

Maps as Media

Fall 2015: Tuesdays 4 to 6:45pm | 63 5th Avenue #106

<http://www.wordsinspace.net/mapsmedia/fall2015/>

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Maps reveal, delineate, verify, orient, navigate, anticipate, historicize, conceal, persuade, and, on occasion, even lie. From the earliest maps in cave paintings and on clay tablets, to the predictive climate visualizations and crime maps and mobile cartographic apps of today and tomorrow, maps have offered far more than an objective representation of a stable reality. In this hybrid theory-practice studio we'll examine the past, present, and future – across myriad geographic and cultural contexts – of our techniques and technologies for mapping space and time. In the process, we'll address various critical frameworks for analyzing the rhetorics, poetics, politics, and epistemologies of spatial and temporal maps. Throughout the semester we'll also experiment with a variety of critical mapping tools and methods, from techniques of critical cartography to sensory mapping to time-lining, using both analog and digital approaches. Course requirements include: individual map critiques; lab exercises; and individual research-based, critical-creative “atlases” composed of at least five maps in a variety of formats.

Your Contributions:

ATTENDANCE AND PARTICIPATION

We want to make sure we get the most out of our discussions, and that we benefit from one another's expertise and experience in developing our individual projects. Thus, we need everyone to show up regularly, on time, and prepared – i.e., having both completed the assigned reading and any mapping exercises. You will be permitted **two excused absences** (“excused” means that you must have contacted me *prior* to class to inform me of your absence) for the semester. Additional excused absences – and any unexcused absences – will negatively affect your grade. **More than three absences**, excused or unexcused, will result in failure of the course; if you anticipate needing to miss several classes, you are advised to drop the course. A pattern of late arrivals is likewise detrimental.

I do not require you to complete weekly reading responses, simply because your work on the individual and group projects should keep you plenty busy. That said, I still do *encourage* you to take time before class to **annotate the weekly readings, abstract them, and reflect** on how they contribute to your understanding of the overarching themes of the course and to your own research and making process. Your consistent presence and regular, constructive contributions account for **15% of your final grade**.

MAP CRITIQUE

We'll dedicate some time in most of our classes to presenting and critiquing several (canonical/ exemplary/ experimental/ overwrought/ elegant/ etc.) maps in a variety of formats, to see what they do right and wrong, what they illuminate and obfuscate, how they integrate form and content effectively and poorly, and what lessons we can take away from them and apply, or avoid, in our own projects.

Each of you will post and publicly present one map critique – ideally, of a map that both addresses (in a direct or tangential way) the week's theme *and* pertains to your semester project. Don't think of this exercise as an additional assignment; use it to advance your own agenda. To identify a map for review, you might look through the websites I list below, under “Required Texts”; and the books I'll be previewing in Week One. You could also

simply Google “your project topic” + “map”; I’ll bet you a dollar you’ll find a few options. Please consult with the other presenters for the week to work out who’s chosen which projects. You’re welcome to double- or triple-up on a particular map, provided you each offer a distinctive perspective.

Your **fifteen-minute presentation-and-discussion** should consist of two parts: (1) a critique and (2) a critical-creative application *prototype*. The **critique** should focus on a single mapping project and should employ some of the critical tools and criteria we discuss in Week 3. Your **application** is a critical-creative attempt to apply to your *own* research project the same effective and/or ineffective techniques used in the map you’ve critiqued. You might choose to exaggerate the failures of that map by creating a parody – or you might choose to try out some helpful features from your critique subject in order to generate mapping techniques that might aid in your own work. Be sure to identify what elements inspired you and why, and how and where we can see those elements’ influence in *your* map. Your application can take virtually any form and format – from a drawing to a paper prototype, from a quilt to a sound map. Keep in mind that this is only a *prototype* – a rough sketch, a maquette, a “napkin drawing”; we’re more concerned in this context with the ideas behind your project than with your execution.

Before class on your presentation day, please **post your 600- to 900-word text** – which should encompass both your critique and the explanation of your application exercise, along with documentation of your application – to our class website. You should aim to wrap up your formal presentation in seven or eight minutes (I’ll cut you off after ten), so we have plenty of time for discussion. And please be sure to have presentation media loaded/booted/hung/distributed before class begins so we can start on time. Your review is worth **15% of your final grade**.

