HSCI 5533: Imagining a Global History of Science: Decentering Europe.
Fall 2012

Time and place: Tuesdays, 1:30-4:30pm, Harlow Room, 5th Floor Bizzell Library
Instructor: Suzanne Moon, Ph.D. (suzannemoon@ou.edu)
Office hours: Tuesday, 12:30-1:30 Thursday, 1-5pm.

Course Description
In this course we will explore how we can and why we should broaden our narratives in the
history of science and technology to become more global in perspective. We will examine the
ways that some scholars have moved away from the Eurocentric roots that have driven research
directions in these fields, and consider the historiographic growth in these areas as well as the
theoretical and methodological challenges that accompany this work.

Course Goals
1. Improve empirical familiarity with subjects in the history of science and technology that fall
   outside the typical coverage of OU’s surveys. This semester we will highlight the history of
   science and technology in China, and histories of science and technology in the colonial and
   post-colonial worlds.
2. Explore what is at stake in re-imagining a global history of science.
3. Elucidate the theoretical and methodological challenges of re-integrating or reframing the
   history of science and/or technology in more global ways.

Course Materials
The required readings we will use for the course are available in a few different places. For
books, they will be on reserve in the History of Science collections or in Bizzell, or available via
internet access from the library’s website. Articles will generally be available on the course D2L
site under the content tab or on library databases. I have not reserved copies of recommended
(optional) readings, but I believe all/most are available in Bizzell library or the collections.
Please ask me if you are having trouble locating anything.

Class meetings
All meetings will be in seminar form. Students should come to class prepared to discuss the
readings. I will ask each student to “lead” class twice during the semester on days of your choice.
This involves primarily coming up with a set of questions and observations pertinent to the
assigned readings. On the days that you will lead class, I highly recommend you also take a look
at something from the recommended readings. There is not usually a need to read a book
comprehensively (which can add a bit too much to your reading load) but to skim it carefully to
get some additional perspective on the subject at hand.

Writing Assignments
I strongly encourage students to exit their geographical/cultural comfort zones (whatever those
are!) and think comparatively, analogically, and creatively about how these different stories in
the history of science can fit together. To this end, students will do brief, targeted write-ups each week (2-3 pp). I'll provide questions - more or less detailed, depending on the topic - on which you should reflect. All writing assignments should be completed before the start of class that week and provided ELECTRONICALLY in the appropriate dropbox on D2L.

The major assignment for the course, due during finals week, will be to produce one of the following three items:
- An annotated syllabus for a world history of science (or technology) course, a regional history of science course for a region outside the usual European/American core.
- A historiographically-oriented research paper on some topic relevant to the course
- A detailed plan of and intellectual foundation for a virtual library or museum exhibit intended to give viewers an introduction to the global history of science

Grading:

Weekly writeups (all): 30%
Final project: 70%

I'll provide more detailed assignment statements later. In each case, students should plan to go well beyond the materials covered in this course and do meaningful research to produce a good result. It will be a good idea to start working on this early in the semester, and let it develop and change as you encounter new ideas. I am also open to other kinds of ideas, so please let me know if you have something you’d like to discuss.

Logistical Details

Students should plan to attend class regularly and let me know in advance if you anticipate any problems attending class.

For all writing assignments, I prefer ELECTRONIC submission. I will set up dropboxes on D2L. If you haven’t yet used D2L it is quite straightforward to learn and will simplify my life. IF YOU EMAIL PAPERS TO ME THEY WILL GET LOST. IF YOU HAND ME PAPER YOU MAY NEVER SEE IT AGAIN. Guaranteed. So please use the dropbox.

Plagiarism
OU has a strict policy forbidding plagiarism. Plagiarism is copying someone else's work and passing it off as your own. Do not do this. If you ever have a question as to what constitutes plagiarism, please ask me.

