

Circuits of Knowledge in Modern China

JM Chris Chang
jcc2174[at]columbia.edu

Spring Term 2018
M/W 2-4pm

The following is a sample syllabus for a course on the history of science and environment in modern China. The syllabus itself grows out of the workshop “Global Socialism and Circuits of Expertise in the Post-1945 World,” convened in May 2016 at the Weatherhead East Asian Institute of Columbia University. That workshop brought together a transnational group of scholars to consider scientific and technological passages in the post-war socialist world. This sample syllabus adapts the methods and themes of the workshop to a potential course for the study of modern China. The syllabus is organized thematically into three main sections – i) environment; ii) knowledge practices; and iii) organization – while providing coverage of Chinese history from the Late Qing to the Reform era. Retaining emphases on transcultural adaptation and co-production, and movements between mass and expert modes of knowledge, the syllabus invites critical reflection upon the social and political uses of science and technology, and their relationship to modernizing projects in the recent Chinese past. Designed for upper level undergraduates, each week offers three readings as well as a supplemental reading for papers or presentations, and is flexible to the needs of different programs and forms of assessment. The syllabus was prepared by JM Chris Chang (Columbia University) with significant contributions by Sigrid Schmalzer (UMass Amherst).

Course Introduction and Expectations

Week 1: Jan 17

Orientation in which we discuss the core components of the course and identify key themes.

Science in the Non-West: Traces of the Universal

Week 2: Jan 22/24

A foundational discussion in which we problematize historicist assumptions about science and their application to the Chinese past. Implicit to this critique is an attention to the contingent, political processes that mediate the circulation of knowledge and claims to expert authority. Arguments in these readings will serve as points of reference for work throughout the semester.

Marwa Elshakry, "When Science Became Western: Historiographical Reflections," *Isis* 101.1 (2010): 98-109.

Roger Hart, "Beyond Science and Civilization: A Post-Needham Critique," *East Asian Science, Technology and Medicine* 16 (1999): 88-114.

Bray, Francesca. "Science, Technique, Technology: Passages between Matter and Knowledge in Imperial Chinese Agriculture." *British Journal for the History of Science* 41.150.3 (2008): 319-44.

Supplemental:

Sheila Jasanoff, "Future Imperfect: Science, Technology, and the Imaginations of Modernity" in Jasanoff and Kim, *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrications of Power* (2015): 1-33.

The Made Environment I

Week 3: Jan 29/31

Readings in this section argue for reconfigured categories of scientific knowledge production that allow us to think of science beyond ‘the advance of gadgets.’ Turning our attention to the history of Chinese agronomy, water management, and food production, we take a *longue durée* approach to understanding how knowledge of the environment was produced and represented, and leveraged for social utility.

Peter Perdue, “Is there a Chinese View of Technology and Nature?” in Reuss and Cutcliffe, *The Illusory Boundary: Environment and Technology in History* (2010): 101-119.

Francesca Bray, *The Rice Economies: Technology and Development in Asian Societies* (1994): Intro, Ch 1-3.

Robert Culp, “Defining “Nature” (*ziran*) in Late Qing and Republican China” (Forthcoming).

Supplemental:

Jonathan Schlesinger, *A World Trimmed with Fur: Wild Things, Pristine Places, and the Natural Fringes of Qing Rule* (2017): Ch 2.

Made Environment II: Ecology, Economy, Crisis

Week 4: Feb 5/7

Robert Marks, *China: Its Environment and History* (2011): Ch 5-7.

Kenneth Pomeranz, “Is there an East Asian Development Path? Long-Term Comparisons, Constraints, and Continuities,” *Journal of the Economic and Social History of the Orient* 44.3 (2001): 322–362.

David A. Pietz, *The Yellow River: The Problem of Water in Modern China* (2015): Ch 1, 3.

Supplemental:

Grace Shen, “Murky Waters: Thoughts on Desire, Utility, and the ‘Sea of Modern Science’” *Isis* 98.3 (2007): 584–96.