MAP LABS + ATLAS

At the beginning of the semester you should begin to think about a fluid, capacious research topic that you’d like to explore through the maps you create over the course of the semester. Ideally, this topic will pertain to projects you’re exploring in your other classes or a thesis project, to a “through-line” you’ve pursued throughout the program, or to work you’re doing in your extracurricular life. You’ll need to submit a **600-word proposal for this project**, via **Google Drive**, before class on **September 15**. This proposal should include (1) a topic description, thematic overview, problem statement, or research question; (2) a discussion of your topic’s personal relevance, larger critical significance, timeliness, etc.; (3) a preliminary discussion of how your topic might lend itself to *spatial/cartographic* investigation (i.e., what can you learn by *mapping* it?); (4) a description of the geographic area(s) and scale(s) you plan to focus on in your maps; and (5) a tentative bibliography of at least seven sources (some scholarly publications, some popular publications, some precedent maps, etc.) that will likely prove useful in your research and practice. You’ll share your proposal in class, in an **informal 5-minute presentation**, on **September 22**. The proposal is worth **15% of your final grade**.

Each of the maps you then create over the course of the semester should pertain to this topic and cumulatively represent myriad ways of illustrating or investigating your subject. You’ll begin developing three of these maps in our in-class labs, and your **presentation of this work-in-progress** during our in-class review sessions, which typically take place two weeks after each in-class lab, will account for **15% of your final grade**.

You can then continue to develop these prototypes, or generate map ideas of your own. By the end of the semester, you should have a minimum of **five completed maps**, in at least three different “media formats” (e.g., hand-drawn, photographic, audio-based, online-interactive, etc.). You’ll then need to compile those maps into an **atlas, which you can present in whatever format you choose** (e.g., a book, a website, an installation, etc.), as long as you frame the contents as a cartographic set – as five “spatial variations on a theme.” You should make sure to offer some means of narratively or argumentatively navigating through your collection; generate connective threads between your individual maps; and provide critical/descriptive commentary reflecting on the unique medial qualities of each piece in the set (see, for example, how Annette Kim addresses the distinctive features of each map in her “Critical Cartography Primer,” pp. 113-145 of *Sidewalk City*). You’ll submit your

project at the start of class on **December 15**, and during that class each student will deliver a **10- to 15-minute presentation** of his/her work (details to come). Your final atlas is worth **40% of your final grade**.

Required Texts:

All readings are made available as pdfs on our course website. All copyrighted material is behind a firewall; you'll be prompted to enter a username (student) and password (seecritfilez). Not so secret, eh?

That said, you're invited to purchase copies of the following, since we'll be using significant portions of these resources:

- John Krygier and Denis Wood, *Making Maps: A Visual Guide to Map Design for GIS*, 2nd ed. (New York: Guilford Press, 2011).
- Shannon Mattern, *Deep Mapping the Media City* (Minneapolis: University of Minnesota Press, 2015).
- John Pickles, *A History of Spaces: Cartographic Reason, Mapping and the Geo-Coded World* (New York: Routledge, 2004).

The following web resources are worth consulting regularly, too:

- *The Atlantic's* CityLab [posts on maps](#)
- [Axis Maps Blog](#)
- [Cartogrammar](#) (Andy Woodruff)
- [Fuck Yeah Cartography!](#)
- [Making Maps: DIY Cartography](#) (John Krygier + Denis Wood)
- [Maps Mania](#)
- Dee Morris & Stephen Voyce's [series of posts](#) on *Jacket2*
- Penn State's online [Cartography and Visualization course](#)
- [David Rumsey Map Collection](#)
- [Stamen Design](#)
- [Strange Maps](#)
- [Wired Map Lab](#)
- [My own mapping links](#)

*This course draws on insights and inspiration from four years' worth of students in my "[Urban Media Archaeology](#)" studio – and is indebted to Jeremy Crampton's [Critical History of Cartography](#) reader; Marisa Olson's "[Media Studies: Experimental Geography Reading List](#)" (*Rhizome*, March 20, 2009); RISD's [Experimental Geography Research Cluster](#); Matthew Wilson's "[Critical GIS](#)" graduate seminar; and Wilson's "[Critical and Social Cartography](#)" course. I must also thank the fellows at the [Digital Cultures Research Lab](#) at Leuphana University, in Lüneburg, Germany, where I workshopped this syllabus in July 2015; as well as Karen Gregory and Lauren Klein for their helpful recommendations.*

Policies and Procedures:

SUBMITTING WORK VIA GOOGLE DRIVE

You'll occasionally be asked to submit your work via Google Drive. Because I prefer to insert margin comments and propose revisions directly in/on your text, I need to work with an editable document (e.g., *not* a pdf). For this reason, I ask that you please either (1) create your documents *in* Google Drive; (2) convert them *to* Google Doc format when you upload them; or (3) upload documents in .doc format, which I can then download and annotate using "track changes," and return to you via email.

