# Sociology 190: AUTOMATION & SOCIAL PROBLEMS

CLASS HOURS Wednesdays 12pm-2pm
LOCATION Social Sciences Building 402

**INSTRUCTOR** Joseph Klett

**EMAIL** <u>jklett@berkeley.edu</u>

• Read THIS;

• Always include "SOC190" in subject line;

• Email received after Thursdays at 2pm will not receive a response until Monday afternoon at the earliest;

• DO NOT contact me through bCourses -- I won't see it.

**OFFICE HOURS** Mondays 12:30pm-2:30pm (in Social Sciences Building 484 or **Zoom**)

Tuesdays 10am-12pm (over **Zoom**)

• Please make office hours appointments <u>HERE</u>

#### COURSE DESCRIPTION

Automation is an old idea reborn with each new era of technology. Today algorithms, robotics, and machine learning overwhelm the popular discourse about our dawning technological futures. Each story that promises automation will improve our lives seems surrounded by so many more that predict disaster for society.

In this seminar we will use the case of automation to understand the emergence and evolution of *social problems*. We will discuss the foundations of social problem analysis, including social construction, conflict theory, and the work of moral entrepreneurs. Some guiding questions we will consider:

- How do sociologists theorize the emergence and evolution of social problems?
- How do various interested parties such as experts, media figures, politicians, and activists work together and apart to construct social problems, and how do they use language and action to do this work?
- How can we understand complex social problems from multiple perspectives, and across a variety of historical, economic, and cultural contexts?
- How can we use the insights of sociology to develop a critical perspective and advocate for specific changes in society?

We will investigate issues of automation in several areas of sociological interest including labor, finance, education, and ecology. Across these domains of social life, we will discuss automation as an empirical, theoretical, and philosophical concern; this includes questions about what, exactly, is being automated in various social practices, the nature of software versus hardware, and moral narratives about the future.

After an initial introduction to the study of social problems, we will approach automation as a set of claims to the social body — in other words, how automation is organized (read: *organ*-ized) in society, "from the feet up." Beginning with concerns about movement and circulation in the material world, we will then ascend the social body to machine interventions in manual labor and ritual. We will further consider debates about human appearances as an interface, worries about consciousness and the value of biological life, and the effects of rational computations on the human capacity for reason. Finally, we will explore the connection between the heart and the mind, to think about what keeps us human among machines.

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# **COURSE REQUIREMENTS** (% of final grade)

This is not a lecture course. Every student is expected to attend each class meeting, stay for the duration, and contribute to the discussion. Here is how you will be graded:

- A. **Preparation and participation** (25%): You will come to EACH class meeting having completed ALL numbered readings and prepared with notes on each reading plus THREE questions for discussion; beginning week 2, you are required to submit your three questions prior to the day of seminar. You will also be graded on active participation in the discussion. Each absence will automatically deduct 5% from your final grade; more than 3 absences will result in a failing grade. You are also required to attend office hours at least once to discuss your research project.
- B. *Discussion leader* (10%): You will work with 1-2 classmates to lead the discussion once in the semester. You are expected to address all numbered readings for the week and provide discussion prompts that invite contrasting viewpoints. You are encouraged to use media and other creative methods to facilitate discussion. You must sign up to lead discussion by Week 2. (When it is your turn as Discussion Leader, you will upload your discussion prompts in place of the prep questions above.)
- C. **Research proposal** (5%): You will submit a 500-700 word proposal for your final paper topic. You will explain why the topic is interesting to you and what research question you will attempt to answer.
- D. **Outline and literature review** (15%): You will submit a 1500-2000 word outline and literature review for your final paper. This includes a detailed outline of the paper's structure, the issue you will be addressing, your initial argument, and what evidence you will be using. You will also include a summary of the literature you will engage, with a brief explanation of each reading and how you will use them in your paper.
- E. First draft (15%): You will submit a 2500-3000 word first draft of your paper.
- F. **Research presentation** (5%): You will make a 10 minute presentation to the class based on your research, followed by Q&A.
- G. *Final paper* (25%): You will submit a 4500-6000 word final paper, inclusive of all feedback received on your first draft.

#### ACADEMIC HONESTY

You are expected to follow the <u>University guidelines for academic honesty</u>. Violations include cheating and plagiarism, as well as self-plagiarism (submitting your own work from a different assignment). Any assignment content composed by a resource other than you, whether human or digital, must be attributed using proper citation. If you have any doubts, please speak to me or your Reader *before* your work is due.

