

Maps as Media

Fall 2018 | GR: NMDS 5223 + CRN 3654 | UG: UURB 4223 + CRN 5636

Wednesdays 4 to 6:45pm | [6 East 16th Street, Room 1109](#)

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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.

Course Materials

All readings will be posted to our class website: <http://www.wordsinspace.net/mapsmedia/fall2018/>

To access password-protected readings, you'll be prompted to enter the **user name** <student> and **password** <seecritfilez>. Not so secret, eh?

A few notes about the weekly readings/screenings/listening exercises:

- I believe we can better appreciate the complexity, relevance, and resonance of each of our weekly themes by approaching them from multiple theoretical, historical, practical, and creative directions. That's why, for each week, I've put together a mini “anthology” rather than assigning a single definitive text. Yes, sometimes those reading lists might look intimidatingly long – but the total number of pages hardly ever exceeds 150 (and a lot of those pages are illustrated!), which is a more-than-reasonable workload for a graduate student. Plus, each text on that list is there because it has the potential to add a distinctive voice to our conversation (you should see the ridiculously long lists of readings that *didn't* make the cut!).
- That said, my selection of a particular text does not constitute an *endorsement* of it. Sometimes I choose texts that annoy me, or with which I disagree, for a few reasons: because they're widely cited and I think it'd behoove you to be aware of them, because I want to allow you to exercise your own judgment, and because I'm pretty sure they'll make for good conversation.
- We will not address *all* the readings in our in-class discussions. Some readings are primarily factual, some are self-explanatory, some simply present interesting illustrations or case studies; we needn't discuss these sorts of texts in-depth – but they're still worth your time. They provide valuable nuance and color that will inform our discussions, shape your own understanding, and, ideally, inspire ideas for your own projects.

OTHER RESOURCES

You'll find the website for our Fall 2015 class (including examples of the students' work) [here](#), our 2016 class [here](#), and our 2017 class [here](#).

The following web resources are worth consulting regularly, too:

- *The Atlantic's* CityLab [posts on maps](#)
- The Library of Congress's [Worlds Revealed: Geography and Maps Blog](#)
- [Making Maps: DIY Cartography](#) (John Krygier + Denis Wood)
- [Maps Mania](#)
- Dee Morris & Stephen Voyle's [series of posts](#) on *Jacket2*
- Penn State's online [Cartography and Visualization course](#)
- [David Rumsey Map Collection](#)
- [LivingMaps Review](#) [a potential venue for those you who aspire to publish your writing and creative work on maps?]
- [Mapzen's Blog](#)
- [Nasa Earth Observatory](#)
- [Stamen Design](#)
- [Strange Maps](#)
- [Territory Journal](#) [another publication venue?]
- [Wired Map Lab](#)
- [Andy Woodruff's Blog](#)
- [My own mapping links](#)

Your Contributions

ATTENDANCE AND PARTICIPATION

Our class is a mix of seminar and workshop, and its success depends on your regular attendance and reliable participation. We need each other to show up on time, having completed the readings, and prepared to engage constructively and respectfully with one another. See below for more on our commitment to inclusion and respect.

[I apologize for the pedantry of the following. Yet recent semesters' experience has demonstrated that such codification of policy is necessary.]

If you must be absent, please notify me in advance. One absence will not affect your grade. **Two absences will result in a "one step" reduction** in your final grade (i.e., from an A to an A-). Three absences will result in a "two-step" reduction. **Four absences will result in failure** of the course; to avoid the 'F' on your transcript, I'll instead advise you to withdraw from the class. Please note that absences include those days you might miss at the beginning of the semester because of late registration. Please note, too, that **a class absence does not entitle you to a private reenactment** of the missed class.

I am required by The New School to take attendance at the start of class. Students who arrive **more than 15 minutes** late will be marked absent. Your timely arrival is appreciated. Students who are consistently late disrupt their classmates and impede our class progress.

[I have adapted the following from my colleague Amir Husak:] While I am happy to work with you to tailor the class's content and assignments to your interests, and to develop strategies for project planning and time management, I also recognize that "it is every student's right to fail." There are myriad circumstances — personal, professional, cultural, etc. — that might prevent you from fulfilling the class requirements. While I appreciate that these circumstances are often difficult, the **class requirements remain the same for everyone**.

Attendance and participation are worth **20%** of your final grade.

READING RESPONSES + DISCUSSION PROMPTS

Because this is a praxis-oriented course blending critical discussions with critical making exercises, we have to use our class time efficiently. We won't always have the luxury of engaging in leisurely, seminar-style discussions of our readings (see above for more about my reading selections). Nevertheless, I do want to ensure that we make time to address particular passages from the readings that resonate strongly for you, that we grapple with any burning questions they raise for you, that we address any frustrations or excitement or discomfort they generate for you. So, if there are particular texts or topics or questions – or themes that extend across various readings or weekly themes – that you find especially compelling, you're invited to “flag” those items for our in-class agenda. (Your predecessors in previous sections of “Maps as Media” have asked that I implement this requirement.)

