

THE LIGHT AND THE DARK OF THE NET: HISTORIES AND THEORIES OF THE INTERNET

Course Number: CAMS 270

Term: Fall 2015

Credit: 1, graded

Date & Time: MThu 2:50–4:00PM

Location: Jewett Art Center 450

Instructor: Nicholas Knouf (nknouf@wellesley.edu; <http://zeitkunst.org>); JAC 460 x2105

Office Hours: MTh 4-5PM or by appointment

Course Description

The Internet is often described in binary terms: as an unmitigated good promising positive social change, or a place of great danger that enables unparalleled amounts of both surveillance and bad behavior. Charting a route between these poles, this course explores the Internet through a close attention to its materiality and history. Topics include the intersection of the state, corporations, the military, and academia in the Internet's construction; the formation of identity; representations of gender, race, class, and ethnicity; artistic interventions; the role of free software movements and hacking; legal questions; changes in commerce; and forms of participatory media. Important to our investigation is an experience with the Internet-as-material; as such, we will conduct exercises that explore the technical makeup of the Internet (no prior technical knowledge necessary). The course will show how the technical and social dimensions of the Internet mutually constitute each other.

Required Texts

- Charlie Gere, *Digital Culture* (Reaktion Books, 2008)
- Texts available in Sakai
- Online resources

Recommended Texts

The history of the Internet is fundamentally intertwined with the history of computing. Given time constraints, we cannot cover all of the necessary history in this one course. As such, the recommended texts go into further depth regarding these histories.

- ✦ Janet Abbate, *Inventing the Internet* (The MIT Press, 2000).
- ✦ Paul N. Edwards, *The Closed World: Computers and the Politics of Discourse in Cold War America* (Cambridge, MA: The MIT Press, 1997).
- ✦ N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: University Of Chicago Press, 1999).
- ✦ Sherry Turkle, *Life on the Screen: Identity in the Age of the Internet* (New York: Touchstone, 1995).
- ✦ Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* (University Of Chicago Press, 2006).
- ✦ Mitchell M. Waldrop, *The Dream Machine : J.C.R. Licklider and the Revolution That Made Computing Personal* (Penguin (Non-Classics), 2002).

Course Goals

The primary aim of this course is to provide an opportunity to understand the Internet beyond the framework of a user. We will explore the history of the Internet through contemporary scholarship, as well as the analysis of primary historical texts. We will additionally engage with a large body of theoretical work that situates the Internet within the domains of infrastructure, identity, economics, politics, and art.

Coupled to this will be a close attention to the Internet as a material entity. To that end, we will conduct a number of “experiments” that highlight how various aspects of the Internet function, such as the ways in which data travels through the network, how surveillance works, and how data is encrypted. These experiments assume no prior knowledge on your part; we will begin from the basics. The experiments have a two-fold purpose: the first is to show how theory and practice are interrelated (i.e., how the material aspects of the Internet enable/disable certain behaviors); the second is to open the “black-box” of technology to scrutiny.

Along with these two aims, you will also:

- ✦ Learn how to approach an object of familiarity with a critical eye
- ✦ Synthesize theoretical arguments through regular writing assignments
- ✦ Explore novel aspects of the Internet
- ✦ Engage with challenging material from a variety of disciplinary domains
- ✦ Experiment with the technical makeup of the Internet
- ✦ Develop a large-scale multi-media project on some aspect of the Internet

Course Requirements

- ✦ Completion of all required reading
- ✦ Participation during class discussion
- ✦ Leading of discussion during one class session
- ✦ Short (1-2 paragraphs) responses to the week’s reading, due before class

- Completion of all experiments
- Two short papers (3–5 pages)
- Final portfolio, consisting of a final paper (10–15 pages) on an Internet-related artifact, and a collection of your best work throughout the semester.

Description of Required Reading

You are required to read the materials provided. The purpose of the readings in this course is threefold. First, the materials serve to familiarize you with the kind of conceptual and material culture within contemporary studies of the Internet. Secondly, these texts are designed to give you a sense about the kinds of research and writings typically expected from professionals in media studies. Lastly, you can think of these texts as conceptual devices that you can engage with in your projects, both for this course as well as in your future endeavors.

