

NEW DIRECTIONS IN ECONOMIC SOCIOLOGY

Algorithmic Management: Organizational & Societal Effects

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Soc 8201

Fall 2023
Columbia University
Thurs: 2:10-4:00 pm
Thurs 4:00-6:00
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Rationale: This is an advanced graduate seminar in Economic Sociology looking at new developments in the field. The theme of this iteration is *Algorithmic Management: Organizational & Societal Effects*.

Organization: We will discuss the organization of the course at the first meeting of the seminar.

Requirements: Informed participation in each weekly seminar is expected of every student in the course. To prepare for the discussions, write a short essay (2 pages) on the readings for each week and bring it to the seminar. The major requirement for the course is a research paper. You should begin working on your paper already during the first weeks of the course. You'll be asked to make a brief presentation about your research. 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.

PART I

* required readings

Sept 7th Introduction

Sept 14th From studying human beings to studying being human.

* Bruno Latour, "Technology is Society Made Durable," and in John Law, ed., *A Sociology of Monsters: Essays on Power, Technology, and Domination*. Routledge, 1991, pp.103-131.

* Then select something from this list of suggested readings:

Edwin Hutchins, *Cognition in the Wild*, MIT, 1995.

Edwin Hutchins and T. Klausen, "Distributed Cognition in an Airline Cockpit." In Y. Engeström & D. Middleton (Eds.), *Cognition and Communication at Work*, (pp. 15-34). New York: Cambridge University Press.

Michel Callon and Fabian Muniesa. "Economic markets as calculative collective devices." *Organization Studies* 2005, 26(8): 1229-1250.

Liliana Doganova and M. Eyquem-Renault, "What Do Business Models Do? Narratives, Calculation and Market Exploration." *Research Policy*.

Fabian Muniesa, *The Provoked Economy: Economic Reality and the Performative Turn*. London: Routledge, 2016.

Lucy Suchman, 2007. *Human-Machine Reconfigurations: Plans and situated actions*, 2nd Edition. Cambridge and New York: Cambridge University Press.

Sheena Iyengar and Mark Lepper, "When choice is demotivating: Can one desire too much of a good thing?" *Journal of Personality and Social Psychology* 2000 79(6): 995-1006.

Bruno Latour, *The Pasteurization of France*. Harvard University Press 1988.

Beth Bechky, "Sharing Meaning Across Occupational Communities: The transformation of understanding on a production floor." *Organization Science* May/June 14(3):312-320.

Preda, Alex. 2006. Socio-technical agency in financial markets: the case of the stock ticker. *Social Studies of Science* 36(5):753-782.

Michel Callon, Yuval Millo, and Fabian Muiesa. eds. 2007. *Market Devices*. Blackwell.

Sept 21st For a Sociology of Algorithms

* Elena Esposito. *Artificial communication: How algorithms produce social intelligence*. MIT Press, 2022. Introduction, Chapter 1, plus another chapter of your choice.

* Anna Beckers and Gunther Teubner, *Three Liability Regimes for Artificial Intelligence: Algorithmic Actants, Hybrids, Crowds*. Hart 2022, chapters 1 and 2.

* Jenna Burrell. "How the machine 'thinks': Understanding opacity in machine learning algorithms." *Big data & society* 3.1 (2016): 2053951715622512.

Donald MacKenzie, *Trading at the Speed of Light*.

Sept 28th More on algorithms (Perhaps about ChatGPT)

* Bowman, Samuel R. "Eight things to know about large language models." *arXiv preprint arXiv:2304.00612* (2023).

* Jean-Marie John-Mathews, and Dominique Cardon. "The Crisis of Social Categories in the Age of AI." *Sociologica* 16.3 (2022): 5-16.

Lev Manovich and Emanuele Arieli, "Seven Arguments about AI Images and Generative Media," Chapter 5 in *Artificial Aesthetics*. <http://manovich.net/index.php/projects/artificial-aesthetics-book>

Oct 5th Algorithmic Management

* David Stark and Ivana Pais, "Algorithmic management in the platform economy." *Sociologica* 14(3) (2020): 47072.

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

Stephen Vallas, & Juliet Schor, "What Do Platforms Do? Understanding the Gig Economy." *Annual Review of Sociology*, 46, 273–294.

