ORGANIZING INNOVATION

Sociology 3675 Department of Sociology, Columbia University

David Stark

Lecture: Tues/Thurs 10:10-11:25

office hours: Tuesdays 2-4:00pm

Fall 2024

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https://calendly.com/starkofficehours/stark-office-hours

This course examines major innovations in organizations and asks whether innovation itself can be organized. We study a range of forms of organizing (e.g., bureaucratic, post-bureaucratic, platforms, and open architecture network forms) in a broad variety of settings: from food systems to the military-entertainment complex, from airline cockpits to Wall Street trading rooms, from engineering firms to mega-churches, from improv comedy to PowerPoint demonstrations, from scientific management at the turn of the twentieth century to algorithmic management in the opening decades of the twenty-first century. Special attention will be paid to relationship between organizational forms and new digital technologies. Basic concepts in organizational analysis – groups, projects, communities, knowledge, networks, search, collaboration, space, location, users, producers – are revisited when organizational design cannot be separated from design of the digital interface.

Discussion sections: Discussions sections will begin meeting during the second week. You should come to sections prepared to discuss the readings for a given week. During the second part of the course, sections will also be an opportunity to discuss your research for the final paper.

Requirements: Attend lectures; informed participation in class discussions based on the readings each week; open book mid-term exam; and research paper **or** take-home final exam. The topic and the format of the final paper are your choice, in consultation with the instructor. Our mutual goal is to find a topic and means of presentation that best meets your needs.

Readings: Books are available on library reserve, also for purchase at Book Culture, 112th St.

Sections: Rooms to be announced.

Thursday 12:00-1:00 Thursday 1:30--2:30 Thursday 3:10-4:00

Teaching Assistants:

Emily Mazo <u>erm2192@columbia.edu</u>
Lena Gloeckler <u>lgg2112@columbia.edu</u>
Taylor Alarcon tba2119@columbia.edu

* indicates required readings (other readings are recommended)

Sept. 3rd Introduction to the course

* David Stark, The Sense of Dissonance: Accounts of Worth in Economic Life, Chapter 1. pp. 1-34.

And you'll be smart to get started on the readings for the coming week, e.g., Taylor, Princples of Scientific Management.

Sept. 10th Microtechnologies of power: Scientific managment



- * Frederick Winslow Taylor, <u>The Principles of Scientific Management</u>, pp.1-85.
- * Michel Foucault, Discipline and Punish, pp. 135-194.

Jodi Kantor and Davi Streitfeld, "Inside Amazon: Wrestling Big Ideas in a Bruising Workplace." NYTimes Magazine Aug 15, 2015 nyti.ms/1TfqcOG

Max Weber, "Bureaucracy." Economy and Society, vol II. pp. 956-1005.

Testimony of Frederick W. Taylor at hearings before Special Committee of the House of Representatives, January, 1912.

Time and Motion – Ghost Dances no. 14 https://www.youtube.com/watch?v=cJMvzH0uvPA

Charlie Chaplin, clip from Modern Times.

Sept. 12th Performance (Silent lecture)



Sept 17th Extensions of scientific management and the loss of socio-diversity



- * Michael Pollan, *Omnivore's Dilemma*. Chapters 2-5, pp. 32-99. Penguin Press, 2006.
- * David Stark, "Work, Worth, and Justice in a Socialist Factory." Chapter 2 in *The Sense of Dissonance: Accounts of Worth in Economic Life*, Princeton University Press, 2009, pp. 35-80.

Carlo Petrini, Slow Food: The Case for Taste. Columbia University Press, 2001.

David Stark, "Bending the Bars of the Iron Cage: Bureaucratization and Informalization in Capitalism and Socialism," Sociological Forum, vol 4, no 4, 1989:637-664.

Sept 24th From Hierarchy to Heterarchy



- * Andrew Hargadon. 2003. *How Breakthroughs Happen*. Harvard Business School Press, Chapter 1-3, pp. 3-64.
- * David Stark, "Creative Friction in a New-Media Start-up." Chapter 3 in *The Sense of Dissonance*, pp. 81-117.