One final note about the readings: you may likely find some of the texts you read to be rather challenging. Some texts might assume a technical knowledge you lack; others might appear to be more suited to a class in poetry rather than one on the Internet. We will work through these challenges together. I hope that you will focus on the process of understanding, and that you find the texts to be productively challenging. Knowing how to approach difficult material from unfamiliar domains is a skill that will be extremely useful to you, no matter your future endeavors.

Teaching philosophy

I am of the belief that theory and practice are fundamentally intertwined. As such, we will do a lot of “hands-on” learning in this course, alongside our discussion of theoretical and historical texts. Additionally, I am less interested in the rehearsal of the minute details of the texts under study and rather want to encourage you to think expansively about how media theory informs media practice, and vice versa. Finally, I want the classroom to be a space where challenging critique and conversation can take place; please be respectful of the opinions and comments of other students in class, and I will do the same.

How to Succeed in this Class

At the bare minimum you must complete the requirements for the course as outlined above. Beyond this you must be willing to take some risks, to challenge yourself to go further in your analysis of the works or in your production of your final project. You can expect to spend 7 to 8 hours preparing for the class (reading the texts, writing summaries, doing the experiments, preparing for projects, etc.).

Assignments and Requirements

Participation: (10%)

The importance of the works under discussion lies not in the works themselves, but rather in their inter-relationship with our discussions and other media that you and I encounter in our lives. Thus class participation is vital to the success of this course. Simply attending class will not be enough to earn full participation credit; instead, you must be an *active* participant, someone who comes prepared and engages with all aspects of the class.

Reading summaries (15%)

Each week each student will write a summary (maximum 300 words) of the readings under consideration. These summaries are due 12PM the day of class in order to provide the other students and I enough time to read them. This summary should include relevant references from the readings, connection to the various media artifacts we have discussed in the course, and points of confusion. Each student will post their summary publicly to the week's forum on Sakai. These summaries will not be graded, per se, but rather will be marked as "check-minus" (insufficient attention to these guidelines), "check" (sufficient attention to these guidelines), and "check-plus" (outstanding commentary). Please think of these summaries as primarily for the benefit of you and the other students in the class; they enable you to pull out the threads that are most relevant for your own interests, as well as highlighting those aspects of the readings that are causing you difficulty. Remember that some these texts rather challenging; noting a problem in understanding is itself a sign of maturity. I encourage students to comment and respond to the writing of other students, although this is not a requirement.

Leading of a class session: (5%)

They say that the best kind of learning comes from having to teach others. For one class session during the semester, you will lead the discussion. This will entail opening the class with an overview of the topics at hand, presentation of relevant media, and the posing of through-provoking questions for us to consider. We will decide upon these sessions early in the semester so you will have plenty of time to prepare.

Experiments (15%)

Engaging with the materiality of the Internet is key to understanding its socio-technical dynamics. Because of this, completion of the following five experiments (along with the introductory ungraded Experiment 0) is required. More information will come as the Experiments come due. Grading for these assignments will be on a pass/fail basis.

- ✦ Experiment 0: command-lines and virtual machines, or how to do things with computers; due September 17.
- ✦ Experiment 1: ping and tracerouteing, or how to see where your data flows; due September 24.
- ✦ Experiment 2: packets and nc, or how you too can run a server from your laptop; due October 8.
- ✦ Experiment 3: protocols, or how you can send e-mail without needing your web browser; due October 15.
- ✦ Experiment 4: surveillance and wireshark, or why you shouldn't do this at home; demonstration in-class October 19.
- ✦ Experiment 5: encryption and pgp, or how to obfuscate things, at least partially; due November 12.

Two short papers (25%)

Evenly spaced throughout the semester will be two short papers on topics germane to the course. For the first, due early in the semester, I will ask you to ruminate on the concept of the "network"; more details to be provided later. The second, due shortly after Fall Break, will ask you to examine a particular artifact of the Internet in the context of the theories and histories we have considered. These papers should be around 3–5 pages in length, properly referenced, and include additional media as necessary or desired. This assignment will be graded on a letter-grade basis.

Final portfolio (30%)

The final portfolio is a collection of the best of the work you have completed in the semester, a final project that is an in-depth exploration of a novel aspect of the Internet, and a rumination on the development of your understanding over the duration of the course.