Class Meetings

8/21 Organizational meeting

8/28 The History of Science: Challenging the Boundaries of the History of Science

“Engaging Asia” Forum section (see articles by: Moon, Nappi, Bray, Fan, Mukharji, Clancey, Hong), East Asian Science, Technology, and Society 6, no. 2, 2012; pp 223-274.

Chakrabarty, Provincializing Europe : Postcolonial Thought and Historical Difference. ch. 1, pp. 3-23. (Available on Bizzell internet access. Please consult library db.)

Choose a history of science, technology, or medicine textbook. To what extent does it grapple with science outside the European experience? How does it do so?

9/4 The History of Science and Technology in China: Questioning “Civilization”
Needham and Wang, Science and Civilisation in China. vol VI, part 6, pp. 1-66. Please read pp. 1-30, and then skim thereafter. Make sure that you focus on one or two sections of the part written by Needham, pp. 38-66.

Nappi, The Monkey and the Inkpot Natural History and Its Transformations in Early Modern China.

Recommended:
Low, Beyond Joseph Needham
Bray, Technology and Gender : Fabrics of Power in Late Imperial China.
Pregadio, Great Clarity : Daoism and Alchemy in Early Medieval China.

9/11 Culture and Technology in Chinese History
Schäfer, *Cultures of Knowledge: Technology in Chinese History.*

Recommended:
Furth, "Thinking with Cases: Specialist Knowledge in Chinese Cultural History."

**9/18 Science in Translation**

Montgomery, *Science in Translation.* Selected chapters to be announced

Salguero, *Buddhist Medicine in Medieval China: Disease, Healing, and the Body in Crosscultural Translation.* Selected chapters to be announced.

Recommended:
Hanson, *Speaking of Epidemics in Chinese Medicine: Disease and the Geographic Imagination in Late Imperial China.*

**9/25 Science and Technology in World Histories?**

Wong, *China Transformed: Historical Change and the Limits of European Experience.*

(selections, targeted skimming)


David Pankenier, "The Planetary Portent of 1524 in China and Europe", *Journal of World History* 20 no. 3, 339-375

Recommended
Any of the books or articles mentioned in the Bray article in EASTS on the subject of China in world history (8/28/12)

AHR Forum “The Search for European Differences and Domination in the Early Modern World: A View from Asia”

**10/2 Global Interactions**

[Please note: we may need to change the meeting time for this class due to my travel schedule.]
Schaffer, *The Brokered World: Go-between and Global Intelligence, 1770-1820.* Please read introduction and articles by Raj, Liss, Safier, and Turnbull

Fan, *British Naturalists in Qing China: Science, Empire, and Cultural Encounter.*

Recommended:

Raj, *Relocating Modern Science.*

**10/9 Chinese Encounters with European Science**

Elman, *On Their Own Terms: Science in China, 1550-1900.*

Recommended:

Wang, "Discovering Steam Power in China, 1840s-1860s."

**10/16 The Colonial Experience**


Revisit Dipesh Chakrabarty reading from Week 1.

Recommended:

Adas, *Machines As the Measure of Men.*


Mrázek, *Engineers of Happy Land: Technology and Nationalism in a Colony.*


**10/23 Colonial Africa**


Recommended:


10/30 Out of town
11/6 Postcolonial histories
Harding, The Postcolonial Science and Technology Studies Reader. Please read the introduction.
Hecht, Being Nuclear: Africans and the Global Uranium Trade.

Recommended:
Anderson, Colonial Pathologies: American Tropical Medicine, Race, and Hygiene in the Philippines.

11/13 The Question of Indigenous Knowledge

Recommended:
Philip, Civilizing Natures Race, Resources, and Modernity in Colonial South India.
González, Zapotec Science: Farming and Food in the Northern Sierra of Oaxaca.
Apffel-Marglin, Smallpox in Two Systems of Knowledge.

11/20 Race, Power, and Technology

11/27 Popular Cultures
'Predictive Text' during the Height of Maoism", forthcoming in *Technology and Culture* (October 2012).

12/4 Presentation of final papers for class discussion
Bibliography


