbara McClintock's Search for the Patterns of Genetic Control*. Cambridge: Harvard University Press.
- * Lutkehaus, Nancy, 2008 Margaret Mead: The Making of An American Icon Princeton: Princeton University Press.
- * Lapsley, Hillary Margaret Mead and Ruth Benedict: The kinship of women
- * Shankman, *The Trashing of Margaret Mead: Anatomy of an Anthropological Controversy* (Studies in American Thought and Culture)
- * Young, Virginia Heyer, 2005. Ruth Benedict: Beyond Relativity, Beyond Pattern
- * Banner, L. 2004 *Intertwined Lives: Margaret Mead, Ruth Benedict and their Circle.* New York: Vintage.
- * Sime, R. 1996 Lise Meitner: A Life in Physics University of California Press.
- * Rife, P. 2006 *Lise Meitner and the Dawn of the Nuclear Age_*Boston: Birkhauser.

Further reading:

- * Quinn, Susan 1995 Marie Curie: A life. New York: Simon and Schuster
- * Goldsmith, Barbara. 2005 Obsessive Genius: The Inner World of Marie Curie New York: W.W. Norton.
- * Wirten, EH. 2015. *Making Marie Curie: Intellectual Property and Celebrity Culture in the Age of Information*. Chicago: University of Chicago Press.
- * Pycior, Helena. 2012. "Beyond the Symbol of the Woman Scientist: Marie Składowska Curie from the Standpoints of Presidents Harding, Coolidge, and Hoover." *The Polish Review*, Vol. 57, No. 2. 69-104.
- * Lytle, Mark Hamilton. 2007 The Gentle Subversive: Rachel Carson, Silent Spring, and the Rise of the Environmental Movement Oxford University Press
- * Lear, Linda 1997 Rachel Carson: Witness for Nature Mariner.
- * Maddox, B. 2003 Rosalind Franklin: Dark Lady of DNA New York: Harper.
- * Sayre, A. 2000 Rosalind Franklin and DNA New York: WW Norton
- * Rees, A. 2009. *The Infanticide Controversy: Primatology and the Art of Field Science*. Chicago: University of Chicago Press [about Sarah Blaffer Hrdy and primate field research]
- * Hrdy, S.B. 1981. *The Woman that Never Evolved*. Harvard University Press.

- *Morantz-Sanchez, Regina Markell 1985 Sympathy and Science: Women Physicians in American Medicine. New York: Oxford U. Press.
- * Reverby, Susan M. 1987. Ordered to Care: The dilemma of American Nursing, 1850-1945.

WEEK 6 February 24

Learning to be....

- * "Male Tales" in Traweek, Sharon *Beamtimes and Lifetimes* pp. 74-105. *Learning to be a physicist.*
- * Hacker, Sally L. 1989. *Pleasure, power and technology: Some tales of gender, engineering and the cooperative workplace.* Boston: Unwin Hyman. Pp. 35-72. *Learning to be an engineer.*
- * "Forging the Iron Surgeon" in Cassell, Joan *The woman in the Surgeon's Body* Pp. 100-150. *Learning to be a surgeon*.
- * Pringle, Rosemary Sex and Medicine: Gender, power and authority in the medical profession pp. 69-96. Learning to be a surgeon.
- * Murray, Margaret A.M. 2000. Women becoming mathematicians: Creating a professional identity in post-World War II America. Cambridge: MIT Press. Pp. 109-198. Learning to be a mathematician.
- *Malka, Susan Gelfand. 2007. Daring to Care: American Nursing and Second Wave Feminism. U. Illinois Press. Pp 63-116. Learning to be a nurse.
- * Chimisso, Christina, Gad Freudenthal, Hélène Metzger. 2003 A Mind of Her Own: Hélène Metzger to Émile Meyerson, 1933 Isis, Vol. 94, No. 3, 477-491. *Learning to be a historian of science.*
- * Irvine, L and Vermilya, JR 2010. Gender work in a feminized profession: The Case of Veterinary Medicine *Gender and Society*, Vol. 24, No. 1 (February 2010), pp. 56-82.