John Seely Brown and John Hagel, "Productive Friction: How Difficult Business Partnerships Can Accelerate Innovation." *Harvard Business Review*, Feb 1, 2005.

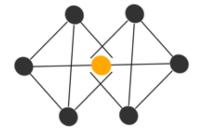
W. Brian Arthur.. "The structure of invention." Research policy 36, no. 2 (2007): 274-

287.

Richard Lester and Michael Piore, *Innovation: The Hidden Dimension*. Harvard Univerity Press, 2004. Chapters 1, 2, 3, 7, and 8.

Oct 1st Network forms of organization

- * Joel Podolony and Karen L. Page. 1998. "Network forms of organization." *Annual Review of Sociology* 24: 57-76.
- * Mathijs de Vaan, Balazs Vedres, and David Stark, "Game Changer: The Topology of Creativity." *AJS*. 120(4):1144-1194, January 2015.



* Walter Powell, "Neither Market Nor Hierarchy: Network Forms of Organization." Research in Organizational Behavior 1990. 12: 295-336.

Oct. 8th A new organizational Form: The platform



- * Juliet Schor & Stephen Vallas, "What Do Platforms Do? Understanding the Gig Economy." *Annual Review of Sociology*, 46, 273–294.
- * Robert Prey, "Nothing personal: algorithmic individuation on music streaming platforms." *Media, Culture & Society* (2017): 0163443717745147

Christopher Miles. "The combine will tell the truth: On precision agriculture and algorithmic rationality." *Big Data & Society* 6.1 (2019): 2053951719849444.

Robert Prey, 2020. "Locating Power in Platformization: Music Streaming Playlists and Curatorial Power." *Social Media + Society*. April-June 2020:1-11.

Curchod, C., Patriotta, G., Cohen, L., & Neysen, N. "Working for an algorithm: Power asymmetries and agency in online work settings. *Administrative Science Quarterly*, 2020. 65(3), 644–676.

Hatim A. Rahman, "The invisible cage: Workers' reactivity to opaque algorithmic evaluations." *Administrative Science Quarterly* 66.4 (2021): 945-988.

Kellogg, Katherine C., Melissa A. Valentine, and Angele Christin. "Algorithms at work: The new contested terrain of control." *Academy of Management Annals* 14.1 (2020): 366-410

Oct 10th Ana Andjelic guest lecture

Oct 15th From scientific management to algorithmic management

* Elena Esposito, Artificial communication: How algorithms produce social intelligence. MIT Press, 2022. Introduction and Chapter 1.

Elena Esposito. *Communicating with Algorithms*. English version of *Kommunikation mit unverständlichen Maschinen* (2024). Pages 1-13 of Part One, and all of Part Two.



Kiviat, Barbara. "The moral limits of predictive practices: The case of credit-based insurance scores." *American Sociological Review* 84.6 (2019): 1134-1158.

Donald MacKenzie, Trading at the Speed of Light.

Brayne, Sarah, and Angèle Christin. "Technologies of crime prediction: The reception of algorithms in policing and criminal courts." *Social Problems* 68.3 (2021): 608-624.

Cevolini, Alberto, and Elena Esposito. "From pool to profile: Social consequences of algorithmic prediction in insurance." *Big Data & Society* 7.2 (2020): 2053951720939228.

Oct 22nd From scientific management to management of the self



- * Carolin Gerlitz and Anne Helmond, "The like economy: Social buttons and the data-intensive web." New Media & Society 15.8 (2013): 1348-1365.
- * William Davies, 2020. "Post-Liberal Competitions?: Pragmatics of Gamification and Weaponization." Pp. 187–207 in *The Performance Complex: Competition and Competitions in Social Life*, edited by D. Stark. Oxford: Oxford University Press.
- * Schüll, Natasha Dow. "Data for life: Wearable technology and the design of self-care." *BioSocieties* 11 (2016): 317-333.

