

DIGITAL LABOR, MATERIALITY, AND URBAN SPACE DH150/250, WINTER 2014

University of California, Los Angeles
Professor Miriam Posner

Cyberspace consists of transactions, relationships, and thought itself, arrayed like a standing wave in the web of our communications. Ours is a world that is both everywhere and nowhere, but it is not where bodies live.

We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth.

We are creating a world where anyone, anywhere may express his or her beliefs, no matter how singular, without fear of being coerced into silence or conformity.

Your legal concepts of property, expression, identity, movement, and context do not apply to us. They are all based on matter, and there is no matter here.

— John Perry Barlow, “A Declaration of the Independence of Cyberspace” (1996)

There is no matter in cyberspace. Because the Internet is without body, matter, or place, we can start afresh in a world unmarked by race, sex, or class. There is no limit on Internet space or time, so we need not concern ourselves with the distribution of its resources. The Internet is everywhere and nowhere, its denizens liberated from the identities that confine them in meatspace.

Or so the story goes. In fact, digital information exists in very real time and space, and rhetoric like John Perry Barlow’s, which evokes a placeless and timeless immateriality, masks some distressing ground truths about the allocation of space, property, and labor. Just out of our sight, hulking server farms eat up mammoth amounts of power, huge satellite arrays feed our information addiction, and ropes of wire coil under the streets and beneath the ocean. Farther afield, people comb through our discarded technology to reclaim precious metals even as workers in great factory-cities churn out new iPhones.

As a corrective to Barlow’s immaterial Internet, we will plot the transmission of information in space and time, showing how its material manifestations can be seen, touched, and felt by real people in real places. We will use Los Angeles as a critical node, showing how the tendrils of the Internet converge here in physical

space. We will see that, far from the utopic non-space of Barlow's vision, the Internet and its attendant technology are very physical phenomena that manifest themselves in real space and time.

Grade Breakdown

Weekly blog posts: 20%

Device narrative: 40%

Participation: 15%

Final exam: 25%

Assignments

Weekly blog posts

You are required to post 400-word weekly blog posts by classtime on Tuesday.

Your posts should adhere to the following format:

1. An image or link to a primary source (defined as a document that “provide[s] first-hand testimony or direct evidence concerning a topic under investigation”) related to the readings for the week.¹
2. An explanation of what the source is and how it relates to the reading. Does it illuminate the phenomenon described in the reading, extend the argument of the reading, or challenge the argument? Why?

In addition to your blog post, you will post two comments in response to your classmates' blog posts by classtime on Thursday.

Device narrative

Using techniques and technology that we will explore together, you will work in groups to create a multimedia essay that tells the story of an electronic device, including its

1. Cultural importance
2. Prefigurations
3. Corporate ownership
4. Supply chain

The details of this assignment are available in a separate document.

Key terms

In order to help you focus your reading and to serve as a mnemonic device, I have provided key terms for each week of class. Your final exam will consist of a selection of these terms, which you will be asked to define. Please note that the definition I will request is not the dictionary definition of the term, but an elucidation of the term *as we have used it in the context of the class*: in our discussions, in our readings, and in our project work. You will be expected to cite

¹ “What Are Primary Sources?” *Primary Sources at Yale*,
http://www.yale.edu/collections_collaborative/primarysources/primarysources.html.

relevant authors (though not exact quotes or page numbers) as well as class discussions.

In order to help you to share ideas on these terms, I have created a group Google doc, called "Class Glossary," on which I invite you to gather your notes, thoughts, and links on each of these terms. This is your document, and you're welcome to use it as you wish.

Policies

- Late work is not accepted without prior written permission from me.
- You are permitted two absences, for whatever reason. After that, your participation grade will be docked by 10% per absence.
- You are always welcome to meet with me to discuss any aspect of the class. Please book an appointment at <http://meetme.so/MiriamPosner>.

Accessibility

In the spirit of Universal Design for Learning, I will strive to provide an environment that is equitable and conducive to achievement and learning for all students. I ask that we all be respectful of diverse opinions and of all class members, regardless of personal attribute. I encourage persons with disabilities or particular needs that impact on performance to meet with me to co-design accommodations, if necessary. I ask that we all use inclusive language in written and oral work. Students with disabilities should also register with the Office for Students with Disabilities (<http://www.osd.ucla.edu>).

