

History 407/ IS 401  
**Technology and Power in Africa**  
Winter 2015 | Wednesdays 2-5 pm | 2271 Angell Hall

**Professor Gabrielle Hecht**

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Over the last two centuries, the African continent has been repeatedly portrayed as a continent without technology. These portrayals reflect the politics and cultures not only of colonial domination, but also of technology. This course challenges assertions about the absence of “technology” in “Africa,” exploring ways in which African histories have been shaped by and through technological activities and conceptions of nature. We will explore the nature and meaning of technological knowledge. We will discuss the ways in which technologies symbolize and enact political power. We shall examine the role of technological infrastructures and technical experts in creating and sustaining networks, and also discuss what happened when those networks broke down. The course focuses mainly on the colonial and postcolonial periods. It proceeds thematically rather than chronologically. Readings draw primarily from the disciplines of history, anthropology, and geography.

### **Course requirements**

This is a discussion seminar. Its success depends on the commitment and involvement of all participants. Therefore, you are expected to arrive in class thoroughly prepared to participate actively in all discussions. This means completing all the readings and the corresponding logs before you walk into the classroom at 2pm on Wednesdays.

We meet just once a week, so attendance is mandatory. Absences should occur only in case of dire need, and require written documentation to be considered “excused.” Unexcused absences will result in a lowering of your final course grade.

I expect an atmosphere of civility and responsibility. At a minimum, this includes:

- arriving on time
- listening to and engaging with your colleagues with respect
- turning off cell phones and similar devices
- limiting your laptop use to consultation of readings
- respectful and prompt electronic communication with me and your colleagues

### **The following books are available for purchase at area bookstores or online:**

- Clapperton Mavhunga, *Transient Workspaces: Technologies of Everyday Innovation in Zimbabwe* (MIT Press, 2014).
- William Kamkwamba & Bryan Mealer, *The Boy Who Harnessed the Wind: Creating Currents of Electricity and Hope* (Harper, 2009).

- Martin Murray, *City of Extremes: The Spatial Politics of Johannesburg* (Duke University Press, 2011).
- Allen F. Isaacman & Barbara S. Isaacman, *Dams, Displacement, and the Delusion of Development: Cahora Bassa and its Legacies in Mozambique, 1965-2007* (Ohio University Press, 2013)

**Other readings are available on Ctools or via the library's ebrary system.**

### **Writing assignments & grading**

- 1) **Weekly responses/logs – 25% of final grade.** Every week you are required to turn in a reading log (or, infrequently, another type of response) for each assigned reading. This assignment has two purposes: (1) to hone your skills as careful and critical readers, and (2) to help you prepare for an effective discussion. The reading log form is simple, and available on Ctools. **You must have hard copies of these logs with you at the beginning of class each week.** At the end of most discussion sessions, you will have 10-15 minutes to add comments to your log before turning it in.
- 2) **Synthetic essay – 15% of final grade.** Instead of a midterm exam, you will have a 1800-2200 word essay due on February 18 (equivalent to 7-9 pages). The goal is to synthesize the readings and themes of the first part of the course. A more specific prompt will be handed out at the end of class the previous week.
- 3) **Final project – 35% of final grade.** During the second part of the term, we will develop a class project on technology and power in Africa. The project will use our reading for March 11 as a jumping-off point: each student will pick a topic related to a theme or event in this reading, and explore it in historical and contemporary context. The project will draw both on course materials and outside research include a written paper (2500-3000 words, 10-12 pages) and an oral presentation (5-7 minutes with slides). Details will be handed out separately. Presentations will be delivered on the last day of class, April 15<sup>th</sup>. Papers will be due no later than 4 pm on Friday, April 17<sup>th</sup>.
- 4) **Class participation – 25% of final grade.** Note: attendance is a prerequisite for, but not an equivalent to, participation. Effective class participation demonstrates that you have read and thought about the readings in advance. It also involves listening to, respecting, and responding to the comments of your classmates.

