

History 506

TECTONICS: Shaping the History of Science

How to Find Me

Carla Nappi
Dept. of History & Philosophy
Wilson 2-168
nappi@montana.edu
Office hours: Wednesdays 9-11 AM
and by appointment

How to Find the Class

Spring 2009
Wednesdays, 3.10-6 PM
Wilson 1-122

Welcome to the spring 2009 incarnation of History 506! This graduate seminar is designed to serve two primary functions: first and foremost, it is an introduction to the professional field of the history of science via some major recent work culled from various subfields; second, it is an experimental workshop designed to stimulate more adventurous, risky, and creative historical work from all of us.

With that dual purpose in mind, the semester is largely organized into paired units, each devoted to a particular concept and ultimately meant to work together. During the first week of each unit, we'll talk and think in depth about a major theoretical work. That discussion will inform the second week of each unit, when we will use our theoretical discussion as groundwork for reading a major recent work in the history of science.

The basic premise informing the selection of theoretical pieces for the semester is deceptively simple: we are all architects. Over the course of this semester we will be exploring the idea that writing a history entails constructing an architectural structure that exists in time as well as space. Whether or not we realize it, all of us work with the same basic structural elements in writing our histories: sentences, paragraphs, a narrative arc, evidence, etc. The assumption of this seminar is that thinking hard about how we understand and use these basic elements will help us do better, more creative, and more elegantly executed work. We will be taking an innovative approach to understanding and using these basic foundational elements by borrowing theoretical apparatus from a field rarely used by historians of science but potentially transformative for our work: architectural and design theory. Our goal this semester is thus to collectively build a tectonics of the history of science.

The idea here is to interrogate the basic building-blocks that make up historical practice – to unearth, study, and reshape these concepts and constructions – and return to our work as historians (especially of science, medicine, and technology) with new perspectives on our

problems, on how to formulate interesting (to ourselves, to others) questions about them, on how to reawaken the generative sense of wonder that got each of us here in the first place. (If you do not have now, nor ever have had in the past, a sense of wonder: then, Friend, this is likely not the class for you.) Over the course of the semester, you will be developing your own research agendas – thus, it is critical for you to start thinking (from Day One) about how to bring your **own work** into the discussion. Come see me any time, as often as you'd like, to talk about ways to develop your research in directions inspired by our class discussions.

I INTRODUCTIONS

Who I Am

I'm a historian of science and medicine, with a heavy research focus on natural history in early modern China. My first book, *The Monkey and the Inkpot: Natural History and its Transformations in Early Modern China*, will be published with Harvard University Press in Fall/Winter 2009. I've also begun work on two new projects: the first (tentatively titled *Epistemologies of Exchange*) looks at the media of exchange of natural objects among the Chinese empire and its borderlands in the fourteenth through eighteenth centuries; the second (tentatively titled *Pharmacy*) is a more theoretically-informed project on the senses and the notion of a pharmacy in contemporary arts and sciences. I'm also working on a longer-term project (tentatively titled *Ribla*) on Chinese-Islamic scientific and medical exchange in early modernity. Stop in and chat any time if you'd like to talk more about any of the above.

You'll learn quickly that I have a very unorthodox approach to history. I like experiments, risks, and creativity. I appreciate hard work. I like being challenged, and I change my mind often. I don't sleep much. I'm a Gen-Xer, I obsess, and I'm a big fan of Arabic-pop-song/Battlestar-Galactica video mash-ups. I read constantly, and I lend out my books all the time (so feel free to ask if there's something you'd like to borrow).

How to Get in Touch With Me

I am an email person, not a phone person. The best way to contact me remotely is **always, always** via email: nappi@montana.edu. Unless I'm traveling, you can expect a reply within twenty-four hours (though often much sooner than that). You can try my office phone in an emergency (994-6798) but email will be quicker (always, always). My office hours during the Spring 09 semester are Wednesdays 9-11, but feel free to make another appointment or to drop in whenever my door is open. If my door is closed and you knock but don't get an answer, there are two possibilities: 1) I'm not in my office, or 2) I'm in my office working with the sound on my iPod jacked all the way up. Either way, don't be offended if I don't answer. It's not you, it's me.

B. COURSE REQUIREMENTS

Course Requirements

All students are responsible for doing the assigned reading before each session of the seminar.