First, the final project. One way to think of the final project would be an in-depth, well-researched (with outside sources), 10–15 page paper on a particular Internet artifact. It would kind of be like an expanded version of your second short paper, but on a different topic.

But on the other hand, our course *is* about the Internet. I am open to other forms of representation of your understanding of the course material, be they websites, computer programs, animations, videos, etc. In any event, they must be of equal effort to a 10–15 page research paper, thus they must not only include outside research of some sort as well as the synthesis of the course concepts, but also must be extensive in terms of length or material. As this is somewhat vague, we will discuss these guidelines together when the time comes in the semester.

In any event, you will present on the present state of your final project during the last days of the class.

This final project will become part of a collection of your best work throughout the semester. You will include your best summary, one-to-two pages on what you learned (or didn't learn and wanted to) from the experiments, and your networks paper and combine it with the final paper into a portfolio. You will introduce this portfolio with a cover letter that not only describes the work therein, but also explores how your thinking has changed over the course of the semester. This will give you a chance to reflect on your assignments as a body of work.

Because this is complicated final assignment, there will be a number of milestones:

- ✦ November 16: Choice of Internet artifact and final project form in consultation with me
- ✦ November 30: Short (250 word) progress report on your final project
- ✦ December 7: Final presentations
- ✦ December 18: Final portfolio due.

We will be discussing this assignment extensively in class so please be sure to ask questions if you have any concerns. The final portfolio will of course be graded on a letter-grade basis.

Summary of assignment due dates

- ✦ 12PM Mondays: Reading summary
- ✦ September 17: Experiment #0 due
- ✦ September 24: Experiment #1 due
- ✦ October 1: Paper #1 on Networks due
- ✦ October 8: Experiment #2 due
- ✦ October 15: Experiment #3 due
- ✦ October 19: Experiment #4 (in-class)
- ✦ October 26: Paper #2 on Internet artifact due
- ✦ November 12: Experiment #5 due
- ✦ December 18: Final portfolio due

Grading

Grading rationale

A grade of “A” is given to students who meet with conspicuous excellence every demand which can fairly be made by the course.

A grade of “B” is given to those students who add to the minimum of satisfactory attainment excellence in not all, but some of the following: organization, accuracy, originality, understanding, insight.

A grade of “C” is given to those students who have attained a satisfactory familiarity with the content of a course and who have demonstrated ability to use this knowledge in a satisfactory manner.

A grade of “D” is a passing grade. There is no grade of D+ or D-.

Depending on enrollment, this course might be subject to the Wellesley College policy (<http://www.wellesley.edu/registrar/grading/gradingpolicyfaq>). While that policy asks faculty to hold each 100- and 200-level course with 10 or more students to an average of no higher than 3.33, it does not require faculty to grade on a “curve.” There is no arbitrary limit on the number of A’s, B’s, C’s etc., and every student will be assigned the grade she earns and deserves according to the grading standards of the college.

In any event, grading is non-competitive: helping your classmates will never harm your grade.

Grading breakdown

| | | |
|------|--------|-------------|
| A = | 4.0 = | 92.5%+ |
| A- = | 3.67 = | 89.5%-92.4% |
| B+ = | 3.33 = | 86.5%-89.4% |
| | = | |
| B = | 3.00 = | 82.5%-86.4% |
| B- = | 2.67 = | 79.5%-82.4% |
| C+ = | 2.33 = | 76.5%-79.4% |
| | = | |
| C = | 2.0 = | 72.5%-76.4% |
| C- = | 1.67 = | 69.5%-72.4% |
| D = | 1.0 = | 59.5%-69.4% |
| F = | 0.0 = | <59.5% |

Administrivia

Absence & Late policy

Absences are allowed in three circumstances: personal illness, family crisis, or college-sanctioned activity. In all three cases I ask to be informed as soon as possible in advance so that we can make proper arrangements for completing the missed work—knowing that in true crisis situations advance notice may not be possible. Excused absences are the only cases in which work can be turned in late without penalty. In all other cases, late work will result in a 10% decrease in your grade for each day it is late, and will be accepted up to one week after the due date. *Please do not turn in work late:* it is highly detrimental to your overall performance, makes it very easy to fall behind, is disruptive to the other students who completed the assignments on time, and adds an additional burden on me in terms of finding time to grade your assignment at a later date. It is oftentimes in your best interest to turn in an time a less-than-perfect assignment rather than a slightly-closer-to-perfect late one.

