

Tech, Money, Power: Critical Perspectives on Computing and Capitalism

Fall 2025
Tuesdays, 1:15-4:00PM
<location TBD>

Instructor: Linda Huber, she/her, lhuber1@swarthmore.edu
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Office hours: <TBD>

Course Description:

This course interrogates digital technology by “following the money”: How are technologies designed to produce power and money - and for whom? How do hierarchies of race and gender contribute to exploitation in the tech industry? How do governments mitigate - or contribute to - the power of the tech industry? How are emerging technologies like AI harming workers, disrupting industries, and impacting the environment? Who is fighting back, and how? This course explores examples from the history of computing, science and technology studies, and critical political economy. Your final project will “follow the money” for a technology of your choice, and imagine how it might be made otherwise.

Learning Objectives:

- Evaluate how technologies are structured and designed in order to produce economic value
- Gain familiarity with social forces and processes which structure economic value and digital business models, especially:
 - The devaluation of labor (e.g. via race/gender/coloniality)
 - Law / policy / regulatory structures that structure ownership (e.g., intellectual property)
- What it might look like to design and build technology for purposes *other than* profit

Course Structure:

Weekly Responses & Student Discussants

Across each week, we will explore a series of readings/media related to a particular theme. At the beginning of the term, we will divide up the weeks, and 1-2 students will be assigned to present a brief summary of the readings and help to facilitate discussion for the class that week.

We will also spend ~10 minutes at the beginning of each class doing a brief writing reflection about the week's readings, summarizing takeaways, questions, and any personal reflections.

Semester Project

Over the course of our semester together, each student in the class will identify a specific digital or computational technology, or business, and analyze it as a political economic artifact. This project will be independently designed and executed, with three major milestones. You will meet with me individually during office hours after each milestone to discuss the project and explore how you might further develop/evolve the project.

- **Sept 30 - Project Proposal:** A 1,000 word proposal identifying a technology / company of your choice, outlining your own interest in this technology and goals for the research project. Your proposal should identify a specific research question and a method/approach for answering it.
- **Nov 4 - Research memo:** A 2,000 word report on your preliminary findings from your research. This should include a mix of "primary" and "secondary" research - drawn from existing literature, reports, or research about the technology, and your own primary research or findings.
- **Nov 25 - Final research report.** A revised/finalized version of your research report (2,000 - 4,000 words), formatted in a way that is shareable/publishable for others who may be interested in using your research.

Course Policies:

This course includes a significant amount of self-directed research. To make this useful for you, I encourage you to reflect on your goals and needs and articulate them to yourself and me, revising and revisiting as needed. **Please reach out to me at any time with feedback, suggestions, or requests that would make our classroom or the assigned activities more accessible or supportive to you.** If you face unexpected disruptions or challenges of any kind during the course, reach out to me so we can make a plan together.

A note on grading: My goal is to provide individual feedback that is useful to you and your learning and personal development goals. I do not think grades should be used as a carrot or stick to incentivize your engagement with a class: you are here of your own volition, to learn and engage to the extent you find it useful. You can assume that if you make a genuine effort to attend and engage in class regularly, attend at least two of our three individual project meetings, and turn in the final project, that you will receive an A in this course.

On use of AI/chatGPT: To this end, please do not turn in assignments which use text or language which is automatically generated: I do not wish to use the precious few minutes of my life providing feedback to a machine. If you aren't able to complete the assignment on your own by the due date - just let me know. We can make a different plan that works better for you.

Course Schedule

WEEK 1 9/2/2025	Course Overview
	• Course overview • Activity: let's analyze a technology from a political economic lens (speedrun version) Key Questions: • What kinds of questions will we explore in this course? What are some of the approaches or entry points to investigate a technology through a "political economy" lens? • What are your goals/interests in this course? Do you have specific technologies that you are interested in researching in this course? • What can we do to make the classroom accessible and supportive?
WEEK 2 9/9/2025	Foundations of Political Economy: Marx & Automation
	• Marx, Capital Vol 1 *as summarized by* Olúfémi Táíwò: ◦ Parts 1, 3, 4, 5, part 9, 11 12, 13, 15. https://whyeverythingcostsmoney.weebly.com/part-11.html (start here, click through for each part) • <i>Forces of Production: A Social History of Industrial Automation</i>, David Noble (1984) ◦ Preface & Chapter Four, "Toward the Automatic Factory" • Automation & The Future of Work - Aaron Benanav (2019/2022) ■ New Left Review Part 2 https://newleftreview.org/issues/ii119/articles/aaron-benanav-automation-and-the-future-of-work-1 ■ Video version: https://www.youtube.com/watch?v=y9bEKFGMebQ Key questions: • Marx describes the nuts and bolts of the capitalist economy: commodities, value, the labor theory of value, primitive accumulation. How else has, or can, society and labor be organized - beyond capitalism? • What role does <i>technology</i> have within Marx's theory of capitalism?
WEEK 3 9/16/2025	Labor Hierarchies in Tech
	• The reproduction of labor-power in the global economy, Marxist theory and the unfinished feminist revolution by Silvia Federici https://caringlabor.wordpress.com/2010/10/25/silvia-federici-the-reproduction-of-labour-power-in-the-global-economy-marxist-theory-and-the-unfinished-feminist-revolution/

