

Geography 719 Mapping: Drawing and Tracing Spring 2017 #digimap

Matthew W. Wilson, PhD POT 861 matthew.w.wilson@uky.edu @wilsonism

Lecture: W 12:00-2:30pm, POT 843 Office hours: by appointment

I. Course Problematic

How might we identify the practices of responsive/responsible social and critical cartography, amid the proliferation of digital spatial media? To address this question, this seminar begins with the premise that cartography is not 'dead', although certainly challenged by the advancement of GIScience. Rather, the renewal of geographic representation can be charted as paralleling the advancement of neogeography, the saturation of location-based services, the marketization of geodesign, the reconfiguration of the humanities toward the spatial and the digital, and the drumbeats of 'big data', 'the death of theory', 'quantified self', 'smart cities', and 'cyberinfrastructure'. In addition to these various stratifications, the contemporary resuscitation of mapmaking also opens a space for new discursive-material investigations and destratifying practices for (more-than-)representational geographies. However, where and when are the moments of fracture, of potential deterritorialization? How might we examine the histories of these reterritorializations in mapmaking, to inform our social and critical cartographies?

In this seminar, we will emphasize digital spatial technologies and practices, such as GIS, the geoweb, neogeography, location-based services, mobile spatial technologies, and their implications for politics and subjects, new forms of social control and exclusion, as well as debates about representation, epistemology, and method. We will read work from some of the well-established historical materialist, political economic, and feminist theorizations of geographic representation, as well as work by poststructuralist scholars that interrogates the subjectivities, embodiments, and more-thanhuman relations that emerge from and with geographic technologies. The course energies will cluster around three investments:

1. **Engagement and Representation.** We will examine the historical precedents for the emergence of digital mapping, with particular attention to the ways in which maps engage. We begin with the presupposition that engaging representations are a fashioning of attention. Topics of discussion may include: attention work and the attention economy; maps that move; animated cartographies; cognitive capitalism; geodesign, urban design and geographic representation; university-community partnerships with mapping; geodemographics and 'volunteered'

geographic information.

- 2. **Digital Mapping Histories.** We will take up the emergence of digital mapping to situate our current preoccupation with digital spatial representation and mapping practices more generally. Topics of discussion may include: studies of geospatial technology development and use; inclusion of unconventional data in mapping; geographies of user-generated content and the geoweb; ethics, privacy, surveillance.
- 3. **Critical Mapping Rhizomologies.** We will discuss the 'classic' scholarship that interrupt cartography and GIScience to better understand the timing of critical GIS as well as other variants of the GIS & Society tradition. Topics of discussion may include: critical geographic inquiry with mapmaking; histories of mapping technologies, histories of cartography; GIScience, the academic-industrial complex, and mapping industries; landscape/urban planning and participatory GIS; war-making, geospatial intelligence, and human terrain systems; historical and qualitative GIS; affective GIS, GIS as art.

II. Learning Objectives

This seminar will provide students with a opportunity to interrogate the practices and philosophies of mapping, in an environment that will challenge them to destabilize the technical vs. theoretical binary. As such, this seminar is designed to help students:

- Practice a range of critical skills in tracing the relationships between technology, space, and society,
- Tinker with a variety of techniques in geographic representation,
- · Gain translational experiences across the technical-theoretical binary,
- Become conversational in efforts that seek to disentangle epistemology from method, and
- Engage in scholarship that appreciates a critical technology studies perspective.

III. Format

This course is primarily composed of discussion sessions. This seminar format requires students to complete the weekly assigned readings as a minimum expectation. There will be opportunities for mapmaking, as it aligns with weekly topics, although these opportunities will be limited. Note that this course does not replace an introductory course in GIS or cartography, nor will it necessarily provide students with a full range of technical skills to conduct mapping work for their thesis projects.