POSTING WORK ONLINE

We'll all create accounts for our class's blog, and we'll briefly review how to post. You're invited to post any class-related material – events, exhibitions, news, etc. – at any time, and you'll occasionally be asked to share your work online. If you're not comfortable posting your work, please don't hesitate to talk to me.

DEADLINES

Assignment deadlines are noted on the syllabus. Late work will be penalized, and extensions will be granted only rarely, and only after consulting with me well *in advance* of the assignment deadline. Sorry – I know some other faculty are a bit more lenient with deadlines, but I tend to set aside big blocks of time for assignment review, and I provide substantial feedback – so missing deadlines means you miss your "window of opportunity" for feedback, which is an essential part of your learning in this course (and any course, for that matter).

A student who has not submitted all assigned work by the end of the semester does not receive an "Incomplete" by default. "Incompletes" are assigned only in extreme circumstances, and require that the student consult with me well before the end of the semester and sign a contract obligating him or her to complete all outstanding work by a date that we agree upon.

ACADEMIC HONESTY

All students are expected to familiarize themselves with the University's [academic honesty policy](#). Plagiarism or cheating of any form will result in immediate failure of the course. No joke. If you have any questions regarding proper citation of sources or other academic integrity matters, consult the [University Learning Center](#).

SEPT. 1: ORIENTATION

Introductions

Syllabus Review

Getting our Bearings

- Robert W. Karrow, Jr., Introduction to James R. Ackerman & Robert W. Karrow, Jr., Eds., *Maps: Finding Our Place in the World* (Chicago: University of Chicago Press & The Field Museum, 2007): 1-12.
- Aaron Reiss, "[My 5 Favorite Maps: Bill Rankin](#)" *The Atlantic CityLab* (September 26, 2014). See also Bill's [top-10 list](#).

References & Inspiration: *I'll bring these books to class so we can look through them. I've also request that copies of (almost) all of these titles be placed on reserve in the TNS Library; I encourage you to reference them throughout the semester.*

- Katharine Harmon, *You Are Here: Personal Geographies and Other Maps of the Imagination* (New York: Princeton Architectural Press, 2004): maps of the body and spirit, maps of emotion and memory, maps of fictional places and cosmology, maps of air routes and stereotypes
- David Macaulay, *Underground* (Boston; Houghton Mifflin, 1976).
- Liza Mogel & Alexis Bhagat, Eds., *An Atlas of Radical Cartography* (Los Angeles: The Journal of Aesthetics Protest Press, 2008).
- Hans Ulrich Obrist, Ed., *Mapping It Out: An Alternative Atlas of Contemporary Cartographies* (London: Thames & Hudson, 2014): cartographic artwork, classified by theme: redrawn territories, charting human life, scientia naturalis, invented worlds, and the unmappable
- Seth Robbins and Robert Neuwirth, *Mapping New York* (London: Black Dog, 2009): maps of the city's evolution and its services, travel maps, maps of the urban imagination
- Rebecca Solnit, *Infinite City: A San Francisco Atlas* (Los Angeles: University of California Press, 2010): maps of indigenous spaces, open spaces, post-industrial spaces, film locations, racial justice, butterfly habitats, shipyard sounds, murders, evictions, coffee, military-industrial think tanks, remembered identities, and more
- Nato Thompson, *Experimental Geography: Radical Approaches to Landscape, Cartography, and Urbanism* (Brooklyn: Melville House, 2008).
- Visual Editions, Ed., *Where You Are: A Book Of Maps That Will Leave You Completely Lost* (London: Visual Editions, 2013) [see also the [lovely print edition](#)]*
- Denis Wood and John Fels, *The Natures of Maps: Cartographic Constructions of the Natural World* (Chicago: University of Chicago Press, 2008): 6-16, 26-28, 31-32.
- Denis Wood, *Everything Sings: Maps for a Narrative Atlas* (Los Angeles: Siglio, 2010).

SEPT 8: CARTOGRAPHIC FUTURES, PRESENTS & PASTS¹

Field Trip: NYPL Map Division, 42nd St + 5th Ave, Room 117 (4-5pm)

The Mapping Revolution...

- Eva Salinas, with Sébastien Caquard, “[The Politics of Making Maps](#)” *Canadian International Council* (November 12, 2014) [final section, on how the study of mapping has changed].
- Scott Etkin, “[Mapping the Earth and Its Future With Big Data](#)” *Data Informed* (March 30, 2015) [on predictive mapping].
- Benjamin Freed, “[Amazon Prime and Uber Are Changing the Map of Your City](#)” *Washingtonian* (May 31, 2015) [on corporate-shaped cartographies].
- Henry Grabar, “[Smartphones, and the Uncertain Future of ‘Spatial Thinking’](#)” *The Atlantic’s CityLab* (September 4, 2014) [on maps’ egocentric framework and liveness].
- Emily Underwood, “[The New Cartographers](#)” *Science* (March 18, 2013) [on cartographic careers].

