

Anthropology 204A: Proseminar in Medicine, Science & Technology Studies (MSTS)

Fall 2017

**Wednesday 12:00-2:50pm
SBSG 3200**

Professor Mei Zhan

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Office location: SBSG 3316

Office hours: Thursday 2:30-4:30 or by appointment

Course Description

The fields of critical medical anthropology and science and technology studies have been shaped in recent decades by a series of questions regarding scientific inquiry, health and illness, and technological development. This course is predicated on the realization that the social phenomena studied by “medical anthropology” and “STS” are inextricably linked, and understanding these convergences requires moving among disparate fields of inquiry. The objective of this course is to introduce students to the literatures and practices that constitute MSTS as a distinctive and open-ended field of inquiry. We will approach MSTS as 1) a body of literature, 2) an emergent (or merging) discipline with complex genealogies, 3) a growing emphasis within sociocultural anthropology, 4) a way of framing inquiries and selecting methods and data, and 5) a mode of social engagement. Topics examined include the foundations of scientific knowledge; the relation of modernity, science, and society; spaces and practices through which authoritative knowledge and objectivity is made; race, gender, and postcolonial encounters; nature and culture; and constructivist, ANT, ontological and materialist approaches to the study of medicine, science, and technology. This course is open to all graduate students, and it is required of those seeking the M.A. in MSTS or the Graduate Concentration in Anthropologies of Medicine, Science, and Technology.

Course Requirements

Your grade will be based on the following components:

1) Attendance (10%)

Attendance is mandatory. Please arrange your schedule (Thanksgiving, Christmas, etc.) to make sure that you attend all 10 sessions of this class.

2) Participation & Discussion Leadership (40%)

This class depends on student presence and engagement. Participation includes: being present in class and having completed the required readings; being able to discuss the readings and to constructively critique them; making comments that are pertinent to the course content; being able to contextualize the readings in relation

to the broader themes of the course; and listening with integrity to what other students have to say. In pairs or small groups, you will facilitate **two** class discussions. You should work with your co-presenters to prepare a handout (approximately 2 pages, single spaced) for distribution at the beginning of class. Your facilitation should focus on encouraging vigorous and thoughtful discussion about the ideas raised in and related to the assigned readings.

3) Final Paper (50%)

Literature review: Construct an analytical review of the literature on a topic of your choice related to MSTs. The review should substantively engage at least 3 readings (books and/or articles) in a substantive manner. Students who are preparing research proposals or orals documents may direct their review toward relevant research projects, while meeting the criteria above. Reviews should be 15 pages, double spaced, standard margins, and a 12pt font.

Course Materials

1. Books

<http://uci.bncollege.com/webapp/wcs/stores/servlet/BNCBTBListView>

2. Articles and chapters

Additional readings will be available either on class website or directly via the links on the syllabus.

Course resources

Books

Biagioli, Mario, ed. 1999. *The Science Studies Reader*. NY: Routledge.

Hackett et al., eds. 2008. *Handbook of Science & Technology Studies*, 3rd ed. Cambridge: MIT Press.

Hess, David. 1997. *Science Studies: An Advanced Introduction*. NY: NYU Press.

Sismondo, Sergio. 2009. *An Introduction to Science & Technology Studies*. Wiley-Blackwell.

Journals & Blogs

Culture, Medicine & Psychiatry

Catalyst: Feminism, Theory, Technoscience

Engaging Science, Technology & Society

Isis

Medical Anthropology

Medical Anthropology Quarterly

Medicine Anthropology Theory

East Asian Science, Technology and Society

Science, Technology & Human Values

Social Science & Medicine

Social Studies of Science

Somatosphere (somatosphere.net)

Professional Organizations

Society for Social Studies of Science (4S) (4sonline.org)

Society for Med Anthro, Science, Technology, & Medicine interest group
(medanthro.net/interestgroups/stm/)

Course Schedule

Any changes to the syllabus will be announced in class.

Week 1, October 4 Introductions, Genealogies, and Orientations

Franklin, Sarah. 1995. "Science as Culture, Cultures of Science." Annual Review of Anthropology 24:163-184.

