

**Confluence:  
Environmental History and Science & Technology Studies  
STS 6181 / HIST 6181**

**Spring 2017**

**Wednesday, 2:30–4:25 pm  
156 Goldwin Smith Hall**

PROFESSOR SARA PRITCHARD

Office 311 Morrill Hall

Office hours Tuesdays, 1:00-3:15 (and by appt)—sign-up in advance here  
[wejoinin.com/sheets/csdop](http://wejoinin.com/sheets/csdop) (walk-in appts on a space available basis)

Phone 607.255.3691

Email [sbp65@cornell.edu](mailto:sbp65@cornell.edu)

### **Course description**

This course examines the confluence of two fields: environmental history and the social and historical studies of science, technology, and medicine (STS). Although preliminary scholarship has begun to explore the fruitful integration of these fields, a number of methodological and theoretical tensions remain. Some of these tensions include the social construction of “nature”; nature as a historical actor or agent; accounts of the emergence of “environmental” “problems”; constructivist models of science and technology; and scholars’ use of scientific and technical sources to assess environmental change. This reading-intensive seminar examines a number of scholarly debates about key terms, definitions, and categories (both historical actors’ and analysts’), knowledge-making about “nature” and human interactions with non-human nature, and the concept of agency.

Weekly seminars are organized around readings in environmental history, science studies, and/or their intersection—a nexus that has flourished over the past 5-10 years—that explore these issues in diverse ways. For instance, conservation science and the space sciences help us consider the conceptualization and construction of distinct environments; diseases such as malaria in colonial Egypt and the Panama Canal Zone raise vital questions about the nature of agency and the agency of nature; other diseases such as sick-building syndrome push us to consider various kinds of borders and boundaries both historically and theoretically; and scientific disciplines such as forestry, glaciology, and seismology invite us to explore the making of both environmental knowledge and ignorance.

### **Required reading**

The following books are required. They are available at the Cornell Store. One copy of each book has also been placed on reserve at Olin Library. Please note: Because library copies of these books have been put on reserve, you are not able to request the books through Interlibrary Loan. However, you can request them through Borrow Direct, which is a better and faster library service anyway.

- Donna J. Haraway, *The Companion Species Manifesto: Dogs, People, and Significant Otherness* (Prickly Paradigm Press, 2003);
- Nancy J. Jacobs, *Birders of Africa: History of A Network* (Yale University Press, 2016).

- Andrew S. Mathews, *Instituting Nature: Authority, Expertise, and Power in Mexican Forests* (MIT Press, 2011);
- Clapperton Mavhunga, *Transient Workspaces: Technologies of Everyday Innovation in Zimbabwe* (MIT Press, 2014);
- Lisa Messeri, *Placing Outer Space: An Earthly Ethnography of Other Worlds* (Duke University Press, 2016);
- Michelle Murphy, *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers* (Duke University Press, 2006);
- Miles A. Powell, *Vanishing America: Species Extinction, Racial Peril, and the Origins of Conservation* (Harvard University Press, 2016);
- Tiago Saraiva, *Fascist Pigs: Technoscientific Organisms and the History of Fascism* (MIT Press, 2016);
- Helen Tilley, *Africa as a Living Laboratory: Empire, Development, and the Problem of Scientific Knowledge, 1870-1950* (University of Chicago Press, 2011);
- Conevery Bolton Valencius, *The Lost History of the New Madrid Earthquakes* (University of Chicago Press, 2015).

Required articles can be accessed through Cornell Library's e-journals collection. These readings are preceded by **[EJ]** on the syllabus. Book chapters are available through Blackboard. These readings are preceded by **[BB]** on the syllabus.

Some additional readings are listed on the syllabus under FFR ("for future reference"). These lists are merely suggestive, not exhaustive. They may be useful starting points for the final paper.