...Maybe Isn’t So Revolutionary?

- G. Malcolm Lewis, “The Origins of Cartography” In J.B. Harley and David Woodward, Eds., [Cartography in Prehistoric, Ancient, and Medieval Europe and the Mediterranean](#), Vol. 1 of *The History of Cartography* (Chicago: University of Chicago Press): 50-53.
- Skim through David Turnbull, [Maps are Territories website](#)

¹ See also J.B. Harley and David Woodward, Eds., [Cartography in Prehistoric, Ancient, and Medieval Europe and the Mediterranean](#), Vol. 1 of *The History of Cartography* (Chicago: University of Chicago Press, 1987) [especially Catherine Delano Smith, “Cartography in the Prehistoric Period in the Old World”] and J. B. Harley and David Woodward, Eds., [Cartography in the Traditional Islamic and South Asian Societies](#), Vol. 2, Book 1 of *The History of Cartography*; [Cartography in the Traditional East and Southeast Asian Societies](#), Vol. 2, Book 2 of *The History of Cartography*; and [Cartography in the Traditional African, American, Arctic, Australian, and Pacific Societies](#), Vol. 2, Book 3 of *The History of Cartography* ❖ Ed Parsons & Steve Chilton, “[The New Mapping Revolution: Google Maps and OpenStreetMap](#),” Discussion at the British Library (September 7, 2010) [on egocentrism, disposability, availability of aerial photography]

SEPT 15: MAPS AS MEDIA² / LAB#1

Tools & Techniques for Critique

- Jeremy Crampton, “What Is Critique?” In *Mapping: A Critical Introduction to Cartography and GIS* (Wiley-Blackwell, 2010): 13-21.
- Mike Foster, “[The Lost Art of Critical Map Reading](#)” *Graphicarto* [blog post] (February 27, 2014).
- Shannon Mattern, “[Critiquing Maps II](#)” *Words In Space* [blog post] (September 5, 2013).
- Denis Wood, “At Least 10 Cartographic Codes” and “It’s Not a Simple Set of Rules” In *Rethinking the Power of Maps* (New York: Guilford Press, 2010): 80-5, 97-8.
- Bill Rankin, “[Redrawing the Map](#)” *Architecture Boston* 18:2 (Summer 2015) [on the programmer as cartographer, and maps’ continued utility as argumentative media].
- Andrew Wiseman, “[When Maps Lie](#)” *The Atlantic CityLab* (June 24, 2015).
- John Krygier and Denis Wood, “Ce n’est pas le monde (This Is Not the World)” [comic] In Rob Kitchin, Chris Perkins and Martin Dodge, Eds., *Rethinking Maps: New Frontiers in Cartographic Theory* (New York: Routledge, 2009): 189-219 [a hinge to next week’s discussion]...

Lab: Small-Group In-Class Map Critiques

² Mark Denil, “Cartographic Design: Rhetoric and Persuasion” *Cartographic Perspectives* 45 (Spring 2003): 8-67. ❖ J.B. Harley, “Maps, Knowledge, and Power” In Denis Cosgrove and Stephen Daniels, Eds., *The Iconography of Landscape* (Cambridge; Cambridge University Press, 1988): 277-312. ❖ Christian Jacob, *The Sovereign Map: Theoretical Approaches In Cartography Throughout History*, Trans. Tom Conley (Chicago: University of Chicago Press, 2006 [1992]). ❖ B. Robert Owens, “Mapping the City: Innovation and Continuity in the Chicago School of Sociology, 1920 – 1934” *The American Sociologist* 43:3 (September 2012): 264-293 + [Maps of the Chicago School of Sociology](#) ❖ Bill Rankin, “[Mapping Social Statistics: Race and Ethnicity in Chicago](#)” [video] ❖ Rankin’s [Radical Cartography](#)

SEPT 22: CARTOGRAPHIC EPISTEMOLOGIES & BLIND SPOTS³

Guest: Bill Rankin (Skype 4-5pm)

Discuss Individual Project Proposals

Epistemology

- Bruno Latour, “The Domestication of the Savage Mind” In *Science in Action: How to Follow Scientists and Engineers Through Society* (Cambridge, MA: Harvard University Press, 1987): 215-219.
- John Pickles, “What Do Maps Represent? The Crisis of Representation and the Critique of Cartographic Reason” and “Mapping and the Production of Social Identities” In *A History of Spaces: Cartographic Reason, Mapping and the Geo-Coded World* (New York: Routledge, 2004): 29-59, 126-33.
- Sophia B. Liu & Leysia Palen, “The New Cartographers: Crisis Map Mashups and the Emergence of Neogeographic Practice” *Cartographic and Geographic Information Science* 37:1 (2010): 69-90 – **focus on 72, 78-82, 86-9** [Where do our data come from, and how do we render them mappable?].

