HOS 720 Historiography and Methods

Let us begin by dispelling what may be a misapprehension: 720 is not a "survey" of the historiography of the fields of science, technology, and medicine in any usual sense. To seek to offer an adequate overview of these sub-disciplines, disparate as they are, over some 2500 years or more of history, all in 14 weeks of readings, would be a fool's mission. Even were I capable of such omniscience, I have opted for a more modest survey that emphasizes five principal themes:

- 1) The Scientific Revolution and the Nature of Modernity
- 2) The History of the Body
- 3) Public Health
- 4) Representations of the World
- 5) Globalization and Commerce

These themes, I believe, are all currently receiving a great deal of attention in the literature, and all have produced some outstanding and varied work. As I hope you will see, these themes intersect to a great extent in interesting ways. In glancing through the syllabus, however, you will readily determine that I have not given equal treatment to all. There are two reasons for this. First, by inclination and previous experience I am an early modern historian, and so the readings probably somewhat over-represent that period. Second, in the time I had to put together this syllabus, I have not been able to find enough readings to satisfy me in all areas equally. There is plenty of stuff out there, let there be no doubt about that. But one has to keep several things in mind when choosing readings, and despite my best efforts, and despite some very generous advice from my colleagues, I have not succeeded in covering all of the themes equally well. There's always next year!

The goal of these readings is to present you with a varied mixture of kinds of writings from social history, intellectual history, the history of concepts (not the same thing!), and cultural studies. There is even a selection from a biography. Biographies constitute a genre that is often pooh-poohed by academic historians of high pretension, but is in fact the form of history most preferred by the public. As I hope you will see, it is also a uniquely interesting ways to pose questions about how history is made.

For your part, the task is to read each week's readings carefully, reflect on them, <u>and come to class prepared to criticize them with vigor and judiciousness</u>. In my opinion, good history begins by knowing how to criticize what one reads. What kinds of evidence has the author of a piece brought to bear on the topic? What kinds of conclusions have been drawn from it? Are those conclusions reasonable in light of the evidence? And perhaps most importantly, how does this work suggest questions and approaches for future research? One of my most cherished goals for 720 is to get you to see that everything you read, whether in a subject that you are particularly interested in or not, is a potential source of inspiration for questions and analytical approaches that can be put to work in your own research. If I accomplish nothing else, I would like to accomplish that.

Requirements

The requirements are simple: do the reading carefully and comprehensively, and attend class every week prepared to discuss the readings. As for formal writing, there are two kinds. Every student will produce two 2-3 page digest/summary/critique of a week's reading, which will be a thematic point of departure for the discussion. It is due on Sunday night at 8:00 p.m. (I will write said digest next week, to

model for you how I would like you to do it.) Each student will also write a 15-page essay review of some body of literature. More details on this later.

The readings that follow have four different designations after them:

All means that you should procure the book yourself and read it – all of it.

Pdf means the reading will be posted on the course web site

E-journal means the reading is available through the library & you can download it for yourself **Hard copy** means that I will round up the library's 2 copies of the book and also make my own copy available for sharing. There is only one of these.

<u>September 12 – Founding Mythologies for the Modern History of Science</u>

Reading: Thomas S. Kuhn, The Structure of Scientific Revolutions (any edition!), all

<u>September 19 – Deliberations About "Antiquity" and "Modernity"</u>

Reading: G. E. R. Lloyd, *The Ambitions of Curiosity: Understanding the World in Ancient Greece and China* (Cambridge: Cambridge U.P., 2002), **all**

H. Floris Cohen, *The Scientific Revolution: A Historiographical Inquiry* (Chicago: Univ. of Chicago Press, 1994), chapter 6. **pdf**

Dipesh Chakrabarty, "The Muddle of Modernity." *American Historical Review* 2011, 116: 663-675. **e-journal**

September 26 - Mapping and Governing the Early Modern World

Reading: Chandra Mukerji, *Impossible Engineering: Technology and Territoriality on the Canal du Midi* (Princeton, NJ: Princeton U.P., 2009), chaps. 1-4. **pdf**

C.M. Santos, "Administrative Knowledge in a Colonial Context: Angola in the Eighteenth Century." *British Journal for the History of Science* 2010, *43*:539-556 **e-journal**

Maria M. Portuondo, "Cosmography at the *Casa*, *Consejo*, and *Corte* During the Century of Discovery." In Daniela Bleichmar et al., (eds), *Science in the Spanish and Portuguese Empires*, 1500-1800 (Stanford, CA: Stanford University Press, 2009), pp. 57-78. pdf

Christian Licoppe, "The Project for a Map of Languedoc in Eighteenth-Century France at the Contested Intersection Between Astronomy and Geography: The Problem of Coordination Between Philosophers, Instruments, and Observations as a Keystone of Modernity." In Marie-Noëlle Bourguet, Christian Licoppe, and H. Otto Sibum (eds), Instruments, Travel and Science: Itineraries of Precision from the Seventeenth to the Twentieth Century (London and New York: Routledge, 2002), pp. 51-74. pdf

October 3 – Colonial & Early Modern Bodies

Reading: Joyce Chaplin, Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500-1676 (Cambridge, MA: Harvard U.P., 2001), all

Jennifer L. Morgan, "'Some Could Suckle Over Their Shoulder': Male Travelers, Female Bodies, and the Gendering of Racial Ideology, 1500-1700." *The William and Mary Quarterly*, 3rd Series (1997), 54:167-192. **e-journal**

Kathleen M. Brown, "Murderous Uncleanness." In Janet Lindman and Michele Tarter (eds), *A Centre of Wonders: The Body in Early America* (Ithaca, NY: Cornell U.P., 2001), pp. 77-94. pdf

October 10 – Aspects of the Modern Body: Sexualized and Disciplined

Reading: Thomas Laqueur, "Orgasm, Generation, and the Politics of Reproductive Biology."