A Note on Email

I enjoy corresponding with you, and I strive to respond to emails within 48 hours. However, I regret that I cannot answer email after 5:00 p.m. or on weekends. Please plan accordingly. This class has many moving parts, and from time to time, I'll need to get in touch with you about assignments or due dates. Thus, I expect you to check the email account associated with your MyUCLA profile each weekday.

READING SCHEDULE

Readings are available on CCLE unless a hyperlink is included in the assignment.

Utopian Immateriality and the Intransigence of Things

Key term: materiality

Week 1A | January 7

Course introduction and overview

Week 1B | January 9

Blanchette, Jean-François. "A Material History of Bits." *Journal of the American Society for Information Science and Technology* 62, no. 6 (June 1, 2011): 1042–1057.

Barlow, John Perry. "A Declaration of the Independence of Cyberspace." <https://projects.eff.org/~barlow/Declaration-Final.html>.

Brown, Bill. "Materiality." In *Critical Terms for Media Studies*, edited by W. J. T. Mitchell and Mark B. N. Hansen. Chicago; London: The University of Chicago Press, 2010.

Silicon Valley

Key terms: *digital utopianism, computational metaphor*

Week 2A | January 14

Introduction, chapter one ("The Shifting Politics of the Computational Metaphor"), and chapter four ("Taking the Whole Earth Digital") in Turner, Fred. *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*. Chicago: University of Chicago Press, 2006.

Week 2B | January 16

In-Class Lab: ScrollKit Tutorial

Rodenbeck, Eric. "Mapping Silicon Valley's Gentrification Problem Through Corporate Shuttle Routes." *Wired*, September 6, 2013.

<http://www.wired.com/opinion/2013/09/mapping-silicon-valleys-corporate-shuttle-problem/>.

Norman Wilson, Andrew. *Workers Leaving the Googleplex*, 2009.

<http://www.andrewnormanwilson.com/WorkersGoogleplex.html>.

In addition to reading the above, please look at some of the following multimedia essays for inspiration:

- "Snow Fall: The Avalanche at Tunnel Creek" (*New York Times*): <http://www.nytimes.com/projects/2012/snow-fall/#/?part=tunnel-creek>
- "Deep Sea Cowboys" (*Epic Magazine*): <http://epicmagazine.com/2013/08/deep-sea-cowboys/>
- "An Oral History of the March on Washington" (*Smithsonian Magazine*) <http://www.smithsonianmag.com/history-archaeology/an-oral-history-of-the-march-on-washington/>
- "Brooklyn Took It" (*Contently*) <http://contently.com/strategist/2013/07/01/the-true-story-of-the-brooklyn-nets/>

Supply Chains

Key terms: supply chains, capital

Week 3A | January 21

Sanyal, Sanjeev. "A Brief History of Supply Chains." *The Globalist* (March 20, 2012). <http://www.theglobalist.com/a-brief-history-of-supply-chains/>.

Harvey, David. "The Geopolitics of Capitalism." In *Spaces of Capital: Towards a Critical Geography*, 312–344. New York: Routledge, 2001.²

Week 3B | January 23

Library Session with Dr. Marta Brunner

Offshore Labor

Key term: globalization

Week 4A | January 28

Duhigg, Charles, and David Barboza. "Apple's iPad and the Human Costs for Workers in China." *The New York Times*, January 25, 2012, sec. Business Day. <http://www.nytimes.com/2012/01/26/business/ieconomy-apples-ipad-and-the-human-costs-for-workers-in-china.html>

Cox, A., Charles Duhigg, Xaquín G.v, Mika Gröndahl, Haeyoun Park, Graham Roberts, and Karl Russell. "The iPhone Economy." <http://www.nytimes.com/interactive/2012/01/20/business/the-iphone-economy.html?gwh=17068CBBDD7EEE9034B71807A095B02D&gwt=pay>.