Made Environment III: Science for the Masses

Week 5: Feb 12/14

Sigrid Schmalzer, *Red Revolution, Green Revolution: Scientific Farming in Socialist China* (2016): Intro., Ch 1-5.

Jacob Eyferth, *Eating Rice from Bamboo Roots: The Social History of a Community of Handicraft Papermakers in Rural Sichuan, 1920-2000* (2009): Ch 5-7.

Fa-ti Fan, ““Collective Monitoring, Collective Defense”: Science, Earthquakes, and Politics in Communist China,” *Science in Context*, 25.1 (2012) 127–154.

Supplemental:

Miriam Gross, *Farewell to the God of Plague: Chairman Mao’s Campaign to Devorm China*. (2016): Pt 3.

Made Environment IV: Place and Memory

Week 6: Feb 19/21

Felix Wemheuer, “Collectivization and Famine” in Smith, *OHHHC* (2017): 407-423.

Gail Hershatter, *The Gender of Memory: Rural Women and China’s Collective Past* (2011): Ch 2.

Micah Muscolino, *The Ecology of War in China: Henan Province, the Yellow River and Beyond 1938-1950* (2014): Ch 1

Supplemental:

Jean Drèze and Amartya Sen. *Hunger and Public Action* (1991): Ch 11.

Thinking and Doing I

Week 7: Feb 26/28

This unit continues to expand on Bray's emphasis on technique as the basis of technology to investigate how specific practices produce objects of knowledge. We will look at how ideas are domesticated through processes of translation and adaptation; the historical emergence of the 'fact' as a unit of truth; and the evolving relationship between visuality and information with the development of new forms of media.

Erik Mueggler, *The Paper Road: Archive and Experience in the Botanical Exploration of West China and Tibet* (2011): Intro, Pt 2.

Fa-ti Fan, *British Naturalists in Qing China: Science, Empire, and Cultural Encounter* (2004): Intro, Pt 2.

Peter Lavelle, "The Aesthetics and Politics of Chinese Horticulture in Late Qing Borderlands," in Liu, *Environmental History in East Asia: Interdisciplinary Perspectives* (2014): 213-242.

Supplemental:

Wu Hung, "Inventing a 'Chinese' Portrait Style in Early Photography: The Case of Milton Miller" in Cody, and Terpak, *Brush & Shutter. Early Photography in China* (2011): 19-46.

Thinking and Doing II: Ideas in Motion

Week 8: Mar 5/7

Lydia Liu, *Translingual Practice: Literature, National Culture, and Translated Modernity* (1995): Intro.

Ruth Rogaski, *Hygienic Modernity: Meanings of Health and Disease in Treaty-Port China* (2004): Intro., Chs 6, 8, 10.

Wang Hui, "The Fate of 'Mr. Science' in China: The Concept of Science and Its Application in Modern Chinese Thought," *Positions* 3.1 (1995): 1-68.

Supplemental:

Eugenia Lean, *Manufacturing Knowledge: Chen Diexian, a Chinese Man-of-Letters in an Age of Industrial Capitalism* (Forthcoming).

Spring Break

Week 9: No Class

Thinking and Doing III: Facts

Week 10: Mar 19/21

Tong Lam, *A Passion for Facts: Social Surveys and the Construction of the Chinese Nation-State, 1900-1949* (California 2011): Intro, Ch 1-3.

Daniel Asen, *Death in Beijing: Murder and Forensic Science in Republican China* (2016): Ch 2.

Arunabh Ghosh. "Accepting difference, seeking common ground: Sino-Indian statistical exchanges 1951–1959" *BJHS Themes*, 1 (2016): 61-82.

Supplemental:

Shellen Wu, *Global Frontiers and the Geopolitical Making of Modern China* (Forthcoming).

Thinking and Doing IV: Information and Representation

Week 11: Mar 26/28

Tom Mullaney, "The Moveable Typewriter How Chinese Typists Developed Predictive Text during the Height of Maoism," *Technology and Culture* 53.4 (2012): 777-814.

Denis Tenen, "Stalin's Powerpoint," *Modernism / Modernity* 21.1 (2014): 253-267.