On at least two occasions over the course of the semester – on any two weeks of your choosing (ideally, not the last two weeks!) – you'll offer a brief **150-word maximum!** response to the week's readings and their significance within the broader context of the class. If a particular week's readings riled you up or moved you, that's your cue to post. Describe what resonated for you or troubled you or confused you; share a passage or quotation you'd like us to unpack together; pose some questions you want us to take up in our discussion. Please **post your responses as comments to the appropriate day's page on our class website**. Your two posts are **due by noon on Wednesdays before class**, and altogether they're worth **10% 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 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; instead, use it to advance your own agenda. To identify a map for review, you might look through the websites I list below, 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 text and images** (~900 words for grads, ~600 words for undergrads) – 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 time for discussion. And please be sure to have your presentation media loaded on the classroom computer before class begins so we can start on time. Your review is worth **15% of your final grade**.

You can view Class of 2015 critiques [here](#), 2016 critiques [here](#), and 2017 critiques [here](#).

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 your thesis, to a "through-line" you've pursued throughout your academic 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**, by **Wednesday, September 19, at 4pm**. 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 or political 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 three-minute presentation**, on **September 26**. The proposal is worth **15% of your final grade**.

You can read about 2015 final projects [here](#), 2016 projects [here](#), and 2017 projects [here](#).

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 exploring a few mapping strategies in/for our in-class labs. You can then continue to develop these prototypes independently, or generate map ideas of your own. By the end of the semester, you should have a minimum of **five (for grads) or four (for undergrads) completed maps**, in a variety of "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, whom we'll read later this semester, addresses the distinctive features of each map in her "Critical Cartography Primer," on pp. 113-145 of *Sidewalk City*).

As you peruse your atlas, ask yourself: Do my maps stand on their own? Do they speak for themselves? Perhaps they don't. Consider integrating prefaces, captions, legends, citations (i.e., where do the data come from?), disclaimers, etc., where appropriate. You're also encouraged to **integrate some of our class readings** – or supplemental cartographic history and theory texts you've read on your own – into your atlas text (or, consider how Nick Sousanis *graphically* integrates theoretical material in his *Unflattening*).

Please do not email me five separate files or five separate links, or hand me five separate documents; your final submission should be **one integrated collection**, with all components synthesized and contextualized. If your work consists of analog, performative, or ephemeral media that doesn't readily lend itself to submission, you'll need to share with me some coherent form of documentation.

You'll submit your project **before the start of class on December 12**, 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**.

Policies and Procedures:

INCLUSION & RESPECT

Modified from The New School's [Safe Zone declaration](#): We in this classroom are dedicated to creating a welcoming environment for all members of the university community inclusive of race, ethnicity, national origin, culture, language, gender and gender expression, sexuality, religious and political beliefs, age, and ability. We'll aim to celebrate our diversity and to respectfully negotiate differences in experience, understanding, and expression. We will stand against all forms of discrimination and oppression, whether directed against individuals or groups. We will also make an effort to respect one another's individuality in our forms of address, which includes learning one another's preferred names and pronouns.

If you experience anything in the classroom that undermines these values – or if there is anything I can do to better cultivate inclusivity and respect – please feel free to let me know. Likewise, if you are facing personal challenges inside or outside the classroom that are impacting your class performance, I'm happy to speak with you about strategies of accommodation, and to help you find the appropriate support resources at the university.

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; or (2) upload documents in .doc format, which I can then download and annotate using "track changes," and return to you via email. You can share your material with me by clicking on the "Share" button in the upper-right corner of Google Drive/Docs, inserting my email address, then clicking on the little pencil icon and choosing "can edit."

I'll probably propose some line edits and add some margin comments to your Doc. I don't expect you to *respond* to my recommendations and queries, but I do hope you'll at least *consider* them! If, however, you *would* like to continue the dialogue in the comments section by responding and requesting additional feedback from me, you'll need to alert me via email because I can't continually monitor for new activity across all students' documents.

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 review, 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.

CHANGES TO THE SYLLABUS

I make every effort to map out the entire semester before the semester begins, so we both know what we're in for. Yet we may need to make a few small alterations to our schedule: we might host a guest who's passing through town, I might decide to cut a couple of our readings or substitute new material that's published over the course of the semester, etc. Any changes will be noted, with plenty of advance notice, on **our class website, which will always be the**

most the most accurate, up-to-date “control center” for our class. This printed syllabus is really just an administrative document.

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. If you have any questions regarding proper citation of sources or other academic integrity matters, consult the [University Learning Center](#).