Hannah Zeavin. The distance cure: A history of teletherapy. MIT press, 2021.

Hans-Georg Moeller & Paul D'Ambrosio, *You and Your Profile: Identity after Authenticity*. Columbia University Press, 2021. (Selections).

Rachel Botsman, "Big data meets Big Brother as China moves to rate its citizens." *Wired.* Oct 21 (2017).

Gary Shteyngart, Super Sad True Love Story.

Gideon Kunda, *Engineering Culture: Control and Commitment in a High-Tech Corporation*. Temple University Press, 1992, pp. 1-25, 50-106, 154-216.

Oct 29th Review session

Oct 31st Mid-term exam

Nov 5th No class, election break

Part II

Nov 7th Topic: The Experience Economy; Setting: The Megachurch



- * James B. Twitchell, *Branded Nation*. Chapter 2, "One Market Under God." Simon and Schuster, 2004, pp. 47-108.
- * Michael Hutter, "Infinite surprises: on the stabilization of value in the creative industries." *The worth of goods. Valuation and pricing in the economy* (2011): 201-220.

NY Times article on converting old shopping malls. February 6, 2012.

Nov. 12th Topic: Simulation Setting: The Military-Entertainment Complex

- * Lucy Suchman, "Imaginaries of omniscience: Automating intelligence in the US Department of Defense." *Social Studies of Science*, vol 53, Issue 5, October 2023, pp. 761-786.
- * Tim Lenoir, "All but War is Simulation: The Military-Entertainment Complex." Configurations, 2000, 8:289-335.



Dan Baum, "Battle Lessons: What the Generals Don't Know," The New Yorker, January 17, 2005, pp. 42-48.

Tim Lenoir, "Programming Theatres of War: Gamemakers as Soldier." In Robert Latham, ed., Bytes, Bandwidth, and Bullets, New York: The New Press, 2003.

On videogame simulations and sports see "Game Changers: How Videogames Trained a Generation of Athletes." Wired Jan 25, 2010. http://www.wired.com/magazine/2010/01/ff_gamechanger/

Bruce Sterling, "War is Virtual Hell." Wired 1.01 March/April 1993.

Manuel DeLanda, War in the Age of Intelligent Machines. New York: Swerve Editions, 1991. Especially, Chapter 3, "Interface" pp. 217-231.



Paul M. Leonardi, *Car Crashes Without Cars: Lessons About Simulation Technology and Organizational Change From Automotive Design*, 2012, Cambridge, MA: MIT Press

Liliana Doganova and Fabian Muniesa, "Capitalization devices: business models and the renewal of markets." In *Making Things Valuable*. Oxford University Press, 2015.

Nov 19th New topic to be determined.

Nov 26th This is not a test! Testing after preparedness.



- * Andrew Lakoff, "Real-time biopolitics: the actuary and the sentinel in global public health." *Economy and Society* 44.1 (2015): 40-59.
- *Andrew Lakoff, "Preparedness indicators: measuring the condition of Global Health security." *Sociologica* 15.3 (2021): 25-43.
- * Pellizzoni, Luigi. "The time of emergency. On the governmental logic of preparedness," *Sociologia Italiana* 2020.

Matt Spencer, "Creative Malfunction: Finding fault with Rowhammer." Computational Culture 8 (2021).

Stephen Collier and Andrew Lakoff, *The Government of Emergency: Vital Systems, Expertise, and the Politics of Security.* Vol. 25. Princeton University Press, 2021.

Andrew Lakoff, Unprepared: global health in a time of emergency. Univ of California ss, 2017.

Nov 28th Thanksgiving Holiday (no class)

Topic: Constraints Setting: Filmmaking

Five Obstructions directed by Jorgen Leth and Lars von Trier

Dec 3rd Student presentations

Dec 5th Student presentations

Dec 19th Deadline for research paper.

Dec 19th Deadline for take-home final exam.