WEEK 7 March 2

Turn in by email a one-page description of the person whose life you will be talking about in your presentation March 23, with a list of at least six sources.

Hearts and minds

- * Showalter, Elaine *The Female Malady: Women, Madness and English Culture,* 1830-1980
- * Lunbeck, E. 1994. *The Psychiatric Persuasion: Knowledge, Gender and Power in Modern America*. Princeton University Press.
- * Gilman, Sander L. Hysteria Beyond Freud
- * Jaye Cee Whitehead, Kath Bassett, Leia Franchini and Michael Iacolucci 2015. "The Proof Is in the Pudding: How Mental Health Practitioners View the Power of Sex Hormones in the Process of Transition." *Feminist Studies*, Vol. 41, No. 3, Gendering Bodies, Institutional Hegemonies (2015), pp. 623-650
- * Thomas, M. 2014 Are women naturally devoted mothers? Fabre, Perrier and Giard on maternal instinct in France under the third republic. *Journal of the History of the Behavioral Sciences*, Vol. 50(3), 280–301 Summer.

- * Carluccio, D. 2013. Cognitive Fictions and Functions of Gender in Evolutionary Psychology and Poststructuralist Theory. *Signs*. 38:2, 431-457.
- * Chambliss, Daniel F. 1996 Beyond Caring: Hospitals, nurses and the social organization of ethics_ University of Chicago Press.

 Optional readings:
- * Hochschild, Arlie 2003 The Managed Heart: Commercialization of Human Feeling.
- * Interview with sociologist Arlie Hochschild: http://isa-global-dialogue.net/emotional-labor-around-the-world-aninterview-with-arlie-hochschild/ [on emotional labor]
- * Burgard, S.A. 2011. "The Needs of Others: Gender and Sleep Interruptions for Caregivers." *Social Forces*, Vol. 89, No. 4 (June 2011), pp. 1189-1215
- *Harding, S. 2009 "Postcolonial and feminist philosophies of science and technology: convergences and dissonances" *Postcolonial Studies*, Vol. 12, No. 4, pp. 401-421.
- * Milam, Erika 2015 "Men in Groups: Anthropology and Aggression, 1965-1984" in Milam and Nye, Robert, eds, 2105, Scientific Masculinities, *Orisis*, Series 2, Volume 30, pp. 66-88.
- * Rutherford, Alexandra. 2015. "Maintaining Masculinity in Mid-Twentieth-Century American Psychology: Edwin Boring, Scientific Eminence and the 'woman problem'" in Milam and Nye, Robert, eds, 2105, Scientific Masculinities, *Orisis*, Series 2, Volume 30, pp 250-271.

WEEK 8 March 9 NO CLASS PENN SPRING BREAK

WEEK 9 March 16 NO CLASS due to conflict with my travel schedule. This class will be made up on Wednesday May 4 (after classes officially end) or on another date/time if that does not work.

WEEK 10 March 23 Life Stories:

Presentations by the class.

WEEK 11 March 30 Gender and Technology

- * Oldenziel, Ruth. 1999. *Making Technology Masculine: Men, women and modern machines in America, 1870-1945.* Amsterdam University Press.
- * Lerman, Nina, Ruth Oldenziel and Arwen Mohun, eds. 2003. *Gender and Technology: A reader*. Baltimore: Johns Hopkins University Press.
- * Bray, Francesca 1997 Technology and Gender: Fabrics of power in late imperial China. 237-272
- * Oudshoorn, Nelly 2003 *The Male Pill: A Biography of a Technology in the Making.* Duke University Press.
- * Herzig, R. 2020. "Does Google Have Gender? Technologies of Everyday Life in Affluent Industrial Societies" *Icon*, Vol. 16, Special Issue: Technology in Everyday Life (2010), pp. 92-97.

* Ha, Nathan. 2015. "Detecting and teaching desire: Phallometry, Freund and Behaviorist Sexology." In " in Milam and Nye, Robert, eds, 2105, Scientific Masculinities, *Orisis*, Series 2, Volume 30, pp 205-227.