Representations (1986) 14:1-41. e-journal

Susan Bordo and Monica Udvardy, "The Body." New Dictionary of the History of Ideas (2005). Cited at Encyclopedia.com (excellent background reading) http://www.encyclopedia.com/doc/1G2-3424300086.html

Michel Foucault, A History of Sexuality, vol. 1 (any edition!) all

Ann Laura Stoler, Carnal Knowledge and Imperial Power: Race and the Intimate in Colonial Rule (Berkeley and Los Angeles: Univ. of California Press, 2002) chapters 1-3, 6. pdf

October 17 - Scientific Scrutiny of the Body

Reading: Anson Rabinbach, *The Human Motor: Energy, Fatigue, and the Origins of Modernity* (Berkeley and Los Angeles: Univ. of California Press, 1992), all Keith Wailoo and Stephen Pemberton, *The Troubled Dream of Genetic Medicine* (Baltimore: Johns Hopkins U.P., 2006), all

October 24 – The Body Before Modernity

Reading: Caroline Bynum, "Why All the Fuss about the Body? A Medievalist's Perspective." Critical Inquiry 1995, 22:1-33. e-journal

Katherine Park, Secrets of Women: Gender, Generation, and the Origins of Human Dissection (New York: Zone Books, 2006), pp. 13-120. pdf

Luke Demaitre, Leprosy in Premodern Medicine: An Illness of the Whole Body (Baltimore: Johns Hopkins U. P., 2007), chapters 3-5. pdf

October 31 - Public Health

Reading: Natalia Molina, Fit to be Citizens? Public Health and Race in Los Angeles, 1879-1939 (Berkeley and Los Angeles: U. of California Press, 2006), intro, chaps 1 & 2 pdf

Warwick Anderson, "Immunization and Hygiene in the Colonial Philippines." *Journal of the History of Medicine and Allied Sciences* 2006, *62*:1-20. **e-journal**

Steven Palmer, "Migrant Clinics and Hookworm Science: Peripheral Origins of International Health, 1840-1920." Bulletin of the History of Medicine 2009, 83:676-709. e-journal

Peter Vinten-Johansen, Cholera, Chloroform, and the Science of Medicine: A Life of John Snow (Oxford: Oxford U. P., 2003). Glance over chaps 1-6. Read chaps 7 & 8. Hard copy & pdf

November 7 – Frames of Reality

Reading: Susan Leigh Star and James R. Griesemer, "Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39." Social Studies of Science 1989, 19:387-420. e-journal

Peter Galison, *Image and Logic: A Material Culture of Microphysics* (Chicago: U. of Chicago Press, 1997), chaps 1-2. **pdf**

David Rooney and James Nye, "'Greenwich Observatory Time for the Public Benefit': Standard Time and Victorian Networks of Regulation." *British Journal for the History of Science* 2009, 42:5-30. e-journal

Deborah R. Coen, "Imperial Climatologies From Tyrol to Turkestan." In James Rodger Fleming and Vladimir Jankovic (eds), *Klima. Osiris* 2nd Series, vol. 26 (Chicago: U. of Chicago Press, 2011), pp. 45-66. **e-journal**

Matthias Dörries, "The Politics of Atmospheric Sciences: 'Nuclear Winter' and Global Climate Change." In Fleming and Jankovic (eds), Klima, pp. 198-223. e-journal

November 14 - Simulation

Reading: Galison, Image and Logic, chap. 8. pdf

William Thomas, "The Heuristics of War: Scientific Method and the Founders of Operations Research." *British Journal for the History of Science* 2007, *40*:227-250. **e-journal**

William Thomas and Lambert Williams, "The Epistemologies of Non-Forecasting Simulations, Part I: Industrial Dynamics and Management Pedagogy at MIT." Science in Context 2009, 22:245-270. e-journal

Paul N. Edwards, *The Closed World: Computers and the Politics of Discourse in Cold War America* (Cambridge, MA: MIT Press, 1996), preface and chaps. 1-3. pdf

November 21 - Objectivity

Reading: Lorraine Daston and Peter Galison, Objectivity (New York: Zone Books, 2007), all.

November 28 – Globalization and Commerce, "The Early Years"

Reading: Harold Cook, *Matters of Exchange: Commerce, Medicine, and Science in the Dutch Golden Age* (New Haven, CT: Yale U. P., 2007), chaps 1-5. **pdf**

Paula de Vos, "The Science of Spices: Empiricism and Economic Botany in the Early Spanish Empire." *Journal of World History* 2006, *17*:399-427. **e-journal**

Fredrik Albritton Jonsson, "Rival Ecologies of Global Commerce: Adam Smith and the Natural Historians." *American Historical Review* 2010, *115*:1342-1363. **e-journal**

December 5 - Globalization and Commerce in the Modern World

Reading: Gyan Prakash, Another Reason: Science and the Imagination of Modern India (Princeton, NJ: Princeton University Press, 1999), chaps 1-4. pdf

Ilana Löwy, "'Sexual Chemistry' Before the Pill: Science, Industry and Chemical Contraceptives, 1920–1960." *British Journal for the History of Science* 2011, *44*:245-274. **e-journal**

Maurice Cassier and Christiane Sinding, "'Patenting in the Public Interest:' Administration of Insulin Patents by the University of Toronto." *History and Technology* 2008, 24:153-171. e-journal

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