

January 28, 2021

SCI-6322: Mapping: Geographic Representation and Speculation

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- Spring 2021, WF 2:30-4
- Class Held on Zoom¹
- Office Hours:
 - Eric: TuF, 9:30-11 Th, 4:30-6, booked on Calendly²
 - Julia: M 12-1 PM, W 1-2 PM
 - Maria: MW, 8-9 AM
- Teaching Assistant: Maria Vollas, mariavollas@gsd.harvard.edu

¹<https://harvard.zoom.us/j/93425515168?pwd=MjU0VDJkdLU0SXVSdm9DdXlaekc4Zz09>

²<https://calendly.com/robkyhuntley/office-hours/>

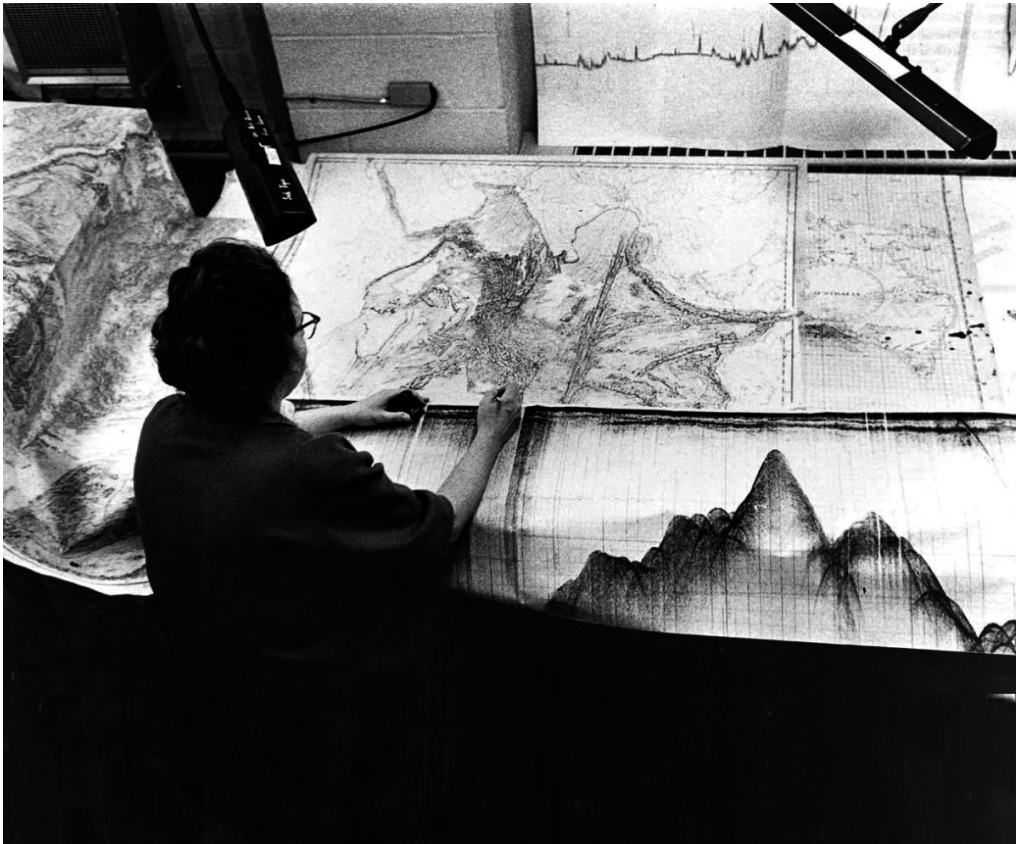


Figure 1: Marie Tharp, cartographer and oceanographer, draws a physiographic diagram of the Indian ocean. Image from the Lamont-Doherty Earth Observatory. Reproduced in Hali Felt's Soundings: The story of the Remarkable Woman who Mapped the Ocean Floor (2012).

Description

Maps both represent reality and create it. It is in the context of this contention that this course presents the fundamentals of mapping, spatial analysis, and visualization. In a design process, the act of mapping selectively narrates site conditions. By choosing what features, forces, and flows to highlight—and which to exclude—the designer creates the reality in which their intervention will be situated. This is only becoming more true, as urban space and populations are ever-more pervasively measured, monitored, and categorized by innumerable institutions. Such representations are often a designer's primary means of responding to a site. Designers are in the difficult position of approaching spatial datasets critically and as sites of contestation while also

employing them in their work.