Further reading:

- * Harvey, K. The History of Masculinity, circa 1650-1800 *Journal of British Studies*, Vol. 44, No. 2 (April 2005), pp. 296-311.
- * Nye, R. 2005. "Locating Masculinity: Some Recent Work on Men" *Signs*, Vol. 30, No. 3 (Spring 2005), pp. 1937-1962.

WEEK 12 April 6

Sex itself

Read:

- * Laqueur, Thomas W. 1992 *Making Sex: Body and Gender from the Greeks to Freud.* Cambridge: Harvard University Press.
- * Sarah Richardson. 2013 Sex Itself: The Search for Male and Female in the Human Genome. Chicago: University of Chicago Press.
- * Clark, Adele 1998 Disciplining Reproduction: Modernity, American Life Sciences, and the Problems of Sex University of California Press.
- *Roberts, Celia 2007. *Messengers of Sex: Hormones, biomedicine and feminism*. Cambridge University Press. Esp pp. 53-136.
- * Richardson, Sarah S. 2015 "Maternal Bodies in the Postgenomic Order: Gender and the Explanatory Landscape of Epigenetics. In Richardson and Stevens, H., eds., *Postgenomics: Perspectives on Biology After the Genome* Duke University Press, pp. 210-241.
- * Susan Bordo. 2002. Does size matter? In Tuana et al, eds. *Revealing Male Bodies* Indiana University Press. Pp. 19-37
- * Linker, Beth and Whitney Laemmli. 2015. "Half a man: The symbolism and science of paraplegic impotence in World War II America." "In Milam and Nye, Robert, eds, 2105, Scientific Masculinities, *Orisis*, Series 2, Volume 30, pp 228-249.

Further reading:

- * Schiebinger, L. ed. 2000. Feminism and the Body, Oxford University Press.
- * Fausto-Sterling, Anne 2000 Sexing the Body: Gender Politics and the Construction of Sexuality New York: Basic Books

WEEK 13 April 13

The Five Sexes: Sex/Medicine/Sexuality

Description/proposal for final paper due in class, 3-5 pp. Plus bibliography.

- * Fausto-Sterling, A. 2000 "The Five Sexes Revisited" *The Sciences*, July-August, 19-23.
- * Alice Dromurat Dreger. 1998. *Hermaphrodites and the medical invention of sex.* Harvard University Press.
- * Bosley, J. 2010. "From Monkey Facts to Human Ideologies: Theorizing Female Orgasm in Human and Nonhuman Primates, 1967–1983" *Signs*, 35:3, 647-671.

- * Henne, K. 2014. The "Science" of Fair Play in Sport: Gender and the Politics of Testing *Signs* 39:3, 787-812.
- * David Serlin, 2004. "Christine Jorgensen and the Cold War Closet," in *Replaceable You: Engineering the Body in Postwar America* (Chicago): 159-90.
- * Rubin, D.A. 2012 "An unnamed blank that craved a name:" A genealogy of intersex as gender" *Signs* 37:4, 883-908.
- * Miller, F.A. 2003. "Your true and proper gender" The Barr Body as Good Enough Science of Sex." *Studies in the History and Philosophy of Biological and Biomedical Sciences*. 37:3, 459-83.
- * Currah, P and Moore, LJ 2009. "We Won't Know Who You Are": Contesting Sex Designations in New York City Birth Certificates. *Hypatia*, Vol. 24, No. 3, Transgender Studies and Feminism: Theory, Politics, and Gendered Realities Summer, 2009), pp. 113-135.
- * Martin, KA 2005. "William Wants a Doll. Can He Have One? Feminists, Child Care Advisors, and Gender-Neutral Child Rearing" *Gender and Society*, Vol. 19, No. 4 (Aug., 2005), pp. 456-479.
- * Devun, Leah. 2015. "Erecting Sex: Hermaphrodites and the Medieval Science of Surgery." In Milam Erika and Nye, Robert, eds, 2105, Scientific Masculinities, *Orisis*, Series 2, Volume 30, pp 17-37.

WEEK 14 April 20

Reproduction--

Everyone get Rapp, and read 62-115 of Cooper and Waldby. Then each of you should try to read one other book.