IV. <u>Texts</u>

You are encouraged to use UK Libraries (to include interlibrary loan) to access the required texts for this course. If access to any particular text proves difficult, then please make arrangements with other students or with the instructor to gain access to a copy of the weekly readings. There are eight **required** books:

- 1. Dodge, Martin, Rob Kitchen, and Chris Perkins, eds. 2009. Rethinking Maps: New Frontiers in Cartographic Theory. London: Routledge. [RM]
- 2. Grosz, Elizabeth. 2008. *Chaos, Territory, Art: Deleuze and the Framing of the Earth.* New York: Columbia University Press. [CTA]
- 3. Halpern, Orit. 2015. Beautiful Data: A History of Vision and Reason since 1945. Durham: Duke University Press. [BD]

- 4. Hays, K. Michael. 2010. Architecture's Desire: Reading the Late Avant-Garde. Cambridge, Mass.: MIT Press. [AD]
- 5. Kurgan, Laura. 2013. *Close Up at a Distance: Mapping, Technology, and Politics.* Brooklyn, NY: Zone Books. [CU]
- 6. Rankin, William. 2016. *After the Map: Cartography, Navigation, and the Transformation of Territory in the Twentieth Century*. Chicago: University of Chicago Press. [AM]
- 7. Sallis, John. 2015. Klee's Mirror. Albany: State University of New York Press. [KM]
- 8. Toscano, Alberto, and Jeff Kinkle. 2015. *Cartographies of the Absolute*. Washington, D.C.: Zero Books. [CA]

V. Assignments, Activities, and Grading

Assessment Overview.

Assessment is distributed in the following ways:

- Class participation, response papers, and discussion leadership (50%)
- Writing project (50%)

Class participation.

At a minimum, attend seminar. However, participation is more than biophysical co-presence. Come prepared, having read the assigned texts and reviewed your colleagues reaction papers. Recognize and support your colleagues as they make contributions. Be modest. Ask thoughtful questions. We all must work together to make these meetings work.

Reading/Exercise responses.

Each week, you should prepare a short (two paragraph) written response to the assigned readings/ exercises, by **Monday evening** before our seminar meetings. Explore tensions. Examine connections and contradictions. Be able to discuss: what key concepts are needed to understand the text?, what is the argument of the text?, what evidence is provided to support this argument?, and what is the significance of the text? You may want to address these questions directly in your written response.

Discussion leadership.

Each of you will be responsible for leading discussion for at least two class meetings (depending on enrollment). You'll work with at least one other person to organize this. On the week that you are responsible, you'll need to 1) read the reading responses from your colleagues, and 2) prepare some sort of activity or guiding questions to inspire and structure the discussion throughout the session. You may want to make an additional reading assignment, based on your interests as they align with the week's theme. Be creative!

Writing project.

During the semester, you will complete a larger writing project that engages with the course material. Structure this project as appropriate for progress toward your degree. You could write 1) a traditional seminar research paper, 2) an extended review of the literature to prepare for qualifying exams or research proposal, 3) a proposal for external funding, or 4) a journal-length manuscript for publication. Feel free to use the weekly reading/exercise responses as an opportunity to test out ideas for this project. You will need to submit a short statement of intent describing your project early in the semester. Check the course schedule below for due dates. No late writing projects can be accepted, so plan early!

VI. Important Notices

Attend class.

Attendance is not taken nor required, however, note that:

- 1. half of your grade depends on your preparation for, and engagement in, class discussions and
- 2. your success in completing the writing project (the other half of your grade) largely depends on how well you understand the material.

Students need to notify the professor of absences prior to class when possible.

Be in contact.

You are responsible for checking your email for announcements; the class listserv is what I will use to send communications outside class. Email is the best way to contact me (place 'Mapping' in the subject heading). Please allow at least 24 hours for a response by email during weekdays. I will not necessarily respond to emails over the weekends.

Be a resource for others.

I strongly encourage you to exchange contact information with your colleagues, in order to provide support for the readings and writing projects.

Be honest.

This course, if successful, will expose you to a variety of concepts and techniques. You are expected to draw upon these various ideas, but you must be transparent and honest about your use of these ideas. Please get help if you're uncertain about this expectation! Per University policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgement of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone else's work, whether it be a published article, chapter of a book, a paper from a friend or some file, or something similar to this. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work which a student submits as his/her own, whoever that other person may be.

For students with special needs:

If you have a documented disability that requires academic accommodations, please contact the instructor as soon as possible to make arrangements.