### Assignments and grading

The following assignments are required:

#### **Critical reading responses (9 x 2.5% each = 22.5%)**

For nine of the thirteen substantive weeks of the course, please submit a reading response that engages with the required reading(s) for that week. Each response should be *no more than two typed, double-spaced pages with normal font and font size*. The papers should be completed *before* the class session on which they comment. You are asked to submit nine entries over the semester, but you can choose which sessions/readings.

Responses are not just summaries of the readings, but opportunities to reflect upon them, forge connections, raise questions, dig into one or more issues, etc. They don't need to be the final word on a given book or theme, but they should go beyond stream of consciousness or a laundry list of potentially interesting ideas.

#### **Book review (7.5%)**

The syllabus lists required and "for future reference" (FFR) readings each week. You are asked to pick one week during the semester when you read one FFR book *in addition to* the required reading(s) for that day. You can also propose an alternative book; just email me and ask. It should, however, be approved in advance. Please write a book review (*1,000 words max*) of that FFR book.

In general, book reviews offer both summaries and evaluations of a given text. They typically start with a succinct overview. You may want to keep in mind the following questions: What is the main argument? Is it new? In what ways? What does the author (not) address? In what scholarly communities or (sub)fields is this book situated? In terms of making a broader argument about the strengths, weaknesses, and contributions of the book, you might want to consider the following: Are the author's claims persuasive? Why or why not? How does this book engage with other literatures and texts? How is this book significant? Remember to assess the book on its own merits, not what you think the author should have written. Beyond these few remarks, I encourage you to read Bruce Mazlish's essay, "The Art of Reviewing" (<https://www.historians.org/publications-and-directories/perspectives-on-history/february-2001/the-art-of-reviewing>).

You are encouraged to share ideas from your supplemental reading during that week's discussion. You are also encouraged to pick a week/theme/recommended reading that is especially relevant to your research, teaching interests, and/or final paper for this seminar. In other words, ideally the book review should do double duty (book review + part of bibliography for final paper).

Please note: Between the reading responses and book review, you will have a grand total of *three "freebie" weeks* during the semester when you do not need to complete some sort of written response. I suggest that you save at least two of your freebie weeks for the second half of the term. 😊

### **Discussion (35%)**

This is a graduate seminar so class meetings will be organized around discussion. We will generally meet as an entire class, but we may occasionally break into smaller groups. All students are expected to participate in discussion, but discussion grades are based primarily on quality and secondarily on quantity. In addition, I value students who listen to one another, ask follow-up questions, synthesize others' comments, and pose questions to the entire class. I expect constructive, generative, respectful, regular engagement from all members of the seminar in our discussions.

### **Final paper (35%)**

More information will be distributed later in the semester, but the final paper is 10–12-page paper that allows you to explore some of your specific intellectual interests. It does, however, need to engage with and build on the major themes of the class. You will draw primarily upon course readings for the paper, but identify several supplemental readings (3–4 books or the equivalent) to help you develop your particular question, issue, or theme that is rooted in the seminar. Please note that this is not a traditional research paper. Rather, think of this paper as a deeper engagement with and exploration of a central concern that emerges from our seminar, but hopefully dovetails with your own interests. Depending on your year and impending requirements (A-exams, dissertation prospectus, grant proposals, etc.), we can refine this assignment to help you meet your professional goals and deadlines.

Your final paper is due during our university-scheduled final exam time slot, which will be announced by the University Registrar in February. Everyone will also give short presentations about their papers during finals. To encourage progress on the paper, I have developed several intermediate deadlines. They are listed on the course schedule.

## Academic conduct

This is a graduate seminar. Issues of academic integrity should be a non-issue. That said, all students are expected to abide by the Cornell University Code of Academic Integrity. The complete Code is available online (<http://www.cuinfo.cornell.edu/Academic/AIC.html>).

## COURSE SCHEDULE

**Week 1 (Jan 25) No class [Sara giving talk at NYC History of Science Consortium; please review syllabus and these recommended readings on your own; be ready to discuss the readings next week!]**

Michel Foucault, "Polemics, Politics, and Problematization"

(<http://foucault.info/foucault/interview.html>).

