

Simon Weckert, Google Maps Hacks <u>https://www.youtube.com/watch?v=k5eL_al_m7Q</u>

COURSE OVERVIEW

From the advent of "landlord tech" that tracks and scores tenants to Ring-enabled policing, from city government's use of algorithms to tackle urban problems to the exploitation of gig workers by corporate platforms, the relationship between digital platforms and cities is impossible to ignore. These landscapes are supported by a rural landscape of digital infrastructure including Amazon data centers, rare earth mining, and industrialized "smart" farms equipped with cutting edge AI that feed a growing urban population. This course explores how platforms and digital technologies more broadly are reshaping urban and rural geographies, and the new relationships between urban and rural space that result.

We will:

- equip ourselves with core concepts, including different ways of understanding city and country; the history and current state of digital platforms, and the relationship between technology and social hierarchies;
- delve into the idea of digital geographies and critically examine how the urban landscape of smart cities is underpinned by rural data centers and resource use;
- investigate how tech is shifting labor practices, urban property markets, and policing, and;
- examine the potential for organizing and "glitches in the system" to build more just urban and rural technologies.

COURSE APPROACH AND INFORMATION

Students should expect to:

- Contribute to building a community to learn, question, produce knowledge, and lend support to peers
- Critically reflect on notions of city and country and the role of technology in producing urbanrural landscapes and relationships
- Understand and discuss the uneven socially and spatially differentiated consequences of technology and reflect on ways of building digital geographies that refuse domination, extraction, and predatory inclusion
- Engage with a variety of media (academic work, popular media, podcasts, games, works of fiction, art, documentary film) to produce a course project that builds on course themes

A note on reading: This is a 4-credit course. You should expect to dedicate **significant** time and effort to completing the weekly reading. It will be difficult for you to enjoy the course, take away insights and understanding, and contribute to the class if you do not make the time to attempt to do the reading each week. We will also spend time discussing strategies for reading and comprehending the texts, and lectures will walk through the key points and debates. It is understandable to be apprehensive about the amount of reading but if you are not enthusiastic about jumping into it despite your apprehensions, this may not be the course for you.

RESOURCES

Being a student at Berkeley can be a highly rewarding experience, and there are different kinds of support to ensure this, whether through tutoring, advice on writing, support for the differently-abled, or services to help deal with pressures, stresses and personal difficulties that interrupt academic life. If you need help determining what kind of support you might need, email your professors or GSIs, come to office hours or speak to the Student Academic Advisor in Geography, Ambrosia Shapiro. We are here to help you learn and flourish in this environment, so if you are having difficulties, please feel free to reach out.

Some helpful resources include:

- <u>Disabled Students Program</u> provides a wide range of resources to ensure equal access to educational opportunities, including advising, diagnostics, note-taking services, and academic accommodations. Please bring any accommodation or scheduling requirements to the attention of the DSP office; once I have heard from them, I will do my best to accommodate you.
- <u>Student Learning Center</u> offers peer tutoring, writing support, and other academic resources.
- <u>Mental health services at University Health</u> offers short and long-term counseling services to assist students with a variety of concerns, including academic success, life management, career and life planning, and personal development.
- <u>Basic Needs Center</u> UCB office providing economic, <u>food</u>, and housing support
- <u>CalFresh</u>: state program providing money to buy groceries
- Food Assistance Program: UCB support for students not eligible for CalFresh
- <u>PATH to Care Center</u> support for survivors and those who have experienced gendered violence, including sexual harassment, dating and intimate partner violence, sexual assault, stalking, and sexual exploitation.

ACADEMIC INTEGRITY

Any test, paper, report or homework submitted under your name is presumed to be your own original work that has not been submitted for credit in another course. All words and ideas written by other people must be properly attributed: fully identified as to source and the extent of your use of their work. Cheating, plagiarism, and other academic misconduct will result in a failing grade on the assignment, paper, quiz, or exam in question and will be reported to Student Judicial Affairs. See the policy here.

ASSIGNMENTS

Assignments in this course consist of three related work packages: package 3 builds on package 2, which builds on package 1.

