"Big Data for Justice" Summer Institute

Sponsored by UCLA CityLab, UCLA Digital and Urban Humanities Programs, and the Bunche Center for African American Studies

July 8-Aug 2, 2019
University of California Los Angeles
6 units course credit (DH 151 and DH 199)

No prior experience or coursework is necessary. The Institute is offered for 6 units consisting of a seminar and studio course (DH 151, 4 units) and a laboratory component (DH 199, 2 units). Both are required for the Summer Institute.

Schedule:

> Morning seminars: 10 AM - 12 PM, followed by lunch.
> Studio or lab work: 1 PM - 4 PM
> Site visits/fieldwork are on Fridays
> Periodic evening activities (portfolio workshops, special lectures, film screenings): approx. 5 PM-7:30 PM

Note: At least once a week we have a field trip or fieldwork. On these days, you should plan to depart from Westwood in the morning (9am) and return by approximately 5 PM. If you live off campus, you may also meet us on-site at the specified time.

Classroom:
Perloff Hall, 1209B (primary classroom)
Young Research Library, Collaborative Pods

Primary Instructors :
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1 other (TBD)

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Additional Guest Faculty and Staff:
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Embedded Librarian:
Renee Romero (UCLA Powell Library)

Course Objectives

- Learn to use and critically assess a suite of digital tools, spatial and quantitative datasets, and mapping/visualization/data analysis software technologies for studying criminal justice in Los Angeles.
- Combine urban, social, computational, statistical and humanist perspectives to investigate data related to criminal justice.
- Understand how the history of Los Angeles is intimately and unevenly linked with race, policing, and power; learn how this is manifest in built spaces, urban infrastructures, and communities.
- Learn transferable technology skills through collaborative, project-based research, while engaging in multidisciplinary inquiry.
- Learn to work in research teams in order to conceptualize, design, carry out, and deliver persuasive arguments through writing, data analysis, mapping, and data visualization.

Course Description:

"Big Data for Justice" (DH 151 + DH 199) is an interdisciplinary study of urbanism, data science, and critical concepts related to race and criminal justice in the context of Los Angeles. The course focuses on critical data analysis, visualization, and Geographic Information Systems (GIS) to research and map urban experiences. Students will gain familiarization with a wide-range of digital tools and methods used to study and analyze criminal justice and will participate in the collection, curation, and presentation of digital data related to Los Angeles. Tools include Tableau, ESRI Storymaps, Google Earth, CartoDB, as well as statistical methods, critical GIS, and data visualization. The course involves fieldwork in Los Angeles and allows students to develop knowledge of key neighborhoods, the people living there, and data technologies related to contextualizing the metropolis.

Requirements and Evaluation:

Students are required to attend all seminars, studios, workshops, and fieldwork sessions each week. Projects will be team based, collaborative undertakings. Students will be asked to upload the material they create to a digital portfolio website that will document the learning process and serve as a research archive.

10% = Digital data project (due Thursday of week 2)
10% = Thick mapping project (due Thursday of week 3)
30% = Final digital project and report (due Thursday of week 4)
25% = Web portfolio of all digital work, book reviews, field notes, research
      methodologies, documentation, individually written analyses, professional
      ambitions, and presentation of portfolio (due on Friday, August 2nd, 5pm)
25% = Preparation and participation in class, fieldwork, and studios

Note: The projects are intended to build on one another in sequence, leading to a final project and report.

Readings and preparatory work:

There are three required books for the class (as noted below). Please purchase these books ahead of time and, if possible, complete the readings before the start of class. During the Summer Institute, we will discuss the books, as noted on the syllabus.

- Whitney Battle-Baptiste and Britt Rusert, *W.E.B. Du Bois' Data Portraits: Visualizing Black America* (2018)
- Kelly Lytle Hernandez, *City of Inmates: Conquest, Rebellion, and the Rise of Human Caging in Los Angeles* (2017)
- Patrisse Khan Cullors and asha bandele, *When they Call you a Terrorist* (2018)

Additional readings are available as PDF files linked from the syllabus.

WEEK 1: BIG DATA & CRIMINAL JUSTICE IN LOS ANGELES

Monday, July 8: Introduction

Morning session 1: "Coming to Los Angeles" (10am start)
In preparation for the first day of class, please make a short video (1-2 minutes max) on your phone, computer, or other app, in which you describe and depict your relationship to Los Angeles. The video should engage with questions such as: Where

did you come from? If you live in Los Angeles, what does the city mean to you? What do you expect or hope from the city? What does justice and Los Angeles mean to you? Try to show as much as you tell. The videos will be screened in class as a way for you to introduce yourself to your classmates.