C. Curchod, 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.

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

Kornberger, M., Pflueger, D., & Mouritsen, J. (2017). Evaluative Infrastructures: Accounting for platform organization. *Accounting, Organizations and Society*, 60, 79–95. DOI: 10.1016/j.aos.2017.05.002

Oct 12th Algorithms and New Class Relations

* Frank Pasquale, *New laws of robotics: defending human expertise in the age of AI*. Belknap Press, 2020.

* David Stark, Book Review Essay: Questioning Humans versus Machines: Artificial Intelligence in Class Conflict. *Administrative Science Quarterly*. 2022.

* Frank Pasquale, "Battle of the Experts: The Strange Career of Meta-Expertise." Book chapter, forthcomin.

Oct 19th Algorithms and public policy

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

* 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.

Medina, Eden. "Rethinking algorithmic regulation." *Kybernetes*(2015).

Busuioc, Madalina. "Accountable artificial intelligence: Holding algorithms to account." *Public Administration Review* 81.5 (2021): 825-836.

Oct 26th 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 Press, 2017.

Nov 2nd Revise and Resubmit

A session on how to revise a paper for publication.

Balazs Vedres and David Stark, "[Structural Folds: Generative Disruption in Overlapping Groups](#)," *American Journal of Sociology*, January 2010 15(4). In addition to the paper (and its prior versions), you will read the complete correspondence between the authors and the editor and reviewers as the paper went through the process of revise and resubmit at the *American Journal of Sociology*.

PART 2. SELECTED TOPICS

Nov 9th }
We will choose among these or other topics (see illustrative list below) depending on participants' interests.

Nov 16th }

Nov 23rd Thanksgiving Holiday

Nov 30th Student Presentations

Dec 7th Student Presentations

Dec 21st Deadline for final paper

Indicative topics for Part II.

Disrupting the Smooth Flow of Communication

Daniel Beunza and David Stark, "From Dissonance to Resonance: Cognitive Interdependence in Quantitative Finance." *Economy and Society*, 2012, 41(3):1-35.

Sheen S. Levine, Evan P. Apfelbaum, Mark Bernard, Valerie L. Bartelt, Edward J. Zajac and David Stark, "Ethnic Diversity Deflates Price Bubbles." *Proceedings of the National Academy of Sciences*, 111(52): 185240-18529, December 30, 2014.

Attention Networks

Levine, Reypens, and Stark, "Racial Attention Deficit." *Science Advances*.

Karin Knorr Cetina, 2003. "From Pipes to Scopes: The Flow Architecture of Financial Markets." *Distinktion*, Nr. 7, 2003, 7–23.

Matteo Prato and David Stark, "Networks as Scopes: Observational Advantage under Uncertainty. Unpublished manuscript.

Purdie Greenaway V, Turetsky KM (2020) Socioecological Diversity and Inclusion: A Framework for Advancing Diversity Science. *Current Opinion in Psychology* 32:171-6.

Frank Dobbin and Alexandra Kalev. "Why Diversity Programs Fail and What Works Better" *Harvard Business Review* 2016 94:52-60.

Ronald Burt, "Structural holes and good ideas." *American Journal of Sociology* 110.2 (2004): 349-399.

Ezra Zuckerman, "The categorical imperative: Securities analysts and the illegitimacy discount." *AJS* 1999 104(5):1398-1438.

Ronald S. Burt, *Brokerage and Closure: An Introduction to Social Capital*. Oxford University Press, 2005.

Joel M. Podolny, "Networks as the pipes and prisms of the market." *American journal of sociology* 107.1 (2001): 33-60.

Matteo Prato and David Stark, "Observation Networks: Temporality and Intensity of Attention in Financial Markets." unpublished manuscript.

Karin Knorr Cetina, 2005. "How Are Global Markets Global? The Architecture of a Flow World." Pp. 38-45 of *The Sociology of Financial Markets*. K Knorr Cetina and A Preda (eds). Oxford University Press.

Karin Knorr Cetina, and U Bruegger. 2002. "Global Microstructures: The Virtual Societies of Financial Markets." *American Journal of Sociology* 107(4): 905-950.

Elena Esposito, "Economic circularities and second-order observation: the reality of ratings." *Sociologica* 2/2013

David Stark, "Observing Finance as a Network of Observations." *Sociologica* 2/2013:1-12.

Collaboration Networks

Miuriel Niederle, "Gender." In *The Handbook of Experimental Economics*, H.H. Kagel & A.E. Roth, eds. Princeton University Press.