Work package 1 (due dates various; weeks 3-13): Fishbowl discussions

Teams of 3-5 students will be responsible for: 1) closely reading the week's assigned texts; 2) developing 5-8 discussion questions designed to explore the texts in depth; and 3) discussing the questions amongst each other in the Thursday class session for 20 minutes while the rest of the class listens, observes, and takes notes; and 4) responding to feedback and questions from the rest of the class.

Teams must vet their questions with Professor Fields in consultation hours and finalize the questions and post them to bCourses by 5pm on Wednesday. Questions should be broad, open-ended, and able to be discussed and debated from different perspectives.

While fishbowl discussions are anchored by teams, the whole class will participate in and evaluate the discussions. Your fishbowl reflection and evaluation sheets will constitute your class participation.

Work package 2 (due dates various; weeks 3-13): Analytic portfolio

Choose a question or theme from five fishbowl discussions to explore in greater depth in a short essay of 500-750 words, not including references. You can respond to your own team's fishbowl discussion. Your essay is due by the Thursday following the fishbowl discussion to which you are responding (e.g. if you are responding to the week 4 fishbowl, it is due by Thursday of week 5). Use your essay to do things like: reflect on relevant texts and points from class discussion, make claims supported by further research evidence; improve your own understanding of the ideas and texts under discussion. Entries must include references for assigned and outside texts: any citation format, (e.g. MLA, APA, Chicago) is acceptable, provided it is a real format and you use the same one consistently.

You should create one Google Doc for your portfolio of five short essays, and have a heading for each entry with the week number and title (e.g. Week 4: Platforms). To submit your work, go to the relevant assignment on bCourses and paste the sharing link from bCourses. Be sure to give me (desireefields@berkeley.edu) commenting privileges on your Google Doc.

Work package 3: (due date: Thursday, December 16, 2021 by midnight Pacific time): Integrative essay

Write an essay of 2000-3000 words that addresses a question, challenge, or concern about platform geographies. Your essay should draw on your analytic portfolio, showing how the themes connect to each other and shed light on your topic.

You are encouraged (but not required) to include a creative component such as a collage, video, Twitter thread, TikTok, short (less than 5 minutes) video or podcast, etc. The creative component does not count toward the word limit. If you incorporate a creative component, please embed or link to it in your essay.

Your essay must include references for assigned and outside texts; any citation format, (e.g. MLA, APA, Chicago) is acceptable, provided it is a real format and you use the same one consistently.

R/R/R week is reserved for consultations on your final project: bring drafts, questions, work in progress, ideas, etc. to share with Professor Fields and peers for feedback!

GRADING

We are using a method of assessment called "contract grading" in this course. Contract grading involves you, the student, determining your grade for this course by fulfilling the requirements associated with your desired grade. Contract grading is based on your definition of success in this class—for some of you, this may be an A; for others this may be passing the class. Contract grading affords you, the student, greater autonomy and requires you to determine success for yourself, and to review and complete an agreement as a member of our class community. It involves the important life skill of taking responsibility for your own project management and workflow.

Even under 'normal' circumstances, your definitions of success in this class will vary depending on things like extracurricular commitments, your GPA coming into the class, and so forth. The historical circumstances under which you are taking this course include a global pandemic and the way it has exacerbated longstanding social inequalities of race, class, and gender; a heightened climate crisis; and geopolitical uncertainty. These circumstances affect everyone in this class, albeit unevenly and in different ways. These times call for us to rethink how we work, what our goals are, and how to assess ourselves: you are encouraged to take this course P/NP as needed to accommodate your current circumstances while still ensuring you can meet future goals.

In practical terms, contract grading will involve you choosing the grade you want to attain in this course, signing a contract to that effect, and completing the level of work that corresponds to your contracted grade. You will have the opportunity to recontract for a different grade before the end of the semester. All work packages will be evaluated with the scale below and additional comments will be provided to give more specific feedback. You will also be responsible for participating in review and assessment of the work of your peers.

LATE WORK

I grant automatic 3-day extensions on the final project. To receive an extension, complete this form by December 15, 2021 (one day before the final is due). You do not need to write me a separate note or ask my permission to use the extension. You will not receive a lower grade for using the extension. I am not able to provide feedback on work submitted late, including for students who sue the extension. If getting feedback (beyond a grade) is important to you, you must submit the final project on time.