	- Amrute, S. (2016). <i>Encoding race, encoding class: Indian IT workers in Berlin</i>. Duke University Press. - Chapters TBD - Irani, L. (2018). "Design thinking": Defending Silicon Valley at the apex of global labor hierarchies. <i>Catalyst: Feminism, Theory, Technoscience</i>, 4(1), 1-19. - Nakamura, L. (2014). Indigenous circuits: Navajo women and the racialization of early electronic manufacture. <i>American Quarterly</i>, 66(4), 919-941. Key questions: - How are social and labor hierarchies constructed, and what role do they play in the digital economy? - What would it take to interrupt or disrupt these hierarchies? Revisiting Marx, is it possible to have capital accumulation <i>without</i> these hierarchies?
WEEK 4 9/23/2025	Foundations of Political Economy: Law & Governance
	- Law and Political Economy Project: "Towards a Manifesto" (2017) https://lpeproject.org/lpe-manifesto/ <i>Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity</i>, Lawrence Lessig (2004) - Chapters TBD <i>Between Truth and Power: The Legal Constructions of Informational Capitalism</i>, Julie Cohen (2019) - Chapters TBD Key questions: - What role does law play in enabling "the economy", or capitalism, as we know it? - Why is law sometimes seen as divorced from the economic domain? (How does this parallel other domains that are seen as separate from "the economy"?) - What questions do this week's readings raise about the role that law has played in other business models/technologies?
WEEK 5 9/30/2025	The Internet as a Business Model, Part 1: "The Sharing Economy"
	**Research project proposals due today! **1-1 meetings this week to discuss research proposals! The Carr-Benkler wager: https://en.wikipedia.org/wiki/Carr%E2%80%93Benkler_wager and https://archive.blogs.harvard.edu/ybenkler/2012/05/07/on-the-carr-benkler-wager/

	• <i>Decoding liberation: The promise of free and open source software.</i> Chopra, S., & Dexter, S. D. (2008). ◦ Chapter 1: Free Software and Political Economy • “Free labor: Producing Culture for the Digital Economy.” Terranova, T. (2012). https://muse.jhu.edu/article/31873 • “How to create value (s) in the sharing economy: Business models, scalability, and sustainability.” <i>Technology innovation management review</i>, 9(2). Acquier, A., Carbone, V., & Massé, D. (2019). https://www.timreview.ca/article/1215 Key questions: • What would Carr and Benkler have to say about the emerging “AI” economy? • How do we see a particular culture (e.g., morality, idealism) influencing the early digital economy? Has this culture shifted? How so? • Do these recent histories of the internet surprise you? Do you think the idea of the “sharing economy” is still relevant today? Why or why not?
WEEK 6 10/7/2025	The Internet as a Business Model, Part 2: Digital Advertising & Recommender Systems
	• Chun, W. H. K. (2021). Discriminating data: Correlation, neighborhoods, and the new politics of recognition. MIT press. ◦ Intro, P1-7; Chapter 3, P.152 (section titled “ALGORITHMIC AUTHENTICITY: MACHINICALLY YOURS” to end of chapter Three (p.183)) • Programmatic Advertising. Clearly Explained https://www.youtube.com/watch?v=GPz_jVAQPq4 • Srinivasan, D. (2020). Why Google dominates advertising markets. <i>Stan. Tech. L. Rev.</i>, 24, 55. ◦ <u>Focus on Introduction and Part 3.</u> ◦ Skim for updated context: https://en.wikipedia.org/wiki/United_States_v._Google_LLC_(2023) • The Traffic Factories: Metrics at Chartbeat, Gawker Media, and The New York Times, Petre, 2015 https://academiccommons.columbia.edu/doi/10.7916/D80293W1 • <i>Optional:</i> ◦ McGuigan, L. (2019). Automating the audience commodity: The unacknowledged ancestry of programmatic advertising. <i>New media & society</i>, 21(11-12), 2366-2385. ◦ Christin, A., & Lu, Y. (2024). The influencer pay gap: Platform labor meets racial capitalism. <i>New Media & Society</i>, 26(12), 7212-7235. Key questions: • How does digital advertising shape our behaviors and identity? How does it shape the behaviors of influencers who are paid through advertising revenue?

