

MILENA TSVETKOVA

Department of Methodology

London School of Economics and Political Science

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APPOINTMENTS

Assistant Professor of Computational Social Science, Department of Methodology, London School of Economics and Political Science	2017–
Postdoctoral Researcher in Computational Social Science, Oxford Internet Institute, University of Oxford	2015–17

RESEARCH AFFILIATIONS

Affiliate, Data Science Institute, LSE	2021–
Associate Member, International Inequalities Institute, LSE	2017–
Affiliate, Social and Economic Data Science Research Unit, LSE	2017–2020
Visiting Scholar, hosted by David Sumpter, Department of Mathematics, Uppsala University	Fall 2014
Visiting Scholar, hosted by Peter Hedström, Institute for Futures Studies, Stockholm	2013–14

EDUCATION

PhD, Sociology, Cornell University	2015
MS, Sociology and Social Research (cum laude), Utrecht University	2010
MA, Social Sciences, University of Chicago	2007
BSAD, Architecture Design, Massachusetts Institute of Technology	2004

ADDITIONAL TRAINING

Postgraduate Certificate in Higher Education (Associate level), Teaching and Learning Centre, LSE	2018
Graduate Workshop in Computational Social Science, Santa Fe Institute	2013
Complex Systems Summer School, Santa Fe Institute	2009

PEER-REVIEWED JOURNAL ARTICLES

* Indicates MSc/PhD student I supervised

Kim*, J.E. and Tsvetkova, M. 2021. Cheating in online gaming spreads through observation and victimization. *Network Science* 9(4):425–442.

- Tsvetkova, M.** 2021. The effects of reputation on inequality in network cooperation games. *Philosophical Transactions of the Royal Society B* 376:20200299.
- Reiss*, M.V. and **Tsvetkova, M.** 2020. Perceiving education from Facebook profile pictures. *New Media & Society* 22(3):550–570.
- Tsvetkova, M.**, Wagner, C., and Mao, A. 2018. The emergence of inequality in social groups: Network structure and institutions affect the distribution of earnings in cooperation games. *PLoS ONE* 13(7):e0200965.
- Tsvetkova, M.**, Yasseri, T., Meyer, E., Pickering, J.B., Engen, V., Walland, P., Lüders, M., Følstad, A., and Bravos, G. 2017. Understanding human-machine networks: A cross-disciplinary survey. *ACM Computing Surveys* 50(1):12.
- García-Gavilanes, R., Møllgaard, A., **Tsvetkova, M.**, and Yasseri, T. 2017. Memory remains: Understanding collective memory in the digital age. *Science Advances* 3(4):e1602368.
- Tsvetkova, M.**, García-Gavilanes, R., Floridi, L., and Yasseri, T. 2017. Even good bots fight: The case of Wikipedia. *PLoS ONE* 12(2):e0171774.
- Tsvetkova, M.**, García-Gavilanes, R., and Yasseri, T. 2016. Dynamics of disagreement: Large-scale temporal network analysis reveals negative interactions in online collaboration. *Scientific Reports* 6:36333.
- García-Gavilanes, R., **Tsvetkova, M.**, and Yasseri, T. 2016. Dynamics and biases of online attention: The case of aircraft crashes. *Royal Society Open Science* 3:160460.
- Tsvetkova, M.**, Nilsson*, O., Öhman*, C., Sumpter, L., and Sumpter, D. 2016. An experimental study of segregation mechanisms. *EPJ Data Science* 5:4.
- Tsvetkova, M.** and Macy, M.W. 2015. The social contagion of antisocial behavior. *Sociological Science* 2:36–49.
- Macy, M.W. and **Tsvetkova, M.** 2015. The signal importance of noise. *Sociological Methods and Research* 44(2):306–328.
- Tsvetkova, M.** and Macy, M.W. 2014. The social contagion of generosity. *PLoS ONE* 9(2):e87275.
- Tsvetkova, M.** and Buskens, V. 2013. Coordination on egalitarian networks from asymmetric relations in a social game of Chicken. *Advances in Complex Systems* 16(1):1350005.
- van der Lippe, T., Frey, V., and **Tsvetkova, M.** 2013. Outsourcing of domestic tasks: A matter of preferences? *Journal of Family Issues* 34(12):1574–1597.
- Shaw, A.K., **Tsvetkova, M.**, and Daneshvar, R. 2011. The effect of gossip on social networks. *Complexity* 16(4):39–47.

