Current Directions in the Social and Historical Study of Science and Technology
Winter 2010, UCLA
Tuesdays 9-12am

History 191i/201o Norton Wise 5272 Bunche Hall nortonw@history.ucla.edu
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Introduction
This class is an advanced introduction to the field of Historical, Philosophical and Social Studies of Science, also known as "Science Studies." It includes approaches primarily from anthropology and history, but issues that are common to multiple disciplines. A key focus of the class is on method. How does one investigate complex technical and scientific objects using the tools and vocabulary of the interpretive human sciences? Readings in the course cover issues from the 17th century to the present. Some questions we will ask include: can historical and anthropological methods be combined, and how? How does one design a research project to illuminate the workings of science and technology? Which archives, sites, people, institutions, technologies, or rationalities constitute good objects for study? How does this work contribute to, critique, rethink or participate in the development of science and technology today? What does the book/monograph offer that other modes of presentation cannot?

Prerequisites
This course assumes at least a basic familiarity with historical or social science research, and good reading skills. We will read at least one book per week. We will begin with the controversies which the field has engendered over the last 25 years but will not dwell on them at length. Previous experience with discussion-intensive seminars, weekly reading responses and summaries will be very helpful.

Requirements
1. Reading and participation: 20%
2. Weekly reading-responses (1500-2500 words): 40%
3. A review essay in which three works from the class, books and/or articles, are explored with respect to questions of method, including a review of relevant background literature, or annotated bibliography; due at the end of quarter: 40%

Course Website

Required Texts


**Detailed Schedule**

**5 January. Introduction—Readings To Be Completed Before The First Class Meeting**


Each student will present on one chapter during class. Pick from: paradigm and normal science (2), mertonian norms (3), strong programme (5), social construction (6), actor-network theory (7), tacit knowledge and experimenter's regress (8), controversies (10), ethnomethodology, formal rules (12), situated knowledges (13), expertise (16)

**12 January. Histories of the Present?**


**19 January. Ethnographic Histories?**


Comaroff, Ethnography and the Historical Imagination.
26 January. Mathematics, Practice, Virtue and Technology in the 17th Century (Kelty Absent)


2 February. Technoscientific Communities, for instance Flies and Geeks


9 February. Uncertainty. For instance, about the Weather


16 February. Science as a Vocation in the 19th and 20th centuries


23 February. Unlikely Connections. Such as Missiles and Babies


2 March. STS and the Last Crisis. Finance as object.


9 March. Post-Disciplinary, Post-Colonial, Post-STS?


Selected Background and Additional Readings

Barry Barnes, David Bloor, and John Henry, Scientific Knowledge, 1996.
Mario Biagioli, Galileo, Courtier: The Practice of Science in the Culture of Absolutism (University Of Chicago Press, 1994).
Wiebe E. Bijker, Of Bicycles, Bakelites, and Bulbs: Toward a Theory of Sociotechnical Change (The MIT Press, 1997).

David Bloor, Knowledge and Social Imagery, 1991.

Harry Collins and Robert Evans, Rethinking Expertise, 1st ed. (University Of Chicago Press, 2007).

Ruth Schwartz Cowan, More Work For Mother: The Ironies Of Household Technology From The Open Hearth To The Microwave (Basic Books, 1985).


Ian Hacking, Representing and Intervening: Introductory Topics in the Philosophy of Natural Science (Cambridge University Press, 1983).
Ian Hacking, Historical Ontology (Harvard University Press, 2004).
Alan Irwin and Brian Wynne, Misunderstanding Science, 1996.
Emily Martin, Flexible Bodies, 1st ed. (Beacon Press, 1995).
Andrew Pickering, Constructing Quarks: A Sociological History of Particle Physics (University Of Chicago Press, 1999).
Paul Rabinow, French DNA: Trouble in Purgatory (University Of Chicago Press, 2002).

Charis Thompson, Making Parents: The Ontological Choreography of Reproductive Technologies, 1st ed. (The MIT Press, 2007).