Week 1: August 29: Calibrating the Compass

Introductions
Syllabus Review

Getting our Bearings: *I'll be referring to these texts in class; you're welcome to read them, but you're not obligated to do so!*

- 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](#).
- Aaron Reiss, "[My 5 Favorite Maps: Stamen Design's Eric Rodenbeck](#)," *The Atlantic CityLab* (February 5, 2016).
- Deborah Cowen and Nemoy Lewis, "[Anti-Blackness and Urban Geopolitical Economy](#)," *Society + Space* (August 2, 2016).
- Rashad Shabazz, "[Ghost Mapping: The Geography of Risk in Black Chicago](#)" in *Spatializing Blackness: Architectures of Confinement and Black Masculinity* (Chicago: University of Illinois Press, 2015): 97-113. We'll talk more about mapping race throughout the semester.
- [Torn Apart / Separados](#)
- Paul Edwards, "[Control Earth](#)," *Places Journal* (November 2016).

References & Inspiration: *I'll bring these books to class so we can look through them. I've also requested that copies of (almost) all of these titles be placed on reserve in the List Center Library @ 6 East 16th St.; I encourage you to reference them throughout the semester.*

- Jill Desimini & Charles Waldheim, *Cartographic Grounds: Projecting the Landscape Imaginary* (New York: Princeton Architectural Press, 2016).
- 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
- Rebecca Solnit, *Nonstop Metropolis: A New York City Atlas* (Los Angeles: University of California Press, 2016).
- 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).

Week 2: September 5: Cartographic Futures, Presents & Pasts¹

Field Trip, 4-5pm: NYPL Map Division, 42nd St + 5th Ave, meet outside room 117

The Old

- Read about the amazingly ambitious *History of Cartography* project, some of which is available to you freely online: “[The History of Cartography, the ‘Most Ambitious Overview of Map Making Ever,’ Now Free Online,](#)” *Open Culture* (September 3, 2015). Now, you’ll read a few small samples from that collection:
 - J. B. Harley, “The Map and the Development of the History 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): 1-6 [stop at “Antiquaries, Collectors...”]
 - 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.
- Just for fun: check out the [maps released by the CIA](#) in November 2016, in honor of the agency’s 75th anniversary. And the recently published [complete archive of National Geographic maps](#).

The New and Timeless: *these two pieces foreshadow many of the themes and critical questions we’ll be discussing throughout the semester*

- Shannon Mattern, “[Mapping’s Intelligent Agents](#),” *Places Journal* (September 2017).
- Lois Parshley, “[Here Be Dragons: Finding Blank Spaces in a Well-Mapped World](#),” *Virginia Quarterly Review* 93:1 (Winter 2017).
- What new cartographic developments – humanitarian or ecological applications, business opportunities, creative experiments, political or ethical threats, areas of critical study, etc. – are most compelling to *you*? You might draw from inspiration from the two essays above, or you might consider how mapping [aids in predictive policing](#) and military combat; how new geolocate technologies [make it possible for online retailers to deliver](#) to remote, henceforth “un-addressed” parts of the world; how real-time mapping opens up new potential in the worlds of [gaming](#) or [performance](#); how [artists find creative fodder](#) in geo-media glitches; how smartphones could be [compromising our “spatial thinking”](#); how Google Maps is, by its own volition (or miscalculation), [renaming neighborhoods](#) [see this, too]; or [how new cartographic technologies have facilitated gerrymandering](#); or [how the lack of accurate cartographic data in the Congo compromises public health work](#); or any of the other ways mapping is transforming transportation, trade, culture, climate, and realms beyond. Your task is to choose a cartographic issue or application of personal interest; do a little digging online for relevant news, recent scholarship, and illuminating “think pieces”; **find a map** that illustrates your chosen phenomenon; **post your map to our collaborative Google Slide deck**; then come to class prepared to **share your map** and talk about why it’s exemplary of some bigger cartographic – and /or cultural, political, economic, aesthetic, etc. – concern. You’ll each have *one minute* to present! Aaack!

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]; The richly illustrated [website companion](#) to Susan Schulten’s *Mapping the Nation* | [David Rumsey Map Collection](#): 70,000+ historical maps of all continents (except Antarctica) and the world; David Turnbull’s [Maps are Territories website](#)

Week 3: September 12: Maps as Media² / Lab #1

Tools & Techniques for Critique: *Yes, there's some redundancy in the readings below! We're aiming to map the overlaps and discrepancies in various critical rubrics.*

- *Skim* 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* (February 27, 2014).
- Andrew Wiseman, "[When Maps Lie](#)," *The Atlantic CityLab* (June 24, 2015).
- Denis Wood, "At Least 10 Cartographic Codes" In *Rethinking the Power of Maps* (New York: Guilford Press, 2010): 80-5.
- Shannon Mattern, "[Critiquing Maps II](#)," *Words in Space* [blog post] (September 5, 2013).
- Laura Kurgan and Bill Rankin, "[Seeing Cities](#)" *Guernica* (December 15, 2015) [Bill will be visiting us on 9/26!]
- Shannon Mattern, "[Maps as Media](#)," *Words In Space* (September 15, 2015) [feel free to **skip/skim the discussions of indigenous mapping in the final section, "Herding Dragons"**; we read about this work a bit last week — and we'll revisit it again in our indigenous mapping lesson in a few weeks].

