Impossible Maps

Instructor: Mimi Onuoha
Term: Fall 2017
Time: Wednesdays, 8am - 11:40am
Course Number: DA 4111, 4 credits

Course Description

Digital technologies have created new opportunities and resources for mapping, cartography, and geolocation-based visual investigation. They have also brought with them the need to consider issues concerning power, representation, and space.

In this course, students will learn the practical realities of working with spatial geographies in digital and web-based contexts. Time will also be devoted to investigating the conceptual questions that inform mapping and strategies for art-based counter-mapping. The course will address questions such as: What makes a good digital or web map? What do maps represent as visual information artifacts? What happens when we consider claims to space as topics for art-based investigations?

Students will gain exposure to a broad range of techniques in web and digital mapping, with the goal that they eventually focus on one or two. Throughout the course, students will be challenged to make maps (or map-based creations) that function as artful objects and challenge common conventions of the capabilities of maps. The class will be taught primarily in JavaScript, with assignments making use of git and Github. Other technologies taught will include mapshaper, Leaflet.js, Mapbox, and Carto.

Expectations and Requirements

- Class attendance and punctuality
- Participation during class discussions and presentations
- Weekly assignments + accompanying blogpost
- Midterm and final project (completed individually or in groups)

This class is an inclusive and harassment-free space for everyone, with no tolerations of discimination based on gender, race, sexual orientation, religion, disability, or appearance. Please feel free to let me know privately if you have an academic accommodation.

All students are allowed a maximum of two absences. It is worth stressing that because the class covers so much new material, it is very much to your advantage to not miss any classes, if possible.

Evaluation

Final evaluation will be based on the completion of all assignments, class participation, quality of work, and attendance.

For homework assignments, I am more interested in your effort and attempts to understand and try the material than in you creating a 100% successful project. Everyone gets one free pass for turning in an assignment late, but only one.

Some readings will be done in-class, but please make sure to do the ones assigned for homework, as they're painless, useful, and interesting.

For the midterm and final projects, I am more interested in what you choose to do than in what you can do. We will elaborate on these distinctions in class.

Format

Each class will begin with exposure to an interesting map or application of mapping, followed by students presenting assignments from previous week. If there was a reading/viewing assigned, the class will start with a brief discussion (no laptops open during discussion). The bulk of the class will be spent introducing and experimenting with more technical mapping methods and tools and teasing out the critical connotations of these objects and techniques. I will screen record the technical sections of class so that you can refer to them outside of class.

Though we will meet in a lab that has computers, it may be beneficial to bring your laptop with you to class.

I can be reached via email at all times, but I am very slow to respond to emails sent over the weekend. If you are in need of a prompt response, please email during the week. I reserve 24 hours to respond, but typically will reply much sooner.

Readings

A sample of some of the readings that the class will cover (this list is not comprehensive):

- Cartography Comparison, Apple Maps and Google Maps - Justine O'Beirne
- "Exactitude in Science", Jorge Luis Borges
- "The Precession of Simulacra", Jean Baudrillard
- *Close Up at a Distance: Mapping, Technology, and Politics*, Laura Kurgan
- "Pleasure In The Idea | The Atlas as Narrative Form", Denis Wood
- "Experimental Geography: From Cultural Production to the Production of Space", Trevor Paglen
- "Feminist Data Visualization", Catherine D'Ignazio
- "Mapping's Intelligent Agents", Shannon Mattern

Syllabus

WEEK ONE
Introductions to class and to each other, and getting set up for the semester. What is a map? What is the history of mapping? What makes digital mapping different from what came before? What are impossible maps?

WEEK TWO
What do maps do? Creating our first webmaps; the anatomy of a web map; what the different parts of a webmap do and what they can be used for.

WEEK THREE
Building out our webmaps; the differences between leaflet and mapbox; Understanding geodata and adding it to our maps.

WEEK FOUR
More geodata; design considerations and cues

WEEK FIVE
Continuation of design considerations; changing geodata into useful forms, working with multiple datasets.

WEEK SIX
Recaps + working in class

WEEK SEVEN
Midterm Presentations + drone mapping

WEEK EIGHT
Aerial Mapping, part 1

WEEK NINE
The experience of mapping

WEEK TEN
Plan Day - no class

WEEK ELEVEN
Aerial imagery and the experience of mapping, part 2

WEEK TWELVE

Google Maps Static Image API | Satellite Imagery

WEEK THIRTEEN

d3; experiments in geography apart from maps || Time to work in class on final projects

WEEK FOURTEEN: December 13

Final Project Presentations