Weisbrot, Mark. *Globalization: A Primer*. Center for Economic and Policy Research, October 1999. <http://dspace.cigilibrary.org/jspui/handle/123456789/7903>.

Week 4B | January 30

Project Clinic: In-class SourceMap tutorial and troubleshooting

"Planet Money Makes A T-Shirt" (all chapters). *NPR.org*, December 2, 2013, <http://apps.npr.org/tshirt/>.

² This is a challenging essay — probably the most challenging we'll read all quarter. You may wish to acquaint yourself with the suggestions contained here: <http://www.studygs.net/texred1.htm>.

Infrastructure and the City I

Key term: *data center, node*

Week 5A | February 4

Selections from Varnelis, Kazys. *The Infrastructural City: Networked Ecologies in Los Angeles*. Barcelona; New York, Columbia University, 2008.

Krieger, Martin H. "System and Network, Node and Link." In *Urban Tomographies*, 54–70. Philadelphia: University of Pennsylvania Press, 2011.

Week 5B | February 6

In-Class Field Trip to Data Center and Undersea Cable Access Point

Bridle, David. "Secret Servers." *ICON* no. 099 (September 13, 2011).

<http://booktwo.org/notebook/secret-servers/>.

Starosielski, Nicole, and Craig Dietrich. "Surfacing." Accessed November 16, 2011. <http://vectorsjournal.org/projects/surfacing/>.

Infrastructure and the City II

Key term: *infrastructure, network*

Week 6A | February 11

Selections from Blum, Andrew. *Tubes: A Journey to the Center of the Internet*. New York: Ecco, 2012.

Mendehlon, Ben. *Bundled, Buried & Behind Closed Doors*, 2011.
<http://vimeo.com/30642376>.

Week 6B | February 13

In-Class Visit from Andrew Blum

Selections from Blum, Andrew. *Tubes: A Journey to the Center of the Internet*. New York: Ecco, 2012.

Biases Built into the System

Key terms: *modularity, glitch, computer*

Week 7A | February 18

Lightning Presentations of Narrative Mockups

McPherson, Tara. "U.S. Operating Systems at Mid-Century: The Intertwining of Race and UNIX." In *The Visual Culture Reader*. New York: Routledge, 2012.

Nakamura, Lisa. "Glitch Racism: Networks as Actors within Vernacular Internet Theory." *Culture Digitally* (December 10, 2013).

<http://culturedigitally.org/2013/12/glitch-racism-networks-as-actors-within-vernacular-internet-theory/>.

Week 7B | February 20

Light, Jennifer S. "When Computers Were Women." *Technology and Culture* 40, no. 3 (1999): 455–483.

Ensmenger, Nathan. "Making Programming Masculine." In *Gender Codes*, edited by Thomas J. Misa, 115–141. John Wiley & Sons, Inc., 2010.

New Kinds of Labor for the Digital Age

Key terms: *digital labor, affective labor*

Week 8A | February 25

Addelman, Ben, Samir Mallal, Adam Symansky, National Film Board of Canada, and Newsreel (Firm). *Bombay Calling*. [New York, N.Y.]: Third World Newsreel, 2006.

Selections from Hochschild, Arlie Russell. *The Managed Heart: Commercialization of Human Feeling*. Berkeley: University of California Press, 1983.

Week 8B | February 27

Nakamura, Lisa. "Don't Hate the Player, Hate the Game: The Racialization of Labor in World of Warcraft." In *Digital Labor: The Internet as Playground and Factory*, edited by Trebor Scholz, 79–97. New York: Routledge, 2013.

De Kosnik, Abigail. "Fandom as Free Labor." In *Digital Labor: The Internet as Playground and Factory*, edited by Trebor Scholz, 98–111. New York: Routledge, 2013.

Internet as Technology of Control

Key term: *control, protocol*

Week 9A | March 4

Chun, Wendy Hui Kyong. *Control and Freedom: Power and Paranoia in the Age of Fiber Optics*. Cambridge, Mass.: MIT Press, 2006.

Week 9B | March 6

Project Clinic

In-class group work and troubleshooting

Closing Shop

Week 10A | March 11

Devices Release Party and Final Presentations

Week 10B | March 13

Final Exam