	Fishbowl (3 possible points; based on dominant score from peer evaluations and Prof. Fields assessment)	Individual entries from analytic portfolio (15 possible points)	Integrative essay (3 possible points)	Creative component of integrative essay (3 possible <i>extra</i> <i>credit</i> points)
Excellent (3)	Team submitted insightful questions on time; used feedback from Prof. Fields to improve questions; skillfully and collaboratively discussed questions in class; and engaged the class in a thought- provoking Q+A	Follows directions; shows insight, effort, deeper thought and reflection; themes of assigned text/discussion are meaningfully engaged and brought into relation with outside texts or sources; passion, creativity, or attempt to challenge oneself is evident and impactful	Follows directions; shows insight, effort, deeper thought and reflection; demonstrates ability to identify and skillfully analyze themes across different topics and texts; successfully relates themes to a larger topic; passion, creativity, or attempt to challenge oneself is evident and impactful	Submitted a relevant creative component that significantly adds to the essay
Good (2)	Team submitted good questions on time; used feedback from Prof. Fields to improve questions; helpfully and collaboratively discussed questions in class; and was able to respond to Q+A with class	Follows directions; shows thought and reflection; themes of assigned text/discussion are meaningfully engaged; if used, outside texts and sources add to the discussion; some creativity or effort to challenge oneself is observable	Follows directions; shows thought and reflection; demonstrates ability to identify meaningfully analyze across different topics and texts; convincingly relates themes to a larger topic; some creativity or effort to challenge oneself is observable	
Acceptable (1)	Team submitted fair questions; minimally or crudely incorporated Prof. Fields feedback; unevenly or minimally discussed questions in class; and was somewhat able to participate in Q+A	Follows directions; shows basic understanding and some effort to reflect using texts/discussion; outside sources may be mentioned	Follows directions; shows ability to identify themes and analyze in a broad or cursory way; generally relates themes to a larger topic	
Below standard (0)* *at Prof. Fields discretion	Questions not submitted in a timely way; team members unable to collaborate productively; class discussion extremely stilted or uninformative	Does not follow directions; fails to engage texts/discussion in a meaningful way; or otherwise lacks basic qualities of the assignment	Does not follow directions; themes are undeveloped or disconnected from the larger topic; larger topic is underdeveloped or unrelated/peripherally related to course; otherwise lacking in quality and substance	

Participation points are assigned based on fishbowl evaluation sheets: attend class and complete a sheet and you get a point for the day for a total of 10 possible participation points

Extra credit: Students who submit a relevant creative component that significantly adds to their integrative essay will receive 3 extra credit points. I will use these points at my discretion in the most

generous way possible, e.g. to bump borderline cases up to the next grade band or to replace missing analytic portfolio entries or participation points, etc.

Grading contract options:

I want to earn an A in this class. I will:

- Complete fishbowl exercise to an excellent standard
- Complete all five analytic portfolio entries with at least three entries of excellent standard and no unacceptable entries
- Complete integrative essay to excellent standard
- Receive at least 9 participation points

I want to earn a B in this class. I will:

- Complete fishbowl exercise to an excellent or good standard
- Complete all five analytic portfolio entries with at least three entries of good standard and no unacceptable entries
- Complete integrative essay to good standard
- Receive at least 8 participation points

I want to earn a C in this class. I will:

- Complete fishbowl exercise to a good or acceptable standard
- Complete all five analytic portfolio entries with at least one entry of good standard and no unacceptable entries
- Complete integrative essay to acceptable standard
- Receive at least 7 participation points

Grade of D/F: Prof. Fields reserves the right to award a grade of D or F to anyone who fails to meet a contractual obligation in a systematic way (e.g. habitual submission of late work, failure to submit acceptable work). A D grade indicates some minimal fulfillment of the contract. An F indicates the contract was not fulfilled by enough satisfactory work to warrant passing the class.

WEEKLY OUTLINE

WEEK 1 (8/26): Introductions

Our first class will provide an overview of the course and introduce the idea of the algorithmic ecology, an approach for organizing against algorithms developed by the Stop LAPD Spying Coalition and Free Radicals.