Artificial intelligence (AI) language models, such as ChatGPT, may be used to summarize or contextualize source materials with appropriate citation and thorough editing. You may NOT use AI to write your work for you. Unattributed use of online platforms is considered academic dishonesty and will be treated as such.

## SPECIAL NEEDS AND ACCOMMODATIONS

All students should be able to participate in this course. Please address any special needs you may have with me at the beginning of the semester, or when a challenge arises. If you qualify for accommodations because of a disability, please submit your accommodation plan from the Disabled Students' Program (DSP) to me by email, preferably within the first two weeks of the semester. Contact the DSP by phone (510) 642-0518 or by email to <a href="mailto:dsp@berkeley.edu">dsp@berkeley.edu</a>.

#### COURSE OUTLINE

All readings should be done prior to the class meeting for which they are assigned. Readings can be found on bCourses under '<u>Files</u>' unless hyperlinked below; in the case that I share a complete book, you are only required to read the indicated chapter(s).

## WEEK 1 Wednesday 8/28: Overview: The social construction of social problems

This week we will discuss the general structure of the seminar. I will introduce the sociological idea of *social problems* and the theory we will use to guide our discussions for the rest of the semester. We will play a game to illustrate the key concept of *social construction* and how this concept will work in the class. We will then discuss a reading that challenges the very claim that there has ever been such a thing as *artificial intelligence*.

- 1. Joel Best. 2017. "The Social Problems Process."
- 2. Jaron Lanier. 2023. "There is no Al."

## Plus:

- Cade Metz. 2023. "'The Godfather of A.I.' Leaves Google and Warns of Danger Ahead."
- David Meyer. 2023. "Most Americans See AI as an Existential Threat."
- Matteo Wong. 2023. "AI Doomerism is a Decoy."

# WEEK 2 Wednesday 9/4: Automating inequality: Moral panics and moral entrepreneurs

This week we will discuss the claim that automation will expand inequality in society. We will discuss the concept of *moral panic* in sociology and the role of so-called *moral entrepreneurs* who designate themselves spokespeople for various social problems. We will compare these ideas to two pieces of scholarship to understand how scholars themselves act as *claimsmakers*.

- 1. Joel Best. 2011. "Locating Moral Panics within the Sociology of Social Problems."
- 2. Virginia Eubanks. 2018. "The Digital Poorhouse."
- 3. Sophie Wang and Taylor Cruz. 2023. AI for Whose Good?

## Plus:

- Zephyr Teachout. 2022. "The Boss Will See You Now."
- Pamela Paul. 2023. "Do Not Panic. It's Just a Moral Panic."

# WEEK 3 Wednesday 9/11: Labored myths I: Alienation, logistics, Keynes and Luddites

This week we'll discuss the claim that automation will destroy jobs and devalue human labor. We will discuss the *alienation* that is produced by algorithmic optimization in the workplace and the reorganization of labor in service of machines. We will look at three readings which place the experience of work in the 21<sup>st</sup> century into a broader historical context.

- 1. David Graeber. 2013. "On the Phenomenon of Bullshit Jobs."
- 2. Carl Frey. 2019. "Artificial Intelligence" in The Technology Trap.
- 3. Emma Goldberg. 2024. "Will AI Kill Meaningless Jobs?"

### Plus:

- Bullshit Jobs (2019, VPRO Backlight)
- Charlie Warzel. 2023. "Here's How AI Will Come for Your Job."
- 99% Invisible. 2023. *Blood in the Machine*.

# WEEK 4 **Wednesday 9/18:** Labored myths II: Semi-automation, emotional labor, and Moravec's paradox

This week we will discuss the claim that *semi-automation* dehumanizes work. We will discuss the hidden *emotional labor* and *embodied knowledge* that humans provide to help automated processes appear to function autonomously. This follows *Moravec's paradox* which states that complex reasoning in the brain is in fact easy to automate, whereas brute manual labor is rather difficult for machines to mimic.

- 1. Astra Taylor. 2018. "The Automation Charade."
- 2. Luke Munn. 2022. "Spotty Automation and Less-Than-Human Workers" and "Automation Is Not Our Future" in *Automation is a Myth*.

