

ANTH 189

Anthropology of Science, Technology, and Data

Spring 2020

T – Th 11:00am – 12:30pm, Barrows 126

Professor Cori Hayden

Office: 327 Kroeber Hall

Office hours: Tues 1pm-4pm

Sign-up: <https://www.wejoinin.com/sheets/fmvih>

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Course description

Science and technology (including information technology) are fundamental parts of the political and social worlds we inhabit, and of our intimate senses of ourselves. This course addresses this assertion in three clusters. First, it provides an advanced introduction to key conceptual work in the anthropology of science, technology, and knowledge production. The goal is to lay a foundation for stepping back and asking, what critical tools are available to us for thinking about how truth-effects are produced in the world today? How do we know what we know? How might we address the dilemmas of a so-called post-truth moment? Second, course readings will ask, what social and political arrangements are “built into” or *materialized* through the infrastructures and objects that help structure our lives in the U.S. and globally? Third, have new information technology, media platforms, and data-rich practices (data mining, self-tracking) fundamentally changed the questions we must pose vis-à-vis knowledge and truth? Here we will look at such things as life by algorithm, the rapidly growing self-tracking movement (especially vis-à-vis health), and recent work on the infrastructures of “the cloud” to examine the forces that are giving shape to the circuitry of knowledge, experience, power, and inequality today.

Readings

Course reader. Unless otherwise noted in the syllabus, the majority of the required readings will be in the **course reader**, which will be available for purchase at **Copy Central (2411 Telegraph Avenue; tel 510-848-8649)**. I will also put a copy of the reader on 2-hour reserve in the Anthropology Library, on the second floor of Kroeber Hall. Additional articles, whether required or recommended, will be posted via bCourses and will be noted as such in the syllabus and/or in lecture. Please ensure that you are set up to receive notifications from bCourses, as that will be my primary way of communicating with you outside of class.

Books. There are two required books for the course, available for purchase at the Cal Student Bookstore:

Ruha Benjamin, *Race After Technology: Abolitionist Tools for the New Jim Code* (Polity 2019)
Tung-Hui Hu, *The Prehistory of the Cloud* (MIT 2015).

Course requirements

This is a concept-driven course that demands close readings, preparation, and active participation in class discussion. Please come to class having completed the assignments listed for that day on the syllabus. We will work through a combination of lectures, group discussion, and smaller group work. I will assign you short written exercises periodically throughout the semester meant to help you synthesize and concretize key arguments from the class.

Your attendance and participation in all class meetings is expected. **You will not pass the class if you have more than 3 unexcused absences.**

Your grade will be based on the following:

Participation	20%
Short take-home exercises	20%
Midterm exam	30%
Final exam	30%

Important dates

Midterm exam:	Thursday March 5 (in class)
Final exam:	Thursday May 14, 8:00am – 11:00am

Statement on Academic Integrity

As a member of the campus community, you are “expected to demonstrate integrity in all of your academic endeavors. Any test, paper or report submitted by you and that bears your name is presumed to be your own original work that has not previously been submitted for credit in another course unless you obtain prior written approval to do so from your instructor. In all of your assignments, you may use words or ideas written by other individuals in publications, web sites, or other sources, but only with proper attribution.” (Wording provided by the Berkeley Center for Teaching and Learning).

If you are not clear about the expectations for completing an assignment please seek clarification from me beforehand. You can find more information for students on academic integrity at <http://sa.berkeley.edu/conduct/integrity>.

Syllabus

1. The End of (Science? Theory? Truth?)

(All links and files this week available in bCourses, Module 1)

Tues Jan 21

Chris Anderson, “The end of Theory: The Data Deluge Makes the Scientific Method Obsolete” *Wired*, 2008 <http://www.wired.com/2008/06/pb-theory>

Thurs Jan 23

Kofman, Ava, 2018. “Bruno Latour, the Post-Truth Philosopher, Mounts a Defense of Science” in *The New York Times Magazine*. <https://www.nytimes.com/2018/10/25/magazine/bruno-latour-post-truth-philosopher-science.html>.

Bruno Latour, *Science in Action*, pp. 1-33.

2. Situated Knowledges

(All links and files this week available in bCourses, Module 2)

Tues Jan 28

Max Liboiron and colleagues, Clear Lab lab book, available at <https://civiclaboratory.files.wordpress.com/2017/12/clear-lab-book.pdf>

Thurs Jan 30

Donna Haraway, “Situated Knowledges” in *Simians, Cyborgs and Women*. Routledge University Press, pp. 183-201

3. Risk society

(All readings now available in course reader unless otherwise noted)

Tues Feb 4

Ulrich Beck, *Risk Society*, excerpts: pp. 19-24 and pp. 51-57.

Thurs Feb 6

Adriana Petryna, 2004. “Biological Citizenship: The Science and Politics of Chernobyl-Exposed Populations,” *OSIRIS* (19): 250-265.

4. Chemical relations

Tues Feb 11

Nicolas Shapiro, 2015. “Attuning to the Chemosphere: Domestic Formaldehyde, Bodily Reasoning, and the Chemical Sublime.” *Cultural Anthropology* Vol. 30, Issue 3, pp. 368–393

Thurs Feb 13

Michelle Murphy 2017. "Alterlife and Decolonial Chemical Relations," *Cultural Anthropology* 32 (4): 494-503.

