CRP 4280/5280: Mapping and Countermapping
Fall 2024

Course Description

This hybrid practice-discourse course introduces students to the ideas, debates, and practices in critical cartography and digital geography. How, who, and towards what purposes are spatial relationships represented through maps? Throughout the semester, we will approach mapping with an emphasis on the ethos of countermapping to make more legible those perspectives, claims, and epistemologies that are generally underrepresented. We will also discuss how new mapping technologies and novel big data are shifting the mapping landscape, what new tensions and possibilities arise, and how these new tools supplant or reinforce existing power dynamics. Students will also "read" and critique maps that speak to each week's theme in order to understand the design, information, context surrounding the creation of the map. Alongside our discussions, we will be learning tools and software to create our own narrative maps and countermaps, with the aim of using these in a final research project of students' own choosing.

Learning Objectives and Outcomes

In this course we will develop tools to build a multi-perspective question, argument, and narrative through map-making. These consist not only of the software, platforms, and code you will learn but the theory, language, and frameworks that support your research. With this in mind, the core learning objectives are:

1) Read and critique maps and texts
2) Understand the discourses and tensions in mapping and countermapping epistemologies
3) Develop an introductory-level understanding of QGIS, Mapbox GL, and Felt for representation and analysis
4) Clearly communicate your narrative through mapmaking, contextualization, textual description, and presentation that demonstrates multiple ways of understanding a spatial question in urban development

Prerequisites

Familiarity with GIS, spatial data formats, and HTML/CSS/JS will help you in the course, but is not required.

A laptop is **required** for the course. Either a Mac or PC is fine, but please make sure you can install software on this laptop. The latest version of QGIS is around 2.91 GB. Please make sure your laptop has the space. If you have any issues installing the software, as a backup you can use the lab computers.

Class Structure

Weeks 1-11: Each week's class will begin with a discussion of the week's topic on Tuesday followed by a software lab on Thursdays, where we work through the software tools and techniques together. Each week, one group will lead a discussion on the required reading on our topic, as well as several "map readings". The lab will have a tutorial component and a more free-form exercise.

Weeks 12-15: The last four weeks of class will be devoted to working on and presenting your final research projects. These projects are of your choosing and should address a spatial question in urban development. The aim is to synthesize and further develop the skills you have learned throughout the semester.

(The readings and structure of this course borrow from and are inspired by Wenfei Xu, Shannon Mattern, Van Tran, and Juan Saladriagga's courses. Thank you!)

Date	Discussion (Tuesday)	Lab (Thursday)
Week 1- Aug 27, 29	**Introductions and Course Overview** Introductions Read over the syllabus together	**Mapping with Felt 1** Discussion sign-up

		Homework due: Hand Drawn Maps, based off Dear Data Week 21: A Week of our Cities, a hand-drawn data visualization exchange between Giogia Luppi and Stefanie Posavec.
Week 2 - Sept 3, 5	**What do Maps Represent?** Corner, James. "The Agency of Mapping" in Mappings, ed. Denis Cosgrove. Reaktion Books, 1999. **Map readings:** National Evictions Data from the Eviction Lab Anti-Eviction Mapping Project (2021). *Counterpoints: A San Francisco Bay Area Atlas of Displacement & Resistance.* PM Press *Optional:* 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. Routledge, 2004. (Selections from Ch. 2) King, G. (1996). *Mapping reality* (p. 1). St. Martin's Press. Aitken, S. C., & Michel, S. M. (1995). Who contrives the "real" in GIS? Geographic information, planning and critical theory. *Cartography and geographic information systems*, *22*(1), 17-29.	Hand Drawn Maps presentations (selected) **QGIS Tutorial 1** Intro to QGIS
Week 3 - Sept 10, 12	**The Ethos of Countermapping** Peluso, N. L. (1995). Whose woods are these? Counter-mapping forest territories in Kalimantan, Indonesia. *Antipode*, *27*(4), 383-406. **Map readings:** Maps from Bélanger, P., & Arroyo, A. (2016). *Ecologies of Power: Countermapping the Logistical Landscapes and Military Geographies of the U.S. Department of Defense*. MIT Press. (Selection of images to be found on Canvas) *Optional* Del Casino Jr, V. J., Del Casino Jr, J., & Hanna, S. P. (2005). Beyond the 'binaries': A methodological intervention for interrogating maps as representational practices. *ACME: An International Journal for Critical Geographies*, *4*(1), 34-56. **In class exercise: Exchanging Proposal Ideas**	**QGIS Tutorial 2** Basic Map Types
Week 4 - Sept 17, 19	**Indigenous Mapping** Norris, R. P., & Harney, B. Y. (2014). Songlines and navigation in Wardaman and other Australian Aboriginal cultures. *arXiv preprint arXiv:1404.2361*. **Map readings:** Ojibwe migration routes (Wiigwaasabak) on birchbark (start here and perhaps contrast with this map, some context) Inuit cartography	**QGIS Tutorial 3** Getting Data and Data Types