Over the course of a semester, students will work extensively with techniques of spatial analysis. Using desktop GIS software, we will explore data sources, data models, overlays, map algebra, spatial statistics, terrain analysis, and suitability modeling, among other techniques of spatial representation. Students will learn to embed these techniques, recursively, within larger design workflows.

Course Format

The course will combine workshops showcasing techniques, and lectures that place these in conversation with design and other forms of spatial inquiry. Students will complete short exercises and reading assignments, as well as two larger projects in which students will deploy mapping techniques to further their own research.

Each week, the two course sessions – in many weeks, a lab and a lecture – will be held synchronously, and students will be encouraged to attend when possible. However, recordings of all sessions will be made available for students who are unable to join synchronously. Furthermore, the instructor, the student TAs and the course TF will be scheduling office hours intentionally to ensure that even those who cannot join class sessions have ample opportunities for face-to-face virtual instruction.

Abbreviated Schedule

Date	Theme	Assigned	Due
01-27	Representation	–	–
01-29	Lab 1-A	–	–
02-03	Positionality	–	–
02-05	Lab 1-B	E1	–
02-10	Magnitudes	–	–
02-12	Lab 2-A	–	–
02-17	Categories	–	–
02-19	Lab 2-B	E2	E1
02-24	Trajectories	–	–
02-26	Lab 3-A	–	–
03-03	Territories	–	–
03-05	Lab 3-B	E3	E2
03-10	P1 Brief/Group-Making	P1	–
03-12	Lab 3-C	–	–

Date	Theme	Assigned	Due
03-17	<i>Spring Recess</i>	–	–
03-19	<i>Spring Recess</i>	–	–
03-24	Surfaces	–	P1 Proposal
03-26	Lab 4-A	–	E3
03-31	Overlays	–	–
04-02	Lab 4-B	E4	–
04-07	P1 Review	–	P1
04-09	P2 Brief/Group-Making	P2	–
04-14	Criticality	–	–
04-16	Lab 5-A	E5	E4
04-21	Counter-Mapping	–	P2 Proposal
04-23	Lab 5-B	–	–
04-28	Pin-Ups	–	E5
05-03	P2 Review	–	P2

Are There Prerequisites?

The course has no prerequisites and no previous experience with GIS is assumed. Familiarity with standard modeling and visual design software will be helpful (e.g., Rhino, Adobe suite), but is not mandatory.

Am I Required to Buy the Texts?

No! All readings are uploaded to the course Canvas site. In fact, many, if not all, of the texts are available digitally to affiliates through the Harvard libraries. Just remember this favor when you ask yourself how much of the reading to complete...

Assessment and Assignments

Assignment	Weight
Module Exercises	30%
Project 1 Proposal	10%
Project 1	20%
Project 2 Proposal	10%
Project 2	20%

Assignment	Weight
Attendance and Participation	10%

Submission

All assignments should be submitted electronically through the Canvas interface by 12 noon, Eastern Time on the appointed day.

Module Exercises (E1 - 5)

- Due: On Friday, in designated weeks.

These are straightforward exercises intended to keep you caught up with the material. They should not take you more than a few hours to complete and will be tightly coupled to each modules themes and labs. **You will be permitted to drop a single exercise.**

Projects and Proposals (P1 - 2)

- Project 1 Proposal Due: Wednesday, March 24.
- Project 1 Due: Friday, April 2
- Project 2 Proposal Due: Wednesday, April 21.
- Project 2 Due: Friday, May 7.

Much of your evaluation in the course will be based on your staged completion of two projects in small groups, both of which will extend and build upon module content. In each case, you will first present a project *proposal* that is meant as a venue for you to develop and plan your respond to the brief. The teaching team will very quickly return feedback to you on these proposals so that you can adjust and iterate before committing to a particular plan.

Your projects will be presented to groups of external critics during reviews taking place at and around our regularly scheduled class time—most likely, we will need to schedule longer multiple hour blocks. Your evaluation will take into account reviewer comments, but most of it will be based on criteria detailed in a rubric to which you will have access well before the review date. You are not required to be present for the entirety of these sessions, though it is considered good form to support your classmates for whatever portion of the time you can manage.