Paul Edwards, "How to Read a Book," v5.0

(<http://pne.people.si.umich.edu/PDF/howtoread.pdf>).

Joe Dumit, "How I Read" (<http://dumit.net/how-i-read/>).

**Week 2 (Feb 1) Welcome and introductions! The ocean in/as environmental history**

[BB] Alfred W. Crosby, "Ecological Imperialism: The Overseas Migration of Western Europeans as a Biological Phenomenon," *The Ends of the Earth*, edited by Donald Worster (Cambridge University Press, 1988), 103-117.

[EJ] David Igler, "Diseased Goods: Global Commodities in the Eastern Pacific Basin, 1770-1850," *American Historical Review* 109:3 (June 2004).

[EJ] W. Jeffrey Bolster, "Opportunities in Marine Environmental History," *Environmental History* 11:3 (July 2006).

[BB] Donald Worster, "Appendix: Doing Environmental History," in *The Ends of the Earth*, edited by Donald Worster (Cambridge University Press, 1988), 289-307.

[EJ] Douglas R. Weiner, "A Death-Defying Attempt to Articulate a Coherent Definition of Environmental History," *Environmental History* 10:3 (July 2005).

[EJ] Paul S. Sutter, "The World With Us: The State of American Environmental History," *Journal of American History* 100 (2013): 94-119.

FFR (historiographical reviews, overviews, etc.):

Richard White, "American Environmental History: The Development of a New Historical Field," *Pacific Historical Review* 54 (1985): 297-335.

Arthur F. McEvoy, "Toward an Interactive Theory of Nature and Culture: Ecology, Production, and Cognition in the California Fishing Industry," in *The Ends of the Earth*, edited by Donald Worster (Cambridge University Press, 1988), 211-229.

"Environmental History: A Roundtable," *Journal of American History* (March 1990), 1087-1147.

William Cronon, "A Place for Stories: Nature, History, and Narrative," *Journal of American History* 78 (March 1992), 1347-1376.

Chris H. Lewis, "Telling Stories About the Future: Environmental History and Apocalyptic Science," *Environmental History Review* 17 (Fall 1993).

- Alfred Crosby, "The Past and Present of Environmental History," *American Historical Review* (1995).
- William Cronon, "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," in *Uncommon Ground: Rethinking the Human Place in Nature*, ed. William Cronon (New York: Norton, 1995): 69-90.
- Jeffrey K. Stine and Joel A. Tarr, "At the Intersection of Histories: Technology and the Environment," *Technology and Culture* 39 (1998): 601-640.
- Richard White, "Environmental History: Watching a Historical Field Mature," *Pacific Historical Review* 70 (2001), 103-111.
- J.R. McNeill, "Observations on the Nature and Culture of Environmental History," *History and Theory* 42 (December 2003), 5-43.
- Richard White, "From Wilderness to Hybrid Landscapes: The Cultural Turn in Environmental History," *Historian* 66 (2004): 557-564.
- J. Donald Hughes, *What is Environmental History?* (Cambridge: Polity, 2006).
- Ursula Lehmkuhl and Hermann Wellenreuther, eds., *Historians and Nature: Comparative Approaches to Environmental History* (New York: Berg, 2007).
- Douglas Cazaux Sackman, "Introduction," in *A Companion to American Environmental History*, ed. Douglas Cazaux Sackman (Malden, MA: Wiley-Blackwell, 2010): xiii-xxi.
- Helen M. Rozwadowski, "Oceans: Fusing the History of Science and Technology with Environmental History," in *A Companion to American Environmental History*, ed. Douglas Cazaux Sackman (Malden, MA: Wiley-Blackwell, 2010): 442-461.
- Frank Uekötter, *The Turning Points of Environmental History* (Pittsburgh: University of Pittsburgh Press, 2010).
- Sarah R. Hamilton, "The Promise of Global Environmental History," *UPF Journal of World History* 3 (June 2012).
- "State of the Field: American Environmental History," *Journal of American History* 100 (2013).
- Jocelyn Thorpe, Stephanie Rutherford, L. Anders Sandberg, eds., *Methodological Challenges in Nature-Culture and Environmental History Research* (Routledge, 2016).