	Songlines: Tracking the Seven Sisters *Optional:* Ingersoll, K. A. (2016). *Waves of knowing: A seascape epistemology*. Duke University Press. (Selection TBD) Orlove, B. S. (1991). Mapping reeds and reading maps: the politics of representation in Lake Titicaca. *American ethnologist*, *18*(1), 3-38. Pearce, M. W., & Louis, R. P. (2008). Mapping indigenous depth of place.	
Week 5 - Sept 24, 26	**Contesting Land and Territory** Sparke, M. (1998). A map that roared and an original atlas: Canada, cartography, and the narration of nation. *Annals of the Association of American Geographers*, *88*(3), 463-495. Anker, K. (2018). Aboriginal title and alternative cartographies. *Erasmus L. Rev.*, *11*, 14. **Map Readings:** Herbicidal Warfare in Gaza and Ecocide in Gaza by Forensic Architecture (as context for the Israeli-Palestinian territorial conflict, also peruse Conquer and Divide) Optional: The Decolonial Atlas *Optional:* Wainwright, J., & Bryan, J. (2009). Cartography, territory, property: postcolonial reflections on indigenous counter-mapping in Nicaragua and Belize. *cultural geographies*, *16*(2), 153-178. Özden-Schilling, T. (2019). Cartographies of consignment: first nations and mapwork in the Neoliberal Era. *Anthropological Quarterly*, *92*(2), 541-573. Aldern, C. Cartographers Without Borders, *Logic Magazine*, Dec 1, 2017 Gil-Fournier, A. (2017). Seeding and Seeing: The inner colonisation of land and vision. *A Peer-Reviewed Journal About*, *6*(1), 90-101.	**QGIS Tutorial 4** Geocoding Georeferencing maps
Week 6 - Oct 1, 3	**Mapping Race and Resistance** Alderman, D. H., Inwood, J. F., & Bottone, E. (2021). The mapping behind the movement: On recovering the critical cartographies of the African American Freedom Struggle. *Geoforum*, *120*, 67-78. Wilson, M. O. (2018). The Cartography of WEB Du Bois's Color Line. *WEB Du Bois's Data Portraits: Visualizing Black America*, 33-38. **Map readings:** William Bunge maps: (check out the following resources) - Dee Morris and Stephen Voyce, "William Bunge, the DGEI, & Radical Cartography", March 20, 2015 - Center for Civic Media's post on "The Detroit Geographic Expedition and Institute: A Case Study in Civic Mapping" Student Nonviolent Coordinating Committee diagram.	**Mapbox Tutorial 1** Introduction to web-mapping What is Mapbox GL?

	Amanda Williams, "Color(ed) Theory" series of painted vacant or abandoned homes in Chicago. *Optional:* Shabazz, Rashad. (2015). *Spatializing blackness: Architectures of confinement and black masculinity in Chicago*. University of Illinois Press.	
Week 7 - Oct 8, 10	**Feminist Epistemologies** D'Ignazio, C., & Klein, L. (2020). On Rational, Scientific, Objective Viewpoints from Mythical, Imaginary, Impossible Standpoints. In *Data Feminism*. Ch 3. **Map readings:** Photogrammar by the Digital Scholarship Lab Cities and Memory Smelly Maps by the Good City Life Optional: The Atlas of Emotions, conceived of by the Dalai Lama and Paul Ekman and built by Stamen Design. This one is more of a visualization. *Optional:* Kwan, M. P. (2007). Affecting geospatial technologies: Toward a feminist politics of emotion. *The professional geographer*, *59*(1), 22-34. Brown, M., & Knopp, L. (2011). Queering the Map: The Productive Tensions of Colliding Epistemologies. *The Map Reader: Theories of Mapping Practice and Cartographic Representation*, 456-463.	**Project Proposals DUE** **In class exercise: Peer-reviewing proposals**
Week 8 - Oct 15, 17	**Mapbox Tutorial 2** Styling in Mapbox	NO CLASS
Week 9 - Oct 22, 24	**Cognition and Mapping Urban Perception** Lynch, K. (1964). *The image of the city*. MIT press., Appendices TBD **Map readings:** Mapping NYC's 311 Noise Complaints by Erik Escoffier Place Pulse and Streetscore by the Collective Learning Group (sadly, the website is no longer up, but please find out about it through the ample material online) Dear Data Week 21: A Week of our Cities, a hand-drawn data visualization exchange between Giogia Luppi and Stefanie Posavec. (All of the Dear Data exchanges can be considered cognitive mappings) *Optional:* Linda Poon, "Maps Made 'From the Mind,' Not from GPS," *CityLab* (November 10, 2015) Tim Wallace, "Kevin Lynch & The Imageable Boston," *Bostonography* (December 15, 2010)	**Mapbox Tutorial 3** Data-driven styling and interactivity
Week 10 - Oct 29, 31	**Crowd-Sourced Data** Crutcher, Michael, and Matthew Zook. "Placemarks and Waterlines: Racialized Cyberscapes in post-Katrina Google Earth." *Geoforum* 40.4 (2009): 523-534	**Mapbox Tutorial 4**