Attendance

As in life, much of your success in this class depends on showing up. Attendance will appear in your grade as a percentage—you come to class (or view the class video), you get full points for the day. You don't come to class (or view the class video), you don't get points for the day. However! These continue to be extraordinary times—I recognize that there may be a variety of reasons for you to miss a class period here and there. I will be recording class sessions so that folks can catch up asynchronously when necessary (though see 'Lecture Recording' below).

If you are unable to attend the regularly scheduled classes for an extended period of time (due to, say, a 14-hour time difference between yourself and the east coast of the United States), let me know as soon as possible—I'll do my best to accommodate your situation. This will likely mean establishing a deadline by which you will be expected to have viewed recorded videos.

Why Attendance and Not Participation?

Great question! 'Participation' is a vague category that allows instructors to evaluate students based on unstated and tacit criteria—it's also a nasty way to let various biases into one's evaluation of students. For this reason, I use attendance. We all know what it means!

Late Policy

Turning in assignments promptly is important both for keeping current with the subject matter, which is cumulative, and to keep all students on a relatively level playing field. A late assignment will be accepted up until one week after the original due date for a loss of one letter grade (e.g., an A becomes an B). After that point, late assignments will receive no credit and will not be accepted.

There will of course be situations where I am willing to bend this rule. This is particularly true now. These are regulatory ideals, not absolutes. I am a human being; you are human beings. The contingencies and exigencies that condition your life are real. I will strive to respect them if you similarly strive to not take advantage of my inclination to respect them. We're all in this weird boat together—let's be good to each other. I also feel that it is important to say that I promise to greet you with the assumption of your honesty.

Lecture Recording

To accommodate folks who may have trouble joining class at the usual time, I will be recording class sessions and making them available. To ensure that everyone is as comfortable as possible, however, I intend to prioritize student and instructor privacy. In practice this means a few things:

1. The recordings will not be made publicly available; access will be limited to members of the class.
2. Any student can ask for us to pause the recording at any time, no questions asked.
3. Students are not required to have their camera on during class time.

Office Hours

We've attempted to schedule the teaching team's office hours such that every time zone will have a session available at reasonable hours.

You can find **Eric** in their Zoom room between...

- 9:30-11:10 AM Eastern (UTC-04:00) on Tuesdays and Fridays and
- 4:30-6:10 PM Eastern (UTC-04:00) on Thursdays.

Eric finds it very helpful if you book sessions in advance through the Calendly³ application, though this is not absolutely mandatory.

You can find **Julia** in her Zoom room between...

- 12:00-1:00 PM Eastern (UTC-04:00) on Mondays and
- 1:00-2:00 PM Eastern (UTC-04:00) on Wednesdays.

You can find **Maria** in her Zoom room between...

- 8:00-9:00 AM Eastern (UTC-04:00) on Mondays and Wednesdays.

We're all suffering from Zoom fatigue to varying degrees, so make it pleasant/fun, whatever that means for you! Bring a cup of tea. Wear a funny hat. Pet an animal. If the scheduled time does not work for you, we can make arrangements to meet at another time. However, please be conscientious! We set this time aside each week for office hours and we really do try to manage my time.

³<https://calendly.com/robkyhuntley/office-hours>

Email

We have seen an explosion of platforms in use by educators for channeling class-related communication. I will be sticking to email because, honestly, Slack messages piling up gives me indigestion. If you want to chat amongst yourselves, I am happy to set up a Slack/Teams/Discord/whatever channel. But I will not be checking it.

Instructors will not always be able to respond to email right away. If we have not answered an email by the next time I see you in class please remind us! The teaching team will do our best to respond to your emails in 24 hours during the week. Instructors do not respond to emails on the weekends. The labor movement fought long and hard to secure your weekend! It is truly remarkable that we live in a world in which an email can travel to space and divebomb from the exosphere to our pockets in a matter of seconds; this does not imply that our response must be equally instantaneous!

A Note on Graduate School and Mental Health

Academic environments are taxing places. For reasons structural, institutional, financial, and interpersonal, they do not always lend themselves to what most reasonable people would think of as human flourishing. I went to graduate school. In fact, I went to graduate school twice. I also went to college. Without dwelling on the issue, I will say that I am intimately familiar with the toll that institutions of higher education can exact on our mental health and wellbeing. I also know that many of you just experienced substantial displacements in your personal, academic and professional lives. This suggests that we should all do our best to form a little mutual aid community—do not hesitate to reach out to me.

