

# Andrei Boutyline

aboutyl@umich.edu

## Curriculum Vitae

### Employment

University of Michigan Assistant Professor of Sociology	Fall 2017	—	...
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### Education

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

### Peer-Reviewed Research

Note: asterisks (\*) indicate graduate student coauthors

Boutyline, Andrei, and Alina Arsniev-Koehler. *Forthcoming*. “Meaning in Hyperspace: Word Embeddings as Tools for Cultural Measurement”. *Annual Review of Sociology*. (Commissioned article)

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 Arsniev-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*
- "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”
  - *Advances in Comparative Culturology*, Lingnan University, Hong Kong, May 2025 (*upcoming*)
  - *Management and Organizations Seminar*, Ross School of Business, University of Michigan, February 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

- “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-Orientation (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, Fall 2022, Fall 2023, Winter 2023, Fall 2024, Winter 2025
- *Culture and Cognition* Winter 2020, 2022, 2023, 2025
- *Introduction to Statistics* Fall 2017

### Additional teaching interests

- *Sociology of Culture* (G, Undergraduate)
- *Computational Social Science* (Graduate, Undergraduate)
- *Computational Text Analysis* (Graduate)
- *Research Methods* (Graduate)

## Professional Service

- Ad-hoc reviewer *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*
- Maintainer *corclass R package for Correlational Class Analysis (on CRAN)*
- Member *American Sociological Association*
- Session Organizer 2024 (upcoming). “Computational Approaches to Culture and Cognition”. *ASA Social Psychology Section*.

Committee member    2020. Outstanding graduate student paper award committee.  
ASA Mathematical Sociology section.

## Departmental Service

*University of Michigan, Dept. of Sociology*

Administration	Director of Graduate Admissions & Recruitment	July 2024 —
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