E-mail

Any questions of a non-personal nature regarding course content, assignments, etc., should be posted to the “General Discussion” Sakai forum, as it is likely other students in the course either have a similar question or can provide you with an answer! Personal questions can be discussed over e-mail, during office hours, or by appointment. I will try to respond to all e-mails within 24 hours. I generally reply to e-mails during business hours during the week, and rarely reply to e-mails on the weekends. Please send e-mail from your Wellesley account to ensure that it does not inadvertently end up in my spam folder.

One final note regarding e-mail: please use proper salutations and grammar in writing your e-mail. (This also goes for forum posts on Sakai.) It might seem like a minor point, but it goes a long way towards producing the environment that is conducive to our joint learning!

Feedback and Comments

I will provide varying levels of feedback on your assignments during the semester. For shorter assignments, this may come in the form of a few short phrases or words. For longer assignments I will provide more extensive comments, not only on content but also on form and mechanics. This feedback might appear at times to be rather direct; know, however, that whenever I provide feedback it is in the service of making you a better writer, a better thinker, a better maker. I am of course more than willing to discuss my feedback with you in person.

Grading concerns

Please take at least 24 hours to review my comments before contacting me regarding any grading concerns. I prefer to do this during office hours or a scheduled appointment, and not before or after class.

Honor code

I want to remind you of the honor code: “As a Wellesley College student, I will act with honesty, integrity, and respect. In making this commitment, I am accountable to the community and dedicate myself to a life of honor.” I expect that you will act accordingly, and you can expect I will do the same.

The College and I take plagiarism seriously. Please be sure to reference any materials you quote or paraphrase, no matter the medium. Let me know if you have any questions regarding this issue.

Laptop/Tablet policy

As I know some students prefer to take notes on the laptops, or view course readings electronically, laptops and tablets *are* allowed in class. If, however, it comes to be that laptops are being used in-class for non-class purposes, we will have a discussion about their continued presence in the classroom.

Pronouns

If you have a preference as to which pronoun you would like me to use with you, please let me know.

Paper formatting and guidelines

Please turn in papers and summaries with proper grammar and spelling. If either detract from my ability to understand your argument, I reserve the right to decrease your grade accordingly.

Papers should be turned in electronically to Sakai, doubled-spaced using a standard serif font (Cambria, Garamond, Georgia, Palatino, Times New Roman, etc.) at a size of 12pt with 1in margins. Please do not try to increase your page count through creative combinations of font, font size, and margins: I've seen it all, I've even tried it myself (and have often failed), and your time would be better spent working on the substance of your paper.

Please be consistent in your choice of citation format; I do not care if you use Chicago, MLA, or APA. As with spelling and grammar, if your citations detract from my ability to understand your paper, I reserve the right to decrease your grade accordingly.

Social Media

It is my policy to not add students as friends on Facebook until they have graduated. I do have a public Twitter handle (@zeitkunst) and if Twitter is your thing and if you are interested, feel free to follow me there (although of course there is no obligation to do so). I have a public website at <http://zeitkunst.org>.

Students with disabilities

If you have a disability and need accommodations, please contact Jim Wice, Director of Disability Services, in Clapp Library 314 to arrange these accommodations. See <http://www.wellesley.edu/disability> for more information.

Schedule

This schedule is subject to change, but any changes will be announced in advance in class and posted to the Sakai site for the course.

INFRASTRUCTURAL HISTORIES

Week 1: Infrastructure (Some Histories and Antecedents)

August 31

J. C. R. Licklider and Robert W. Taylor, "The Computer as a Communication Device," *Science and Technology*, no. 76 (1968): 21–31.

Highly Recommended

J. C. R. Licklider, "Man-Computer Symbiosis," *IRE Transactions on Human Factors in Electronics* 1, no. 1 (March 1960): 4–11.

J. C. R. Licklider, "Memorandum For Members and Affiliates of the Intergalactic Computer Network," April 23, 1963, accessed January 26, 2014, <http://www.kurzweilai.net/memorandum-for-members-and-affiliates-of-the-intergalactic-computer-network>.