	How might our online experience (e.g., of social media, browsing/search, news media) look different if they weren't driven by advertising revenue?
WEEK 7 10/14/2025	FALL BREAK
WEEK 8 10/21/2025	Data as Capital
	- Poon, M. (2016). Corporate capitalism and the growing power of big data: Review essay. - Sadowski, J. (2019). When data is capital: Datafication, accumulation, and extraction. <i>Big data & society</i>, 6(1), 2053951718820549. "What's the value of data?" This Machine Kills interview with Salomé Viljoen https://soundcloud.com/thismachinekillspod/305-whats-the-value-of-data-ft-salome-viljoen - Couldry, N., & Mejias, U. A. (2019). Data colonialism: Rethinking big data's relation to the contemporary subject. <i>Television & new media</i>, 20(4), 336-349. Key Questions: - Following Marx's definition, does it make sense to describe data as capital? What are the different roles that data plays within the digital economy, other than strictly <i>as capital</i>? - How does thinking of data extraction as a form of colonialism help to clarify our understanding of the digital economy? What does it obscure, or leave out?
WEEK 9 10/28/2025	Finance and Crypto-Economies
	- Kostakis, V., & Giotitsas, C. (2014). The (A) political economy of bitcoin. <i>tripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society</i>, 12(2), 431-440. - De Filippi, P., & Loveluck, B. (2016). The invisible politics of bitcoin: governance crisis of a decentralized infrastructure. <i>Internet policy review</i>, 5(4). - Rosales, A. (2019). Radical rentierism: gold mining, cryptocurrency and commodity collateralization in Venezuela. <i>Review of International Political Economy</i>, 26(6), 1311-1332. "Private Money" - an interview with Stefan Eich https://thedigradio.com/podcast/private-money-with-stefan-eich/ Key questions: - Why are investors excited about cryptocurrencies and blockchain; what potential for power and capital does this represent? - What potential does blockchain and crypto represent for an alternative, non-capitalist economy, or for the redistribution of power?

WEEK 10 11/04/2025	Silicon Valley and Innovation Cultures/Economies
	**Research memos due today! **1-1 meetings this week to discuss research progress • Harris, M. (2023). Palo Alto: A history of California, capitalism, and the world. Hachette UK. ◦ Chapters TBD • Turner, F. (2005). Where the counterculture met the new economy: The WELL and the origins of virtual community. <i>Technology and culture</i>, 46(3), 485-512. • Cooman, F. (2024). Imprinting the economy: The structural power of venture capital. <i>Environment and Planning A: Economy and Space</i>, 56(2), 586-602. • Lindtner, S. M. (2020). Prototype nation: China and the contested promise of innovation. In <i>Prototype nation</i>. Princeton University Press. ◦ Chapters TBD
WEEK 11 11/11/2025	The “AI” Economy
	• “AI Generated Business: The Rise of AGI and the Rush to Find a Working Revenue Model”, Brian Merchant (2024) https://ainowinstitute.org/general/ai-generated-business • Greene, D. (2022). Landlords of the internet: Big data and big real estate. <i>Social Studies of Science</i>, 52(6), 904-927. • Narechania, T. N., & Sitaraman, G. (2024). An antimonopoly approach to governing artificial intelligence. <i>Yale L. & Pol'y Rev.</i>, 43, 95. • The Data Fix with Dr. Mél Hogan- AI Con, with Emily M. Bender and Alex Hanna https://shows.acast.com/the-data-fix/episodes/con-with-emily-m-bender-and-alex-hanna Key questions: • What business models are emerging around “AI” today? • What processes and structures (e.g., legal regimes, labor hierarchies) are helping to advance and solidify these business models? • Is there space to interrupt or destabilize these business models? Is an “AI for the public good” possible?
WEEK 12 11/18/2025	Technology Beyond Capitalism?

	• Bookchin, Murray. "Toward a Liberatory Technology," 1965. https://theanarchistlibrary.org/library/lewis-herber-murray-bookchin-towards-a-liberatory-technology • Maharawal, Manissa M. ; McElroy, Erin. "The Anti-Eviction Mapping Project: Counter Mapping and Oral History toward Bay Area Housing Justice." <i>Annals of the American Association of Geographers</i> 108, no. 2 (2018). https://doi.org/10.1080/24694452.2017.1365583. • Langdon Winner, "I: A Philosophy of Technology" in The Whale and the Reactor (1986) pp. 1-58 • <i>Real Utopias</i>, Erik Olin Wright (2010) ◦ Ch 4: "Thinking About Alternatives to Capitalism" pg 100-ch end ◦ Ch 7: "Real Utopias II Social Empowerment and the Economy" p. 191-216 and p.234-246 Key questions: • What inspiration can we find to help us concretely imagine society beyond capitalism - alternative ways to organize production and exchange? • What role could digital technologies and computation play in this alternate society? • What are some concrete examples of anti-capitalist technologies that exist today?
WEEK 13 11/25/2025	Co-working time
	Final research reports due! • No readings this week • 1-1 meetings *during class* to discuss research reports
WEEK 14 12/2/2025	Research presentations
	No readings this week.
WEEK 15 12/10/2025	Research presentations
	No readings this week.