Before you come to our first class, read/listen:

Stop LAPD Spying Coalition and Free Radicals (2021) "<u>The Algorithmic Ecology: An Abolitionist Tool for</u> <u>Organizing Against Algorithms</u>" and <u>worksheet</u>

Algorithmic Ecology and Abolition (podcast): listen the first 27:30 minutes (roughly) of the podcast.

WEEK 2 (8/31 and 9/2): City and Country Part I

Over the course of two weeks, we will delve into different approaches to understanding rural and urban space, and the relationship between the two. Part I offers perspectives that complicate and contextualize notions of urban and rural.

Before Tuesday's class, read:

Saidiya Hartman (2017). The Terrible Beauty of the Slum Brick: A Literary Journal, Brick 99

Katherine McKittrick (2011). On Plantations, Prisons, and a Black Sense of Place. *Social & Cultural Geography*, 12(8). 947-963.

Libby Porter & Oren Yiftachel (2019) Urbanizing settler-colonial studies: introduction to the special issue, Settler Colonial Studies, 9(2), p. 177-181 only.

Raymond Williams (1973). A Problem of Perspective (p. 9-12) and Golden Ages (p. 35-45). In: *The Country and the City*. Hogarth Press.

WEEK 3 (9/7 and 9/9): City and Country Part II

In part II, we focus on the urban-rural relationship through concepts of operational landscapes, extended urbanization, and recombinant urbanization.

Before Tuesday's class, read:

Sai Balakrishnan (2019). Recombinant Urbanization: Agrarian-Urban Landed Property and Uneven development in India. *International Journal of Urban and regional Research* 43(4), 617-632.

Neil Brenner and Nikos Kitsikis (2020). Operational landscapes: Hinterlands of the Capitalocene. Architectural Design, 90(1), 22-31.

AbdouMaliq Simone (2019). Maximum exposure: making sense in the background of extended urbanization. *Environment and Planning D; Society and Space*, 37(6), 990-1006.

WEEK 4 (9/14 and 9/16): Platforms

What forces gave rise to the proliferation of sprawling digital platforms? How should we think about platforms and their geographical implications? Why are the spatial manifestations of capitalism even more important in a digital world?

Before Tuesday's class, read:

Sarah Barns (2019). Negotiating the platform pivot: From participatory digital ecosystems to infrastructures of everyday life. *Geography Compass*.

Jathan Sadowski (2019). When data is capital. Big Data & Society, 6(1), 1-12.

Nick Srnicek (2017). The Long Downturn. In: *Platform Capitalism*. Polity Books.

Optional reading:

Tarleton Gillespie (2010). The politics of 'platforms'. New Media and Society 12(3), 347-364.

Tarleton Gillespie (2015). Platforms intervene. Social Media and Society.

K. Sabeel Rahman (2018). The new octopus. LOGIC Magazine. (pdf version)

WEEK 5 (9/21 and 9/23): Technology and society

What is the role of technology in creating and exacerbating social inequalities? What are the problems with seeing technology as a neutral tool? How do technological changes affect society?

Before Tuesday's class, read/listen

Ruha Benjamin (2019). Engineered inequity. In: *Race after technology: Abolitionist tools for the New Jim Code* (p. 49-76). Polity Press

Catherine D'Ignazio and Lauren Klein (2020). "What Gets Counted Counts". In: Data Feminism. MIT Press.

Zeynep Tufekci (2017). Technology and People. In: *Twitter and Tear Gas (*p. 115-131). Yale University Press.

'<u>Automating Inequality'</u>: Algorithms in public services often fail the most vulnerable. *All Tech Considered*.

WEEK 6 (9/28 and 9/30): Digital geographies

This week we'll look at digital geographies, and the promise of the internet as a frictionless utopia and digital frontier, where physical geographies supposedly do not matter. At the same time, the physical world has become intertwined with the digital through networks of GPS, sensors and location enabled services. What contradictions emerge? How do we map this hybrid new terrain?