September 3

Tom Standage, *The Victorian Internet: The Remarkable Story of the Telegraph and the Nineteenth Century's On-line Pioneers* (New York: Walker & Company, 2007 [1998]), "The Thrill Electric," "Wiring the World," "Love over the Wires".

Derek W. Vaillant, "La Police de l'Air: Amateur Radio and the Politics of Aural Surveillance in France, 1921-1940," *French Politics, Culture & Society* 28, no. 1 (April 2010): 1–24, <http://www.jstor.org/stable/42843635>.

Week 2: Infrastructure (Some Histories of Computing)

September 7

Labor Day: no class!

September 10

Charlie Gere, *Digital Culture* (Reaktion Books, 2008), "Introduction", 11–20, "The Beginnings of Digital Culture", 21–50.

Recommended Viewing

Lynn Hershman Leeson, *Conceiving Ada* (1997), Film.

Supplemental

Paul N. Edwards, *The Closed World: Computers and the Politics of Discourse in Cold War America* (Cambridge, MA: The MIT Press, 1997).

Week 3: Infrastructure (Some Histories of the Internet)

September 14

Charlie Gere, *Digital Culture* (Reaktion Books, 2008), “The Cybernetic Era”, 51–78.

Paul Baran, *On Distributed Communications: I. Introduction to Distributed Communications Networks*, technical report RM-3420-PR (Rand Corporation, 1964), iii, v, vii–viii, 1–12.

Donald W. Davies, *Proposal for a Digital Communication Network*, technical report (National Physical Laboratory, 1966), 1–11.

Viewing

Peter Chvany, *Computer Networks - The Heralds Of Resource Sharing* (1972), Film, https://archive.org/details/ComputerNetworks_TheHeraldsOfResourceSharing.

Supplemental

Janet Abbate, *Inventing the Internet* (The MIT Press, 2000), 7–41.

Mitchell M. Waldrop, *The Dream Machine : J.C.R. Licklider and the Revolution That Made Computing Personal* (Penguin (Non-Classics), 2002), 259–332.

Jennifer S. Light, “When Computers Were Women,” *Technology and Culture* 40, no. 3 (1999): 455–483, <http://www.jstor.org/stable/25147356>.

September 17

Charlie Gere, *Digital Culture* (Reaktion Books, 2008), “The Digital Counter-culture”, 116–154.

Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* (University Of Chicago Press, 2006), 207–262.

Viewing

MarcelVEVO, “The Mother of All Demos, presented by Douglas Engelbart,” 1968, accessed January 26, 2014, <http://www.youtube.com/watch?v=yJDv-zdhzMY>.

TECHNICALITIES

Week 4: Networks

September 21

Nicholas Gane and David Beer, *New Media: The Key Concepts* (Oxford and New York: Berg, 2008), "Network", 15–33.

Projects

fadaiat, "fadaiat," 2006, accessed January 26, 2014, <http://fadaiat.net/english.html>.

feral trade, "feral trade courier," <http://www.feraltrade.org/cgi-bin/courier/courier.pl>.

September 24

Ulises A. Mejias, "The limits of networks as models for organizing the social," *New Media & Society* 11, no. 8 (2009): 1–18, <http://nms.sagepub.com/cgi/content/abstract/1461444809341392v1>.

Susan Leigh Star, "Power technologies, and the phenomenology of conventions: on being allergic to onions," in *A Sociology of Monsters: Essays on Power, Technology, and Domination*, ed. John Law (London, UK: Routledge, 1991), 26–56.

Projects

Nicholas Knouf, "Fluid Nexus," 2011, accessed January 20, 2012, <http://fluidnexus.net>.

Danja Vasilev, "netless: a network without The Net," 2012, accessed January 26, 2014, <http://k0a1a.net/netless/>.

Week 5: Protocols and exploits

September 28

Alexander R. Galloway, *Protocol* (Cambridge, Mass.: MIT Press, 2004), 28–53.

Projects

Heath Bunting, "_readme: Own, Be Owned or Remain Invisible," 1998, accessed January 26, 2014.

Radical Software Group, "Carnivore," 2001, accessed January 26, 2014, <http://r-s-g.org/carnivore/>.