Morning Session 2: Overview of Course

- Curriculum and Schedule Review
- Context and Concepts: What is Big Data, Criminal Justice, and Urbanism?
- Methods of Digital and Urban Humanities

Over lunch: Students get to know each other and teams at lunch

Afternoon Session1: Introduction to Criminal Justice in L.A.
 Talk/Panel or Interactive Discussion

Readings
- Patrisse Khan Cullors and asha bandele, *When they Call you a Terrorist*
- Max Felker Kantor, *Policing Los Angeles: Race, Resistance, and the Rise of the LAPD* – Introduction and Chapter 1
- Excerpt from: Michelle Alexander, *The New Jim Crow*, "Let's Talk about Race-Resisting the Temptation of Colorblind Advocacy"(pgs 236-248)

Afternoon Session 2: Check-out laptops, get acquainted with software and access to datasets

Tues, July 9 – Data, Data Visualization, and Race

Morning Seminar: W.E.B Du Bois and Digital Humanities

Reading:
- Whitney Battle-Baptiste and Britt Rusert, *W.E.B. Du Bois' Data Portraits: Visualizing Black America*
- Kim Gallon, "Making a Case for Black Digital Humanities," in *Debates in Digital Humanities*

Questions: What is "Digital Humanities" and "Black Digital Humanities"? How can quantitative and qualitative analyses be brought together? What does "data" and "visualization" have to do with race?

Break for lunch: 11:45 am (lunch provided)

Lunch and Community Building Exercise (12 pm-1:30 pm)

- Identity Wheel
- Identity: Self > our class > the city of LA
- Develop community agreements and guidelines for collaborative work

Afternoon Lab -- "Telling a story with Statistics"
(Using excel)
   o Descriptive statistics vs statistical tests
   o Proportions, rates, averages and medians
   o Cross tabs & association
   o What is "significance"
   o Review and discussion of assignment

Readings and Assignments
- Definition sheet and examples of differences between proportions/percentage and rates, averages and medians.
- Assignment 1: Worksheet on rates, proportions, averages and medians (Using MDH Reports)

3:30-4:30 pm: Afternoon Workshop (Renee Romero in YRL Research Commons Classroom): Resources at the UCLA Library and your research process (collecting data, organizing digital assets, documenting your sources)

Wednesday, July 10 – Introducing Los Angeles Urbanism

Morning Seminar: LA -- Past and Present
- Los Angeles as "ghost metropolis" and the many hidden histories of the city
- Overview of Los Angeles through the lens of transportation infrastructures, policing, and racial politics
- History of El Pueblo, downtown LA, civic center (City Hall and complex of city, county, state, and federal offices)
- Discussion of fieldwork protocols

Readings:
- Phil Ethington, "Ab Urbe Condita: The Regional Regimes of Los Angeles"
- Laura Pulido, selections from: *A People's Guide to Los Angeles* (Introduction, pp. 1-13, and learn about the parts of North LA which we will visit on Thursday: pp. 16-71: Intro, Biddy Mason Park, Calle de los Negros, Chinatowns, Downey Block, La Placita, LAPD Headquarters, Pershing Square, America Tropical Mural, Yang-Na)
- Kelly Lytle Hernandez, "Introduction" from: *City of Inmates*

LUNCH

Afternoon Studio 1: Beginning to work with Big Data

- Criminal Justice - Open Data Portal & Open Justice Data Portals
https://openjustice.doj.ca.gov/data (review/familiarize)
- MDH Datasets
  - LAPD 2012-2017 and LASD 2010-2016

Discussion: Critical Perspectives on Big Data
- Introduction to data criticism -- Is it reliable? Why might it not be
reliable? How can we make it reliable?
  - Where does the data come from? What errors could there be due to
data source?
  - What types of variables does the data include? What do those
variables mean and what can we do to analyze them?
  - What questions would you like to ask of the data? Can they actually
be answered? What are the limitations to the potential responses?

Afternoon Studio 2: "Introduction to Tableau"

Data tools and datasets:
- MDH Datasets
- Census Data Sheet with LA City and County population by race (will be
provided)

Data visualization tool: Tableau

View before class: Tableau tutorial film: "Getting Started with Tableau"

EVENING FILM SCREENING AND DINNER (5-7 pm)
The 13th, Directed by Ava DuVernay (1 hour 40 minutes)

Thursday, July 11 – Mass Incarceration, Policing, and Los Angeles

Morning Seminar:
- Discussion of *The 13th*

Morning Session 2: Students ensure Tableau is operating properly and answer any
questions.

Lunch

Afternoon Studio 1: "Analysis and Arguments using Tableau"
- The goal of this session is to bring together at least two datasets and provide
an analysis/argument using Tableau.