- Please start preparing your **semester project proposal** – due Wednesday, **September 19, at 4pm!**
- And while you're developing ideas for your final project, think about which week you'd like to present your map critique. Ideally, this assignment will feed into your final project. [Reserve your slot here](#).

Lab: Small-Group In-Class Map Critiques

SEPTEMBER 19: **No Class: Yom Kippur**

Reminder: Your semester project proposals are due, via Google Drive, by **Wednesday September 19, at 4pm**, so I'll have plenty of time to read, respond, and organize you into presentation groups for class on 9/20! For more information, see the first paragraph under "Map Labs and Atlas" in "Your Contributions."

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]); 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; "[Map Critique](#)," Intro to QGIS; *Laura Norén's [graphic critiques](#) on *Graphic Sociology*; 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](#).

Week 4: September 26: Cartographic Epistemologies & Blind Spots³

Guest: Skype 4-5pm: Bill Rankin, Associate Professor of History @ Yale, Cartographer

5:15 – 6:45: **Discuss Individual Project Proposals**

Yes, this looks like a long reading list. But it's really only two substantial texts (Pickles and Vertesi, the latter of which has lots of images), plus several short, digestible excerpts and posts. In all, about 75 pages. You can do it.

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?](#)" in *A History of Spaces: Cartographic Reason, Mapping and the Geo-Coded World* (New York: Routledge, 2004): 29-59.
- Excerpts from 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): **focus on 72, 78-82, 86-9** [Where do our data come from, and how do we render them mappable?].
- Bill Rankin: [Companion website for his recent book, *After the Map*](#); [video synopsis of the book, *American Slavery, Slavery in the North, Slave Insurance*](#)

Frames, Borders, Gaps, Cuts & Boundaries

- 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.
- Miriam Berger, "[When Waze Won't Help, Palestinians Make their Own Maps](#)," *Wired* (December 10, 2017).
- 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 Keir Clarke, "[Working with Map Projections](#)," *Map Mania* (October 9, 2017); Cornell University Library's [PJ Mode Collection of Persuasive Cartography](#); 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); **Olaus Magnus's [Carta Marina](#)** (1539); John Pickles, "Mapping and the Production of Social Identities" In *A History of Spaces: Cartographic Reason, Mapping and the Geo-Coded World* (New York: Routledge, 2004): 126-33; Bill Rankin, "[Base Maps and Invisible Landscapes](#)," University of Nebraska, Lincoln, February 14, 2018 {video}; Bill Rankin, "[Mapping Social Statistics: Race and Ethnicity in Chicago](#)" {video}; Bill Rankin, "[Redrawing the Map](#)," *Architecture Boston* 18:2 (Summer 2015); 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: Jess Bier, *Mapping Israel, Mapping Palestine: How Occupied Landscapes Shape Scientific Knowledge* (Cambridge, MA: MIT Press, 2017); Jess Bier, "Palestinian State Maps and Imperial Technologies of Staying Put," *Public Culture* 29:1 (2016): 53-78; 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); Christopher Jobson, "[Animated Subway Maps Compared to Their Actual Geography](#)," *Colossal* (May 31, 2017); Luke O'Connell, "[Dashed Lines and Dashed Hopes: The Downside of Google's 'Neutrality'](#)," *Brown Political Review* (May 9, 2014); Aaron Rothman, with Mishka Henner, Daniel Leivick & Clement Valla, "[Beyond Google Earth](#)," *Places* (May 2015); Peter Turchi, "[A Wide Landscape of Snows](#)" in *Maps of the Imagination: The Writer as Cartographer* (San Antonio: Trinity University Press, 2004): 27-71.

Week 5: October 3: 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).
- Lily Bui On, "[Dragons, Memory & Navigating the Globe Using Only Your Wits](#)," *Nautilus* (October 13, 2014) [*a preface to our indigenous mapping discussion in three weeks*].
- 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].
- Perfect City Working Group, "[What Do You Avoid? Where Do You Belong?](#)" *Urban Omnibus* (July 5, 2017).

Lab: Discuss methods for cognitive and participatory mapping.

⁴ Lily Bui On, "[The Art and Science of Polynesian Wayfinding](#)," PRX [radio]; Michel de Certeau, "Spatial Practices" In *The Practice of Everyday Life* (Berkeley, CA: University of California Press, 1984): 100-134; [Hand Drawn Map Association](#); 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; Linda Poon, "[Maps Made 'From the Mind,' Not from GPS](#)," *CityLab* (November 10, 2015); Kim Tingley, "[The Secrets of the Wave Pilots](#)," *New York Times Magazine* (March 17, 2016); 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).