Frames, Borders, Gaps, Cuts & Boundaries

- Peter Turchi, “A Wide Landscape of Snows” *Maps of the Imagination: The Writer as Cartographer* (San Antonio: Trinity University Press, 2004): 27-71.
- Bernhard Siegert, “Exiting the Project” and “The Permanently Projected World” In *Cultural Techniques: Grids, Filters, Doors, and Other Articulations of the Real* (New York: Fordham University Press, 2015): 142-5.
- Bill Rankin, “Cartography and the Reality of Boundaries” *Perspecta* 42 (Spring 2010): 42-45.
- Luke O’Connell, “[Dashed Lines and Dashed Hopes: The Downside of Google’s ‘Neutrality’](#)” *Brown Political Review* (May 9, 2014).
- Janet Vertesi, “Mind the Gap: The London Underground Map and Users’ Representations of Urban Space” *Social Studies of Science* 38:1 (2008): 7-33 [*a binge to next week’s discussion*]...

³ J.B. Harley, “Deconstructing the Map” *Cartographica* 26:2 (Summer 1989): 1-20. ❖ Rob Kitchin, Justin Gleeson & Martin Dodge, “Unfolding Mapping Practices: A New Epistemology for Cartography” *Transactions of the Institute of British Geographers* 38:3 (July 2013): 480-96. ❖ Rob Kitchin, Chris Perkins and Martin Dodge, “Thinking About Maps” In *Rethinking Maps: New Frontiers in Cartographic Theory* (New York: Routledge, 2009): 2-25. ❖ Manuel Lima, *The Book of Trees: Visualizing Branches of Knowledge* (New York: Princeton Architectural Press, 2014). ❖ Bernhard Siegert, “[The Map is the Territory](#)” *Radical Philosophy* 169 (September/October 2011): 13-6. ❖ Denis Wood, “The Mathematical Transformation of the Object” In *The Power of Maps* (New York: Guilford Press, 1992): 56-61 [on projections]. **BORDERS/GAPS:** Paul Carter, “Dark with Excess of Bright: Mapping the Coastlines of Knowledge” In Dennis Cosgrove, Ed., *Mappings* (London: Reaktion Books, 1999): 125-47. ❖ [Disputed Territories](#) ❖ Nicholas Jackson, “[15 High-Profile Sites Google Doesn’t Want You to See](#)” *The Atlantic* (June 21, 2011). ❖ Aaron Rothman, with Mishka Henner, Daniel Leivick & Clement Valla, “[Beyond Google Earth](#)” *Places* (May 2015). **DATA SOURCES:** Shannon Mattern, “[Methodolatry and the Art of Measure](#)” *Places* (November 2013). ❖ Marble Fairbanks [Branch Library Design Proposal](#) [video: 5:05 → 13:21] ❖ Hans Rosling, “[Let My Dataset Change Your Mindset](#)” TED Video

SEPT 29: COGNITIVE MAPPING, DISSONANCE & RESISTANCE⁴ / LAB#2

- Recall Vertesi from last week in reading Jody Rosen, “[The Knowledge, London’s Legendary Taxi-Driver Test, Puts Up a Fight in the Age of GPS](#)” *New York Times Magazine* (November 10, 2014).
- Jenny Gustafsson, “[Mapping, Beirut-Style: How to Navigate a City Without Using Any Street Names](#)” *The Guardian* (June 2, 2015).
- See the [Hand Drawn Map Association](#)
- Tim Wallace, “[Kevin Lynch & The Imageable Boston](#)” *Bostonography* (December 15, 2010) [and follow Wallace’s link to the “[Perceptual Forms of the City](#)” material in the MIT Archives].
- Kevin Lynch, “The Uses of Method” In *The Image of the City* (Cambridge, MA: MIT Press, 1960): 140-159 [consider also other sensory means of comprehending space].
- John Krygier and Denis Wood, “How to Make a Map,” “What’s a Map For?” “Mappable Data,” “Map Making Tools” & “Geographic Framework” In *Making Maps: A Visual Guide to Map Design for GIS*, 2nd ed. (New York: Guilford Press, 2011): 2-101 [What constitutes cartographic “data”?].