October 1

Gilles Deleuze and Félix Guattari, "From A Thousand Plateaus," in *The New Media Reader*, ed. Noah Wardrip-Fruin and Nick Montfort (Cambridge, MA: MIT Press, 2003), 405–409.

Alexander R. Galloway and Eugene Thacker, *The Exploit: A Theory of Networks* (Minneapolis: University of Minnesota Press, 2007), "Protocol in Computer Networks", 42–47, "Toward a Political Ontology of Networks", 58–63, "Counterprotocol", 97–101.

Due: Paper #1 on Networks

Projects

RTMark, "RTMark," 2000, accessed January 26, 2014, <http://www.rtmark.com/>.

Deep Lab, "Deep Lab," 2015, accessed August 30, 2015, <http://www.deeplab.net>

Week 6: Databases

October 5

Jacques Derrida, *Archive Fever* (University of Chicago Press, 1995), 1–5.

Lev Manovich, "Database as Symbolic Form," *Convergence: The International Journal of Research into New Media Technologies* 5, no. 2 (1999): 80–99, eprint: <http://con.sagepub.com/content/5/2/80.full.pdf+html>.

Projects

0100101110101101.org, "Life Sharing," 2003, accessed January 26, 2014, <http://0100101110101101.org/home/lifesharing/index.html>.

Hasan Elahi, "Tracking Transience," 2013, accessed August 24, 2013, <http://trackingtransience.net/>.

Jonathan Harris and Sep Kamvar, "We Feel Fine," 2006, accessed January 26, 2014, <http://www.wefeelfine.org/>.

Josh On, "They Rule," 2011, accessed November 11, 2012, <http://www.theyrule.net/>.

October 8

Vannevar Bush, "As We May Think," *Atlantic Monthly* 176, no. 1 (March 1945): 641–649, <http://www.theatlantic.com/doc/194507/bush>.

Matteo Pasquinelli, "Google's PageRank Algorithm: A Diagram of the Cognitive Capitalism and the Rentier of the Common Intellect," in *Deep Search: The Politics of Search Beyond Google*, ed. Konrad Becker and Felix Stalder (London: Transaction Publishers, 2009).

Recommended

Matteo Pasquinelli, "Anomaly Detection: The Mathematization of the Abnormal in the Metadata Society" (Presentation at transmediale 2015, 2015).

TOPICS

Week 7: Privacy

October 12

No class: Fall Break!

October 15

Philip E. Agre, "Surveillance and Capture: Two Models of Privacy," in Wardrip-Fruin and Montfort, *The New Media Reader*, 737–760

Helen Nissenbaum, "A Contextual Approach to Privacy Online," *Daedalus* 140, no. 4 (2011): 32–48.

Finn Brunton and Helen Nissenbaum, "Political and Ethical Perspectives on Data Obfuscation," in *Privacy, Due Process and the Computational Turn*, ed. Mireille Hildebrandt and Katje de Vries (New York: Routledge, 2013), 164–188

Projects

Daniel C. Howe and Helen Nissenbaum, "TrackMeNot," 2011, accessed January 26, 2014, <http://cs.nyu.edu/trackmenot/>.

Institute for Applied Autonomy, "iSee: Now More Than Ever," 2005, accessed January 26, 2014, <http://www.appliedautonomy.com/isee.html>.

Julian Oliver and Danja Vasilev, "Newstweek," 2011, accessed November 11, 2012, <http://newstweek.com/>.

Week 8: Surveillance

October 19

Gilles Deleuze, "Postscript on the Societies of Control," *October* 59 (1992): 3–7, <http://www.jstor.org/stable/778828>.

Barton Gellman and Laura Poitras, "U.S., British intelligence mining data from nine U.S. Internet companies in broad secret program," June 7, 2013, accessed January 27, 2015, http://www.washingtonpost.com/investigations/us-intelligence-mining-data-from-nine-us-internet-companies-in-broad-secret-program/2013/06/06/3a0c0da8-cebf-11e2-8845-d970ccb04497_story.html.

Glenn Greenwald, "XKeyscore: NSA tool collects 'nearly everything a user does on the internet,'" July 31, 2013, accessed January 27, 2015, <http://www.theguardian.com/world/2013/jul/31/nsa-top-secret-program-online-data>.

