

Andrei Boutyline

aboutyl@umich.edu

Curriculum Vitae

Employment

University of Michigan		
Associate Professor of Sociology	2025	—
Assistant Professor of Sociology	2017	— 2025

Education

University of California, Berkeley	PhD	2017
Sociology	MA	2011
New York University	MA	2009
Humanities and Social Thought		
University of California, Berkeley	BA	2004
Cognitive Science, Computer Science (minor)		

Peer-Reviewed Research

Note: asterisks (*) indicate graduate student coauthors

Boutyline, Andrei, and Alina Arseniev-Koehler. 2025. "Meaning in Hyperspace: Word Embeddings as Tools for Cultural Measurement." *Annual Review of Sociology* 51 (Volume 51, 2025):89–107. doi:10.1146/annurev-soc-090324-024027

Boutyline, Andrei, Alina Arseniev-Koehler(*), and Devin Cornell(*). 2023. "School, Studying, and Smarts: The Gender of Education Across 80 Years of American Print Media, 1930-2009." *Social Forces*. doi.org/10.1093/sf/soac148

Boutyline, Andrei. 2022. "Holding a Position: Public Opinion as Cognition in a Disorganized Field." *Poetics*. doi.org/10.1016/j.poetic.2022.101710

Boutyline, Andrei, and Laura Sauter(*). 2021. "Cultural Schemas: What They Are, How to Find Them, and What to Do Once You've Caught One". *American Sociological Review* 86, no. 4 (August): 728-758. doi.org/10.1177/00031224211024525

— Honorable mention for Outstanding Recent Contribution in Social Psychology Award, ASA Social Psychology section, 2023

— Honorable mention for Clifford Geertz Prize for Best Article, ASA Culture Section, 2022

Boutyline, Andrei, Devin Cornell(*), and Alina Arseniev-Koehler(*). 2021. "All Roads Lead to Polenta: Cultural Attractors at the Junction of Public and Personal Culture." *Sociological Forum*. doi.org/10.1111/socf.12760

— Commissioned article for special issue on culture & cognition.

- Boutyline, Andrei and Stephen Vaisey. 2017. "Belief Network Analysis: A Relational Approach to Understanding the Structure of Attitudes." *American Journal of Sociology* 122, no. 5 (March): 1371-1447. doi.org/10.1086/691274
- Boutyline, Andrei. 2017. "Improving the Measurement of Shared Cultural Schemas with Correlational Class Analysis: Theory and Method." *Sociological Science* 4: 353-393. May 29, 2017. doi:10.15195/v4.a15
- Graduate student paper award, ASA Mathematical Sociology Section, 2015
 - Honorable mention for graduate student paper award, ASA Methodology Section, 2016
- Boutyline, Andrei and Robb Willer. 2017. "The Social Structure of Political Echo Chambers: Variation in Ideological Homophily in Online Networks." *Political Psychology* 38, no. 3 (June): 551-569. doi.org/10.1111/pops.12337

Work in Progress

- "Forging Better Axes: Methods for Estimating Semantic Dimensions with Word Embeddings", with Ethan Johnston(*). Revise and resubmit at *Sociological Methods and Research*.
- "Semantic Structure in Large Language Model Embeddings," with Austin Kozlowski and Callin Dai (*). Preprint: <https://arxiv.org/abs/2508.10003>
- "Discriminating Digital Doubles or Mere Prejudiced Parrots: Do Large Language Models Develop Coherent Stereotypes of Social Groups or Simply Parrot Biased Judgements?" with Alina Arsniev-Koehler
- "MMM: A More Meaningful Measure of Document – Concept Engagement via Language Models", with Alina Arsniev-Koehler and Ethan Johnston(*)

Patents

- Nepomniachtchi, Grigori and Andrei Boutyline. Two patents for "Method for Applying Signature Simplicity Analysis for Improving the Accuracy of Signature Validation."
- U.S. Patent No. 8,452,098 (2013) and No. 7,787,695 (2010)

Selected Awards and Honors

- American Sociological Association, Social Psychology Section*. Honorable mention, outstanding recent contribution in social psychology award. 2023.
- American Sociological Association, Culture Section*. Honorable mention, Clifford Geertz prize for best article. 2022.
- American Sociological Association, Section on Methodology*. Honorable mention, best paper award for graduate students. 2016.
- American Sociological Association, Mathematical Sociology Section*. Winner, best paper award for graduate students. 2015.
- National Science Foundation Graduate Research Fellowship Program*. 2011 – 2014. (\$92,000).

National Science Foundation Integrated Graduate Education Research Traineeship in Politics, Economics, Psychology, and Public Policy (NSF-IGERT). 2010 – 2011. (\$30,000).

The Herbert and Rose Hirschhorn Thesis Award. Graduate School of Arts and Science, New York University. 2009.