Lab: You’ll create cognitive maps pertinent to your semester project, then reconceive those maps in terms of plotted “data” and re-draft using Krygier & Woods’s recommendations for collecting, orienting, organizing, distorting data, and considerations regarding projections. **Detailed instructions to come.** We’ll discuss what’s gained and lost in the translation process.

OCT 6: (CRITIQUING) CRITICAL CARTOGRAPHY & COUNTER-MAPPING⁵

- Jeremy W. Crampton and John Krygier, “An Introduction to Critical Cartography” *ACME: An International E-Journal for Critical Geographies* 4:1 (2006): 11-33.
- Denis Wood, Excerpts from “Counter-Mapping and the Death of Cartography” In *Rethinking the Power of Maps* (New York: Guilford Press, 2010): 120-129.
- Dee Morris & Stephen Voyle, “[William Bunge, the DGEI, & Radical Cartography](#)” *Jacket 2* (March 20, 2015).
- Annette Kim, “Mapping the Unmapped” In *Sidewalk City: Remapping Public Space in Ho Chi Minh City* (Chicago: University of Chicago Press, 2015): 84-149. See also <http://slab.today/>
- Nancy Lee Peluso, “Whose Woods Are These? Counter-Mapping Forest Territories in Kalimantan, Indonesia” *Antipode* 27:4 (1995): 383-406 [*a hinge to next week’s discussion*]...

⁴ Michel de Certeau, “Spatial Practices” In *The Practice of Everyday Life* (Berkeley, CA: University of California Press, 1984): 100-134. ❖ Fredric Jameson, *Postmodernism, or The Cultural Logic of Late Capitalism* (New York: Verso, 1991): 49-54, 413-18. ❖ Kevin Lynch, “The City Image and Its Elements” In *The Image of the City* (Cambridge, MA: MIT Press, 1960): 46-90. ❖ Alberto Toscano & Jeff Kinkle, *Cartographies of the Absolute* (Washington, D.C.: Zero Books, 2015) [with [companion website](#)]. ❖ Denis Wood, *Everything Sings: Maps for a Narrative Atlas* (Los Angeles: Siglio, 2010).

⁵ Kate Crawford & Megan Finn, “The Limits of Crisis Data: Analytical and Ethical Challenges of Using Social and Mobile Data to Understand Disasters” *GeoJournal* (November 2014). ❖ Lindsay Palmer, “Ushahidi at the Google Interface: Critiquing the ‘Geospatial Visualization of Testimony’” *Continuum: Journal of Media & Cultural Studies* 28:3 (2014): 342-56.

OCT 13: INDIGENOUS MAPS, SPATIAL ONTOLOGIES & EPISTEMOLOGIES⁶

Discuss Cognitive Maps from Week 5

Map Critiques: up to three students present their map critiques

- Ray P. Norris & Bill Yidumduma Harney, “Songlines and Navigation in Wardaman and Other Australian Aboriginal Cultures” *Journal of Astronomical History and Heritage* 17:2 (in press): 1-14.
- [Aboriginal Mapping Network](#): See in particular the “[About](#)” page, the “[Mapping Resources](#)” and “[The Living Atlas](#)”
- Claudio Aporta, Michael Bravo & Fraser Tyler, *Pan Inuit Trails*
- Eva Salinas, with Sébastien Caquard, “[The Politics of Making Maps](#)” *Canadian International Council* (November 12, 2014) [read sections on counter- and indigenous mapping].
- Sam Sturgis, “[Kids in India are Sparking Urban Planning Changes by Mapping Slums](#)” *The Atlantic’s CityLab* (February 19, 2015).

OCT 20: LAB#3: MAPPING PLATFORMS

Guest Cartographer: Someone from Mapzen

- John Krygier and Denis Wood, “The Big Picture of Map Design,” “The Inner Workings of Map Design,” “Map Symbolization,” “Words on Maps” and “Color on Maps” In *Making Maps: A Visual Guide to Map Design for GIS*, 2nd ed. (New York: Guilford Press, 2011): 106-139, 170-243.
- [Maptime Resources](#) + [Tutorials](#)
- [Mapbox](#)
- [Mapzen](#)
- [CartoDB Academy](#)
- [ESRI](#) + [ArcGIS](#) + [StoryMaps](#)
- [Social Explorer](#)

FRIDAY OCTOBER 23, 4-6pm: CartoDB FIELD TRIP

Optional, but highly recommended, field trip to the CartoDB offices in Bushwick, where we’ll take a tour with Andy Eschbacher, Map Scientist, who’ll also lead us through a mapping workshop. If this date doesn’t work for members of the class, we’ll consider Saturday October 24. Directions to come.