FFR (the ocean):

- Helen Rozwadowski, *Fathoming the Ocean: The Discovery and Exploration of the Deep Sea* (Cambridge: Harvard University Press, 2005).
- David Iglar, *The Great Ocean: Pacific Worlds from Captain Cook to the Gold Rush* (New York: Oxford University Press, 2013).

**Week 3 (Feb 8) Introduction to (environmental) STS**

- [EJ] Donna Haraway, "Teddy Bear Patriarchy: Taxidermy in the Garden of Eden, New York City, 1908-1936," *Social Text* 11 (1984): 20-64.
- [BB] Wiebe E. Bijker, "Sociohistorical Technology Studies," in *Handbook of Science and Technology Studies*, ed. Sheila Jasanoff, et al. (Sage, 1995), 229-256.
- [BB] Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Harvard University Press, 1993), 1-48.
- [BB] Bruno Latour, *Politics of Nature: How to Bring the Sciences into Democracy*, trans. Catherine Porter (Harvard University Press, 2004), 1-52.

- [BB] Steven Yearley, “The Environmental Challenge to Science Studies,” in *Handbook of Science and Technology Studies*, edited by Sheila Jasanoff, et.al. (Sage Publications, 1995), 457-479.
- [BB] Steven Yearley, “Nature and the Environment in Science and Technology Studies,” in *Handbook of Science and Technology Studies*, edited by Edward J. Hackett, et.al. (Sage Publications, 2007), 921-948.

FFR:

- Wiebe E. Bijker, Thomas P. Hughes, and Trevor Pinch, eds., *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology* (MIT Press, 1987).
- Trevor J. Pinch and Wiebe E. Bijker, “The Social Construction of Facts and Artifacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other,” in *The Social Construction of Technological Systems. The Handbook of Science and Technology Studies*, 1<sup>st</sup> ed. (Sage, 1995) and 2<sup>nd</sup> ed. (MIT Press, 2007).
- Mario Biagioli, ed., *The Science Studies Reader* (Routledge, 1999).
- Sergio Sismondo, *An Introduction to Science and Technology Studies*, 1<sup>st</sup> ed. (Blackwell, 2004) or 2<sup>nd</sup> ed. (Wiley-Blackwell, 2010).

**Week 4 (Feb 15) Constructing (the) environment(s), I**

- Miles A. Powell, *Vanishing America: Species Extinction, Racial Peril, and the Origins of Conservation* (Harvard University Press, 2016).
- [BB] Dolly Jørgensen, “Environmentalists on Both Sides: Enactments in the California Rigs-to-Reefs Debate,” in *New Natures: Joining Environmental History with Science and Technology Studies*, edited by Dolly Jørgensen, Finn Arne Jørgensen, and Sara B. Pritchard (University of Pittsburgh Press, 2013).

FFR:

- Stephen Bocking, “Science and Spaces in the Northern Environment,” *Environmental History* 12:4 (October 2007).
- Sara B. Pritchard, “Joining Environmental History with Science and Technology Studies: Promises, Challenges, and Contributions,” in *New Natures*.

**Week 5 (Feb 22) Constructing (the) environment(s), II**

- Lisa Messeri, *Placing Outer Space: An Earthly Ethnography of Other Worlds* (Duke University Press, 2016).
- [BB] Valerie A. Olson, “NEOecology: The Solar System’s Emerging Environmental History and Politics,” in *New Natures*.

FFR:

- Valerie Olson, “Political Ecology in the Extreme: Asteroid Activism and the Making of an Environmental Social System,” *Anthropological Quarterly* 85 (2012): 1027-1044.