- Students will present results to the class

Afternoon Studio 2: Setting up your Digital Portfolio
- Setting up your website, organizing menus and content

Friday, July 12 – Fieldwork
All-day fieldwork in downtown LA. Class will meet at Pershing Square at 10 am sharp and walk north toward La Placita. We will document the intersection of three urban infrastructures attuned to racial and class stratifications: culture, transportation, and policing.

Preparatory Work:
- Check out the historical maps of Los Angeles (type "Los Angeles" in the search box). Try to find the "center" of Los Angeles and characterize the expansion of the city.
- Look at Los Angeles (especially Wilshire corridor and downtown LA) in the racial dot map.
- Review the locations in Laura Pulido's book, *A People's Guide to Los Angeles*.

WEEK 2: MAPPING AND CRIMINAL JUSTICE

Monday, July 15: Introduction to Mapping and Demographics

Morning Seminar 1:
Review of fieldwork and sharing of experiences and data. In preparation, review the itinerary we covered and come prepared to share some of your data and possible themes you'd like to map out.

Morning Seminar 2:
- *The Racial Dot Map: http://demographics.virginia.edu/DotMap/*
- History of US census: https://www.census.gov/history/www/through_the_decades/overview/1790.html
- History of racial categories in US Census: http://www.pewsocialtrends.org/interactives/multiracial-timeline/
- Browse Census data files: https://www.census.gov/geo/maps-data/
- Discussion of history of "redlining" and Los Angeles redlining maps

Afternoon Studio: Mapping Race

Working with the racial dot map, the Los Angeles datasets, and demographic data from social explorer, begin to explore the history of the city. In your exploration, you

might look at the following: How do roads/highways operate as indicators of racial and economic segregation? What are the most diverse and least diverse areas of Los Angeles? How have these changed historically? What can the data tell you about Los Angeles' history and what can the data not tell you? Begin to create and annotate maps of LA where you explore various "fault lines" (race, culture, language, ethnicity, country of origin, economic, transportation, policing, etc) using both the quantitative datasets and your own qualitative documentation from your fieldwork (photographs, narratives, video, etc).

- Spatial visualization tool: *Google Earth* (overlaying maps and data)
- *Social Explorer*

Introduction to datasets:
- LA City Data
- UCLA spatial datasets (http://tinyurl.com/y9xg88pt),
- Navigate LA (http://navigatela.lacity.org/navigatela)

Due on Thursday -- Project #1: Digital Data Analysis: In groups of two, you will explore the various LA datasets, pick two to analyze in depth, and write-up an illustrated analysis (about four double-spaced pages) attuned to the following:

Part 1: What is included in your chosen datasets? How are they structured? What kind of questions can be answered with these data? What are its limits?

Part 2: Now, put these datasets into "conversation" with each other. What new questions can be answered by bringing them together?

Part 3: Finally, if you were to produce or find a third dataset, what would it be? How would it be structured? What new questions could be asked and answered?

Create a set of illustrations (screenshots or visualizations in Tableau and/or Google Earth) to go with the answers to these questions. Total length: 4 pages (in shareable format, such as Google Docs or Google Presentations). Teams will present their results on Thursday at 10 am!

Tuesday, July 16: Working with Spatial Data

Morning Studio
- Using Social Explorer for demographic data (exporting data)
- Learning to work with and analyze Los Angeles spatial datasets (http://tinyurl.com/y9xg88pt), including census data, redlining data, historical maps, highway and street data, public transportation data, and zoning data.
- Introduction to LA City data, including GeoHub

8

Afternoon Studio: Open data workshop
(https://sandbox.idre.ucla.edu/sandbox/mapping-open-data)
- What is spatial data and spatial visualization?
- Getting data in and out of various platforms, including Google Earth

Wednesday, July 17: "Million Dollar Hoods" as Case Study

Morning Seminar: Mapping Mass Incarceration
Guest lecture: Kelly Lytle Hernandez
- "Million Dollar Hoods Los Angeles" project website and story map

Reading:
- Kelly Lytle Hernandez, *City of Inmates: Conquest, Rebellion, and the Rise of Human Caging in Los Angeles*

Afternoon Studio: Mapping, Data Analysis, and Visualization

- Preparation for presentations

Thursday, July 18: Data Presentations and Introduction to South LA and 90044

Morning Seminar: Student presentations
Each group will present their "Digital Data Analysis" to the class and receive feedback. Presentations will be 5 minutes followed by 10 minutes of Q+A.

Afternoon Seminar: Introduction to South LA, 90044, and Community Partners

Readings:
- Laura Pulido, *A People's Guide to Los Angeles* – "South LA" (pp. 117-162)

Friday, July 18: Fieldwork in 90044
Depart from UCLA @ 9:00am

Morning Seminar @ Coco.
- Review Community Centered Approach & Positionality. Break out, role play.
- Testimonials & informational interviews. Part 1.
Lunch
- Testimonials & informational interviews. Part 2.