	Map readings "Foursquare check-ins show the pulse of New York City and Tokyo" Hoodmaps (and not to be confused with Hood mapping) Locals and Tourists by Erica Fischer and Gnip *Optional:* Zook, M., Graham, M., Shelton, T., & Gorman, S. (2010). Volunteered geographic information and crowdsourcing disaster relief: a case study of the Haitian earthquake. *World Medical & Health Policy*, *2*(2), 7-33. Elwood, S. (2008). Volunteered geographic information: future research directions motivated by critical, participatory, and feminist GIS. *GeoJournal*, *72*(3), 173-183. Crampton, J. W. (2009). Cartography: maps 2.0. *Progress in human geography*, *33*(1), 91-100. Elwood, S. (2006). Negotiating knowledge production: The everyday inclusions, exclusions, and contradictions of participatory GIS research. *The Professional Geographer*, *58*(2), 197-208.	
Week 11 - Nov 5, 7	**Smart Cities and Urban Surveillance (Farzin Lotfi-Jam)** Wasiuta and Fotfi-Jam, Unstable Control, *e-flux Architecture* Halpern, O., Mitchell, R., & Geoghegan, B. D. (2017). The smartness mandate: Notes toward a critique. *Grey Room*, (68), 106-129. **Map Readings: No map readings this week!** Optional: Strava Heatmap and skim this *Wired* magazine story Favelas 4D from the Senseable Cities Lab Kitchin, R. (2014). The real-time city? Big data and smart urbanism. *GeoJournal*, *79*(1), 1-14. Benjamin, R. (2019). *Race after technology: Abolitionist tools for the New Jim Code* (Selection TBD) Mattern, S. (2017). Mapping's intelligent agents. *Places Journal.* A Cloudless Atlas — How MapBox Aims to Make the World's 'Most Beautiful Map', *Wired*, May 14, 2013 Kitchin, R. (2014). *The data revolution: Big data, open data, data infrastructures and their consequences*. Sage. (data as capta) Thompson, D. (2016). *The schematic state*. Cambridge University Press. Onouha, Mimi. "What is Missing is Still There." Nichons-Nous Dans L'Internet, 2018 Gitelman, Lisa. "Raw Data" Is an Oxymoron. The MIT Press, 2013. Kitchin, Rob, and Martin Dodge. 2011. Code/space : software and everyday life, Software studies. Cambridge, Mass.: MIT Press. Chapter 4 Eubanks, V. (2018). *Automating inequality: How high-tech tools profile, police, and punish the poor*. St. Martin's Press.	NO CLASS (ACSP)

	Bowker, G., & Star, S. L. (1999). Sorting things out. *Classification and its consequences*, *4*. (Part 2 on South African racial classification)	
Week 12 - Nov 12, 14	**Mapbox Storymaps 1** **Initial data exploration and layouts DUE**	**Mapbox Storymaps 2**
Week 13 - Nov 19, 21	**Web Design Fundamentals**	Group work and final project
Week 14 - Nov 26, 28	NO CLASS – Day before Thanksgiving Break	NO CLASS – Thanksgiving
Week 15 - Dec 3, 5	FINAL PROJECT PRESENTATIONS	FINAL PROJECT PRESENTATIONS
	Research Project Final Deliverables due **December 5 at 11:59pm**	