Before Tuesday's class, read:

John Perry Barlow (1996). A Declaration of the Independence of Cyberspace

Ingrid Burrington (2016). Introduction (p. 5-13). Networks of New York. Melville House Publishing.

Julie Cohen (2007). Cyberspace as/and space. Columbia Law Review 107(1), 201-256.

Stephen Graham (2005). Software-sorted Geographies. Progress in Human Geography, 29(5), 562-580.

Tamara Shepard (2017). Neocolonial Intimacies. The Zuckerberg Review.

WEEK 7 (10/5 and 10/7): READING WEEK (no class meetings)

WEEK 8 (10/12 and 10/14): Smart cities

This week we examine urban experiments with technology past and present. We consider the metaphors that often shape thinking about cities, how the spectacle and apparent objectivity of technology can depoliticize the violence it perpetuates, the relationship between urban planning and technology, and the urban politics of technology.

Before Tuesday's class, read/listen:

Shannon Mattern (2017). A City is Not a Computer. Or substitute podcast interview (approx. 45 minutes) "<u>How Smart is the Smart City</u>?" (w/ Paris Marx)

Sara Safransky (2020). Geographies of Algorithmic Violence: Redlining the Smart City. *International Journal of Urban and Regional Research*, 44(2), 200-218.

Jennifer Light (2003). The City as a Communication System, (selected pages 35-51). In: *From Warfare to Welfare: Defense Intellectuals and Urban Problems in Cold War America*. Johns Hopkins University Press.

WEEK 9 (10/19 and 10/21): Data centers

This week, we'll look at the Pacific Northwest, where settlers formed logging and fishing industries, and subsequently hydroelectric power. In recent years, new settlers have arrived in the wake of industry decline. Is the answer to decline simply development?

Before Tuesday's class, read:

Jenna Burrell (2020). On Half-Built Assemblages: Waiting for a Data Center in Prineville, Oregon. *Engaging Science, technology, and Society* volume 6, p. 283-305.

Anthony Levenda and Dillon Mahmoudi (2019). Silicon Forest and Server Farms: The (Urban) Nature of Digital Capitalism in the Pacific Northwest. *Culture Machine*, 18, 1–14.

Paul Roberts (2018). This is What Happens When Bitcoin Miners Take Over Your Town. Politico Magazine.

Richard White (1995). The Organic Machine selections (Chapter 2, section II, Chapter 3, section II). Hill & Wang. (Abbreviation note: BPA = Bonneville Power Administration, IOU= Investor Owned Utility, PUD=Public Utility District)

WEEK 10 (10/26 and 10/28): Precision agriculture

This week we explore precision agriculture: what is it, how do we understand its environmental implications, (how) do we need to rethink sovereignty in the context of these developments, and to what extent is it a radical development?

Before Tuesday's class, read:

Jennifer Clapp and Sarah-Louise Ruder (2020). Precision technologies for agriculture: digital farming, gene-edited crops, and the politics of sustainability. *Global Environmental Politics*, 20(3), 49-69.

Alistair Fraser (2019). Land grab/data grab: precision agriculture and its new horizons. *The Journal of Peasant Studies*, *46*(5), 893-912.

Christopher Miles (2019). The combine will tell the truth: On precision agriculture and algorithmic rationality. *Big data & society, 6*(1), 2053951719849444

WEEK 11 (11/2 and 11/4): Property technologies

How are questions of property bound up with technology? This week we consider the politics of digital transformations of housing, anticapitalist experiments in property, and struggles against landlord tech.

Before Tuesday's class, read:

Desiree Fields (2019). Uploading Housing Inequality, Digitizing Housing Justice? Public Books.

Erin McElroy et al. (2021). Prison Tech Comes Home. Public Books.

Miranda Hall (2020). How to Pick a Smart Lock. e-flux architecture

WEEK 12 (11/9 only): Surveillance and carceral tech

This week we study differentiated experiences of surveillance, the role of information capitalism in criminal justice, and the relationship between smart city technologies and carcerality.

There is no class meeting on Thursday, 11/11 as this is Veterans Day. To ensure we have an opportunity to reflect on this material without having a synchronous class session, we will develop an asynchronous activity you can complete online on your own time before 11/16.