In addition, you will take turns leading a session of the seminar by presenting an overview of the reading (including discussion of major themes, as well as critiques), and presenting questions for discussion based on book reviews and other relevant sources. You should each lead seminar twice, and if possible choose one week that is based on largely theoretical material and one week based on a recent work of history of science.

In preparation for leading seminar, you will be asked to write a 4-5 page (typed, double-spaced) response essay and provide an additional bibliography of the major supplementary sources you have consulted for that week's reading: major book reviews during weeks when we're reading a book, or other sources when we're reading articles, including reviews of an author's major work. Please also come to seminar armed with basic biographical information on the author or authors of the week: who are they? Where do they currently work? Who did they study under?

Your 4-5 page response essay should:

1. Provide a brief overview of the major themes in the week's book or other reading.
2. Critique some aspect of the book based on your own reading and whatever supplementary material (reviews, etc) you consulted. You can also use your critique to place the reading in historiographical perspective. See me if you're not sure where to look for major reviews.
3. Present questions for discussion that reflect your careful reading and knowledge of reviews or other supplementary materials. During weeks devoted to theoretical sources, try to think of ways in which the ideas might be made relevant to work in the history of science. During history-weeks, make an effort to engage with the questions raised by the previous week's theoretical discussion.

We will be posting response essays and most other course material (including weekly readings) on our WebCT site for the course. Please post your review no later than **Monday at 7:00 p.m of each week.**

Everyone should read the weekly response essays carefully **before** the seminar meeting Wednesday afternoon. During the seminar the week's leader will begin and lead the discussion, though I will jump in and help as well. When leading discussion:

- DO** ask questions that get at what you perceive to be the major themes or questions of the reading
- DO** try to help your colleagues understand how the reading fits into bigger historiographical debates in the history of science, or might be relevant to our work in that field
- DO** try to spark vigorous debate when possible
- DO** raise questions over the course of our seminar meeting to guide discussion and help raise issues if you feel that central points in the reading are being missed
- DON'T** launch into lengthy monologues or lectures about the reading
- DON'T** simply give up if you find the material to be difficult! Every book is on the syllabus for a reason. Persevere, my friends.
- DON'T** wait until the last minute or the night before class to get through the reading.

Grading

The final grades for this seminar will be assessed as follows:

1. Regular and vocal participation in seminar, including your response essays and participation as seminar leader: 40%
2. Book review assignment: A book review (4-5 pages) of one of the books on the syllabus (hard copy due in my History & Philosophy Department mailbox **Friday, March 06**): 20%
3. Final tectonic research prospectus creatively engaging your research (including two stages: 10% for a title and argumentative abstract due in my mailbox **Friday, March 27**, and 30% for a final research prospectus due in my mailbox no later than **Friday, May 01**): 40%

More details regarding the evaluation, goals, and requirements of the short written assignments will be provided in the coming weeks.

3) THE COURSE WEBSITE

The Importance of Checking Email

IT IS VITAL that you check your email regularly, as email is the primary medium I will use to contact you about the course. If you don't use your myportal account, make sure to provide me with an alternate email address **as soon as possible**.

The Course Website on WebCT

The course WebCT site is our virtual classroom for the semester. Get to know it!

<http://webct.montana.edu/>

Log in with your WebCT ID. Click on Tab for "HIST50601s09." The "Course Menu" on the lefthand side of the page lists all of the course components, including the discussion board, course readings, and other handouts.

Posting on the WebCT Board

1. Click "Discussions"
 2. Click on the topic for the week ("Week 2," etc.)
 3. To post a new thread, e.g. to post your response paper for weeks in which you're leading discussion, Click the bar for "Compose Message" and follow the directions.
 4. To post a response: Click on the icon next to the posting you'd like to respond to, and hit "Reply" to post your response.
- And so on, and so on. Lather, rinse, repeat.

Four: UNIT GUIDES

The mind of The Management is a bizarre and Cornellian space, and while the semester has been carefully and methodically planned, the logic of the weeks' movements might not be immediately obvious to you. With that in mind, I will be posting a guide to each unit's material and assignments on WebCT by noon on the previous Saturday. Use this as a roadmap through the themes and readings for the week. It is VERY important that you read these, as they will contain important information and updates. So say we all.