Additionally, the COVID crisis has not meant the end of Harvard's formal support for student wellbeing. The university continues to offer a range of counseling and mental health resources⁴ for students. I would really encourage you to be proactive about taking advantage of these things. Also, as I said above, do not hesitate to let me know if you're struggling. It is not my intention to mine for the details of your private lives! It is only to let you know that I am sensitive to the distinctive difficulties of the environment we inhabit and that help is available.

Land Acknowledgement

Mapping has been (and continues to be) instrumental in the dispossession of indigenous lands by colonists. As such, it would seem particularly important to include lan-

⁴<https://camhs.huhs.harvard.edu/>

guage in this syllabus recognizing that the land on which Harvard sits (and on which many, if not all, of the places we're Zooming in from sit) is unceded—the claims on it are multiple and in conflict.

“Harvard University is situated on the traditional and ancestral homelands of the Massachusett people. Our university honors the historic Harvard Charter of 1650, which committed our institution to “the education of English and Indian youth of this country.” As a chartered creation of the Massachusetts colonies and Commonwealth, Harvard evolved alongside the persistence of the Massachusett, Nipmuck, and Wampanoag Nations. Located near the Charles River, this place has long served as a site of meeting, exchange, and diplomacy among nations, with thousands of contemporary Native American people living in greater Boston and tens of thousands in the state of Massachusetts. As an Interfaculty Initiative at a world-class university situated on these lands, we are dedicated to building vibrant partnerships with Native American communities, promoting innovative scholarship on Native American issues, and cultivating distinguished achievement by Native American students.” – Developed by the Harvard University Native American Program.

Schedule

Module 1: Orientations

01-27: Representation: What Do Maps Represent? What Does Representation Do?

Due

- Nothing.

Assigned

- Nothing.

Readings

- Rob Kitchin, Chris Perkins, and Martin Dodge. 2009. “Thinking About Maps.” In *Rethinking Maps: New Frontiers in Cartographic Theory*, edited by Martin Dodge, Rob Kitchin, and Chris Perkins. New York, NY: Routledge.

- Start here. The section beginning “Post-Representational Cartography” (pp. 10-23) is especially illuminating for our purposes—this chapter provides a useful diagram in which to locate the pieces that follow.
 - Jill Desimini and Charles Waldheim. 2016. “Introduction: Projecting the Landscape Imaginary.” In *Cartographic Grounds: Projecting the Landscape Imaginary*, 9–19. New York: Princeton Architectural Press.
 - A nice introduction to a cartographically rich exhibit by GSD folks that takes as its subject our key contention: that maps function differently in design practice than in the more descriptive disciplines.
 - Robin Evans. 1986. “Translations to Drawing to Building.” *AA FILES* 12: 3-18. <https://www.jstor.org/stable/29543512>
 - Pp. 6-7 pretty neatly summarize the reason I assign this piece.
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- James Corner. 1999. “The Agency of Mapping: Speculation, Critique, and Invention.” In *Mappings*, edited by Denis E. Cosgrove, 213–52. London: Reaktion Books.
 - It probably merits comment that I relegated this very well-known piece to the position of ‘optional reading.’ I do so because I find its argument a bit overblown when read outside of its context—it is a polemical response to a particular form of landscape architectural practice that has arguably waned, namely the ‘ecological planning’ tradition as articulated in the Penn curriculum under Ian McHarg’s chairpersonship.
 - Lorraine Daston and Peter Galison. 2010. “Representation to Presentation.” In *Objectivity*, 363-416. New York, NY: Zone Books.
 - This is a long, dense chapter that comes at the end of a long, dense book. But its description of how engineers evaluate scientific representation—does this representation work?—is quite nice. They suggest that ‘representation’ is the wrong word because the image is active in producing the phenomenon depicted. Also, check out the beautiful secular sermon that spans pp. 372-74 (“All epistemology begins in fear...”).

02-03: Positionality: Mapping from Somewhere

Due

- Nothing.

Assigned

- Exercise 1, due 02 - 19.

Readings

- Nadine Schuurman and Geraldine Pratt. 2002. "Care of the Subject: Feminism and Critiques of GIS." *Gender, Place and Culture* 9 (3): 291–99. <https://doi.org/10.1080/0966369022000003905>.
- Catherine D'Ignazio and Lauren F. Klein. 2020. "On Rational, Scientific, Objective Viewpoints from Mythical, Imaginary, Impossible Standpoints." In *Data Feminism*, 73–96. Cambridge, MA: The MIT Press.