#### Plus:

- The Cleaners (2018, dir. Moritz Riesewieck and Hans Block)
- Moritz Altenried. 2022. "Workers Leaving the Factory" in *The Digital Factory*.
- James Wright. 2023. "Introduction" in Robots Won't Save Japan.
- Jacob Sweet. 2023. "A Robot's Nightmare Is a Burrito Full of Guac."
- Jacob Stern. 2023. "Al Is Running Circles Around Robotics."

# Sunday 9/22: Research proposal DUE

## WEEK 5 Wednesday 9/25: Technocracy: Quantification and abstraction

This week we will discuss the claim that policies based on statistical analysis produce unjust social outcomes. We will discuss a historical example of *quantification* and compare it to recent research on

the design of *large language models*. Both examples reveal the overwhelming power of *inference* when human entities are abstracted into units – as well as revealing the perverse incentives for wielding such power despite the troubling conditions that result.

- 1. Ted Bouk. 2015. "Fatalizing" in How Our Days Became Numbered.
- 2. Emily Bender et al. 2021. "On the Dangers of Stochastic Parrots."

### Plus:

- Karen Hao. 2020. "We Read The Paper That Forced Timnit Gebru Out Of Google. Here's What It Says. "
- Tom Simonite. 2021. "What Really Happened When Google Ousted Timnit Gebru."
- Heather Vogell. 2022. "Rent Going Up?"
- Heather Vogell. 2023. "DOJ Backs Tenants."

# WEEK 6 Wednesday 10/2: Deep inelegance: Life, consciousness, and existence

This week we will discuss the claim that attempts to mimic animal functions only serve to redefine the boundaries between organic and artificial lifeforms. We will look at several historical examples of machines which reproduce animal minds and behaviors, with an emphasis on the ability to play (and win) games. While novel, these inventions provoke us to consider what cannot be mimicked by machines, and thus, what is exceptional about conscious beings.

- 1. Jessica Riskin. 2003. "The Defecating Duck, or the Ambiguous Origins of Artificial Life."
- 2. Nathan Ensmenger. 2011. "Is Chess the Drosophila of Artificial Intelligence?"

#### Plus:

- Ted Chiang. 2021. "Why Computers Won't Make Themselves Smarter."
- AlphaGo: The Movie (2020, Dir. Greg Kohs)
- Amanda Gefter. 2023. "What are Dreams for?"
- James Somers. 2023. "A Coder Considers the Waning Days of the Craft."
- Noam Chomsky. 2023. "The False Promise of ChatGPT."

# WEEK 7 **Wednesday 10/9:** Godmode: Humanity, belief, and wonder

This week we will discuss the claim that machines cannot replicate the human spirit. We will discuss the goals of *transhumanism* and consider critiques of this idea alongside several speculative fictions. The new forms of faith emerging with digital automation, alongside these stories of not-quite-human encounters, helps us consider what human values are considered expendable by some and crucial to others.

1. Be Right Back (2013, dir. Owen Harris)

- 2. Meghan O'Glietyn. 2017. "Ghost in the Cloud."
- 3. Nilay Patel. 2024. "Replika CEO Eugenia Kuyda says it's okay if we end up marrying Al chatbots."

## Plus:

- John Ajvide Lindqvist. 2009. Handling the Undead.
- Proxy (2019, dir. Chioke Nassor)
- 99pi. 2018. "Sabbath Mode."
- Holly Walters. 2023. "Robots are Performing Hindu Rituals."
- Webb Wright. 2024. "God Chatbots Offer Spiritual Insights on Demand ."
- THIS

# WEEK 8 Wednesday 10/16: Governance: Citizenship and rights in the Automation era

This week we will discuss the claim that automation is a threat to democracy. We will consider legal philosophy in action, as both a practical guide to law enforcement and a policy guide to governance in the 21<sup>st</sup> century. These debates indicate that while various safeguards are conceivable to preserve the rights of citizens, the very introduction of automation into society will fundamentally alter the terms of public life.

- 1. Woodrow Hartzog. 2016. "There Is No Such Thing as "Public" Data."
- 2. Sarah Brayne and Angele Christin. 2020. "Technologies of Crime Prediction."
- 3. Office of Science and Technology Policy. 2022. *Blueprint for an AI Bill of Rights.* (Read pages 1-11; skim the rest)

## Plus:

- Matteo Wong. 2023. "The AI Crackdown is Coming."
- Cecilia Kang and David Sanger. 2023. "<u>Biden Issues Executive Order to Create A.I.</u> Safeguards ."
- Tim Wu. 2023. "In Regulating AI, We May Be Doing Too Much. And Too Little."