- Debbora Battaglia, David Valentine, and Valerie Olson, "Relational Space: An Earthly Installation," *Cultural Anthropology* 30 (2015): 245-256.
- Valerie Olson and Lisa Messeri, "Beyond the Anthropocene: UnEarthing an Epoch," *Environment and Society: Advances in Research* 6 (2015): 28-47.
- Lisa Ruth Rand, "Orbital Decay: The History of Space Junk and the Expanding Boundaries of the Natural World," Ph.D. diss, University of Pennsylvania, 2016.

### **Week 6 (Mar 1) The agency of nature and the nature of agency**

- [BB] Michel Callon, "Some Elements of a Sociology of Translation: Domestication of Scallops and the Fishermen of St. Briec Bay," in *Power, Action, and Belief: a New Sociology of Knowledge?*, edited by John Law (Routledge and Kegan Paul, 1985), 196-233.
- [BB] John Law, "Technology and Heterogeneous Engineering: The Case of Portuguese Expansion," in *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, edited by Wiebe E. Bijker, et.al. (MIT Press, 1987), 111-134.
- [BB] Timothy Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity* (University of California Press, 2002), 19-53.
- [EJ] Linda Nash, "The Agency of Nature and the Nature of Agency," *Environmental History* 10:1 (January 2005).
- [EJ] Paul Sutter, "Nature's Agents or Agents of Empire? Entomological Workers and Environmental Change during the Construction of the Panama Canal," *Isis* 98:4 (2007).
- [EJ] Etienne Benson, "Generating Infrastructural Invisibility: Insulation, Interconnection, and Avian Excrement in the Southern California Power Grid," *Environmental Humanities* 6 (2015): 103-130.
- [EJ] Chris Pearson, "Between Instinct and Intelligence: Harnessing Police Dog Agency in Early Twentieth-Century Paris," *Comparative Studies in Society and History* 58 (2016): 463-490.

### **Week 7 (Mar 8) Human/nonhuman/posthuman, I: Cyborgs and companion species**

- [BB] Donna J. Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs, and Women: The Reinvention of Nature* (Routledge, 1991), 149-181.

Donna Haraway, *The Companion Species Manifesto: Dogs, People, and Significant Otherness* (Prickly Paradigm Press, 2003).

➔ **Prospective final paper topic due (one paragraph!).**

FFR (Because. Haraway):

Donna J. Haraway, *When Species Meet* (University of Minnesota Press, 2007).

Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press, 2016).

### **Week 8 (Mar 15) Human/nonhuman/posthuman, II: Organisms**

Tiago Saraiva, *Fascist Pigs: Technoscientific Organisms and the History of Fascism* (MIT Press, 2016).

FFR (organisms):

- Robert E. Kohler, *Lords of the Fly: Drosophila Genetics and the Experimental Life* (University of Chicago Press, 1994).
- Joseph E. Taylor, III, *Making Salmon: An Environmental History of the Northwest Fisheries Crisis* (University of Washington Press, 1999).
- William Boyd, "Making Meat: Science, Technology, and American Poultry Production," *Technology and Culture* 42:4 (October 2001): 631-664.
- Edmund Russell, "Evolutionary History: Prospectus for a New Field," *Environmental History* 8:2 (April 2003).
- Susan R. Schrepfer and Philip Scranton, eds., *Industrializing Organisms* (Rutgers University Press, 2004).
- Edmund Russell, "Introduction – The Garden in the Machine: Toward an Evolutionary History of Technology," in *Industrializing Organisms*, edited by Susan R. Schrepfer and Philip Scranton (Rutgers University Press, 2004), 1-16.
- Stephen Pemberton, "Canine Technologies, Model Patients: The Historical Production of Hemophiliac Dogs in American Biomedicine," in *Industrializing Organisms*, edited by Susan R. Schrepfer and Philip Scranton (Rutgers University Press, 2004).
- Ann Norton Greene, *Horses at Work: Harnessing Power in Industrial America* (Harvard University Press, 2008).
- Matsutake Worlds Research Group, "A New Form of Collaboration in Cultural Anthropology: Matsutake Worlds," *Cultural Anthropology* 36:2 (2009).
- Stefan Helmreich and S. Eben Kirksey, "The Emergence of Multispecies Ethnography," *Cultural Anthropology* 25:4 (2010): 545-575.
- Jake Kosek, "Ecologies of Empire: On the New Uses of the Honeybee," *Cultural Anthropology* 25:4 (November 2010): 650-678.
- Edmund Russell, "Can Organisms Be Technology?" in *The Illusory Boundary*, edited by Martin Reuss and Stephen H. Cutcliffe (University of Virginia Press, 2010).
- Edmund Russell, *Evolutionary History: United History and Biology to Explain Life on Earth* (Cambridge University Press, 2011).