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- Nadine Schuurman. 2000. "Trouble in the Heartland: GIS and Its Critics in the 1990s." *Progress in Human Geography* 24 (4): 569–590. <https://doi.org/10.1191/030913200100189111>.
 - This piece provides a tidy summary of the so-called 'science wars' and how GIS practitioners on both ends of the debate understood the stakes.
 - Donna J. Haraway. 1988. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14 (3): 575–99. <https://doi.org/10.2307/3178066>.
 - An undisputed classic of feminist science studies. You can almost feel Haraway's (admittedly quite dense) language straining to throw off the excesses of western scientism.
 - Sandra Harding. 1995. "'Strong Objectivity': A Response to the New Objectivity Question." *Synthese* 104 (3): 331–349.

- Another classic—in which Harding argues that, contra the conventional wisdom, acknowledging one’s positionality actually strengthens claims to objectivity, rather than weakening them.
- Matthew W. Wilson. 2018. “On Being Technopositional in Digital Geographies.” *cultural geographies* 25 (1): 7–21. <https://doi.org/10.1177/1474474017743030>.

Technical References

- Paul Bolstad. 2019. “Map Projections and Coordinate Systems.” In *GIS Fundamentals*, 87-115. Sixth edition. Ann Arbor, MI: XanEdu.

Module 2: Magnitudes and Categories

02-10: Magnitudes

Due

- Nothing.

Assigned

- Nothing.

Readings

- Sarah Williams. “Big Data in Cities is Not New.” In *Data Action: Using Data for Public Good*, 1-50. Cambridge, MA: The MIT Press.
- Jenny Rice. 2020. “Prolific Archives: Notes from Truthworld.” In *Awful Archives: Conspiracy Theory, Rhetoric, and Acts of Evidence*, 63–96. Columbus, OH: Ohio State University Press.
 - See especially the section beginning “Mega-Things”, pp. 66-69.
- Louise Amoore. 2013. “On Aesthetics: Security’s Objects and the Form of Data.” In *The Politics of Possibility: Risk and Security Beyond Probability*, 129-54. Durham, NC: Duke University Press.

- Halpern, Orit. 2014. *Beautiful Data: A History of Vision and Reason since 1945*. Durham: Duke University Press.
- Jeremy W. Crampton, Mark Graham, Ate Poorthuis, Taylor Shelton, Monica Stephens, Matthew W. Wilson, and Matthew Zook. 2013. “Beyond the Geotag: Situating ‘Big Data’ and Leveraging the Potential of the Geoweb.” *Cartography and Geographic Information Science* 40 (2): 130–39. <https://doi.org/10.1080/15230406.2013.777137>.

Technical References

- Ate Poorthuis. 2018. “Big Data Visualization.” *The Geographic Information Science and Technology Body of Knowledge*. Edited by John P. Wilson. <https://doi.org/10.22224/gistbok/2018.3.5>.
- Selections from Rob Kitchin. 2014. *The Data Revolution*. Thousand Oaks, CA: SAGE Publications.

02-17: Categories

Due

- Exercise 1, due 02 - 19.

Assigned

- Exercise 2, due 03 - 05.

Readings

- Catherine D’Ignazio and Lauren F. Klein. 2020. “‘What Gets Counted Counts’.” In *Data Feminism*, 97-124. Cambridge, MA: The MIT Press.
- Jill Desimini and Charles Waldheim. 2016. “Land Classification.” In *Cartographic Grounds: Projecting the Landscape Imaginary*, 112-135. ____
- Urban Theory Lab–GSD. 2014. “Visualizing an Urbanized Planet - Materials.” In *Implosions/Explosions: Towards a Study of Planetary Urbanization*, p. 460-475. Berlin, Germany: Jovis.
- Crampton, Jeremy W. 2011. “Cartographic Calculations of Territory.” *Progress in Human Geography* 35 (1): 92–103. <https://doi.org/10.1177/0309132509358474>.

Technical References

- Paul Bolstad. 2020. "Chapter 2: Data Models." In *GIS fundamentals: A first text on geographic information systems*. Sixth edition. 2020.

Module 3: Trajectories and Territories

02-24: Trajectories

Due

- Nothing.

Assigned

- Nothing.