Week 6: October 10: Critical Cartography & Counter-Mapping⁵

Map Critiques: up to four students present their map critiques

- Do a quick search to learn a bit about critical cartography – especially its core tenets, the context for its emergence in late 1980s. If you'd like more technological, cultural, and disciplinary history, see Jeremy W. Crampton and John Krygier, "[An Introduction to Critical Cartography](#)," *ACME: An International E-Journal for Critical Geographies* 4:1 (2006): 11-33.
- The coining of "counter-mapping": 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...*].
- Yet counter-mapping was taking place before the term existed: Dee Morris & Stephen Voyce, "[William Bunge, the DGEI, & Radical Cartography](#)," *Jacket 2* (March 20, 2015).
- And it's useful for understanding diverse urban contexts: 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/>.

Other Examples:

- Aimi Hamraie's Mapping Accessibility project: [About](#) + [Methodology](#).
- Sarah Bond, "[How Is Digital Mapping Changing the Way We Visualize Racism and Segregation?](#)" *Forbes* (October 20, 2017).
- Robert K. Nelson, LaDale Winling, Richard Marciano, and Nathan Connolly, et al., "[Mapping Inequality](#)," *American Panorama*.

⁵ William Bunge, *Fitzgerald: Geography of a Revolution* (Athens, GA: University of Georgia Press, 2011[1971]); 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; Sera Tolgay, [Critical Cartography](#); Denis Wood, Excerpts from "Counter-Mapping and the Death of Cartography" In *Rethinking the Power of Maps* (New York: Guilford Press, 2010): 120-129.

MORE ON WM BUNGE: MIT Center for Civic Media on [The Detroit Geographic Expedition and Institute; a collection of Bunge maps](#) on Detroitography; the [DGEI Field Notes](#) @ Antipode, as well as papers from a symposium reflecting on those notes; Andy Merrifield, "Situated Knowledge Through Exploration: Reflections on Bunge's 'Geographical Expeditions,'" *Antipode* 27:1 (January 1995); and Linda Campbell, Andrew Newman & Sara Safransky's "[Uniting Detroiters](#)" project, inspired by Bunge.

Week 7: October 17: Indigenous Maps, Spatial Ontologies & Epistemologies⁶

Guest: 4-5pm: [Kasey Klimes](#), Google Maps [Kasey will be sharing work that pertains primarily to *last* week's discussion on critical cartography. After her visit, we'll turn to this week's theme: indigenous cartography.]

- Margaret Wickens Pearce and Renee Pualani Louis, "[Mapping Indigenous Depth of Place](#)," *American Indian Culture and Research Journal* 32:3 (2008): 107-26 [you'll find some repetition with Peluso's piece, from last week, but the major part of this article focuses on graphic *applications*]
- Ray P. Norris & Bill Yidumduma Harney, "[Songlines and Navigation in Wardaman and Other Australian Aboriginal Cultures](#)," *Journal of Astronomical History and Heritage* 17:2 (2014): 141-8.
- Explore some sample projects:
 - Jason Pellegrino, "[Experience the Songlines of Uluru with Google Maps Street View and Story Spheres](#)," *Google Maps Blog* (June 7, 2017).
 - Check out [LandMark: Global Platform of Indigenous and Community Lands](#), [Pan Inuit Trails](#), and the [Ground Truth Initiative](#).
 - Patricio González Vivo and Jen Lowe, "[Guayupia](#)," *The Map Is Not IV* (2017).
- Lisa Poggiali, "[Seeing \(from\) Digital Peripheries: Technology and Transparency in Kenya's Silicon Savannah](#)," *Cultural Anthropology* 31:1 (August 2016).
- Many more examples in the Supplemental Resources below!