Before Tuesday's class, read:

Chris Gilliard (2020). Caught in the Spotlight. Urban Omnibus.

Brian J Jefferson (2020). <u>Introduction</u>. *Digitize and Punish: Racial criminalization in the Digital Age*. University of Minnesota Press.

Alan Wiig (2017). <u>Secure the City, Revitalize the Zone</u>: Smart Urbanization in Camden, New Jersey. *Environment and Planning C: Politics and Space*, 36(3), 403-422.

Algorithmic Ecology and Abolition (podcast): listen from roughly 27:30 to the end of the podcast.

Optional:

Stop LAPD Spying Coalition (2018). <u>Before the Bullet Hits the Body</u> (report summary). Full report for those who are interested.

WEEK 13 (11/16 and 11/18): Gig work and gig organizing

One of the most notable features of platform capitalism is how tech companies have relied on flexible working arrangements to bypass taxes and regulations and accumulate. Today, gig work is at the center of many workers' lives, generating new questions (and resurfacing old ones) about exploitation and resistance. This week we examine the contours of gig work and its politics, and provocations for reimagining gig work.

Before Tuesday's class, read:

Tressie McMillan Cottom (2020). The Hustle Economy. Dissent.

Rida Qadri and Noopur Raval (2021). Mutual Aid Stations. Logic Magazine.

Katie Wells, Kafui Attoh, Declan Cullen (2020). <u>"Just-in-Place" labor: Driver organizing in the Uber</u> workplace. Environment and Planning A: Economy and Space.

Julia Ticona (2020). Essential and Untrusted. Dissent.

Niels van Doorn (2017). <u>Platform labor: on the gendered and racialized exploitation of low-income service</u> work in the 'on-demand' economy. *Information, Communication, and Society* 20(6), 898-914.

Optional reading:

Edward Onswego Jr. (2021). The Gig Economy's Business Model is a Racial Justice Issue. Vice.

This week follows up last week's focus on gig work by considering

Hannah Johnston (2020). Labour geographies of the platform economy: Understanding collective organizing strategies in the context of digitally mediated work. *International Labour Review*.

Veena Dubal and Juliet Schor (2021). Gig Workers are Employees. Start Treating them That Way. <u>*The New York Times.*</u>

WEEK OF GRATITUDE (no class meetings)

WEEK 14 (11/30 and 12/2): Glitches

How do we build digital geographies that refuse domination, extraction, and predatory inclusion? What does an abolitionist politics of technology look like? What does disruptive urban technology look like when designed from the ground up?

Before Tuesday's class, read:

Ruha Benjamin (2019). <u>Retooling Solidarity, Reimagining Justice</u> (p. 160-197). In: *Race after technology: Abolitionist tools for the New Jim Code*. Polity Press

Sarah Elwood (2020). <u>Digital geographies, feminist relationality, Black and queer code studies: Thriving</u> <u>otherwise</u>. *Progress in Human Geography.*

Rodrigo Ochigame (2020). Informatics of the oppressed. Logic Magazine.

Jathan Sadowski et al. (2021). Everyone Should Decide how their Digital Data are Used—Not just Tech Companies. *Nature*.

Optional:

Greta Byrum (2019). <u>Building the people's Internet</u>. Urban Omnibus. (pdf version)

Jovan Scott Lewis (2018). Jamaica Calling: VoIP, ICT, and the Lotto Scam. International Journal of Urban and Regional Research, Spotlight On: Disruptive Urban Technologies.

Lara Houston (2019). <u>Mobile Phone Repair Knowledge in Downtown Kampala: Local and trans-local</u> <u>circulations</u>. In: *Repair Work Ethnographies: Revisitng Breakdown, Relocating Materiality* (eds. Strebel et al.). Palgrave Macmillan.

Lara Houston (2019). <u>*The Art of Maintenance.*</u> The Conference 2019. (video of 15 min talk)

Legacy Russell (2019). 7 Questions (in conversation with Pandora Lavender). Frieze.

WEEK OF READING, REVISION, AND REVIEW (12/7 and 12/9)

WEEK OF FINAL PROJECT SUBMISSION: due 12/16 by midnight