Readings

- Jack Giesecking. 2020. "Constellating a Queer Map of the Lesbian City." In *A Queer New York*, 197-232. New York, NY: New York University Press.
- Matthew W. Wilson. 2017. "A Single Point Does Not Form a Line." In *New Lines: Critical GIS and the Trouble of the Map*, 135-41. Minneapolis, MN: University of Minnesota Press.
- Doreen Massey. 2005. "Opening Propositions." In *For Space*, 9-15. Los Angeles, CA: SAGE.

03-03: Territories

Due

- Exercise 2, due 03-05.

Assigned

- Exercise 3, due 03-26.

Readings

- Wendy Brown. Selections from *Walled States, Waning Sovereignty*. New York, NY: Zone Books.
 - Garrett Dash Nelson. 2020. “The Dysfunctional Geography of Ancient Borders in a Modern Pandemic.” *Common Wealth Magazine*, November 22, 2020. <https://commonwealthmagazine.org/arts-and-culture/the-dysfunctional-geography-of-ancient-borders-in-a-modern-pandemic/>.
 - Reuben Rose-Redwood. “With Numbers in Place: Security, Territory, and the Production of Calculable Space.” *Annals of the Association of American Geographers* 102 (2): 295–319.
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- James C. Scott. 2008. “Nature and Space.” In *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed*, 11–52. New Haven, CT: Yale University Press.

Technical References

- O’Sullivan, David, and David J. Unwin. 2010. “The Pitfalls and Potential of Spatial Data.” In *Geographic Information Analysis*, 33–54. Hoboken, NJ: John Wiley & Sons. <https://doi.org/10.1002/9780470549094.ch2>.

Interlude: Project 1 Brief

03-10: Brief

Due

- Nothing.

Assigned

- Project 1 Proposal, due 03-24.
- Project 1, due 04-07.

Readings

- TBD.

Spring Break

03-15-03-21: R&R

Due

- Nothing!

Assigned

- Nothing!

Readings

- None!

Module 4: Surfaces and Overlays

03-24: Surfaces

Due

- Project 1 Proposal, due 03-24.
- Exercise 3, due 03-26.

Assigned

- Nothing.

Readings

- C. Dana Tomlin. 2012. "Mastering Spatial Analyst (by Thinking Like a Worm)". Paper Presented at the Northeast Arc Users Group (NEARC), Smith College, May 22. <https://vimeo.com/46106213>.
- Doreen Massey. 2005. "Opening Propositions." In *For Space*, 9-15. Los Angeles, CA: SAGE.
- Carlsson, Moa Karolina. 2017. "Environmental Design, Systems Thinking, and Human Agency: McHarg's Ecological Method and Steinitz and Rogers's Interdisciplinary Education Experiment." *Landscape Journal* 36 (2): 37-52. <https://doi.org/10.3368/lj.36.2.37>.

- Patrick McHaffie. 2000. "Surfaces: Tacit Knowledge, Formal Language, and Metaphor at the Harvard Lab for Computer Graphics and Spatial Analysis." *International Journal of Geographical Information Science* 14 (8): 755–73. <https://doi.org/10.1080/136588100750022778>.

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- C. Dana Tomlin. 2017. "The Bird's-Eye View from a Worm's-Eye Perspective." In Griffith, D., Chun Y., Dean D. (eds) *Advances in Geocomputation*. Springer. http://doi-org-443.webvpn.fjmu.edu.cn/10.1007/978-3-319-22786-3_3.
 - Garrett Dash Nelson. 2019. "Mosaic and Tapestry: Metaphors as Geographical Concept Generators." *Progress in Human Geography* 43 (5): 853–70. <https://doi.org/10.1177/0309132518788951>.
 - John Hessler. 2009. "How to Map a Sandwich: Surfaces, Topological Existence Theorems and the Changing Nature of Modern Thematic Cartography, 1966-1972." *Coordinates A* (7).
 - Gillian Rose. 1995. "Distance, Surface, Elsewhere: A Feminist Critique of the Space of Phallogentric Self/Knowledge." *Environment and Planning D: Society and Space* 13 (6): 761–781. <https://doi.org/10.1068/d130761>.

03-31: Overlays

Due

- Nothing.

Assigned

- Exercise 4, due 04 - 16.