VII. <u>Schedule</u> Subject to change.

Week	Wednesday
1: Jan. 11	Introduction and overview: engagement, histories, criticality
	 Kitchin, Rob, Justin Gleeson, and Martin Dodge. 2013. "Unfolding mapping practices: a new epistemology for cartography." <i>Transactions of the Institute of British Geographers</i> no. 38 (3):480-496. doi: 10.1111/j.1475-5661.2012.00540.x. Cosgrove, Denis E. 2005. "Maps, Mapping, Modernity: Art and Cartography in the Twentieth Century." <i>Imago Mundi</i> no. 57 (1):35-54. Pavlovskaya, Marianna, and Kevin St. Martin. 2007. "Feminism and Geographic Information Systems: From a Missing Object to a Mapping Subject." Geography Compass 1 (3):583-606. ["Introduction", p. 1-14] Malabou, Catherine. 2008. <i>What should we do with our brain?</i> 1st ed, Perspectives in continental philosophy. New York: Fordham University Press. Crogan, Patrick, and Sam Kinsley. 2012. "Paying attention: Towards a critique of the attention economy." <i>Culture Machine</i> no. 13:2-29. Wilson, Matthew W. Forthcoming, 2017. "Digitality: Origins, or the Stories We Tell Ourselves," in <i>New Lines: Critical GIS and the Trouble of the Map</i>. Minneapolis: University of Minnesota Press.
2: Jan. 18	 Cartographic thought, theories, concepts [RM: Ch 1] Kitchin, Rob, Chris Perkins, and Martin Dodge. 2009. "Thinking about maps." In <i>Rethinking Maps : New frontiers in cartographic theory</i>, edited by Martin Dodge, Rob Kitchin and Chris Perkins, 1-25. London: Routledge. [RM: Ch 2] Crampton, Jeremy W. 2009. "Rethinking maps and identity: choropleths, clines, and biopolitics." In <i>Rethinking Maps</i>, 26-49. [RM: Ch 3] Harris, Leila, and Helen D. Hazen. 2009. "Rethinking maps from a more-than-human perspective: nature-society, mapping and conservation territories." In <i>Rethinking Maps</i>, 50-67. [RM: Ch 5] Goodchild, Michael F. 2009. "Modeling the earth." In <i>Rethinking Maps</i>, 83-96. [RM: Ch 7] Propen, Amy D. 2009. "Cartographic representation and the construction of lived worlds: understanding cartographic practice as embodied knowledge." In <i>Rethinking Maps</i>, 113-130. [RM: Ch 11] Krygier, John, and Denis Wood. 2009. "Ce n'est pas le monde (This is not the world)." In <i>Rethinking Maps</i>, 189-219. [RM: Ch 9] Craine, James, and Stuart C. Aitken. 2009. "The emotional life of maps and other visual geographies." In <i>Rethinking Maps</i>, 149-166.

Week	Wednesday
3: Jan. 25	Pretty maps, cartophilia, infographics
	 [Selected passages, TBD] Raisz, Erwin. 1938. General cartography. 1st ed, New York: McGraw-Hill Book Company, inc. Also as 1948 (2nd ed). [Selected passages, TBD] Robinson, Arthur. 1952. The look of maps; an examination of cartographic design. Madison,: University of Wisconsin Press. Also as Robinson, Arthur. 2010. The look of maps : an examination of cartographic design. 1st ed. Redlands, Calif.: ESRI Press. [Selected passages, TBD] Bertin, Jacques. 1983. Semiology of graphics. Madison, Wis:: University of Wisconsin Press. Also as Bertin, Jacques, and William J. Berg. 2010. Semiology of graphics : diagrams, networks, maps. 1st ed. Redlands, Calif.: ESRI Press. [Selected passages, TBD] Fisher, Howard T. 1982. Mapping information : the graphic display of quantitative information. Cambridge, MA: Abt Books. [Selected passages, TBD] Tufte, Edward R. 1990. Envisioning information. Cheshire, Conn.: Graphics Press. [Selected passages, TBD] Desimini, Jill, and Charles Waldheim. 2016. Cartographic grounds : projecting the landscape imaginary. New York: Princeton Architectural Press.
4: Feb. 1	 Archives, attention, atmospheres 1. Stiegler, Bernard. 2012. "Relational ecology and the digital pharmakon." <i>Culture Machine</i> no. 13:1-19. 2. Wyly, Elvin K. 2013. "The city of cognitive-cultural capitalism." City no. 17 (3): 387-394. doi: 10.1080/13604813.2013.807014. 3. Ash, James. 2013. "Rethinking affective atmospheres: Technology, perturbation and space times of the non-human." <i>Geoforum</i> no. 49:20-28. 4. Latour, Bruno. 2008. "A cautious prometheus? A few steps toward a philosophy of design (with special attention to Peter Sloterdijk)." Keynote lecture at meeting of Design History Society, Falmouth, Cornwall, 3 September. 5. Cosgrove, Denis E. 2008. "Cultural cartography: maps and mapping in cultural geography." <i>Annales de Géographie</i> no. 117 (660-661):159-178. 6. Barnes, Trevor J. 2008. "Geography's underworld: The military-industrial complex, mathematical modelling and the quantitative revolution." <i>Geoforum</i> no. 39:3-16.