⁶ Nabil Ahmed, "[Land Rights: Counter-Mapping West Papua](#)," *continent*. 4:4 (2015); *Sunitha Chari, "[Mapping Back: A Workshop on Counter Mapping Resource Conflicts on Indigenous Homelands](#)," *Transformations to Sustainability* (December 4, 2017); [Decolonial Atlas](#); Ceridwen Dovey, "[The Mapping of Massacres](#)," *The New Yorker* (December 6, 2017); Gwilyn Lucas Eades, *Maps and Memes: Redrawing Culture, Place, and Identity in Indigenous Communities* (Montreal: McGill-Queen's University Press, 2015); Julianna A. Hazlewood and the Communities of La Chiquita and Guadualito, "[Court Issues Ruling in World's First 'Rights of Nature' Lawsuit](#)," *Intercontinental Cry* (February 16, 2017); [History of Cartography Volume 2](#): three volumes on traditional cartographies; Dallas Hunt and Shaun A. Stevenson, "Decolonizing Geographies of Power: Indigenous Digital Counter-Mapping Practices on Turtle Island," *Settler Colonial Studies* (2016); Mishuana Goeman, *Mark My Words: Native Women Mapping Our Nations* (Minneapolis: University of Minnesota Press, 2013); Illinois State Museum, [Native American Mapping Traditions](#); Karin Amimoto Ingersoll, *Waves of Knowing: A Seascape Epistemology* (Durham, NC: Duke University Press, 2016); G. Malcolm Lewis, Ed., *Cartographic Encounters: Perspectives on Native American Mapmaking and Map Use* (Chicago: University of Chicago Press, 1998); Renee Pualani Lois, with Moana Kahele, *Kanaka Hawai'i Cartography: Hula, Navigation, and Oratory* (Portland: Oregon State University, 2017); *Rachel Olson, Jeffrey Hackett & Steven DeRoy, "Mapping the Digital Terrain: Towards Indigenous Geographic Information and Spatial Data Quality Indicators for Indigenous Knowledge and Traditional Land-Use Data Collection," *The Cartographic Journal* 53:4 (2016); Gina Dawn Richard, "[Radical Cartographies: Relational Epistemologies and Principles for Successful Indigenous Cartographic Praxis](#)," Dissertation, University of Arizona, 2015; Eva Salinas, with Sébastien Caquard, "[The Politics of Making Maps](#)," *Canadian International Council* (November 12, 2014); Teresa Scassa, Nate J. Engler & D.R. Fraser Taylor, "Legal Issues in Mapping Traditional Knowledge: Cartography in the Canadian North," *The Cartographic Journal* 52:1 (2015): 41-50; "[Singing the Country to Life](#)," *ABC* (July 3, 2016); Jota Stamper, "[Toward an Epistemology of the Form of the Informal City: Mapping the Process of Informal City-Making](#)," *Informal Settlements Research ISR* (July 7, 2012); Sam Sturgis, "[Kids in India are Sparking Urban Planning Changes by Mapping Slums](#)," *The Atlantic's CityLab* (February 19, 2015); UCLA, [Mapping Indigenous LA](#); Helen Watson, "[Aboriginal-Australian Maps](#)," *Maps Are Territories*; Jeffrey Yoo Warren, "Grassroots Mapping: Tools for Participatory and Activist Cartography," Masters Thesis, MIT, 2010; Margaret Wickens Pearce, "The Last Piece Is You," *The Cartographic Journal* 51:2 (2014): 107-22; Denis Wood, "The Outside Critique: Indigenous Mapping" In *Rethinking the Power of Maps* (New York: Guilford Press, 2010): 129-142.

Week 8: October 24: Lab #3: Mapping Platforms

Map Critiques: up to three students present their map critiques

Our list of resources – platform and data sets – will depend on the nature of your projects. We'll update the list online at least a week before 10/24.

Week 9: October 31: The Aerial Gaze⁷ / Lab #4

Lab: Map Workshop: Share your work in progress and get some feedback! We'll split the class into quarters, and each of you will have roughly **ten minutes two do two things:** present one prototype map-in-development for your final atlas, *and* solicit and receive feedback. How prototype-y are we talking? It can be rough, but your concept and execution plan should be clear, so your classmates will have something concrete to respond to.

What are the epistemologies and politics of aerial imagery?

- John Pickles, "[The Cartographic Gaze, Global Visions and Modalities of Visual Culture](#)" in *A History of Spaces: Cartographic Reason, Mapping and the Geo-Coded World* (New York: Routledge, 2004): 75-91.
- 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.
- "[Seeing the World Through Google's Eyes](#)," *Exposing the Invisible* (n.d.).
- Clayton Aldern, "[Cartographers Without Borders](#)," *LOGIC* 4 (2018).
- And a variety of short applications:
 - Tim Maly, "[A Cloudless Atlas – How Mapbox Aims to Make the World's 'Most Beautiful Map'](#)," *Wired* (May 14, 2013).
 - Jo Craven McGinty, "[A Sizable Challenge: Mapping Alaska](#)," *Wall Street Journal* (November 13, 2015).
 - Check out [Terrapattern](#).

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; Alexander Burgess, "[Shift Command Three](#)," *Photomediations Machine*; Gabriele Colombo, Paolo Ciuccarelli, and Michele Mauri, "[Visual Geolocations: Repurposing Online Data to Design Alternative Views](#)," *Big Data & Society* (2017); Robin Kelsey, "Reverse Shot: Earthrise and Blue Marble in the American Imagination," *New Geographies* 4: Scales of the Earth (Harvard Graduate School of Design, 2011): 10-16; 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; Geoff Manaugh, "[Grid Corrections](#)," *BldgBlog* (December 11, 2015); Robinson Meyer, "[A New and Stunning Way to See the Whole Earth](#)," *The Atlantic* (January 26, 2016); Robinson Meyer, "[Google Remakes the Satellite Business, By Leaving It](#)," *The Atlantic* (February 7, 2017); *Trevor Paglen, "[Some Sketches on Vertical Geographies](#)," *e-flux* (October 5, 2016); Lisa Parks, "Digging into Google Earth: An Analysis of 'Crisis in Darfur,'" *Geoforum* 40:4 (2009): 535-45; Lisa Parks, "Mapping Orbit: Toward a Vertical Public Space," in Chris Berry, Janet Harbord, and Rachel Moore, eds., *Public Space, Media Space* (Palgrave, 2013): 61-87; 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; John Pickles, [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): 145-75; Aaron Rothman, with Mishka Henner, Daniel Leivick & Clement Valla, "[Beyond Google Earth](#)," *Places* (May 2015); Thomas Stubblefield, "In Pursuit of Other Networks: Drone Art and Accelerationist Aesthetics" in Lisa Parks and Caren Kaplan, eds., *Life in the Age of Drone Warfare* (Durham, NC: Duke University Press, 2017); 195-219; Genevieve Yue, "Errant Pixels: The Sight Specificity of Satellite," *ASAP/Journal* 2:3 (September 2017): 677-708.