BOOK CHAPTERS

- Eide, A.W., Pickering, J.B., Yasseri, T., Bravos, G., Følstad, A., Engen, V., **Tsvetkova, M.**, Meyer, E.T., Walland, P., and Lüders, M. 2016. Human-machine networks: Towards a typology and profiling framework. In *Human-Computer Interaction. Theory, Design, Development and Practice*, edited by M. Kurosu, pp. 11–22.
- Tsvetkova, M.** and Macy, M.W. 2015. The contagion of prosocial behavior and the emergence of voluntary-contribution communities. In *Social Phenomena: From Data Analysis to Models*, edited by B. Gonçalves and N. Perra, pp. 125–143.

OP-EDS

- Tsvetkova, M.** and Sumpter, D. 2016. This simple experiment shows how easy it is for society to become segregated. *The Conversation*, March 16.
- Tsvetkova, M.** and Macy, M.W. 2014. The science of ‘paying it forward’. *The New York Times*, March 16, p.12.

WORK IN PROGRESS

- Tsvetkova, M.**, Müller*, S., Vuculescu, O., Ham, H., and Sergeev, R. Social comparison increases the dispersion and predictability of effort and performance. *SocArXiv preprint*: doi:10.31235/osf.io/hjbs5. *Revise and resubmit*.
- Straub, V.J., **Tsvetkova, M.**, and Yasseri, T. The cost of coordination can exceed the benefit of collaboration in performing complex tasks. *arXiv preprint* arXiv:2009.11038. *Revise and resubmit*.
- Lietz, H., Jadidi, M., Kostic, D., **Tsvetkova, M.**, and Wagner, C. The Matthew Effect in computer science: A career study of cohorts from 1970 to 2000. *Revise and resubmit*.
- Tsvetkova, M.**, Vuculescu, O., Dinev, P., Sherson, J., and Wagner, C. Inequality and fairness with heterogenous endowments. *Under review*.
- He*, Y. and **Tsvetkova, M.** A method for estimating individual socioeconomic status of Twitter users. *arXiv preprint* arXiv:2203.11636. *Under review*.
- Almaatouq, A., Becker, J., ..., **Tsvetkova, M.**, Watts, D.J, Whiting, M.E, and Ming, Y. (24 authors). Scaling up experimental social, behavioral, and economic science. *OSF preprint*: doi:10.17605/osf.io/knvjs
- Tsvetkova, M.**, Vuculescu, O., and Sherson, J. Group distinctions and inequality. *In preparation*.
- He*, Y. and **Tsvetkova, M.** Mobile-tracked visits to millions of places reveal socioeconomic inequality of daily consumption in the United States. *In preparation*.

KEYNOTE TALKS

General Online Research Conference, online	2020
International Conference on Learning Analytics & Knowledge, online	2020
Social Simulation Conference, Stockholm, Sweden	2018
International Conference on Complex Networks, Boston, MA	2018
International Conference on Computational Social Science, Cologne, Germany	2017

OTHER INVITED TALKS

SFI Seminar, Santa Fe Institute	2022
Analytical Sociology Colloquium, European University Institute	2021
POPNET Connects Seminar, University of Amsterdam	2021
Summer Institute in Computational Social Science, University of Bologna	2021
AI4Research Seminar, Uppsala University	2021
Tech+Democracy Seminar, Birkbeck, University of London	2020