Martin, Emily. 1998. Anthropology and the Cultural Study of Science: from citadels to string figures. Science, Technology & Human Values, Vol. 23, No. 1, 24-44.

Fujimura, Joan. 1998. "Authorizing Knowledge in Science and Anthropology." American Anthropologist 100(2):347-360.

Fischer, Michael M.J. 2007. "Four genealogies for a recombinant anthropology of science and technology." Cultural Anthropology 22(4): 539-615.

Galison, Peter. 2004. "Specific Theory." Critical Inquiry 30 (2004): 379-383.

Recommended

Nader, Laura, ed. 1996. Naked Science: anthropological inquiry into boundaries, power and knowledge.

Week 2, October 11 Paradigm Shifts: Science as Culture and Practice

Skim Weber, Max. 1946. "Science as a Vocation." In Max Weber: Essays in Sociology. Gerth and Mills, trans. Oxford: Oxford University Press. Pgs. 129-156.

Merton, Robert. 1973 (1942). "The Normative Structure of Science." The Sociology of Science. Norman W. Storer, ed. Chicago: University of Chicago Press. Pgs. 267-278.

Kuhn, Thomas. 1996 (1962). The Structure of Scientific Revolutions. Chicago: University of Chicago Press. *Selections*.

Andrew Pickering. 1993. "The Mangle of Practice: Agency and Emergence in the Sociology of Science". American Journal of Sociology, Vol. 99, No. 3 (Nov., 1993), pp. 559-589

Recommended readings:

Fleck, Ludwik. 1979 (1935). *Genesis and Development of a Scientific Fact*. F. Bradley and T. Trenn, trans. Chicago: University of Chicago Press. Prologue and pgs. 1-51.

Week 3, October 18 Modernity

Re-read: Weber, Max. 1946. "Science as a Vocation." In *Max Weber: Essays in Sociology*. Gerth and Mills, trans. Oxford: Oxford University Press. Pgs. 129-156.

Bruno Latour. 1993. *We Have Never Been Modern*. Harvard U Press.

Recommended:

Thomas Hobbes. 1651. *The Leviathan*. *Selections*.

Steven Shapin and Simon Schaffer. 1989. *The Leviathan and the Air Pump*. Princeton University Press.

Week 4, October 25 Feminist Projects

Hilary Rose. 1983. "Hand, Brain, and Heart: A Feminist Epistemology for the Natural Sciences". *Signs* Vol. 9, No. 1, *Women and Religion* (Autumn, 1983), pp. 73-90.

Nancy Hartsock. 1983. "The Feminist Standpoint: Developing the Ground for a Specifically Feminist Historical Materialism". In *Discovering Reality: Feminist Perspectives on Epistemology, Metaphysics, Methodology, and Philosophy of Science*. edited by Sandra Harding & Merrill B. Hintikka, 283-310

Sandra Harding. 1986. Chapter 6 in *Sandra Harding, The Science Question in Feminism*. Ithaca, NY: Cornell University Press, 1986

Donna Haraway. 1991. *Simians, Cyborgs and Women* (London: Routledge, 1991), Ch. 9 ("Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective"), pp. 183-201.

Recommended:

Helen E. Longino, "Can there be a Feminist Science." In Tuana (ed.), *Feminism and Science*, Indiana University Press, 1990.

Week 5, November 1 No Nature, No Culture

Michelle Z. Rosaldo. 1974. "Woman, culture and society: A theoretical overview," in *Woman, Culture and Society*, eds. M. Rosaldo and L. Lamphere (Stanford: Stanford Univ. Press, 1974), pp. 17-42.

Evelyn Fox Keller. 1990. "The gender/science system: Is sex to gender as nature is to science?" In Tuana (ed.), *Feminism and Science*, Indiana University Press.

Londa Schiebinger. 1993. *Nature's Body: gender in the making of science*. Chapters 2 and 5.

Anne Fausto-Sterling. 2000. Chapter 4, *Sexing the Body: Gender Politics and the Construction of Sexuality*. New York: Basic Books, 2000.

Marilyn Strathern. 1980. "No Nature, No Culture: the Hagen case". *Nature, culture and Gender*. Marilyn Strathern and Carol MacCormack eds. Cambridge U Press.