Michael Schoenhals, "China's 'Great Proletarian Information Revolution' of 1966-1967" in Brown and Johnson, *Maoism at the Grassroots: Everyday Life in China's Era of High Socialism* (2015): 230-258.

Supplemental:

Quinn Slobodian, "The Uses of Disorientation: Socialist Cosmopolitanism in an Unfinished DEFA-China Documentary" in Slobodian, *Comrades of Color: East Germany in the Cold War World* (2015): 219-242.

The Organizational Machine I

Week 12: Apr 2/4

We approach issues of bureaucracy and social control through the lens of the 'organizational machine,' a term borrowed from Peter Perdue to express the technologies that are involved in complex systems of managing large groups of people. In this unit, we examine how the organizational machine employs methods of classification, specialist languages and jargon, networks of communication, and institutions of surveillance and discipline. As the Chinese revolution was part of a broader 20th century movement of global socialism, we reflect on resonances between the Chinese experience and that of other socialist societies.

Philip Kuhn, *Soulstealers: The Chinese Sorcery Scare of 1768* (1992): Ch 1, 3, 7-9.

James C Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (1998): Intro, Ch 3, 4, 6.

Yang Jisheng and Roderick MacFarquhar. *Tombstone: The Great Chinese Famine, 1958-1962* (2013): Ch 13-15.

Supplemental:

Sigrid Schmalzer, "On the Appropriate Use of Rose-Colored Glasses: Reflections on Science in Socialist China," *Isis* 98.3 (2007): 571-83.

The Organizational Machine II: Engineering the Enemy

Week 13: Apr 9/11

Yang Kuisong, "How a 'Bad Element' Was Made: The Discovery, Accusation, and Punishment of Zang Qiren in Brown and Johnson, *Maoism at the Grassroots: Everyday Life in China's Era of High Socialism* (2015): 19-50.

Sheila Fitzpatrick, *Tear Off the Masks! Identity and Imposture in Twentieth-Century Russia* (2005): Intro, Pt 4.

Michael Schoenhals, *Spying for the People: Mao's Secret Agents, 1949-1967* (2013): Intro, Ch 2, 3.

Supplemental:

Katherine Verdery, *Secrets and Truths: Ethnography in the Archive of the Romanian Secret Police* (2014): Intro, Ch 1.

The Organizational Machine III: Science as a Politics

Week 14: Apr 16/18

Sigrid, Schmalzer, "The Very First Lesson": Teaching about Human Evolution in Early 1950s China" in Brown and Pickowicz, *Dilemmas of Victory: The Early Years of the People's Republic of China* (2010): 232-255.

Hu, Danian, "The Reception of Relativity in China," *Isis* 98.3 (2007): 539–57.
Susan Greenhalgh, *Just One Child: Science and Policy in Deng's China* (2008): Ch 3, 5.

Supplemental:

Peter Neushul, and Wang Zuoyue, "Between the Devil and the Deep Sea: C. K. Tseng, Mariculture, and the Politics of Science in Modern China." *Isis* 91.1 (2000): 59–88.

The Organization Machine IV: Big Data and Big Brother

Week 15: Apr 23/25

Sheila Fitzpatrick, Popular Opinion Under Communist Regimes in Smith, *OHHC* (2017) 371-386.

Yang Guobin. *The Power of the Internet in China: Citizen Activism Online*. (2011): Ch 1-3.

Paul Betts, "The Politics of Plenty: Consumerism in Communist Societies," in Smith, *OHHC* (2017): 424-440.

Supplemental:

Lucas Pope, *Papers, Please!*

Final Session

Week 16: Apr 30

Appendix

Selected Visual Resources for Chinese History

Everyday Life in Mao's China (Covell Meyskens)
IISH-Chinese Poster Collection (Stefan Landsberger)
Memory Project at Duke University (Wu Wenguang)
Visualizing China (University of Bristol)

Selected Films

Yellow Earth (1984), dir. Chen Kaige
Blind Shaft (2003), dir. Li Yang
Still Life (2006), dir. Jia Zhangke
Whose Utopia (2006), Cao Fei