Workshop on Integrating Quant. Social, Ecological and Mathematical Sciences into Landscape Decision-Making, Isaac Newton Institute, Cambridge, UK	2020
CogX – Global Leadership Summit & Festival of AI and Breakthrough Tech, online	2020
Mitchell Centre for Social Network Analysis Seminar, University of Manchester	2020
AI Seminar, Financial Conduct Authority, London, UK	2020
Virtual Labs Workshop, University of Pennsylvania	2020
Panel on Gender Equality in Social Data Science, Sage Ocean, London, UK	2019
The Language of Cooperation Workshop, Lorenz Center, Leiden, Netherlands	2019
Summer Institute in Computational Social Science, University of Bamberg	2019
Workshop on Complex Systems Perspectives on Algorithmic Bias, ICWSM, Munich, Germany	2019
SEDS Annual Summit, London School of Economics and Political Science	2019
School of Politics and International Studies Seminar, University of Leeds	2019
B4P Seminar, University College London	2018
Sociology Seminar, University College Dublin	2018
Workshop on Running Interactive Experiments Online, Zurich, Switzerland	2018
Workshop on Mathematics for Social Activism, Uppsala University	2018
Computational Social Science Seminar, University of Pennsylvania	2018
Social Science Foo Camp, Menlo Park, CA	2018
Seminar on the Analysis of Social Processes and Structures, Paris, France	2018
Workshop on Citizen and Elite Activity on Wikipedia, Hertie School of Governance	2017
Institute for Analytical Sociology Seminar, Linköping University	2017
Summer School on Methods for Computational Social Science, Sardinia, Italy	2017
Web Science Summer School, Saint Petersburg, Russia	2017
Sociology Seminar, Nuffield College, University of Oxford	2017
Innovation, Entrepreneurship, and Inform. Systems Seminar, Aarhus University	2017
Networks and Time Workshop, Columbia University	2016
Interdisciplinary Symposium on Experiments and Models of Social Networks, Copenhagen, Denmark	2016
Cooperative Relations Seminar, Utrecht University	2011
Workshop on Networks in Economics and Sociology, Utrecht University	2010

CONFERENCE AND WORKSHOP PRESENTATIONS

The social contagion of cheating through victimization and observation: Evidence from online gaming, American Sociological Association Annual Meeting (Session on Computational Sociology), online	2020
Social comparison increases disparities in effort and performance: Evidence from online contests, International Conference on Computational Social Science, online	2020
The contagion of cheating in online gaming through victimization and observation, International Conference on Computational Social Science, online	2020
The effect of endowment and wealth visibility on inequality, International Conference on Computational Social Science, online	2020
Habitus online: Perceiving education from Facebook profile pictures, American Sociological Association Annual Meeting (Session on Digital and Social Media),	2019

New York, NY	
The effect of visibility of endowment heterogeneity and wealth on inequality, International Conference on Computational Social Science, Amsterdam, Netherlands	2019
The emergence of inequality in social groups: The effects of network structure, reputation, and punishment institutions, International Network of Analytical Sociologists Conference, Stanford, CA	2018
Inequality is higher in fixed clustered networks with punishment institutions, European Symposium Series on Societal Challenges in Computational Social Science, London, UK	2017
Dynamics of disagreement: Large-scale temporal network analysis reveals negative interactions in online collaboration, International Conference on Computational Social Science, Evanston, IL	2016
Dynamics of disagreement: Large-scale temporal network analysis reveals negative interactions in online collaboration, International Network of Analytical Sociologists Conference, Utrecht, Netherlands	2016
The dynamics of disagreement: A large-scale analysis of the Wikipedia revert network, GESIS Computational Social Science Winter Symposium, Cologne, Germany	2015
Experimental evidence for the Schelling segregation model, International Conference on Computational Social Science, Helsinki, Finland	2015
The contagion of prosocial behavior and the emergence of voluntary contribution communities, International Conference on Computational Social Science, Helsinki, Finland	2015
Web-based real-time multi-player games for social experiments, GESIS Computational Social Science Winter Symposium, Cologne, Germany	2014
The social contagion of generosity, International Network of Analytical Sociologists Conference, Stockholm, Sweden	2013
Microfoundations of inequality, International Sociological Association International Laboratory for PhD Students in Sociology, Taipei, Taiwan	2012
Mechanisms for long-tailed degree distributions in social interaction networks, International Sunbelt Social Networks Conference, Redondo Beach, CA	2012
Reciprocity as micro-foundation of (in)equality, American Sociological Association Annual Meeting (Session on Social Networks), Las Vegas, NV	2011

GRANTS

VolkswagenStiftung 92173 Grant “The Emergence of Inequality in Social Groups,” Co-PI with Andrew Mao and Claudia Wagner (€853,800)	2017–21
NSF SES-1260348 Sociology Grant “Generalized Reciprocity: Understanding the Social Contagion of Altruistic Behavior,” Co-Investigator with Michael W. Macy PI (\$115,412)	2013–14
NSF SES-1303526 Doctoral Dissertation Research Improvement Grant “The Social Contagion of Generosity,” Co-PI with Michael W. Macy (\$11,998)	2013