Sheen Levine, Charlotte Reypens, and David Stark, "Paying to Cross the Gender Gap." Unpublished manuscript.

Brian Uzzi and Jarrett Spiro, "Collaboration and Creativity: The Small World Problem," *AJS*, Sept 2005, 111:447-504.

Mathijs de Vaan, Balazs Vedres, and David Stark, "Game Changer: The Topology of Creativity." *AJS*. 120(4):1144-1194, January 2015.

Brooke Harrington, 2008. *Pop Finance: Investment Clubs and Stock Market Populism*. Princeton University Press.

Ruef, M. 2014. *The Entrepreneurial Group: Social Identities, Relations, and Collective Action*. Princeton University Press.

Persona

Jerolmack, C., & Tavory, I. (2014). Molds and Totems: Nonhumans and the Constitution of the Social Self. *Sociological Theory*, 32(1), 64–77.

Giovanni Formilan and David Stark. "Moments of Identity: The Dynamics of Artist, Persona, and Audience in Electronic Music. *Theory & Society*, in press.

Moeller, H.-G., & D'Ambrosio, P. J. (2021). *You and Your Profile: Identity after Authenticity*. New York: Columbia University Press.

Brubaker, R. (2020). Digital hyperconnectivity and the self. *Theory and Society*, 49, 771–801.

Roberta Sassatelli and Alessandro Pizzorno, "The Mask and Identity. A Conversation with Alessandro Pizzorno." *Sociologica* 2019 13(2): 45-53.

Erving Goffman, *The Presentation of Self in Everyday Life* (esp. chapter 1, "Performances").

David W. Lehman, Kieran O'Connor, Balázs Kovács, and George E. Newman. "Authenticity." *Academy of Management Annals* 13, no. 1 (2019): 1-42.

Alessandro Pizzorno. (2010). The mask: An essay. *International Political Anthropology*, 2010, 3(1): 5–28.

Roberta Sassatelli. "Recognition and reception. On Pizzorno, identity and the mask." *Sociologica* 13.2 (2019): 39-43.

Bernie Hogan. "The presentation of self in the age of social media: Distinguishing performances and exhibitions online." *Bulletin of Science Technology & Society*, 2010, 30: 377.

Evan Kindley, "The People we Know Best." *New York Review of Books*, March 25, 2021.

Valuation

Michèle Lamont, "Toward a comparative sociology of valuation and evaluation." *Annual review of sociology* 38 (2012): 201-221.

David Stark, ed. *The Performance Complex: Competition and Competitions in Social Life*. Oxford University Press.

Luc Boltanski and Laurent Thévenot. "The sociology of critical capacity." *European journal of social theory* 2.3 (1999): 359-377.

John Dewey, *Theory of Valuation*. University of Chicago Press, 1939.

Diversity and Performance

Michèle Lamont, 2018. Addressing recognition gaps: Destigmatization and the reduction of inequality. *American Sociological Review*, 83(3), 419-444.

Bas Hofstra, Vivek V. Kulkarni, Sebastian Munoz-Najar Galvez, Bryan He, Dan Jurafsky, and Daniel A. McFarland. "The Diversity–Innovation Paradox in Science." *Proceedings of the National Academy of Sciences* 117, no. 17 (2020): 9284-9291.

Kohler-Hausmann I (2018) Eddie Murphy and the Dangers of Counterfactual Causal Thinking About Detecting Racial Discrimination. *Northwestern University Law Review* 113(5):1163-227.

Robin Ely, Padavic I, Thomas DA (2012) Racial Diversity, Racial Asymmetries, and Team Learning Environment: Effects on Performance. *Organ Stud* 33(3):341-62.

Purdie-Vaughns V, Steele CM, Davies PG, Dittmann R, Crosby JR (2008) Social Identity Contingencies: How Diversity Cues Signal Threat or Safety for African Americans in Mainstream Institutions. *J Pers Soc Psychol* 94(4):615-30.

Purdie Greenaway V, Turetsky KM (2020) Socioecological Diversity and Inclusion: A Framework for Advancing Diversity Science. *Current Opinion in Psychology* 32:171-6.

Models

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

Donald MacKenzie and Yuval Millo, "[Constructing a Market, Performing Theory](#): The Historical Sociology of a Financial Derivatives Exchange." *AJS* July 2003 109(1):107-145.