- * Rapp, Rayna 2000 Testing Women, Testing the Fetus: The social impact of amniocentesis in America.
- * Cooper M. and Waldby, C. 2014. *Clinical Labor: Tissue donors and research subjects in a global economy.* Esp. section on "Reproductive Arbitrage", pp. 62-115. Duke University Press.
- * Charis Thompson 2005. *Making Parents: The ontological choreography of reproductive technologies*.MIT Press.
- * Lynn M. Morgan and Meredith W. Michaels, eds. 1999. *Fetal subjects, feminist positions*. Philadelphia: University of Pennsylvania Press.
- * Inhorn, Marcia. 2003 Local Babies, Global Science: Gender, Religion and In Vitro Fertilization in Egypt. New York: Routledge.

WEEK 15 April 27

Cyborg Visions--

- * Haraway, Donna 1989 *Primate Visions: Gender, Race and Nature in the World of Modern Science* New York: Routledge. Read carefully pp. 1-83, 133-185 and 231-243, and skim/glance at other chapters. Look up reviews, find commentaries.
- * Haraway, Donna 1985 "Cyborg Manifesto." Originally in <u>Socialist Review</u> but now reprinted many places and available online: http://www.stanford.edu/dept/HPS/Haraway/CyborgManifesto.html

Examine at least one of her other books, though I am less interested in the "when species meet" stuff (her two most recent books) so try:

- *Crystals, Fabrics, and Fields: Metaphors of Organicism in Twentieth-Century Developmental Biology (1976)
- *Simians, Cyborgs, and Women: The Reinvention of Nature (1991)
- *Modest Witness@Second Millenium. FemaleMan Meets OncoMouse: Feminism and Technoscience

Or, the interviews with her, *How Like a Leaf*.

- * Sperling, Susan 2007. The Troop Trope: Baboon Behavior as a Model System in the Postwar Period. In Creager, Lunbeck and Wise, eds., *Science without laws: Model Systems, Cases, Exemplary Narratives*. Duke University Press.
- * Fernbach, A. 2000. The Fetishization of Masculinity in Science Fiction: The Cyborg and the Console Cowboy. Science Fiction Studies. 27:234-55.
- * Vertesi, J. 2007. Pymalion's Legacy: Cyborg Women in Science Fiction. In Grebowicz, ed., *SciFi in the Mind's Eye: Reading Science through Science Fiction*. Open Court. 73-86.

WEEK 16 May 4

Conclusions

- *Londa Schiebinger. 1999. *Has Feminism Changed Science?* Harvard University Press. Pp 65-179.
- *Longino, H. 1987. "Can there be a feminist science?" *Hypatia*, 2:3, 51-64.
- *Conkey, Margaret 2003. Has feminism changed archeology? *Signs*, Vol. 28, No. 3, Gender and Science: New Issues (Spring, 2003), pp. 867-880.
- *Bug, Amy 2003 Has Feminism Changed Physics? *Signs*, Vol. 28, No. 3, Gender and Science: New Issues (Spring, 2003), pp. 881-899.
- *Boulis, Ann 2004. The Evolution of Gender and Motherhood in Contemporary Medicine *Annals of the American Academy of Political and Social Science*, Vol. 596, Mommies and Daddies on the Fast Track: Success of Parents in Demanding Professions (Nov., 2004), pp. 172-206
- *Fox, Mary Frank 2005 Gender, Family Characteristics, and Publication Productivity among Scientists *Social Studies of Science*, Vol. 35, No. 1 (Feb., 2005), pp. 131-150.
- * Marks, Stephen R. 1995. The Art of Professing and Holding Back in a Course on Gender *Family Relations*, Vol. 44, No. 2 (Apr., 1995), pp. 142-148

Further Reading:

*Creager, Angela N.H., Elizabeth Lunbeck and Londa Schiebinger, eds., 2001. *Feminism in Twentieth-Century Science, Technology and Medicine*. Chicago: University of Chicago Press.

Final historiographical papers due Wednesday May 11. Please send them by email and also leave a printed out copy in my mailbox in Suite 303 by 5 p.m.