Recommended

Thomas Laqueur. 1992. *Making Sex: body and gender from the Greeks to Freud*.

Rayna Rapp. 2000. *Testing Women, Testing the Fetus: The Social Impact of Amniocentesis in America*

Week 6, November 8 Technology and Objectivity

Pinch, Trevor. 1996. "The Social Construction of Technology: A Review." In *Technological Change: Methods and Themes in the History of Technology*. Robert Fox, ed. Pgs. 17-35.

Jasanoff, Sheila. 2015. "Future Imperfect: Science, Tech, and the Imaginations of Modernity." In *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*. Sheila Jasanoff and San-Hyun Kim, eds. Chicago: Univ of Chicago Press.

Galison, Peter, and Lorraine Daston. 2007. "Introduction". *Objectivity*. New York: Zone Books.

Jonathan Crary. 1990. *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*. Zone Books. *Selections*.

Recommended

Marx, Karl. "The Machine versus the Worker." In *The Social Shaping of Technology*. 2nd edition. Donald MacKenzie and Judy Wajcman, eds. Pgs. 156-157.

Week 7, November 15 Constructing and Constructs

Ian Hacking. 1999. *The Social Construction of What?* (Cambridge, MA: Harvard University Press, 1999). *Selections*.

Michelle Murphy. 2017. *The Economization of Life*. Duke University Press. UCI electronic resource.

Week 8, November 22 Assemblages (AAA meetings. reschedule)

Callon, Michel. 1987. "Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St. Brieuc Bay." In *Power, Action and Belief: A New Sociology of Knowledge?* John Law, ed. London: Routledge. Pgs. 196-229.

Tim Ingold. 2008. When ANT meets SPIDER: Social theory for arthropods. In: Knappett C., Malafouris L. (eds) *Material Agency*. Springer, Boston, MA

Stefan Helmreich. 2009. *Alien Ocean: Anthropological Voyages in Microbial Seas*. University of California Press.

Week 9, November 29 Materiality

Barad, Karen. 2003. Posthumanist performativity: toward an understanding of how matter comes to matter. *Signs* 28(3):801–831.

Annemarie Mol. 2003. *The Body Multiple: Ontology in Medical Practice*

Recommended:

Mol, Annemarie. 1999. "Ontological politics: a word and some questions. In *Actor network theory and after*". John Law and John Hassard, eds. Pp. 74–89. Boston: Blackwell.

Latour, Bruno. 2009. "Perspectivism: 'Type' or 'bomb'?" *Anthropology Today* 25:2.

Hylton White "Materiality, Form and Context: Marx contra Latour" *Victorian Studies* 55(4) 2013 pp. 667-682.

Woolgar, Steve, and Javier Lezaun. 2013. The wrong bin bag: a turn to ontology in science and technology studies? *Social Studies of Science* 43(3):321–340.

Jane Bennett. 2010. *Vibrant Matter: A Political Ecology of Things*

Karen Barad. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Duke University Press.

Week 10, December 6 Provincializing Science, Technology and Medicine

Troy Duster. 2003. "Buried Alive: The Concept of Race in Science," in Alan H. Goodman, Deborah Heath, and M. Susan Lindee, eds., *Genetic Nature / Culture: Anthropology and Science Beyond the Two-Culture Divide*, Berkeley and London: University of California Press, 2003, 258-277. UCI electronic resource.

John Hartigan. 2013. "Mexican Genomics and the Root of Racial Thinking", *Cultural Anthropology*, 28 (3), 372-395, August, 2013

Harding, Sandra. 1994. "Is Science Multicultural?" *Configurations*. Volume 2, Number 2.

John Law and Wen-yuan Lin. 2014. A Correlative STS: Lessons from a Chinese medical practice. *Social Studies of Science*. Volume: 44 issue: 6, page(s): 801-824

To be confirmed: essays from AAA Elements panel

Recommended

Latour, Bruno. 1987. *Science in Action*. Chapters 4 and 5 (PDF will be provided).

Final paper due at 5 pm on Wednesday, Dec. 13