Barton Gellman and Ashkan Soltani, "NSA infiltrates links to Yahoo, Google data centers worldwide, Snowden documents say," October 30, 2013, accessed September 19, 2014, <http://www.washingtonpost.com/world/>

national-security/nsa-infiltrates-links-to-yahoo-google-data-centers-worldwide-snowden-documents-say/2013/10/30/e51d661e-4166-11e3-8b74-d89d714ca4dd_story.html.

Glenn Greenwald, "How Covert Agents Infiltrate the Internet to Manipulate, Deceive, and Destroy Reputations," February 24, 2014, accessed January 27, 2015, <https://firstlook.org/theintercept/2014/02/24/jtrig-manipulation/>.

Richard Esposito, Matthew Cole, Mark Schone, and Glenn Greenwald, "Snowden docs reveal British spies snooped on YouTube and Facebook," January 27, 2014, accessed September 19, 2014, http://investigations.nbcnews.com/_news/2014/01/27/22469304-snowden-docs-reveal-british-spies-snooped-on-youtube-and-facebook

October 22

Tentative guest lecture by Jennifer Gradecki and Derek Curry.

Week 9: Labor

October 26

Maurizio Lazzarato, "Immaterial Labor," in *Radical Thought in Italy: A Potential Politics*, ed. Paolo Virno and Michael Hardt (Minneapolis, MN, USA: University of Minnesota Press, 1996), 133–147.

Michael Hardt, "Affective Labor," *boundary 2* 26, no. 2 (1999): 89–100, <http://www.jstor.org/stable/303793>.

Discussion

Wages for Housework; the "materiality" of the immaterial.

Due: Paper #2 on Internet artifact

October 29

Tiziana Terranova, "Free Labor: Producing Culture for the Digital Economy," *Social Text* 18, no. 2 (Summer 2000): 33–58.

Lilly Irani, "The cultural work of microwork," *New Media & Society*, 2013, eprint: <http://nms.sagepub.com/content/early/2013/11/19/1461444813511926.full.pdf+html>, <http://nms.sagepub.com/content/early/2013/11/19/1461444813511926.abstract>.

Project

Lilly Irani and M. Six Silberman, "TurkoPicon," 2013, accessed January 26, 2014, <http://turkoPicon.ucsd.edu/>.

Week 10: Identity, Labor, Race

November 2

Alice E. Marwick and danah boyd, "I Tweet Honestly, I Tweet Passionately: Twitter Users, Context Collapse, and the Imagined Audience," *New Media & Society* 13, no. 1 (2010): 114–133.

Christine Bacareza Balance, "How It Feels to Be Viral Me: Affective Labor and Asian American YouTube Performance," *Women's Studies Quarterly* 40, nos. 1/2 (April 2012): 138–152, <http://www.jstor.org/stable/23333440>.

Susanna Paasonen, "Labors of love: netporn, Web 2.0 and the meanings of amateurism," *New Media & Society* 12, no. 8 (2010): 1297–1312.

Discussion

Sad girl theory.

November 5

Lisa Nakamura, *Cybertypes: Race, Ethnicity, and Identity on the Internet* (Routledge, 2002), "Head-Hunting on the Internet: Identity Tourism, Avatars, and Racial Passing in Textual and Graphic Chat Spaces", 31–60.

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Marcia A. Forbes, *STREAMING: Vol 1: #Social Media, Mobile Lifestyles* (Kingston, Jamaica: Phase Three Productions, 2012), "Facebook All-Mighty", 1–39.

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Week 11: Free Software, Hacking, and Information Freedom

November 9

Bill Gates, "An Open Letter to Hobbyists," *Homebrew Computer Club Newsletter* 2, no. 1 (January 1976): 2, http://www.digibarn.com/collections/newsletters/homebrew/V2_01/gatesletter.html.

Richard Stallman, "The GNU Manifesto," 1985, <http://www.gnu.org/gnu/manifesto.html>.

E. Gabriella Coleman, *Coding Freedom: The Ethics and Aesthetics of Hacking* (Princeton: Princeton University Press, 2013), "A Tale of Two Legal Regimes", 61–89.

November 12

Aaron Swartz, "Guerilla Open Access Manifesto," 2008, accessed January 16, 2014, <https://archive.org/details/GuerillaOpenAccessManifesto>.