**Cold calling:** to encourage full involvement and preparation, I will “cold call” several students during each class. This means that I will ask you a direct question on the readings even if you haven’t raised your hand. I will expect answers that demonstrate your knowledge of the material and your ability to draw interesting connections between the readings. This practice is not intended to single out or embarrass anyone. Instead, its goal is to help you prepare for class and to learn to think and talk “on your feet,” a crucial skill required by almost any profession. **You will be graded on both the regularity and the quality of your participation, including your responses to cold calls.**

## **Academic Integrity**

University policy prohibits all forms of academic dishonesty, including (but not limited to) plagiarism, double submission of papers, responding to in-lecture questions in another student's place, or abetting another student's dishonesty. Any action or assignment in violation of these strictures will automatically receive a failing grade. Violations will also be reported to the Assistant Dean for Undergraduate Education. This is required by LSA policy, which also ensures due process rights of appeal for students. Depending on the severity of the infraction, the instructor or the university may impose additional penalties. When in doubt, be sure to cite carefully and completely all sources from which information is obtained. This includes (but is not limited to) books, articles, internet sites, encyclopedias, and periodicals. You must provide a citation whenever you quote a source, paraphrase it, or extract information from it. In order to ensure that you're following appropriate academic convention, please consult the [Chicago Manual of Style Online](#), and pay close attention to specific guidelines provided in the course assignments.

Clarifying the disciplinary standards of research ethics and source citation is part of the educational mission of this course. In order to deepen your understanding of academic integrity, you should examine the policies and resources laid out by LSA and the History department:

<http://www.lsa.umich.edu/academicintegrity/>

<http://www.lsa.umich.edu/history/undergraduate/courses/guidelinesandpolicies>

If you haven't already done so for another course, I especially recommend that you take the "Academic Integrity" quiz on the LSA site. If you still have questions about specific practices, please speak to me, and/or one of the staff at the Newnan LSA Academic Advising Center or the Sweetland Writing Center.

*[The text of this clause includes boilerplate derived from other colleagues and is used with permission.]*

## Topics and Readings

### January 7 Introduction

### January 14 "Technology" and "Africa"

Ralph A. Austen and Daniel Headrick. "The Role of Technology in the African past," *African Studies Review* 26, no. 3/4 (1983): 163-184.

Michael Adas, *Machines as the Measure of Men: Science, Technology, and Ideologies of Western Dominance* (Cornell, 1989). Read the following excerpts:

- Chapter 3: pages **133-152** [on Europe; pay special attention to pages 133-34 and 143-145; you may simply skim the rest of the excerpt] and **152-165** [Africa – read all];
- Chapter 4: pages 199-210 [civilizing mission] and 221-236 [machine as civilizer].

Ferguson, James. *Global Shadows: Africa in the Neoliberal World Order* (2006), Introduction.

Emily Osborn, "Casting aluminum cooking pots: labour, migration, and artisan production in West Africa's informal sector, 1945-2005," *African Identities*, Vol. 7, no. 3 (August 2009): 373-386.

Kusiak, Pauline. "'Tubab' technologies and 'African' ways of knowing: nationalist techno-politics in Senegal," *History and Technology* 26:3: 225-249.

Study the map of Africa at <http://faculty.humanities.uci.edu/mitchell/africastudymap.html>. Practice until you can get through the test in 7 minutes or less.

### January 21 Technology in the Deep Past

Kruger, Colleen E. *Pride of Men. Ironworking in 19<sup>th</sup> century West Central Africa* (Heinemann 1999), chapters 3, 4, and 5

Clapperton Mavhunga, *Transient Workspaces: Technologies of Everyday Innovation in Zimbabwe* (MIT Press, 2014), Introduction, chs 1 & 2

### January 28 Tools of Empire

Daniel Headrick, *Tools of Empire: Technology and European Imperialism in the Nineteenth Century* (Oxford University Press, 1981), chapters 3, 6, and 7.

Libbie Freed, "Networks of (colonial) power: roads in French Central Africa after World War I." *History and Technology* 26, no. 3 (2010): 203–223.

Brian Larkin, *Signal and Noise: Media, Infrastructure, and Urban Culture in Nigeria* (Duke University Press, 2008), ch 1: "The Colonial Sublime," pp 16-47. ch 2: "Unstable Objects: Making Radio in Nigeria," pp. 48-72.

Nancy J. Jacobs, *African History through Sources: Colonial Contexts and Everyday Experiences, c. 1850-1946, Vol. 1* (Cambridge University Press, 2014): chapter 3.

**February 4      Guns**

Storey, William K. "Guns, Race, and Skill in Nineteenth-Century Southern Africa," *Technology and Culture* 45 (4): 687-711.

Giacomo Macola, "Reassessing the Significance of Firearms in Central Africa: the Case of North-Western Zambia to the 1920s," *Journal of African History*, vol. 51 (3), Nov. 2010: 301-321.

Clapperton Mavhunga, *Transient Workspaces: Technologies of Everyday Innovation in Zimbabwe* (MIT Press, 2014), chapters 3, 4, 5.