Readings

- Ian L. McHarg. 1969. "Processes as Values." In *Design with Nature*. Garden City, NY: The Natural History Press.
 - Also read Ian L. McHarg. 1998. "Foreword." In *The History of Geographic Information Systems: Perspectives of the Pioneers*, edited by Timothy W. Foresman, ix–x. Upper Saddle River, NJ: Prentice Hall.

- Susan Herrington. 2010. “The Nature of Ian McHarg’s Science.” *Landscape Journal* 29 (1): 1–10.
- Belle Lipton. 2019. “Opening Access to Historical Urban Atlases of Boston.” Annual Meeting of the North American Cartographic Information Society. Tacoma, WA. <https://www.youtube.com/watch?v=y6wolT1jbs0&t=184s>

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- Billy Fleming. 2019. “50 Years Later, Ian McHarg’s Ideas Still Define Landscape Architecture.” *Metropolis*, June 18. <https://www.metropolismag.com/cities/mcharg-design-with-nature-50th-anniversary/>.
 - Margot Lystra. 2017. “Drawing Natures: US Highway Location, Representational Techniques and the Rise of Ecological Design.” *Journal of Design History* 30 (2): 157–174. <https://doi.org/10.1093/jdh/epw013>.
 - Anne Whiston Spirn. 2000. “Ian McHarg, Landscape Architecture, and Environmentalism: Ideas and Methods in Context.” In *Environmentalism in Landscape Architecture*, edited by Michel Conan, 97–114. Washington, DC: Dumbarton Oaks.

Interlude: Project 1 Review, Project 2 Brief

04-07: Project 1 Review

Due

- Project 1, due 04-02.

Assigned

- Project 2 Proposal, due 04-21.
- Project 2, due 05-03.

Readings

- TBD

Module 5: Criticality and Counter-Mapping

04-14: Criticality

Due

- Exercise 4, due 04 - 16.

Assigned

- Exercise 5, due 04 - 28.

Readings

- Matthew W. Wilson. 2017. "Criticality: The Urgency of Drawing and Tracing." In *New Lines: Critical GIS and the Trouble of the Map*, 25-46. Minneapolis, MN: University of Minnesota Press.
- Trevor J. Barnes. 2008. "Geography's Underworld: The Military-Industrial Complex, Mathematical Modelling and the Quantitative Revolution." *Geoforum* 39 (1): 3-16. <https://doi.org/10.1016/j.geoforum.2007.09.006>.
- Selections from Rita Felski. 2015. *The Limits of Critique*. Chicago, IL: University of Chicago Press.
- Selections from Donna Haraway. 2016. *Staying with the Trouble: Making Kin in the Cthulucene*. Durham, NC: Duke University Press.

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- Haraway, Donna J. 1988. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14 (3): 575-99. <https://doi.org/10.2307/3178066>.

04-21: Counter-Mapping

Note that, like the previous week, the associated lab comes first (on Friday April 16) and the lecture comes second (on Wednesday April 21).

Due

- Project 2 Proposal, due 04 - 21.

Assigned

- Nothing.

Readings

- Laura Nader. 1972. “Up the Anthropologist: Perspectives Gained from Studying Up.” In *Reinventing Anthropology*, edited by Dell Hymes, 284–311. New York, NY: Pantheon Books.
- Chelsea Barabas, Colin Doyle, JB Rubinovitz, and Karthik Dinakar. 2020. “Studying Up: Reorienting the Study of Algorithmic Fairness around Issues of Power.” In ACM Conference on Fairness, Accountability, and Transparency, January 27–30, 2020, Barcelona, Spain. New York, NY: ACM. <https://doi.org/10.1145/3351095.3372859>.
- Maharawal, Manissa M., and Erin McElroy. 2018. “The Anti-Eviction Mapping Project: Counter Mapping and Oral History toward Bay Area Housing Justice.” *Annals of the American Association of Geographers* 108 (2): 380–89. <https://doi.org/10.1080/24694452.2017.1365583>.

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- Selections from Pierre Belanger and Alexander Arroyo. *Ecologies of Power: Countermapping the Logistical Landscapes and Military Geographies of the U.S. Department of Defense*. Cambridge, MA: The MIT Press.

04-28: Pin-Ups

Due

- Exercise 5, due 04 - 28.
- Informal presentation to teaching team and each other.

Assigned

- Nothing.

Readings

- None.

05-03: P2 Review

Due

- Project 2, due 05-03.