Larissa MacFarquhar, "Requiem for a Dream," March 11, 2013, accessed January 16, 2014, http://www.newyorker.com/reporting/2013/03/11/130311fa_fact_macfarquhar?currentPage=all.

Janelle Nanos, "Losing Aaron," 2014, accessed January 26, 2014, <http://www.bostonmagazine.com/news/article/2014/01/02/bob-swartz-losing-aaron/>.

Project

Nicholas A. Knouf, "Journal of Journal Performance Studies," 2010, accessed January 26, 2014, <http://turbulence.org/Works/JJPS/>.

Week 12: Tactical Media & Cyberfeminism

November 16

Charlie Gere, *Digital Culture* (Reaktion Books, 2008), "The Digital Avant-garde", 79–115.

Critical Art Ensemble, *The Electronic Disturbance* (New York: Autonomedia, 1994), Chapter 2, "Nomadic Power and Cultural Resistance", 11–31, <http://www.critical-art.net/books/ted/>.

David Garcia and Geert Lovink, "The ABC of Tactical Media," 1997, <http://www.nettime.org/Lists-Archives/nettime-l-9705/msg00096.html>.

Recommended:

Hakim Bey, *T.A.Z. the Temporary Autonomous Zone, Ontological Anarchy, Poetic Terrorism* (Brooklyn: Autonomedia, 1991), <http://hermetic.com/bey/taz3.html#labelTAZ>.

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eToy.CORPORATION, "Toywar," 1999, accessed January 26, 2014, <http://www.etoys.com/projects/toywar/>.

November 19

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.

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María Fernández and Faith Wilding, "Situating Cyberfeminisms," in *Domain Errors! Cyberfeminist Practices*, ed. María Fernández, Faith Wilding, and Michelle M. Wright (New York: Autonomedia, 2002), 17–28.

María Fernández, "Cyberfeminism, Racism, Embodiment," in Fernández, Wilding, and Wright, *Domain Errors! Cyberfeminist Practices*, 29–44.

Project

Cornelia Sollfrank, "Female Extension," 1997, accessed January 26, 2014, <http://artwarez.org/femext/>.

Discussion

Projects of contemporary cyberfeminist groups.

Week 13: "Liberation Technologies"

November 23

Ulises A. Mejias, "Liberation Technology and the Arab Spring: From Utopia to Atopia and Beyond," *fibreculture*, 20 2012, <http://twenty.fibreculturejournal.org/2012/06/20/fcj-147-liberation-technology-and-the-arab-spring-from-utopia-to-atopia-and-beyond/>.

Linda Herrera, *Revolution in the Age of Social Media: The Egyptian Popular Insurrection and the Internet* (London and Brooklyn: Verso, 2014), "Wired Youth Rise", 1–24.

Recommended

Kate Milberry, "Hacking for Social Justice: The Politics of Prefigurative Technology," in *(Re)Inventing the Internet*, ed. Andrew Feenberg and Norm Friesen (Rotterdam/Boston/Taipei: Sense Publishers, 2012), 109–130.

Discussion

Internet usage in the "Arab Spring"

November 26

No class: Thanksgiving break!

Week 14: Anonymous, Memes, and the Vernacular Web

November 30

Gabriella Coleman, *Hacker, Hoaxer, Whistleblower, Spy: The Many Faces of Anonymous* (London and Brooklyn: Verso, 2014), "Introduction: 'And Now You Have Got Our Attention'", 1–17, "On Trolls, Tricksters, and the Lulz", 19–51.

Recommended Viewing

Brian Knappenberger, *We Are Legion: The Story of the Hacktivists* (2012), Film.

December 3

Olia Lialina, "A Vernacular Web," 2005, accessed January 26, 2014, <http://art.teleportacia.org/observation/vernacular/>.

Helene Dams, "I THINK YOU GOT CATS ON YOUR INTERNET," in *Digital Folklore*, ed. Olia Lialina and Dragan Espenschied (2009), 105–131.

Kyle Chayka, "Wow this is doge," December 31, 2013, accessed January 26, 2014, <http://www.theverge.com/2013/12/31/5248762/doge-meme-rescue-dog-wow>.

Week 15: Final Presentations

December 7

Final presentations & thoughts.