## Sunday 10/20: Outline and literature review DUE

## WEEK 9 Wednesday 10/23: Unmotivated learning: Education and human capital

This week we will discuss the claim that automation degrades human intelligence. We will read about two parallel yet distant trends, one in American public education and the other in Africa's college-educated laborers. As students are increasingly taught shortcuts to critical learning activities, these changes to curriculum come bolstered by a hidden workforce which is applying the brightest minds in a population to abstract and ends wholly-removed from their communities.

- 1. Josh Dzieza. 2023. "Al is a Lot of Work."
- 2. Christine Smallwood. 2023. "Misreading the Cues."
- 3. Ted Chiang. 2023. "ChatGPT is a Blurry JPEG of the Web."

## Plus:

- Ian Bogost. 2023. "The First Year of AI College Ends in Ruin."
- Rose Horowitch. 2023. "Here Comes the Second Year of Al College."
- Benj Edwards. 2023. "Can You Melt Eggs?"
- James Somers. 2023. "How Will AI Learn Next?"
- Justin Pot. 2023. "CAPTCHAs Are About to Get So Much More Annoying."
- THIS

# WEEK 10 **Wednesday 10/30:** Rational beyond reason: Ecology, corporations, and economic warfare

This week we will discuss the claim that the creation, deployment, and maintenance of automated systems creates disastrous incentives for geopolitical conflict. We will read about the role of corporate entities and state actors in the production of automation and the demotion of reason in the face of sheer rationality. Caught up in these conflicts are communities, their economies, and the environment.

- 1. Charlie Stross. 2017. Dude, You Broke the Future!
- 2. Kate Crawford. 2021. "Conclusion: Power" in The Atlas of Al.
- 3. Karen Hao. 2023. "The New Al Panic."

## Plus:

- Donald MacKenzie. 2014. "Be Grateful for Drizzle."
- Ted Chiang. 2023. "Will AI Become the New McKinsey?"
- BF Campbell. 2023. "Perils of Paperclips."
- Issie Lapowsky. 2023. "<u>Tech Companies' Friendly New Strategy to Destroy One Another."</u>
- Matteo Wong. 2023. "The Internet's Next Great Power Suck."
- Kevin Roose. 2023. "Al Belongs to the Capitalists Now."
- Cory Doctorow. 2024. "Enshittification is Coming for Absolutely Everything."

# WEEK 11 Wednesday 11/6: Heart and soul: What can't be automated(?)

This week we will discuss the claim that there is something essentially human which cannot be automated. We will read a novel and watch a film, both of which present a vision of the future in which people develop relationships with automated entities. We will use these extended human stories to

think more broadly about the inclusions we make and deference we pay when incorporating artificial beings into society.

- 1. Kazuo Ishiguro. 2021. Klara and the Sun. (Read the whole thing. Yes, the whole thing.)
- 2. *Her* (2013, dir. Spike Jonze)

## Plus:

- Jane Hu. 2021. "Portrait of the Robot as a Young Woman."
- Alex Vadukul. 2022. "Luddite Teens Don't Want your Likes."
- Carolina Bandinelli. 2022. "Dating Apps."
- Jennifer Korn. 2023. "Modern Romance: Falling in Love with Al."

# Sunday 11/10: First draft DUE

## WEEK 12 Wednesday 11/13: Research presentations I

The final three weeks of seminar you will be sharing your research with the class. We will use this opportunity to share the ideas you have been exploring, and reflecting on how your work extends our conversations from throughout the semester.

## WEEK 13 Wednesday 11/20: Research presentations II

The final three weeks of seminar you will be sharing your research with the class. We will use this opportunity to share the ideas you have been exploring, and reflecting on how your work extends our conversations from throughout the semester.

# WEEK 14 Wednesday 11/27: NO CLASS

# WEEK 15 Wednesday 12/4: Research presentations III

The final three weeks of seminar you will be sharing your research with the class. We will use this opportunity to share the ideas you have been exploring, and reflecting on how your work extends our conversations from throughout the semester.

## Wednesday 12/18: Final paper DUE