SCIENCE AND TECHNOLOGY BEYOND BORDERS

Prof J. Krige
SPRING TERM, 2017
THURSDAYS 3.05pm – 5.55pm, Room104, Old CE
Office hours: Thursdays, 12.30pm-2.30pm

Catalog description: Discusses the roles of science and technology as instruments of social control and of social change in development and modernization.

This course will deal with the transnational circulation of knowledge in the 20thC. It will combine theoretical reflections with case studies. Its aim is to stimulate analyses of how science and technology were used to project power abroad, with particular though not exclusive reference to the U.S.

When reading texts students need to ask: who are the key actors? What exactly is the knowledge that is circulating 'across borders' and what power relationships are at play in that process i.e. who is passing it on, who are they passing it on to? Is that 'other' an 'empty vessel' or is there some sort of negotiation/reshaping of the knowledge happening? Is it sought by or imposed on the 'other'? What interests do the two poles of the dyad have in knowledge circulation? The most important general learning outcome is that students never again take the circulation and dissemination of knowledge for granted: it is a negotiated process, often embedded in asymmetric power relations that determine what is shared and what denied between nodes in a network.

Class attendance is obligatory. To participate in class each student must submit 3-5 bullet points each week at least two hours before class starts. These bullet points are essentially quotes of 3-5 lines from the readings that the student brings to class for further discussion.

Evaluation
The final grade comprises two components.
1. 60%: a final written exam in the form of a take-away paper to be submitted by midnight on May 5.
2. 40%: an open-ended but focused team project on Afghanistan with individual components evaluated along different axes—written work, poster presentation, powerpoint presentation, documentary-type film, etc.

January 12 The Global 'Diffusion' of Science and Technology

G. Basalla, "The Spread of Western Science," *Science,* 156 (5 May 1967), 611-622.

Warwick Anderson, "Introduction: Postcolonial Technoscience," *Social Studies of Science*, December 2002; vol. 32:5-6: pp. 643-658.

David Arnold, *The Tropics and the Travelling Gaze. India, Landscape and Science. 1800-1856* (Seattle: University of Washington Press, 2006), Introduction, Chapter 5 (Provided by JK.)

Kapil Raj, *Relocating Modern Science, Circulation and the Construction of Knowledge in South Asia and Europe, 1650-1900* (Palgrave Macmillan, 2007), Introduction, Chapters 1, 2, 6 and Conclusion

January 19. Transnational History

Emily S. Rosenberg, *Transnational Currents in a Shrinking World, 1870-1945* (Cambridge MA: Belknap Press), Introduction (provided by JK)

C.A. Bayly, Sven Beckert, Matthew Connelly, Isabel Hofmeyr, Wendy Kozol and Patricia Seed, "AHR Conversation On: Transnational History," *American Historical Review*, 111:5 (2006), 1441-1464.

Erik van der Vleuten, "Towards a Transnational History of Technology: Meanings, Promises, Pitfalls," *Technology and Culture*, 49:4 (2008), pp.974-994.

John Krige, "Introduction", and "Elements for Writing a Transnational History of Science and Technology", and other select articles from a workshop to be published in John Krige, ed., *Writing the Transnational History of Science and Technology* (Cambridge, MA: Amherst College Press) forthcoming.

January 26 High Modernism

James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (Yale University Press, 1998), Introduction, chapters 1-3, 8-10.

February 2 Making Latin America Legible

Ricardo D. Salvatore, *Disciplinary Conquest. U.S. Scholars in South America, 1900-1945* (Durham N.C.: Duke University Press, 2016), chapters 1-4, 9, 10.

Sandra Harding, "Latin American Decolonial Social Studies of Scientific Knowledge: Alliances and Tensions," *Science, Technology and Human Values* (2016), 1-25.

February 9 Imperialism and Africa

James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (Yale University Press, 1998), chapter 7.

Christophe Bonneuil, "Development as Experiment. Science and State Building in Late Colonial and Postcolonial Africa, 1930 - 1970," in Roy Macleod, ed, OSIRIS, Vol. 15, (2000), 258-281.

Helen Tilley, *Africa as a Living Laboratory: Empire, Development, and the Problem of Scientific Knowledge, 1870-1950* (University of Chicago Press, 2011), Chapters 1, 2. 7. (provided by JK)

Joseph Nye, *Soft Power. The Means to Success in World Politics* (New York, NY: Public Affairs, 2004), Chapters 1, 2 and 5.

David Engerman, "American Knowledge and Global Power," *Diplomatic History,* 31:4 2007), 599-622.

Michael Adas, Dominance By Design. Technological Imperatives and America's Civilizing Mission (Harvard/Belknap Press, 2006), chapters 1 and 5.