Week	Wednesday
5: Feb. 8	STATEMENT OF INTENT DUE Territory and the global map 1. [Selected passages, TBD] Rankin, William. 2016. After the Map: Cartography, Navigation, and the Transformation of Territory in the Twentieth Century. Chicago: University of Chicago Press.
6: Feb. 15	 Art and the visible 1. [Selected passages, TBD] Sallis, John. 2015. <i>Klee's Mirror</i>. Albany: State University of New York Press.
7: Feb. 22	PROGRESS REPORT DUE Form, convention, architecture 1. [Selected passages, TBD] Hays, K. Michael. 2010. Architecture's Desire: Reading the Late Avant-Garde. Cambridge, Mass.: MIT Press.
8: Mar. 1	 Image, politics, conflict 1. [Selected passages, TBD] Kurgan, Laura. 2013. <i>Close Up at a Distance: Mapping, Technology, and Politics</i>. Brooklyn, NY: Zone Books.
9: Mar. 8	 Crises of representation, crises of capitalism 1. [Selected passages, TBD] Toscano, Alberto, and Jeff Kinkle. 2015. <i>Cartographies of the Absolute</i>. Washington, D.C.: Zero Books.
10: Mar. 15	SPRING RECESS

Wednesday
Machine, vision, interface
 [Selected passages, TBD] Halpern, Orit. 2015. Beautiful Data: A History of Vision and Reason since 1945. Durham: Duke University Press.
Sensations, affects, intensities
 [Selected passages, TBD] Grosz, Elizabeth. 2008. Chaos, Territory, Art: Deleuze and the Framing of the Earth. New York: Columbia University Press.
AAG Annual Meeting in Boston
Introduction to Mapshop, part 1
Introduction to Mapshop, part 2
Map studies, manifestos, (post)critique
 [RM: Ch 12] Dodge, Martin, Chris Perkins, and Rob Kitchin. 2009. "Mapping modes, methods and moments: a manifesto for map studies." In <i>Rethinking Maps :</i> <i>New frontiers in cartographic theory</i>, edited by Martin Dodge, Rob Kitchin and Chris Perkins, 220-243. London: Routledge. Alton, Chris, Zulaikha Ayub, Alex Chen, Leif Estrada, Justin Kollar, Patrick Leonard, Martin Pavlinic, Andreas Viglakis, and Matthew W. Wilson. 2014. "Thinking/making geographic representation." Antipode. doi: <u>http://</u> antipodefoundation.org/2014/07/09/thinking-making-geographic- representation/ Wood, Denis. 2003. "Cartography is Dead (Thank God!)." <i>Cartographic Perspectives</i> no. 45:4-7. Stiegler, Bernard. 2013. <i>Manifesto 2010</i>, 5 October 2010 [cited 4 August 2013]. Available from <u>http://arsindustrialis.org/manifesto-2010</u>. Latour, Bruno. 2004. "Why has critique run out of steam? From matters of fact to matters of concern." <i>Critical Inquiry</i> no. 30:225-248. Wilson, Matthew W. 2014. "Map the Trace." <i>ACME: An International E-Journal for</i> <i>Critical Geographies</i> 13 (4):583-585.
WRITING PROJECT DUE