Since this seminar is also designed to introduce you to the professional study of the history of science, I will also be using 15-20 minutes or so of each class meeting to introduce you to some basic tool of the trade. Stay tuned.

****: READINGS

The course material will include short essays, images, and files posted to the course WebCT site. In addition, the books available for purchase and on reserve in Renne Library include:

1. Deleuze and Guattari, *A Thousand Plateaus*
2. Manuel De Landa, *A Thousand Years of Nonlinear History*
3. Reiser + Umemoto, *Atlas of Novel Tectonics*
4. Pamela Smith, *The Body of the Artisan*
5. Bruno Latour, *The Pasteurization of France*
6. Adrian Johns, *The Nature of the Book*
7. Emily Thompson, *The Soundscape of Modernity*

This seminar is designed to help you hone one of the most critical tools in a historian's toolkit: the ability to read a lot of material quickly. The reading load for the seminar is rather heavy, so please get an early start on each week's reading. The unit guides will provide some tips on what to look out for in each reading. In addition, read each book or article actively with the following questions in mind: What is the author's main argument? What kinds of evidence or examples are summoned to support the main argument? What kinds of historical sources does the author use? How does the main argument of the reading fit into the broader literature on the subject or within the field? Reading to answer these questions is more important than obsessing over the details within a given study.

Keep in mind that our ultimate goal in reading the more theoretically-oriented pieces is to use the theory to inform and open up our work as historians. Make sure to keep that central goal in your mind when working through the Deleuze and Guattari, the De Landa, and the Reiser + Umemoto.

Week 1 (Jan. 14)

INTRODUCTION

Reading: There's no reading assigned for the first class meeting, Silly.

Week 2 (Jan. 21)

TECTONICS

Reading: Reiser + Umemoto, *Atlas of Novel Tectonics*

Week 3 (Jan. 28)

SCIENCE I

Reading: Georges Canguilhem, "The Object of the History of Sciences"
Hans-Jörg Rheinberger, "Reassessing the Historical Epistemology of Georges Canguilhem"
Michel Foucault, *The Order of Things* (preface)
Paul Veyne, "Foucault Revolutionizes History," in Arnold Davidson, ed.,
Foucault and his Interlocutors

Week 4 (Feb. 04)

SCIENCE II

Reading: Deborah Harkness, *The Jewel House* (Excerpt)
Katharine Park and Lorraine Daston, eds., *The Cambridge History of Science: Early Modern Science* (Selected articles)
Nick Jardine review of *The Cambridge History*

Week 5 (Feb. 11)

TEXT I

Reading: Sanford Kwinter, *Far From Equilibrium* (Selection)
Cecil Balmond, *Element or Informal* (Selection)

Week 6 (Feb. 18)

TEXT II

Reading: Adrian Johns, *The Nature of the Book*

Week 7 (Feb. 25)

CRAFT I

Reading: Juhani Pallasmaa, *The Eyes of the Skin: Architecture and the Senses* (selection)
Gaston Bachelard, *The Poetics of Space* (selection)

Week 8 (March 04)

CRAFT II

Reading: Pamela Smith, *The Body of the Artisan*

Important Event: Book review due in my mailbox by Friday March 06 at 5 pm!

Week 9 (March 11)

EMERGENCE I

Reading: Manuel de Landa, *A Thousand Years of Nonlinear History*

Week 11 (March 25)

EMERGENCE II

Reading: Arnold Davidson, *The Emergence of Sexuality* (selection)
Carlo Ginzburg, "Clues: Roots of an Evidential Paradigm"

Week 12 (April 01)

MODEL I

Reading: 306090 *Models* (selection)

Week 13 (April 08)

MODEL II

Reading: Angela Creager, ed., *Science Without Laws* (selection)

Important Event: Title and abstract due in my mailbox by Wednesday April 08 at 5 pm!

NARRATIVE I	Week 14 (April 15)
Reading: Deleuze and Guattari, <i>A Thousand Plateaus</i>	

NARRATIVE II	Week 15 (April 22)
Reading: Bruno Latour, <i>The Pasteurization of France</i>	

SPACE	Week 16 (April 29)
Reading: Emily Thompson, <i>The Soundscape of Modernity</i>	
Important Event: Final tectonic research prospectus due in my mailbox by Friday May 01 at 5 pm!	