Week 10: November 7: Multimodality, Multivocality & Deep Mapping⁸

Map Critiques: up to four students present their map critiques

- Les Roberts, “[Deep Mapping and Spatial Anthropology](#),” *Humanities* 5:1 (2016).
- *Skim* 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).
- In class, we’ll look at Megan Prelinger, Rick Prelinger and Stacy Kozakavich’s series of fabulous [atlases for the Bay Observatory](#) in San Francisco, and [Bobby Pietrusko’s](#) beautiful [Urban Intermedia](#) work.

Week 11: November 14: The Mapping Arts⁹

Map Critique: up to three students present their map critiques

Guest: Tiffany Chung???

- Daniel Rosenberg, “[Against Infographics](#),” *Art Journal OPEN* (March 11, 2016) [on aesthetics & epistemology].
- Joe Hamilton, [Indirect Flights](#) (2015).
- Catherine D’Ignazio, “[Art and Cartography](#)” in *The Encyclopedia of Human Geography* (New York: Elsevier, 2009): 190-206 – or (take your pick!) – Denis Wood, “[Map Art: Stripping the Mast from the Map](#)” in *Rethinking the Power of Maps* (New York: Guilford Press, 2010): 189-230.
- [Bellerby & Co Globemakers](#)
- [Work from our visiting artist](#)

NOVEMBER 21: No Class: Thanksgiving

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); David J. Bodenhamer, John Corrigan, and Trevor M. Harris, Eds., *Deep Maps and Spatial Narratives* (Bloomington, IN: Indiana University Press, 2015); Martin Dodge, “Cartography I: **Mapping Deeply**, Mapping the Past,” *Progress in Human Geography* 41:1 (2017): 1-10; 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]

⁹ Denis E. Cosgrove, “Maps, Mapping, Modernity: Art and Cartography in the Twentieth Century,” *Imago Mundi* 57 (2005): 35-54; Katherine A. Harmon, *The Map as Art: Contemporary Artists Explore Cartography* (New York: Princeton Architectural Press, 2009); Karen O’Rourke, *Walking and Mapping: Artists as Cartographers* (Cambridge, MA: MIT Press, 2013); Denis Wood, “Map Art” *Cartographic Perspectives* 53 (Winter 2006): 5-14; David Woodward, *Art and Cartography: Six Historical Essays* (Chicago: University of Chicago Press, 1987). Many of the books I placed on reserve for our class are also about map-based art!

Week 12: November 28: Mapping Sensation & Affect¹⁰ / Lab #5

Map Critiques: up to three students present their map critiques

- *Optional [on feminist histories of affective cartography]:* 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.
- You can choose to read about either smell maps or sound maps:
 - Sybille Lammes, Kate McLean, and Chris Perkins, “Mapping the Quixotic Volatility of Smellsapes: A Trialogue,” in Sybille Lammes, Chris Perkins, Alex Gekker, Sam Hind, Clancy Wilmott, and Daniel Evans, eds., *Time for Mapping: Cartographic Temporalities* (Manchester: Manchester University Press, 2018): 50-90 [experimental design with lots of images].
 - Samuel Thulin, “[Sound Maps Matter: Expanding Cartophony](#),” *Social & Cultural Geography* 19:2 (2018): 192-210.
- Check out the various sound maps at [Cities and Memory](#), [London Sound Survey](#), and [Radio Aporee](#) – and explore the affective maps at [Good City Life](#).
- Danielle Quercia, Luca Maria Aiello, and Rossano Schifanella, “[Mapping Towards a Good City Life](#),” *Journal of Urban Design and Mental Health* 3:3 (2017) [connecting affect to cognitive mapping].