Invited Talks

- “Meaning in Hyperspace: Word Embeddings as Models of Culture and Cognition”
 - *Management and Organizations Seminar*, Ross School of Business, U. of Michigan, Feb. 2025.
 - Keynote talk, *XXII Annual International «Vectors» Conference*, April 2024
 - *Worldview Lab*, Kenan Institute of Ethics, Duke University. May 2024
- “Taming the Wild West: Increasing the Reliability and Validity of Cultural Measurement via Word Embeddings”
 - *Polarization and Social Change Lab (PASCL)*. Sociology Dept, Stanford. May 2023.
- “Cultural Schemas: What They Are, How to Find Them, and What to Do Once You've Caught One”.
 - *Culture and Politics Workshop*. Pennsylvania State University. October 2020.
- “School, Studying, and Smarts: The Gender of Education Across 80 Years of American Print Media, 1930-2009”
 - *The Knowledge Lab*. University of Chicago. February 2020.
- “What Explains The Systematic Character of Political Attitudes? Evidence from Two Novel Methods for Structural Analysis of Culture”
 - *Computational Sociology Working Group*. UCLA. April 2017.
 - *Theory Workshop*. Sociology Dept., University of Iowa. January 2017.
 - *Morality and Hierarchy Workshop*. Sociology Dept., Stanford University. October 2016.
 - *Duke Network Analysis Center*. Duke University. February 2016.
- “The Field Structure of Public Opinion: Theory and Methods for a Cognitive Macro-Sociology”
 - *Culture Workshop*. Sociology Department, Duke University. April 2014.
 - *Laboratory for Social Research*. Sociology Dept., Stanford University. November 2013.

Selected Conference Presentations

- “Meaning in Hyperspace: Word Embeddings as Models of Culture and Cognition”
 - *American Sociological Association conference*. Chicago, IL. Aug. 2025.
 - *Sociological Science conference*. Ithaca, NY. Jun. 2025
- “Forging Better Axes: A New Analogy-Based Technique for Improving Cultural Measurement via Word Embeddings”
 - *American Sociological Association conference*. Philadelphia, PA. Aug. 2023.
- “Cultural Schemas: a Conceptual Re-Oriented (with Free How-To Guide)”
 - *American Sociological Association conference*. Philadelphia, PA. Aug. 2019. (*invited session*)
- “To Hold a Position: Public Opinion as Cognition in a Disorganized Field”
 - *American Sociological Association conference*. Montreal, QC. Aug. 2017.
- “The Unbearable Linearity of Being: Measuring Complexity of ‘Culture-in-the-Mind’”
 - *Culture & Cognition Mini-Conference (part of ESS)*. Philadelphia, PA. Feb. 2017.

“Towards a Cognitive Macro-Sociology of Culture”

— *American Sociological Association annual meeting*. Seattle, August 2016 (invited panel)

“Belief Network Analysis: Findings from a Novel Structural Methodology”

— *American Sociological Association annual meeting*. Chicago, IL. August 2015.

“Improving the Measurement of Shared Cultural Schemas with Correlational Class Analysis”

— *American Sociological Association annual meeting*. San Francisco, CA. August 2014.

“Belief Network Analysis: A Relational Approach to Understanding the Structure of Attitudes”

— *American Sociological Association annual meeting*, August 2012. Denver, CO.

— *Political Networks conference*, June 2012. Boulder, CO.

— *International Network for Social Network Analysis conference (Sunbelt)*, February 2012. Redondo Beach, CA.

“The Social Structure of Political Echo Chambers: Ideology and Political Homophily in Online Communication Networks”

— *Group Processes conference*. August 2013. New York, NY.

— *American Sociological Association annual meeting*, August 2011. Las Vegas, NV.

— *Political Networks conference*, June 2011. Ann Arbor, MI.

— *European Network of Analytical Sociologists conference*, June 2011. Paris, Fr.

— *International Network for Social Network Analysis (Sunbelt)*, Feb 2011. St. Pete Beach, FL.

Teaching

University of Michigan, Dept. of Sociology

Graduate

— *Culture and Cognition*

Winter 2018, 2020, 2023

— *Social Network Analysis*

Winter 2019

— *Measuring and Modeling Culture workshop*

Fall 2019, Winter 2020, 2022

Undergraduate

— *Research Methods*

Winter 2019, Fall 2019, F 2022,

F 2023, W 2023, W 2024,

F 2024, W 2025, W 2026

— *Culture and Cognition*

Winter 2020, 2022, 2023, 2025, 2026

— *Introduction to Statistics*

Fall 2017

Additional teaching interests

— *Sociology of Culture*

(G, UG)

— *Computational Social Science*

(G, UG)

— *Computational Text Analysis*

(G)

— *Research Methods*

(G)

— *Theory Construction*

(G)

Departmental Service

University of Michigan, Dept. of Sociology

Administration	Director of Graduate Admissions & Recruitment	2025 —
Committee member	<i>Culture and Knowledge Preliminary Exam Comm.</i>	2019–‘20, ‘23–‘24
	<i>Comm. on Administration of Graduate Affairs</i>	2018–‘19, ‘23
	<i>Colloquium Committee</i>	2019–‘20
	<i>Committee on Graduate Admissions</i>	2017–‘18

Professional Service

Ad-hoc reviewer	<i>American Journal of Sociology, American Sociological Review, Social Forces, American Journal of Political Science, Journal of Personality and Social Psychology, Demography, Poetics, Sociological Methodology, Sociological Methods & Research, Sociological Theory, Social Networks, Social Psychology Quarterly, Socio-Economic Review, British Journal of Sociology, Social Science Research, Socius, and other venues</i>	
Maintainer	<i>corclass R</i> package for Correlational Class Analysis (on CRAN)	
Member	<i>American Sociological Association</i>	
Session Organizer	2024. “Computational Approaches to Culture and Cognition”. <i>ASA Social Psychology Section</i> .	
Committee member	2020. Outstanding graduate student paper award committee. <i>ASA Mathematical Sociology section</i> .	