⁶ Mishuana Goeman, *Mark My Words: Native Women Mapping Our Nations* (Minneapolis: University of Minnesota Press, 2013).
❖ Illinois State Museum, [Native American Mapping Traditions](#). ❖ G. Malcolm Lewis, Ed., *Cartographic Encounters: Perspectives on Native American Mapmaking and Map Use* (Chicago: University of Chicago Press, 1998). ❖ Jeffrey Yoo Warren, “Grassroots Mapping: Tools for Participatory and Activist Cartography,” Masters Thesis, MIT, 2010. ❖ Helen Watson, “[Aboriginal-Australian Maps](#)” *Maps Are Territories*. ❖ Denis Wood, “The Outside Critique: Indigenous Mapping” In *Rethinking the Power of Maps* (New York: Guilford Press, 2010): 129-142.

OCT 27: THE TECHNO-CARTOGRAPHIC/ MILITARY-INDUSTRIAL/ CAPITALIST GAZE⁷

Map Critiques: up to three students present their map critiques

- John Pickles, “The Cartographic Gaze, Global Visions and Modalities of Visual Culture” and “Cyber-Empires and the New Cultural Politics of Digital Spaces” In *A History of Spaces: Cartographic Reason, Mapping and the Geo-Coded World* (New York: Routledge, 2004): 75-91, 145-75.
- Laura Kurgan, “Mapping Considered as a Problem of Theory and Practice,” “Representation and the Necessity of Interpretation,” & “From Military Surveillance to the Public Sphere” In *Up Close at a Distance: Mapping, Technology and Politics* (New York: Zone Books, 2012): 9-54.
- Alexis Madrigal, “[How Google Builds Its Maps – and What It Means for the Future of Everything](#)” *The Atlantic* (September 5, 2012) [A more recent, yet less thorough, article on Google’s Ground Truth: Greg Miller, “[The Huge, Unseen Operation Behind the Accuracy of Google Maps](#)” *Wired* (December 8, 2014).]
- Laura Bliss, “[Who Owns the Digital Map of the World?](#)” *The Atlantic’s CityLab* (June 25, 2015).

NOV 3: MULTIMODALITY, MULTIVOCALITY & DEEP MAPPING⁸

Discuss Critical Mappings from Week 8

Map Critiques: up to three students present their map critiques

- L.A. Cicero, “[Deep Mapping](#)” *Stanford University Multidisciplinary Teaching & Research* (Fall 2006).
- Skim through Karen E. Till, Ed., *Mapping Spectral Traces* [exhibition catalog] (Blacksburg, VA: Virginia Tech, 2010).
- Shannon Mattern, *Deep Mapping the Media City* (Minneapolis: University of Minnesota Press, 2015).

⁷ Ryan Bishop, “Transparent Earth: The Autopsy of Aerial Targeting and the Visual Geopolitics of the Underground” In *Forensis: The Architecture of Public Truth* (Forensic Architecture, Sternberg Press, 2015): 580-90. ❖ Mei-Po Kwan, “Feminist Visualization: Re-envisioning GIS as a Method in Feminist Geographic Research” *Annals of the Association of American Geographers* 94:2 (2002): 645-61. ❖ Giorgia Lupi, Luca Simeone, Paolo Patelli and Salvatore Iaconesi, “Polyphonic Images of the Cities. Mapping New Human Landscapes through User-Generated Content,” Presented at the Northern World Mandate, Cumulus Helsinki Conference, Helsinki, 2012. ❖ Lisa Parks, “Digging into Google Earth: An Analysis of ‘Crisis in Darfur’” *Geoforum* 40:4 (2009): 535-45. ❖ Lisa Parks and James Schwoch, Eds., *Down to Earth: Satellite Technologies, Industries, and Cultures* (New Brunswick, NJ: Rutgers University Press, 2012). ❖ Marianna Pavlovskaya & Kevin St. Martin, “Feminism and Geographic Information Systems: From a Missing Object to a Mapping Subject” *Geography Compass* 1:3 (2007): 583-606. ❖ Aaron Rothman, with Mishka Henner, Daniel Leivick & Clement Valla, “[Beyond Google Earth](#)” *Places* (May 2015).

