Seminar in Cultural Anthropology:
Anthropology of Science, Beyond the Laboratory

Anthropology 256
University of California, Riverside
Winter 2010
Watkins 1347
Wednesday 4:10 PM-7 PM
http://faculty.ucr.edu/~derickf/10winsci/

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“There is a price to pay...for the renewed and principled use of the expression [the anthropology of science]: most of what we believe anthropology to be has to be abandoned and so has most of what we believe science to be.”

— Bruno Latour

Course Overview
In recent decades, sociocultural anthropologists have taken the ethnographic methods they developed for studying exotic peoples in exotic locales and applied them to scientific communities and practice. Anthropology has become one of many disciplines contributing to and drawing from the interdisciplinary field of science and technology studies. One theme of the course is the ongoing and controversial legacy of French philosopher and anthropologist Bruno Latour. Latour’s Laboratory Life (with Steve Woolgar) represented one of the first ethnographic studies of scientific practice, but Latour’s more recent work has expanded into political philosophy, and a bold attempt to rethink fundamentally the categories and methods of social science. The second theme is the movement of approaches derived from ethnographic studies of science “beyond the laboratory” to more “field-based” scientific pursuits (e.g. oceanography and conservation biology) and topics outside the conventional purview of science studies (e.g. space and place, international development). Underlying this theme is an inquiry into the implications of social studies of science for the practices of anthropological fieldwork and ethnographic writing: what form should anthropology take if, according to Latour, “no social explanation is necessary”?

Requirements
This class will be run as a graduate-level reading-intensive research seminar. Preparation for class discussion by careful reading of the week’s readings is required. This seminar relies upon the participants’ capacity to participate in a fruitful discussion in the seminar meeting. This means that each student should be familiar with the central arguments of the required readings, and be able to develop thoughts on the connections/disconnections in the larger body of readings for the week and across the term.

Additionally, each student will be expected to:

1) Prepare a one page critical commentary on the week’s readings to be circulated electronically via iLearn by 10 AM on the Tuesday before each class. In iLearn, click on Weekly Commentaries > Week # > Create Blog Entry. These are meant to jump-start discussion, to
flag critical issues and concerns, and to highlight any crosscutting themes or connections that you may want to bring in. They should be intelligible but need not be formal or incredibly polished.

2) **Co-lead/co-chair at least one class discussion.** (The exact number will depend on the number of students in the class). This involves three things: 1) a short (<15 minute) presentation of the key arguments made in the readings pertaining to that week; 2) using other materials to locate them in one or more debates or to show something of their intellectual genealogy; 3) leading the class discussion on the readings. Again, the presentation should be no more than fifteen minutes.

3) **Write.** There are two options for the writing component of this course. I have no preference for either choice; I expect you to choose the option that is more useful to you at the current stage of your graduate career.

   - **Option one:** Two papers of 6 to 8 pages, in which you develop your thoughts and/or reading commentaries into well-crafted and concise analyses that relate readings to each other within a given week or across sessions. You may submit the papers at any point during the term; however, you should submit the first one by week seven, and the second by the final class.

   - **Option two:** submit a paper or research proposal of 15-25 pages, due by Wednesday March 17. Papers or proposals should use readings from the class (probably in theoretical, contextual or comparative sections) to engage with your dissertation topic or a closely-related area.

4) Finally, all students should visit the exhibition Intelligent Design: Interspecies Art at the UCR Sweeney Art Gallery (downtown Riverside) sometime before the class of January 27.

**Auditors**
Auditors are welcome in this class on two conditions: they need to come to most (preferably all) of the classes and they should be prepared to do all the readings and fulfill qualification (i) above, i.e. prepare a weekly commentary. Auditors can add a great deal to the discussion in the class but only if they prepare in the same way as students taking the class for credit.

**Grading**
Participation (including commentaries and discussion leading): 35%
Discussion Leading: 15%
Paper(s) : 50%
**Required Texts**

Cori Hayden, *When Nature Goes Public: the Making and Unmaking of Bioprospecting in Mexico*

Stefan Helmreich, *Alien Ocean: Anthropological Voyages in Microbial Seas*

David Mosse, *Cultivating Development: An Ethnography of Aid Policy and Practice*

Robert Oppenheim, *Kyongju Things: Assembling Place*

Bruno Latour, *Science in Action: How to Follow Scientists and Engineers through Society*

Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory*

Bruno Latour, *Aramis, or the Love of Technology*

Lyn Schumaker, *Africanizing Anthropology: Fieldwork, Networks and the Making of Cultural Knowledge in Central Africa*

Sergio Sismondo, *An Introduction to Science and Technology Studies*

(Note that *Aramis* was not on the precirculated list of texts, and has only just been ordered at the UCR bookstore).