FFR on model organisms:

- Robert E. Kohler, *Lords of the Fly: Drosophila Genetics and the Experimental Life* (University of Chicago Press, 1994).
- Angela Creager, *The Life of a Virus: Tobacco Mosaic Virus as an Experimental Model, 1930 – 1965* (University of Chicago Press, 2002), 1-16 and 317-333.
- Karen Rader, *Making Mice: Standardizing Animals for American Biomedical Research, 1900-1955* (Princeton University Press, 2004), 1-24 and 251-268.
- Angela Creager, *Life Atomic: A History of Radioisotopes in Science and Medicine* (University of Chicago Press, 2013).

**Week 9 (Mar 22) Borders and boundaries, I: Body/environment/technology**

Michelle Murphy, *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers* (Duke University Press, 2006).

➔ **Revised final paper topic and tentative "bibliography" (remember—3 to 4 books!) due.**



FFR on body/environment/technology:

- Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs, and Women: The Reinvention of Nature* (Routledge, 1991), 149-181.
- Covey Bolton Valencius, *The Health of the Country: How American Settlers Understood Themselves and Their Land* (Basic Books, 2002).
- Barbara Allen, *Uneasy Alchemy: Citizens and Experts in Louisiana's Chemical Corridor Disputes* (MIT Press, 2003).
- Gregg Mitman, Michelle Murphy, and Christopher Sellers, "Introduction: A Cloud Over History," *Osiris* 19 (2004): 1-17, and entire *Osiris* volume.
- Michelle Murphy, *Sick Building Syndrome and the Problem of Uncertainty* (Duke University Press, 2006).
- Linda Nash, *Inescapable Ecologies: A History of Environment, Disease, and Knowledge* (University of California Press, 2007).
- Gregg Mitman, *Breathing Space: How Allergies Shape our Lives and Landscapes* (Yale University Press, 2008).
- Jody A. Roberts and Nancy Langston, "Toxic Bodies/Toxic Environments: An Interdisciplinary Forum," *Environmental History* 13:4 (2008), and related articles.
- Nancy Langston, *Toxic Bodies: Hormone Disruptors and the Legacy of DES* (Yale University Press, 2010).
- Joy Parr, *Sensing Changes: Technologies, Environments, and the Everyday, 1953-2003* (UBC Press, 2010).
- Joy Parr, "Our Bodies and Our Histories of Technology and the Environment," in *The Illusory Boundary*, edited by Martin Reuss and Stephen H. Cutcliffe (University of Virginia Press, 2010).
- Neil M. Maher, "Body Counts: Tracking the Human Body through Environmental History," in *A Companion to American Environmental History*, ed. Douglas Cazaux Sackman (Malden, MA: Wiley-Blackwell, 2010): 163-180.
- Brett Walker, *Toxic Archipelago: A History of Industrial Disease in Japan* (Seattle: University of Washington Press, 2011).
- Gabrielle Hecht, "Nuclear nomads: A Look at the subcontracted heroes," *Bulletin of the Atomic Scientists*, January 9, 2012 (<http://thebulletin.org/nuclear-nomads-look-subcontracted-heroes>).
- Sara B. Pritchard, "An Envirotechnical Disaster: Nature, Technology, and Politics at Fukushima," *Environmental History* 17 (April 2012): 219-243.
- Kate Brown, *Plutopia: Nuclear Families, Atomic Cities, and the Great Soviet and American Plutonium Disasters* (Oxford University Press, 2013).