⁸ Ian Biggs, “[Deep Mapping as an ‘Essaying’ of Place](#),” Presented at “Writing” Seminar, Bartlett School of Architecture; reprinted on *IanBiggs* [blog post] (July 9, 2010). ❖ Adam Frampton, Jonathan D. Solomon & Clara Wong, *Cities Without Ground: A Hong Kong Guidebook* (ORO Editions, 2012). ❖ Todd Presner, David Shepard & Yoh Kawano, *HyperCities: Thick Mapping in the Digital Humanities* (Cambridge, MA: Harvard University Press / metaLab Projects, 2014). ❖ Martino Stierli, *Las Vegas in the Rearview Mirror: The City in Theory, Photography, and Film* (Los Angeles: Getty Research Institute, [2010] 2013): 109-190 [on photographic and filmic mapping in the VSB Yale Studio]

NOV 10: MAPPING SENSATION & AFFECT⁹

Map Critiques: up to three students present their map critiques

- Giuliana Bruno, “Art of Mapping” in *An Atlas of Emotions: Journeys in Art, Architecture, and Film* (New York: Verso, 2002): 205-245 – **focus on 210-15, 232-5**
- Mei-Po Kwan, “Affecting Geospatial Technologies: Toward a Feminist Politics of Emotion” *The Professional Geographer* 59:1 (2007): 22-34.
- Christian Nold, [biomapping](#) [leaflet]
- Theo Balcomb, “[The Sounds of New York City, Circa 1920](#)” NPR (October 22, 2013) [re: Emily Thompson’s “[The Roaring Twenties: An Interactive Exploration of the Historical Soundscape of New York City](#)”]
- Shannon Mattern, “[Infrastructural Tourism](#)” *Places* (July 2013).

NOV 17: THE MAPPING ARTS¹⁰ / LAB#4

Guest: Nina Katchadourian (4:00 – 5:30)

- Ricardo Padrón, “Mapping Imaginary Worlds” In James R. Ackerman & Robert W. Karrow, Jr., Eds., *Maps: Finding Our Place in the World* (Chicago: University of Chicago Press & The Field Museum, 2007): 255-287.
- See [OpenGeofication](#)
- Catherine D’Ignazio, “Art and Cartography” *The Encyclopedia of Human Geography* (New York: Elsevier, 2009): 190-206 – **or** – Denis Wood, “Map Art: Stripping the Mast from the Map” In *Rethinking the Power of Maps* (New York: Guilford Press, 2010): 189-230.
- See [Nina Katchadourian’s map-based work](#)

Lab: Sensory Maps + Deep Mapping – **more info TBA**

NOV 24: NO CLASS – THANKSGIVING HOLIDAY

⁹ Stuart C. Aitken & James Craine, “[Affective Geovisualizations](#)” *Directions Magazine* (2006) [on film and video games as conduits for affect]. ❖ William J. Broad, “[A Rising Tide of Noise Is Now Easy to See](#)” *New York Times* (December 10, 2012) + National Oceanic and Atmospheric Administration’s [Cetacean & Sound Mapping](#). ❖ Tom Conley, *Cartographic Cinema* (Minneapolis: University of Minnesota Press, 2007). ❖ Jonathan Flatley, “Affective Mapping” In *Affective Mapping: Melancholia and the Politics of Modernism* (Cambridge, MA: Harvard University Press, 2008): 76-84.

¹⁰ Denis E. Cosgrove, “Maps, Mapping, Modernity: Art and Cartography in the Twentieth Century” *Imago Mundi* 57 (2005): 35-54. ❖ Denis Wood, “Map Art” *Cartographic Perspectives* 53 (Winter 2006): 5-14.

DEC 1: MAPPING TIME¹¹ / LAB#5

Field Trip or Visitors: Representatives from NYPL Labs' Space/Time Directory

- Daniel Rosenberg & Anthony Grafton, "Time in Print" *Cartographies of Time: A History of the Timeline* (New York: Princeton Architectural Press, 2010): 10-25.
- "[Timeline Maps](#)" in the David Rumsey Map Collection (March 29, 2012).
- Johanna Drucker & Bethany Nowviskie, "[Temporal Modeling](#)" In Drucker, Ed., *SpecLab: Digital Aesthetics and Projects in Speculative Computing* (Chicago: University of Chicago Press, 2009); reprinted in Chicago Scholarship Online, 2013.
- [Topotime](#)
- [Space/Time Directory](#)

Lab: Conceptual design workshop w/ NYPL Labs' Space/Time Directory

DEC 8: PLUG-IN WEEK / LAB#6

Discuss Sensory Maps + Deep Maps from Week 12

This week, for the second half of class, we can explore topics or practice skills of your choosing. We'll dedicate the remainder of our time to an open lab, during which you to work on your final projects and solicit feedback from your classmates and from Shannon.

DEC 15: FINAL PRESENTATIONS

¹¹ [Speculative Timelines](#) research group ❖ [Rethinking Timelines](#) Project @ University of Sydney ❖ [Topotime](#) [see especially the documentation]