Lab: Sensory Mapping – more info TBA

¹⁰ Stuart C. Aitken & James Craine, “[Affective Geovisualizations](#),” *Directions Magazine* (2006) [on film and video games as conduits for affect]; *Isobel Anderson, “[Soundmapping Beyond the Grid: Alternative Cartographies of Sound](#),” *Journal of Sonic Studies* 11 (August 2015); Jennifer Arnott, “[Tactile Maps and Teaching Maps Skills](#),” Perkins School for the Blind eLearning (May 31, 2018); 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](#); Sébastien Caquard & D.R. Fraser Taylor, “What Is Cinematic Cartography?” *The Cartographic Journal* 46:1 (2009): 5-8; Tom Conley, *Cartographic Cinema* (Minneapolis: University of Minnesota Press, 2007); Cindy Dampier, “[Chicago Stinks, Especially in Summer: Find Out What Your Neighborhood Smells Like](#),” *Chicago Tribune* (July 27, 2018); Catherine D’Ignazio and Lauren F. Klein, “[Feminist Data Visualization](#),” *IEEE Vis* (2016); Milena Droumeva, “Soundmapping as Critical Cartography: Engaging Publics in Listening to the Environment,” *Communication and the Public* 2:4 (2017): 335-51; Jonathan Flatley, “Affective Mapping” In *Affective Mapping: Melancholia and the Politics of Modernism* (Cambridge, MA: Harvard University Press, 2008): 76-84; Jen Jack Gieseck, “Operating Anew: Queering GIS with Good Enough Software,” *The Canadian Geographer* 62:1 (2018): 55-66; *Jessica Hamilton, “[Tactile Map Tile: Working Toward Inclusive Cartography](#),” ASLA 2017 Student Awards (2017); Victoria Henshaw, *Urban Smellsapes: Understanding and Designing City Smell Environments* (New York: Routledge, 2014); “[Mapping Sound](#),” National Park Service; Shannon Mattern, “[Infrastructural Tourism](#),” *Places* (July 2013); Kate McLean, “[Emotion, Location and the Senses: A Virtual Dérive Smell Map of Paris](#),” *Out of Control*, Proceedings of the International Design and Emotion Conference, London, 2012; Christian Nold, *biomapping*; Gascia Ouzounian, “[Acoustic Mapping: Notes from the Interface](#)” in Matthew Gandy & BJ Nilsen, Eds., *The Acoustic City* (Berlin: Jovis, 2014): 164-73; OWJL Summer Program, “[Sensory Mapping](#),” *Mapping Weird Stuff* (2009); Eric Rodenbeck, “[Introducing the Atlas of Emotions, Our New Project with the Dalai Lama and Paul & Eve Ekman](#),” *Medium* (April 26, 2016) + [Nicolette Hayes](#)’ post + Paul Ekman’s *Atlas of Emotions*; Tania Rossetto, “The Skin of the Map: Viewing Cartography Through Tactile Empathy,” *Environment and Planning D* [online first] (2018): 1-21; “[The Trouble With Sound Maps](#),” *London Sound Survey* (May 25, 2015); Jacqueline Waldoock, “[Soundmapping: Critiques and Reflections on This New Publicly Engaging Medium](#),” *Journal of Sonic Studies* 1:1 (October 2011); David Weimer, “To Touch a Sighted World: Tactile Maps in the Early Nineteenth Century,” *Winterthur Portfolio* 51: 2/3 (2017): 135-58.

WOMEN IN CARTOGRAPHY: Laura Bliss, “[The Hidden Histories of Maps Made by Women: Early North America](#),” *The Atlantic City Lab* (March 21, 2016) [multi-part series]; Christine E. Dando, *Women and Cartography in the Progressive Era* (Routledge, 2018); Judith Tyner, “Mapping Women: Scholarship on Women in the History of Cartography,” *Terrae Incognitae* 48:1 (April 2016): 7-14.

Week 13: December 5: Mapping Time¹¹

Map Critiques: up to three students present their map critiques

- Daniel Rosenberg & Anthony Grafton, "[Time in Print](#)" in *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.
- Stephen Boyd Davis & Florian Kräutli, "[The Idea and Image of Historical Time: Interactions Between Design and Digital Humanities](#)," *Visible Language* 49:3 (December 2015).
- [Topotime](#)
- [Space/Time Directory](#)

Week 14: December 12: Final Presentations

This week, for the first half of class, we can explore topics or practice skills of your choosing. We'll dedicate the remainder of our time either to (1) an open lab, during which you can work on your final projects and solicit feedback from your classmates and instructors; or (2) our first few final presentations.

Week 15: TBD: Final Presentations

The New School didn't map out the academic calendar very carefully and consequently forgot to schedule a 15th session of all Wednesday classes. Doh! We'll have to determine when to hold our final class: Immediately after our December 12 session, as an Act II? Sometime during the weekend of the 14th? Or during the university's official make-up day, on Tuesday, December 18?

¹¹ [Rethinking Timelines](#) Project @ University of Sydney; Daniel Rosenberg, [Time Online](#), University of Oregon; [Speculative Timelines](#) research group; Sybille Lammes, Chris Perkins, Alex Gekker, Sam Hind, Clancy Wilmott, and Daniel Evans, eds., [Time for Mapping: Cartographic Temporalities](#) (Manchester: Manchester University Press, 2018).