Elena Esposito, "Economic circularities and second-order observation: the reality of ratings." *Sociologica* 2/2013

David Stark, "Observing Finance as a Network of Observations." *Sociologica* 2/2013:1-12.

Algorithms and online cultural markets

Robert Prey, 2018. "Nothing Personal: Algorithmic Individuation on music streaming platforms." *Media, Culture & Society*, 40(7):1086-1108.

Crawford, Kate. 2009. "Following you: Disciplines of listening in social media." *Continuum: Journal of Media & Cultural Studies* 23(4):525-535.

Bonini, T., & Gandini, A. 2019. "First Week Is Editorial, Second Week Is Algorithmic": Platform gatekeepers and the platformization of music curation. *Social Media + Society*, 5(4), 1–11.

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

Antoine Hennion, "[Baroque and rock: Music, mediators and musical taste](#)." *Poetics* 24 (1997): 415-435.

Ratings and Rankings

Wendy Nelson Espeland and Michael Sauder. 2007. "Rankings and Reactivity: How Public Measures Recreate Social Worlds." *American Journal of Sociology* 113(1): 1-40.

Elena Esposito and David Stark. "What's Observed in a Rating?" In *The Performance Complex: Competition and Competitions in Social Life*. Oxford U Press.

Antoine Hennion, "Paying Attention: What is Tasting Wine About?" in *Moments of Valuation: Exploring Sites of Dissonance*. Edited by Ariane Berthoin Antal, Michael Hutter, and David Stark. Oxford and New York: Oxford University Press, 2015.

Wendy Nelson Espeland and Mitchell Stevens. 1998. "Commensuration as a Social Process." *Annual Review of Sociology* 24:312-43.

When the other is a Bot

Balazs Vedres, Orsolya Vasarhelyi, Taha Yasseri, and David Stark. Wikibot project.

Barrett, Michael, Eivor Oborn, Wanda J. Orlikowski, and JoAnne Yates. 2012. "Reconfiguring Boundary Relations: Robotic Innovations in Pharmacy Work." *Organization Science* 23(5):1448–66. doi: [10.1287/orsc.1100.0639](https://doi.org/10.1287/orsc.1100.0639).

Beane, Matt, and Wanda J. Orlikowski. 2015. "What Difference Does a Robot Make? The Material Enactment of Distributed Coordination." *Organization Science* 26(6):1553–73. doi: [10.1287/orsc.2015.1004](https://doi.org/10.1287/orsc.2015.1004).

Beane, Matthew. 2019. "Shadow Learning: Building Robotic Surgical Skill When Approved Means Fail." *Administrative Science Quarterly* 64(1):87–123. doi: [10.1177/0001839217751692](https://doi.org/10.1177/0001839217751692).

Experience Goods

Jens Beckert, "The Transcending Power of Goods. In Jens Beckert and Patrik Aspers (eds.), *The Worth of Goods*. Oxford: Oxford University Press, 106–128.

Michael Hutter, "Infinite surprises. On the stabilization of value in the Creative Industries." In Beckert and Aspers, eds. *The Worth of Goods*.

Jens Beckert, "Imagined Futures: Fictionality in Economic Action." Working Papers, Max Planck Institute for the Study of Societies, Cologne. 11/8.

Critique and the Dynamics of Capitalism

Luc Boltanski and Eve Chiapello, *The New Spirit of Capitalism*. London: Verso. Preface (p. ix-xvii); General Introduction (p. 3-55); Management discourse of the 1990s (p. 57-103 with special attention to p. 70-86 ("1990s: Towards a model of the firm as a network") and p. 93; skim Chapter 2 (The formation of the Projective City (p.103 to 163); skim Conclusions (p. 485-528).

Religion and Commerce

Max Weber, *The Protestant Ethic and the Spirit of Capitalism*.

Max Weber, 1985 (1906). "'Churches' and 'Sects' in North America: An Ecclesiastical Socio-Political Sketch." *Sociological Theory* 3(1):7-13.

David Stark, "The Megachurch as an Experience Good." Pp. 29-37 in Dirk Baecker and Birger P. Priddat, eds., *Ökonomie der Werte*. Marburg: Metropolis-Verlag, 2013.

James B. Twitchell, *Branded Nation*. Chapter 2, "One Market Under God." Simon and Schuster, 2004, pp. 47-108.