Points Unknown: Cartographic Narratives

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A4063-1 / SPRING 2019
FRIDAYS 11AM-1PM / WARE LOUNGE AVERY
3PTS

V 2018.11.27

Everything Sings, Denis Wood[1]

The apparent duplicity of maps – their "slipperiness" – is not some idiosyncratic deviation from an illusory perfect map. Rather it lies at the heart of cartographic representation.

J.B. Harley[2]

COURSE
DESCRIPTION

Society is increasingly dependent on data and computation, a dependence that often evolves invisibly, without any critical assessment or accountability. In New York City, with its mandate to make data public, students have an opportunity to learn how to question data through journalistic lines of inquiry: What data are made public? What data are kept hidden? Who was involved with what data are included and excluded? Who wasn't? What do they say about life in the city? How are neighborhoods rendered in data and what are the consequences of those representations? What undiscovered stories can be found in the data?

This course was designed and is taught as a bridge between disciplines — journalism and architecture. In journalism, data has emerged as an essential component of the trade, and yet working with spatial data, both as products in stories and, more critically, as emerging and little-explored tools for reporting, continues to be a novelty. In parallel, and in spite of their training in visual literacy and basic map-making skills, architects too frequently treat spatial data as a neutral backdrop into which their designs will be inserted. Literacy with spatial data analysis, mapping and storytelling have yet to become an integral part of the design process. Spatial training paired with journalistic techniques can serve as a missing "integrator" of data and the real world — providing lessons, stories, and designs that travel beyond the boroughs of New York.

Points Unknown will provide students an opportunity to explore new forms of site analysis. Through pairing the processes of architecture and techniques of journalism, this course will explore sites of New York City and the Hudson Valley Region. Students will propose a site to investigate from a set of site topics identified for their unique connection to the city, their centrality to demographic populations, and their environmental impact — water, waste, transit, justice, and ecology & resiliency.

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1. Wood, D. (2013). *Everything sings: Maps for a Narrative Atlas*. Los Angeles: Siglio.
2. Harley, J.B. (2001). *Texts and Contexts in the Interpretation of Early Maps*. 1990. Reprint in *The New Nature of Maps*, ed. Paul Laxton, 36. Baltimore: Johns Hopkins University Press.

Students will work in groups under the direction of a practicing journalist who will serve as editor to help groups explore and report on their site, spending the semester researching and constructing a geospatial narrative. Students will learn how to investigate the site and will select a particular issue to address. They will conduct research, interviews, perform exploratory and advanced data analysis, and learn various geospatial visualization techniques to produce a comprehensive narrative. From spatial association to pattern analysis, geostatistics to classification, students will employ statistical and analytical processes that both informs their reporting and defines their narratives.

The final output will come in the form of a presentation that successfully highlights an identified problem of the site, posits evidence through novel implementations of data, and provides a comprehensive narrative through geospatial representations. In addition, the research will surface recommendations for site intervention.

A full description of the course as well as links to resources can be found at pointsunknown.nyc.

COURSE SCHEDULE

WEEK	DATE	TOPIC	FORMAT	ASSIGNEMENT STRUCTURE
1	01/25/19	Course Introduction, Narrative Cartography Introduction & Site Discussion	Lecture Krisch & Basic	
2	02/01/19	Intro to Cartographic Narratives	Lecture Basic	MAPPING 1 ASGMT
3	02/08/19	Reporting on a New Topic	Lecture Krisch	MAPPING 1 DUE REPORTING 1 ASGMT
4	02/15/19	The Art of the Interview	Guest Lecture Francesca Berardi	REPORTING 1 DUE REPORTING 2 ASGMT
5	02/22/19	Intro to Public Data	Lecture Krisch	MAPPING 2 ASGMT MIDTERM ASGMT
6	03/01/19	Graphics Reporting	Guest Lecture Jeremy White	REPORTING 2 DUE MAPPING 2 DUE
7	03/08/19	Midterm: Narrative Pitch	Class Presentations	MIDTERM DUE
8	03/15/19	Design Principles	Guest Lecture Rosalie Yu	MAPPING 3 ASGMT REPORTING 3 ASGMT
9	03/22/19	*Spring Break*		
10	03/29/19	Cartographic Narrative Software / Working Group	Lecture Basic/Krisch	MAPPING 3 DUE REPORTING 3 DUE
11	04/05/19	Mapping Techniques II - Spatial Statistics	Lab Session Saldarriaga	MAPPING 4 ASGMT
12	04/12/19	Mapping Techniques III - Networks	Lab Session Krisch	MAPPING 4 DUE
13	04/19/19	Mapping Techniques IV - MCDA	Lecture Basic	
14	04/26/19	Working Session	Office Hours	
15	05/3/19	Final: Cartographic Narrative	Class Presentations	STORY MAP DUE (FINAL REVISIONS DUE 5/10/2019)

COURSE
OBJECTIVES

A wide array of available spatial-visualization tools can extend journalistic practice, helping reporters better find, understand, and tell stories. These same tools can expose the invisible spaces, forces, and environments that architecture, urban design, and planning students must engage, navigate, and learn to represent as part of their spatial toolkit.