Eve Tuck, 2009. "Suspending Damage: A letter to Communities," *Harvard Educational Review* Vol. 79 No. 3

Max Liboiron 2017, "Pollution is Colonialism," link available on bCourses:
<https://discardstudies.com/2017/09/01/pollution-is-colonialism/>

5. A politics of habitability**Tues Feb 18**

Peter Sloterdijk, 2009. *Terror from the Air*, Semiotext(e), Chapter 1 (pp. 1-46).

Vanessa Agard-Jones 2014. "Spray" *Somatosphere* <http://somatosphere.net/2014/spray.html/>
(bCourses)

Thurs Feb 20

Adriana Petryna, 2018. "Wildfires at the Edges of Science: Horizons of Work Amid Runaway Change." *Cultural Anthropology* 33(4): 570-595.

Cagle, Susie. 2018. "[Fire and Rain](#)." Podcast episode. *99 Percent Invisible*, August 7. Link provided on bCourses.

6. Human, non-human**Tues Feb 25**

Tobias Rees, 2019. "For microbes." <https://culanth.org/fieldsights/for-microbes>. bCourses

Jaime Lorimer, 2016. "Gut Buddies: Multispecies Studies and the Microbiome," *Environmental Humanities* 8(1): 57-76.

Thurs Feb 27

Donna Haraway, 1991. "A cyborg manifesto," in *Simians, Cyborgs and Women*.

7. Review and midterm exam week**Tues Mar 3**

Review

Thurs Mar 5

In-class midterm exam

8. Data, health, mass, self

Tues Mar 10: Mass health

Joseph Dumit, 2015. *Drugs for Life* (excerpts)

Thurs Mar 12: Quantified self

Wolf, Gary, and Ernesto Ramirez. *Quantified Self/Public Health Symposium*, April 2014, pp. 1-45).

9. Big data and algorithmic life: questions, tactics

Tues Mar 17

boyd, danah, and Kate Crawford. "Critical Questions for Big Data: Provocations for a Cultural, Technological, and Scholarly Phenomenon." *Information, Communication & Society* 15, no. 5 (June 2012): 662–79

Nick Seaver, 2017. "Algorithms as culture: Some tactics for the ethnography of algorithmic systems," in *Big Data & Society*, 4(2): 1-12.

Thurs Mar 19

Stefania Milan, 2015. "When Algorithms Shape Collective Action: Social Media and the Dynamics of Cloud Protesting." *Social Media and Society* (July-Dec 2015): 1 –10.

Preface and introduction of Ruha Benjamin, *Race After Technology: Abolitionist Tools for the New Jim Code*. Polity 2019.

10. Spring break

Tues Mar 23 and **Thurs Mar 25**: finish reading Benjamin, *Race After Technology*.

11. Do artifacts have politics?

Tues Mar 31

Discussion of *Race After Technology*

Thurs Apr 2

Langdon Winner, 1980. "Do Artifacts Have Politics?" *Daedalus*, Vol. 109 (1): 121-136

Kurgan, Laura, Dare Brawley, Brian House, Jia Zhang, and Wendy Hui Kyong Chun. "Homophily: The Urban History of an Algorithm." *E-Flux Architecture*, Are Friends Electric?, October 4, 2019. <https://www.e-flux.com/architecture/are-friends-electric/289193/homophily-the-urban-history-of-an-algorithm/>. bCourses.

12. Automating inequality

Tues Apr 7

Listen to the following podcast (all the way through!) before coming to class: “Cathy O’Neil. Weapons of Math Destruction | Talks at Google,” November 2, 2016.

<https://www.youtube.com/watch?v=TQHs8SA1qpk>. bCourses.

Thurs Apr 9

Mary Gray and Siddhartha Suri, 2019. *Ghost Work: How to Stop Amazon, Google, and Uber From Creating a New Global Underclass*. Houghton Mifflin Harcourt. Excerpts.

Astra Taylor, “The Automation Charade,” in *Logic* (Issue: Failure), August 1, 2018 (link provided on bCourses)

13. Prehistory of the Cloud

Tues Apr 14

Tung Hui Hu, 2015. *Prehistory of the Cloud*, Introduction and Chapter 1, “The Shape of the Network”

Thurs Apr 16

Prehistory of the Cloud, Chapter 2, “Time-Sharing and Virtualization.”

14. Cloud infrastructures

Tues Apr 21

Prehistory of the Cloud, Chapter 3, “Data Centers and Data Bunkers”

Thurs Apr 23

Nicole Starosielski, 2015. “Fixed-flow Undersea Cables as Media Infrastructure” in *Signal Traffic*, edited by Lisa Parks and Nicole Starosielski. University of Illinois Press.

15. Future past

Tues Apr 28 Halpern, Orit, Jesse LeCavalier, Nerea Calvillo, and Wolfgang Pietsch, 2013. “Test-Bed Urbanism.” *Public Culture* 25, no. 2: 272–306.

Thurs Apr 30

Imagining an otherwise

Final exam: Thursday May 14, 8:00am – 11:00am.