FFR on hybridity:

- Richard White, *The Organic Machine: The Remaking of the Columbia River* (Hill & Wang, 1995).
- Mark Fiege, *Irrigated Eden: The Making of an Agricultural Landscape in the American West* (University of Washington Press, 1999).
- Timothy Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity* (University of California Press, 2002), 19-53.

Richard White, "From Wilderness to Hybrid Landscapes: The Cultural Turn in Environmental History," *Historian* 66 (2004): 557-564.

Martin Reuss and Stephen H. Cutcliffe, eds., *The Illusory Boundary: Environment and Technology in History* (University of Virginia, 2010).

Sara B. Pritchard, *Confluence: The Nature of Technology and the Remaking of the Rhône* (Harvard University Press, 2011).

Brett Walker, *Toxic Archipelago: A History of Industrial Disease in Japan* (Seattle: University of Washington Press, 2011), Introduction.

**Week 10 (Mar 29) No class [Sara at ASEH conference]**

**Week 11 (April 5) No class [Happy spring break!]**

**Week 12 (April 12) Borders and boundaries, II: Mobility(ies)**

Clapperton Mavhunga, *Transient Workspaces: Technologies of Everyday Innovation in Zimbabwe* (MIT Press, 2014).

FFR:

Thomas Zeller, *Driving Germany: The Landscape of the German Autobahn, 1930-1970* (New York: Oxford, 2007).

See *Transfers: Interdisciplinary Journal of Mobility Studies*.

**Week 13 (April 19) (Not) knowing nature(s), I: Forests and glaciers**

Andrew S. Mathews, *Instituting Nature: Authority, Expertise, and Power in Mexican Forests* (MIT Press, 2011).

[EJ] Mark Carey, M. Jackson, Alessandro Antonello, and Jaclyn Rushing, "Glaciers, Gender, and Science: A Feminist Glaciology Framework for Global Environmental Change Research," *Progress in Human Geography* 40 (2016): 770-793.

FFR:

James Ferguson, *The Anti-politics Machine: 'Development', Depoliticization, and Bureaucratic Power in Lesotho* (New York: Cambridge University Press, 1990).

Madhav Gadgil and Ramachandra Guha, *This Fissured Land: An Ecological History of India* (Berkeley: University of California Press, 1993).

James Fairhead and Melissa Leach, *Misreading the African Landscape: Society and Ecology in a Forest-Savanna Mosaic* (New York: Cambridge University Press, 1996).

K. Sivaramakrishnan, *Modern Forests: Statemaking and Environmental Change in Colonial Eastern India* (Stanford: Stanford University Press, 1999).

S. Ravi Rajan, *Modernizing Nature: Forestry and Imperial Eco-Development, 1800-1950* (Oxford University Press, 2006).

**Week 14 (April 26) (Not) knowing nature(s), II: Earthquakes**

Conevery Bolton Valencius, *The Lost History of the New Madrid Earthquakes* (University of Chicago Press, 2015).

**Week 15 (May 3) Knowledge, environment, empire, I: Discipline(s), expert(ise)(s), and imperialism(s)**

Helen Tilley, *Africa as a Living Laboratory: Empire, Development, and the Problem of Scientific Knowledge, 1870-1950* (University of Chicago Press, 2011).

**Week 16 (May 10) Knowledge, environment, empire, II: Africa(ns) and ornithology**

Nancy J. Jacobs, *Birders of Africa: History of a Network* (Yale University Press, 2016).

**Study period and finals week (specific deadlines TBA in February 2017)**

→ *Peer review of rough drafts (probably during study period).*

→ *Presentations of papers and final drafts due during university-scheduled final exam slot.*