Besides these books, there will be several articles and/or book chapters assigned most weeks, distributed via iLearn.

**Class Schedule**

**Week One - January 6**

**Required Readings**

Latour, B.


**Week Two - January 13 - STS: the Early Years, and Some Anthropological Precedents**

**Required Readings**

Sismondo chapters 1-3, 5, 6, 10, 15

Whorf, B.


Nadasdy, P.


Latour, B. and Woolgar, S.


**Optional Readings**

Early STS

Merton, R. K.

Bloor, D.

Kuhn, T. S.

S. Turner

Shapin, S., Schaffer, S., and others

See also the literature reviews in Latour and Woolgar 1986 above and Bourdieu 2004 below.

**Anthropological Precedents**

Bloor, D.

Evans-Pritchard, E. E.

Horton, R.

Horton, R.

Malinowski, B.

**Some Philosophical Underpinnings**

Popper, K. R.

Wittgenstein, L.

Berger, P. and Luckmann, T.

Hacking, I.
1999 *The social construction of what?*. Cambridge, MA: Harvard Univ Pr.

**A Critical Reading of the History of STS**

Bourdieu, P.
Week Three - January 20 - Actor-Network Theory, and Some Critiques

Required Readings
Callon, M.

Latour, Science in Action — remainder
Singleton, V. and Michael, M.

Sismondo, ch. 8 and 7
Haraway, D. J. and Randolph, L. M.

Optional Readings

A useful recent critical review can be found in
Braun, B.

Gender and Science
Lederman, M. and Bartsch, I.

Carolyln Merchant

Schiebinger, L.
1991 The mind has no sex?: women in the origins of modern science. Cambridge: Harvard Univ Pr.

Harding, S. G.

Haraway, D. J.

Haraway, D. J.

In addition, work on gender and reproductive technologies was (and remains) particular prominent in early anthropological work on science. See the review in Franklin, S. 1995. Science as Culture, Cultures of Science. Annual Review of Anthropology 24(1):163-184.
Week Four - January 27 - Moving outside the Laboratory

**Required Readings**

Henke, C. R.

Jacobs, N. J.

Sismondo chs. 14, 17

Cori Hayden, *When Nature Goes Public: the Making and Unmaking of Bioprospecting in Mexico*

**Optional Readings**

Latour, B.

Scott, J.

Doing, P.

Week Five - February 3 - Life Itself, and Professional Lives

**Required Readings**

Sismondo ch. 4, 13

Van Reybrouck, D. and Jacobs, D.

Stefan Helmreich, *Alien Ocean: Anthropological Voyages in Microbial Seas*

**Optional Readings**

Latour, B.

Foucault, M.

Foucault, M., Senellart, M., and Davidson, A. I.

Foucault, M.

Agamben, G. and Raiola, M.
Week Six - February 10 - The Love of Technology

Required Readings
Sismondo ch. 9
De Laet, M. and Mol, A.
Latour, Aramis

Optional Readings
Lemonnier P.
Horst H. and Miller D., 2006
Needham J.
Pfaeflerberger B.
White L.

Week Seven - February 17 - Publics, Places and Things

Required Readings
Sismondo ch. 16
Caneda, M.
Robert Oppenheim, *Kyongju Things: Assembling Place*

Optional Readings
Braun, B.
Harvey, D.
Lefebvre, H.
Lefebvre, H., Kofman, E., and Lebas, E.
Hart, G.
Cronon, W.
Low, S. and Lawrence-Zunigais, D., eds.

**Week Eight - February 24 - Anthropology’s Actor-Networks**

**Required Readings**
Schumaker, *Africanizing Anthropology*
Plath, D.

**Optional Readings**
Gordon, R.
Hammond-Tooke, D.
Bank, A.
Sanjek, R.
Vincent, J.
Patterson, T. C.
Stocking, G. W. and Stocking, G. W.
Week Nine - March 3 - When Objects Object

Required Readings
Sismondo ch. 12
David Mosse, Cultivating Development: An Ethnography of Aid Policy and Practice
Pritchett, J. A.
Mosse, D.

Optional Readings
Latour, B.

Anthropology of Development
Cooper, F. and Packard, R. M.
Hoben, A.
Ferguson, J.
Grillo, R. D.
Long, N.
Long, N. and Long, A.
Peters, P. E., ed.
Rist, G.
Week Ten - March 10 - Is the Social in Need of Reassembly?

Required Readings:
Latour, Reassembling the Social

Schinkel, W.

OR
Oppenheim, R.

Optional Readings:
The Tarde-Durkheim Debate (http://www.bruno-latour.fr/expositions/TARDE-DURKHEIM-GB.pdf)