David C. Engerman, Nils Gilman, Mark H. Haefele and Michael E. Latham, *Staging Growth. Modernization, Development and the Global Cold War* (Cambridge MA: University of Massachusetts Press, 2003), Introduction and chapters by Adas, Belmonte and Klein.

February 23 Modernization and Development

Daniel Immerwahr, "Modernization and Development in U.S. Foreign Relations," *Passport,* 2012, available at http://faculty.wcas.northwestern.edu/daniel-immerwahr/ModandDev.pdf

Nick Cullather, "Development? Its History," Diplomatic History, 24:4 (2000), 641 - 653.

Michael E. Latham, *The Right Kind of Revolution. Modernization, Development, and U.S. Foreign Policy from the Cold War to the Present* (Cornell University Press, 2011). Chapters 1-4.

March 2 Community Development

Daniel Immerwahr, *Thinking Small. The United States and the Lure of Community Development* (Cambridge, MA: Harvard University Press, 2015), chapters 1-3, Epilog

Tania Murray Li, *The Will to Improve. Governmentality, Development and the Practice of Politics* (Durham NC: Duke University Press, 2007), Introduction, Chapter 1, Chapter 7, Conclusion.

March 9 The Green Revolution

Nick Cullather, *The Hungry World. America's Cold War Battle Against Poverty in Asia* (Harvard University Press, 2010), OMIT chapters 2, 3 and 4.

Nicole Sackley, "Foundation in the Field. The Ford Foundation's New Delhi Office and the Construction of Development Knowledge, " in John Krige and Helke Rausch, eds. American Foundations of World Order in the Twentieth Century (Vandenhoeck and Ruprecht, 2012), 232-260. (Provided by JK)

March 16 Nuclear Power

in Krige and Barth, *Global Knowledge Power. Science, Technology and International Affairs*, OSIRIS, Vol. 21, 2006, pp. 161-81, available online at johnkrige.com/selected articles/atoms for peace

John Krige, "Technoutopian Dreams, Technopolitical Realities: the Education of Desire for the Peaceful Atom," in Gordon, Tilley and Prakash, eds, *Utopia/Dystopia. Conditions of Possibility* (Princeton University Press, 2010) available online at johnkrige.com/selected articles/atoms for peace

Martin J. Medhurst, "Atoms for Peace and Nuclear Hegemony: the Rhetorical Structure of a Cold War Campaign," *Armed Forces and Society*, 23:4 (1997), 571-93.

Kenneth Osgood, *Total Cold War. Eisenhower's Secret Propaganda Battle at Home and Abroad* (University Press of Kansas, 2006) chapter 5 (Provided by JK)

Gisela Mateos and Edna Suàrez-Dièz, "Technical Assistance in Movement: Nuclear Knowledge Crosses Latin American Borders", in Krige, ed, *Writing Transnational History of Science and Technology,* in press (Provided by JK.)

March 23 NO CLASS Midterm Break

March 30 – April 20 Group Project on Afghanistan
The following lists a few texts to help orientate you in this project. We will collectively develop the reading list in class.

Nick Cullather, *The Hungry World. America's Cold War Battle Against Poverty in Asia* (Harvard University Press, 2010), chapter 4.

Paul Josephson, *Industrialized Nature. Brute Force Technology and the Transformation of the Natural World* (Island Press, 2002), chapter 1 (Provided by JK)

Jenifer Van Vleck, "An Airline at the Crossroads of the World: Ariana Afghan Airlines, Modernization, and the Global Cold War", *History & Technology.* Vol. 25:1 (2009), 3-24.

Donna Mehos and Suzanne Moon, "The Uses of Portability: Circulating Experts in the Technopolitics of Cold War and Decolonization", in Gabrielle Hecht, ed., *Entangled Geographies. Empire and Technopolitics in the Cold War* (Cambridge MA: MIT Press, 2011), chapter 3. (Provided by JK.)

Hugh Gusterson, "Human Terrain: Is Resistance Futile?", paper on anthropologists and the U.S. forces in Afghanistan, presented in Copenhagen, 2011 (Provided by JK.)

Barry Bearak, "Over World Protests, Taliban Are Destroying Ancient Buddhas," *New York Times,* March 2001 (Provided by JK.)

Council on Foreign Relations, "Who are the Taliban?" available at www.cfr.org/afghanistan/taliban-afghanistan/p10551 (Provided by JK.)

Alfred W. McCoy, "The Opium Wars in Afghanistan," *The Asia-Pacific Journal,* 30 March 2010 (Provided by JK.)

April 24 MONDAY at 4pm (TBC) Presentation of Afghanistan Project Findings to HSOC Community

April 27 Summing up and distribution of final exam paper to be submitted by midnight May 5.