Visit to CBOs in small groups

- Getting to know 90044
- What are the most pressing issues in Criminal Justice for 90044 from stakeholders?

Readings*: H. Richard Milner, Race, Culture, and Researcher Positionality: Working Through Dangers Seen, Unseen, and Unforeseen*

WEEK 3: MAKING DATA MEANINGFUL THROUGH "THICK MAPPING"

Monday, July 22: Introduction to Critical Cartography and Thick Mapping

Morning Seminar 1: Recap and review fieldwork experience

Morning Seminar 2: What is "critical cartography" and how does it differ from conventional mapping? Discussion of Google Earth as a mapping platform. Discuss how digital maps and digital data can be "thickened."

Readings:
- In-class analysis of Google Earth and Google Maps ("what's on the map and what's not on the map?"); using Google Earth to make an argument
- Skim: Todd Presner, with David Shepard and Yoh Kawano, "The View from Above/Below: Toward a Media Archaeology of Google Earth," in: *HyperCities: Thick Mapping in the Digital Humanities* (pp. 6-28, pp. 84-127)

Afternoon Studio: Techniques for Layering/Thickening your Digital Maps
In studio, you will discuss how you can "thicken" your digital maps by adding new data, new layers, new kinds of interactivity, new narratives, new voices, and new perspectives in order to present an argument about 90044. The goal is to create a map that makes an argument by the end of the week.

- Link to redlining database with description files
- Discussion of assumptions built into data, data structures, and mapping visualizations
- Working with and manipulating digital data

Extended Portfolio Workshop Time (3:30 - 4:30)
Start of technical web design tutorials, How to use Wix.com

Project #2, Due on Thursday, July 25th, at 10 am: "Thick Map." Using materials from the various LA spatial datasets and ideas based upon your fieldwork experiences, students will create a "thick map." A "thick map" makes an argument in spatial form and has multiple layers of data and design. The thick map should draw on a range of data and be connected to an issue around criminal justice. You may need to gather more data, revisit certain sites, take pictures, record sound, write

narratives, talk to people, and "thicken" your map by providing both qualitative and quantitative analysis, considering design decisions, and refining your argument. The thick map should have multiple data layers, narrative complexity, and thoughtful design, **with the goal of articulating an argument in spatial form**. The thick map (viewable as a KML file/tour in Google Earth or an ESRI Storymap). It should also be accompanied by a 1-page write-up that explains your project's method, research analysis, argument, revision/design process, and limits.

Tuesday, July 23 – Mapping for Justice: Digital Activism

Morning Seminar: Data for Activism – Big data and mapping used for activism in L.A. (I. Bryan)

Lunch

Afternoon Studio Group Work
- Develop ideas for "thick map," refine analysis, and visualization for community partners
- Develop plan and acquire data

Wednesday, July 24 – All-day Mapping Studio

Morning and Afternoon Studio: Developing Thick Maps
- Students work on thick maps and develop presentations
- Troubleshooting, concept development, argumentation refined

Thursday, July 25 -- Presentations of "Thick Maps"

Morning Seminar: Presentations (10-12:30)
Each group will have 10 minutes to present their thick map and 10 mins for Q+A. The discussion will focus on refining the thick map for the final project. Maps should be shared with TAs

Afternoon Studio: Discussion of community partnerships/collaborations

Friday, July 26 – Fieldwork and Community Partner Collaborations
Depart UCLA @ 9:00 am

Morning – Field Work
- Meet with CBOs to present analysis

- Discuss feedback
- Present concepts of thick mapping – request feedback for thick maps

Lunch
Afternoon – Lab Work
- Run next analysis based on CBO feedback
- Lay out plan to capture community images – contact partners as needed

WEEK 4: ENVISIONING JUSTICE IN 90044

Monday, July 29:

Morning Seminar: Justice Reports
- Debrief of thick mapping presentations to community partners
- Discussion and refinement of final project ideas
- Creation of plan for the final projects – data, design, and argument

Lunch

Afternoon Studio
- Present final concept for report to fellows based on CBO feedback and data analysis
- Continue working with Tableau, GIS
- Integrate stories from community partners

3:30-4:30: Website discussions and portfolio workshop
- Conceptual design of your digital portfolio through wireframing; outline content and design

Tuesday, July 30: Project Refinement and Development
- Interim project reviews
- Technical support and project refinement

Wednesday, July 31: Digital Studio

All-day studio time, project consultations, and presentation practice

Thursday, August 1: Presentations and Celebration

Students present their final projects and reports, followed by a lunch and celebration.

- Final projects and reports due by 10 am.

- Web portfolio due on Friday, August 2nd, 5pm

<u>Friday, August 2: Web Portfolios</u>

Open studio time to complete web portfolios.