Points Unknown will task students with producing cartographic narratives, investigating a site utilizing principles borrowed from both journalistic and architectural practice.

Key objectives include:

+ Building core competency in spatial analysis and visualization, including data acquisition, cleaning, analyzing and visualizing; multi-criteria decision analysis; spatial statistics and network analysis
+ Producing a cohesive cartographic narrative that tells a compelling story about a site
+ Introducing core journalistic training, including reporting and interviewing techniques, into architectural and design practice practice
+ Integrating design principles and spatial and data analysis into journalistic practice

COURSE
STRUCTURE

Points Unknown is an interdisciplinary collaboration between instructors from Columbia Journalism School and Columbia Graduate School of Architecture, Planning and Preservation. As such, the course curriculum will leverage aspects from journalism and architecture, resulting in lectures that span from the art of the interview to performing multi-criteria decision analysis.

For the duration of the course, students will work in small groups, exploring an individual site of New York City and/or the surrounding region. Students will have the opportunity to identify their site from the following categories: water, waste, transit, justice, and ecology & resilience. An example might be a cartographic narrative of the third water tunnel, infrastructure that provides potable water to the five boroughs.

Assignments and lab sessions will establish core competency in reporting, analysis, and visualization to be used for within their final cartographic narrative. All of these assignments are individual, though results should be shared with group members. To assist in defining the narrative of each project, groups will work closely with editors who are active in the journalism field. These editors will be assigned early in the course, and will work with teams on a weekly basis.

Final projects will be cohesive, map-based narratives that explore the site in question. These narratives will be exhibited through Story Maps, an open-source project by ESRI, and shared via a public crit on May 3, 2019.

PREREQUISITES

No prior GIS experience is required to enroll in this course. We will provide basic tutorials at the beginning of the course to ensure that all students feel confident in their ability to produce all mapping assignments required throughout the course. All lab sessions will be taught using the open-source tool QGIS v3.4. Although this will be our primary tool for analyzing and visualizing spatial data, students are allowed, and encouraged, to explore all tools available to them, including ArcGIS.

COURSE
REQUIREMENTS

Late Work
All assignments are due at the specified time and date. In the case of illness or other special circumstance, notification should be given to the instructors as soon as possible and before the deadline in question. Any work that is not submitted on time may be submitted at any point during the remainder of the semester but prior to May 10, 2019 at 11am EST, the final submission deadline. Any late submission will receive a maximum grade of half credit. Late work submitted after the May 10 deadline will not be accepted under any circumstance.

Citations and Original Work
Points Unknown (A4063-1 / Spring 2019) adheres to the Columbia University Graduate School of Architecture, Planning and Preservation [Plagiarism Policy](#) and [Honor System](#). Any violation of these policies will result in an immediate report to the Associate Dean of Students.

Please familiarize yourself with the proper methods of citation and attribution. Data studies used in the preparation of analysis, papers, and presentations should be fully cited in the resulting work. For reference on citations, please consult [Columbia Libraries](#) and the [Digital Social Science Center](#).

Attendance
Attendance is mandatory for both lectures and lab sessions of the course. Attendance and participation make up 10% of your final grade. Attendance will be taken within 10 minutes of the start of each class. If you arrive after attendance is taken, you must check-in with the instructor in-person prior to the conclusion of the class. In the case of illness or other special circumstance, notification should be given to the instructors as soon as possible and must be given before the class.

Collaboration
As referenced in the Course Structure section of the syllabus, this course will consist of group work under the direction of an editor. Throughout the duration of the semester, it is assumed that weekly group work takes place, either in person or through digital meetups, all while performing individual tasks that will establish core competency in journalistic technique, data analysis and visualization, and mapping.

EVALUATION AND
GRADING

Each class will commence with a discussion based on readings assigned in the previous session. Students should participate in these discussions, and instructors will ensure that all students in the class are actively engaged. Class participation will be wrapped into your attendance grade.

The core deliverable of this course is a group assignment due at the end of the semester, and the majority of assignments work towards producing graphics and narratives to be incorporated in the final. Despite this, all mapping (4) and reporting (3) assignments will be completed, submitted, and graded individually.

> Cumulative Mapping Assignments 30%
> Cumulative Reporting Assignments 30%
> Final Story Map 30%
> Attendance & Participation 10%

Evaluation will be carried out in accordance with the Columbia University Graduate School of Architecture, Planning and Preservation Grading, Grade Appeals and Grade Change guidelines. For students from programs outside of GSAPP, grades will be converted and reported in the format preferred by the school in which they are enrolled.

OFFICE HOURS

Office Hours will be offered weekly from 1-3PM on Tuesdays in 30-minute intervals. All office hours require appointments that can be made online at calendly.com/pointsunknown/office-hours. If you are consistently unable to meet during this time due to class or other conflicts, please reach out to us directly to schedule an appointment.

ACCESSIBILITY
STATEMENT

Columbia is committed to providing equal access to qualified students with documented disabilities. A student's disability status and reasonable accommodations are individually determined based upon disability documentation and related information gathered through the intake process.

For more information regarding this service, please visit the University's Health Services website.