Jack Hogan, 'Hardly a Place for a Nervous Old Gentleman to Take a Stroll': Firearms and the Zulu during the Anglo-Zulu War," pp 129-148 in Karen Jones, Giacomo Macola, and David Welch, eds., *A Cultural History of Firearms in the Age of Empire* (Ashgate, 2013).

**February 11            Mining**

Moodie, T. Dunbar with Vivienne Ndatshe, *Going for Gold: Men, Mines and Migration* (California, 1994), ch 2: "Production Politics: Workplace Control and Worker Resistance," 44-75.

Jeff Guy & Motlatsi Thabane, "Technology, Ethnicity, and Ideology: Basotho Miners and Shaft-Sinking on the South African Gold Mines," *Journal of Southern African Studies*, vol. 14, no. 2 (Jan. 1988).

Jock McCulloch, "Counting the Cost: Gold Mining and Occupational Disease in Contemporary South Africa," *African Affairs*, 108/431, 221-240.

Gabrielle Hecht, "Africa and the Nuclear World: Labor, Occupational Health, and the Transnational Production of Uranium," *Comparative Studies in Society and History*, 51/4 (October 2009): 896-926.

**February 18            Synthetic essay due**

See assignment prompt for details.

**February 25            South Africa: Citizenship and the State**

Keith Breckenridge, *Biometric State: The Global Politics of Identification and Surveillance in South Africa, 1850 to the Present* (Cambridge University Press, 2014): 1-62.

Geoffrey C. Bowker and Susan Leigh Star, "The Case of Race Classification and Reclassification under Apartheid," in *Sorting Things Out* (MIT Press 1999), 195-225.

Keith Breckenridge, "Verwoerd's Bureau of Proof: Total Information in the Making of Apartheid," *History Workshop Journal*, No. 59 (Spring, 2005): pp. 83-108.

Gabrielle Hecht and Paul N. Edwards, "History and the Technopolitics of Identity: The Case of Apartheid South Africa," *Journal of Southern African Studies* 36:3 (September 2010): 619-639.

**March 3            WINTER BREAK**

**March 11          Improvisation, Initiative, and Inequality**

William Kamkwamba & Bryan Mealer, *The Boy Who Harnessed the Wind: Creating Currents of Electricity and Hope* (Harper, 2009).

Ferguson, James. *Global Shadows: Africa in the Neoliberal World Order* (2006), ch. 1.

NOTE: See final assignment prompt for details on this week's reading log & topic selection.

**March 18          Energy and High Modernism**

Allen F. Isaacman & Barbara S. Isaacman, *Dams, Displacement, and the Delusion of Development: Cahora Bassa and its Legacies in Mozambique, 1965-2007* (Ohio University Press, 2013), selected chapters TBA.

**March 25          Mobility and Modernization**

Joshua Grace, *Modernization Bubu: Cars, Roads, and the Politics of Development in Tanzania, 1870s to 1980s*, (dissertation, Department of History, Michigan State University, 2013): Introduction and chapters 1, 2, 4, and 6.

**April 1            Infrastructure and Space in an African Metropolis**

Martin Murray, *City of Extremes: The Spatial Politics of Johannesburg* (Duke University Press, 2011), selected chapters TBA.

**April 8            Water, Waste, and the Technopolitics of Citizenship**

Brenda Chalfin, "Public things, excremental politics, and the infrastructure of bare life in Ghana's city of Tema," *American Ethnologist* Vol. 41, No. 1 (2014): 92-109.

Von Schnitzler, Antina. "Citizenship Pre-paid: Water, Calculability, and Techno-Politics in South Africa," *Journal of Southern African Studies*, 34/4 (Dec. 2008): 899-917.

Jacky Boujou, "Urban Dwellers, Politicians, and Dirt: An Anthropology of Everyday Governance in Bobo-Dioulasso (Burkina Faso), 143-170 in Giorgio Blundo and Pierre-Yves Le Meur, *The Governance of Daily Life in Africa: Ethnographic Explorations of Public and Collective Services* (Brill, 2008). Available via Mirlyn's ebrary system.

Mahaman Tidjani Alou, "Public Goods and the Management of Collective Infrastructure: the Case of the Drinking-Water Supply Systems in the Maradi Region of Niger," 317-340 in Giorgio Blundo and Pierre-Yves Le Meur, *The Governance of Daily Life in Africa: Ethnographic Explorations of Public and Collective Services* (Brill, 2008). Available via Mirlyn's ebrary system.

Melanie Samson, "Wasted Citizenship? Reclaimers and the Privatised Expansion of the Public Sphere," *Africa Development*, vol. XXXIV, nos. 3 & 4: 1-25

**April 15            Final papers due, with presentations**

See assignment prompt for details