AWARDS AND HONORS

Excellence in Education Award, LSE	2021
Excellence in Education Award, LSE	2020
Excellence in Education Award, LSE	2018
Russell Sage Doctoral Fellowship, Cornell University	2014
Russell Sage Doctoral Fellowship, Cornell University	2011
Best Master's Thesis – finalist, Utrecht University	2011
Thanks to Scandinavia Scholarship, Cornell University	2010
Valedictorian, Graduate School of Soc. and Behav. Sciences, Utrecht University	2010
Best Student Prize, Sociology and Social Research, Utrecht University	2010
Utrecht Excellence Scholarship, Utrecht University	2009
Utrecht Excellence Scholarship, Utrecht University	2008
MSCOPE Intern at Center for the Presentation of Science, University of Chicago	2006
International House Graduate Fellowship, University of Chicago	2006
University Full-Tuition Scholarship, University of Chicago	2006
Paul E. Gray Endowed UROP, Massachusetts Institute of Technology	2004

TEACHING

Department of Methodology, LSE	2017–
<i>MY470 Computer Programming</i>	
<i>MY461 Social Network Analysis</i> (co-taught with Eleanor Power)	
<i>MY472 Data for Data Scientists</i> (co-taught with Ken Benoit)	
<i>Agent-Based Modeling</i> (workshop)	
Oxford Internet Institute, University of Oxford	2016
<i>Introduction to Python</i> (co-taught with Bernie Hogan)	
<i>Simulating Society</i> (co-taught with Taha Yasseri)	

PHD SUPERVISION

Yuanmo He (primary), Department of Methodology, LSE	2020–
Marta Pagnini (secondary), Department of Sociology, LSE	2020–
Mai Al-Naemi (secondary), Department of Management, LSE	2017–20

INSTITUTIONAL AND DEPARTMENTAL SERVICE

Department representative at Data Science Education Forum, Data Science Institute (2021)

Head of teaching in Computational Social Science (2021)

Program director for MSc in Applied Social Data Science (Summer 2019, Spring 2020)

Recruitment committee member

Assistant Professor in Computational Social Science (2019)

LSE Fellow in Computational Social Science (2019)

Research Fellow in Data Science (2018)

Assistant Professor in Computational Social Science (2017)

PROFESSIONAL SERVICE

Journal reviews

ACM Computing Surveys
Advances in Complex Systems
Aggressive Behavior
American Journal of Sociology
American Sociological Review
EPJ Data Science
European Sociological Review
Journal of Archaeological Method and Theory
Nature Communications
Nature Human Behaviour
PLOS ONE
Policy & Internet
Political Communication
Proceedings of the National Academy of Sciences
Scientific Reports
Social Forces
Social Networks
Social Science Research
Sociological Methods and Research

Grant proposal reviews

European Research Council
FWF Austrian Science Fund
UK Research and Innovation
Vienna Science and Technology Fund

Consultancies

LSE Data Analytics Career Accelerator (2021–2023)
GESIS Fall Seminar in Computational Social Science, Mannheim, Germany (2022)
Harvard & UCL Emotional Well-being and Physical Health Course, London, UK (2022)
Data Science Summer School, Berlin, Germany (2021)
Cambridge University Press (2019)
SAGE Publishing (2018)
Alfred P. Sloan Foundation (2018)

Event organization

Session on Computational and Empirical Approaches to Micro-Macro Dynamics, ASA Rationality & Society Section (2022)
Summer Institute in Computational Social Science (co-organizer), London, UK (2021)
Second Meeting of the Computational Social Science London Initiative (co-organizer) (2016)

Leadership

Council member (elected), ASA Rationality & Society Section (2021–23)
Senior program committee member, SocInfo (2022)
Program committee chair, International Conference on Computational Social Science (2019)
Senior program committee member, Int. AAI Conference on Web and Social Media (2017)

Award committees

Outstanding Article Award, ASA Rationality & Society Section (2021, 2022)

Program committees

Complex Networks (2017, 2022)

International Conference on Computational Social Science (2016, 2017, 2018, 2020, 2021)

LSE Workshop on Experimental Sociology (2021)

SocInfo (2017, 2018)

International World Wide Web Conference, Web and Society Track (2017)

Conference on Complex Systems, Computational Social Science Satellite Workshop (2016)

Connected Life (2016)

GESIS Computational Social Science Winter Symposium (2016)

International AAAI Conference on Web and Social Media (2016)