

Douglas R. Guilbeault

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Interests: Categorization, Creativity, Social Networks, Collective Intelligence, Online Experiments, Social Media

Education

University of Pennsylvania (2015-present)

Ph.D. Candidate, The Annenberg School for Communication
Dissertation: "The Network Dynamics of Category Formation"
The Network Dynamics Group | Advisor Damon Centola

University of British Columbia (2013-2015)

M.A., Cognitive Linguistics | w. Distinction

University of Waterloo (2009-2013)

Joint Honors, Philosophy & Rhetoric, minor in Cognitive Science | w. Distinction

Peer Reviewed Articles

- Guilbeault, Douglas**, Joshua Becker, and Damon Centola. 2018. [Social learning and partisan bias in the interpretation of climate trends](#). *Proceedings of the National Academy of the Sciences* 115(39): 9714-9719.
- Guilbeault, Douglas**. 2018. [Digital Marketing in the Disinformation Age](#). *The Journal of International Affairs* 71(1): 33-43.
- Gorwa, Rob, and **Douglas Guilbeault**. 2018. [Unpacking the Social Media Bot: A Typology to Guide Research and Policy](#). *Policy & Internet*.
- Guilbeault, Douglas**, Joshua Becker, and Damon Centola. 2018. [Complex Contagions: A Decade in Review](#). In S. Lehmann & Y. Ahn (Eds.), *Spreading Dynamics in Social Systems*. Springer Nature. pp. 3-25.
- Guilbeault, Douglas**. 2017. [How Politicians Express Different Viewpoints in Gesture and Speech Simultaneously](#). *The Journal of Cognitive Linguistics* 28(3): 417-447.
- Guilbeault, Douglas**. 2016. [Growing Bot Security: An Ecological View of Bot Agency](#). *The International Journal of Communication* 10: 5003-5021.

Journalism (Selected)

- Gorwa, R. & **Douglas Guilbeault**. 2017. [Tinder Nightmares: The Promise and Peril of Political Bots](#). *Wired*.
- Guilbeault, Douglas** & Samuel Woolley. 2016. [How Twitter Bots are Shaping the Election](#). *The Atlantic*.

Book Chapters

- Guilbeault, Douglas** & Joel Finkelstein. 2018. [Human-bot Ecologies](#). In Z. Papacharissi (Ed.), *A Networked Self: Human Augmentics, Artificial Intelligence, Sentience*. Routledge.
- Woolley, Sam & **Douglas Guilbeault**. 2018. [United States: Manufacturing Consensus Online](#). In S. Woolley & P. Howard (Eds.), *Computational Propaganda: Political Parties, Politicians, and Political Manipulation on Social Media*. Oxford University Press. Pg. 185-212.

Awards

- Facebook Content Moderation Policy Research Award**. 2019. [Networked Crowdsourcing: An Online Experiment in Content Moderation](#). w. Damon Centola. (\$100,000)
- Computational Modeling Prize in Applied Cognition**. 2019. The Social Network Dynamics of Category Formation. *The 41st Annual Meeting of the Cognitive Science Society*. w. Andrea Baronchelli and Damon Centola. (\$1,500)
- Best paper award**. 2018. Bipartisan Social Networks Reduce Political Bias in the Interpretation of Climate Trends. *The International Conference on Computational Social Science*. Kellogg, Northwestern, July. w. Joshua Becker and Damon Centola. (\$1,000)

Dissertation award. 2018. The Network Dynamics of Interdisciplinary Research. *The Institute for Research on Innovation and Science*, The University of Michigan. (\$15,000)

Top student paper award. 2018. What should we do about Political Automation? Challenges for Policy and Research. Communication & Technology Division, *The International Communication Association*, Prague, March. w. Robert Gorwa.

The Philosophy Award for Distinguished Achievement, University of Waterloo, 2014.

The Albert Shaw Poetry Prize, University of Waterloo, 2012.

Scholarships & Fellowships

Research Fellowship at the Institute for the Future (2018). (\$10,000)

Joseph-Armand Bombardier Canadian Graduate Scholarship from the Social Science and Humanities Research Council of Canada (SSHRCC) – 2016-2020. (\$80,000)

The Tina and Morris Wagner Foundation Fellowship, UBC, 2014. (\$12,500)

The Langridge Graduate Scholarship in Humanities, UBC, 2014. (\$3,500)

Joseph-Armand Bombardier Canadian Master's Scholarship from the Social Science and Humanities Research Council of Canada (SSHRCC) – 2013-2014. (\$20,000)

Ron Bates Bursary for Academic Achievement, 2014. (\$500)

Faculty of Arts Graduate Award, UBC, 2013. (\$13,000)

University of Waterloo Merit Scholarship, 2009. (\$1000)

Research Grants

Guilbeault, Douglas and Joshua Becker. 2018. *The Collective Intelligence Dynamics of Fake News*. The Gates Foundation and the Institute for the Future. w. Joshua Becker. (\$20,000)

Guilbeault, Douglas, Jahani E., Gallagher N., Cavelli N., Leng Y., and C. Bail (equal authorship). 2018. *The Outsider Effect on Polarization Dynamics in Social Networks*. Russell Sage Foundation, in association with the Summer Institute for Computational Social Science, Duke University, 2018. (\$10,000)

Centola, Damon, **Guilbeault D.**, Ayasola J., Audrain J., and J. Becker. 2017. *Using Social Networks to Improve Scientific Communication about Tobacco Use*. NIH grant. (\$50,000)

Travel Grants

Student Travel Award. 2019. Funding to present "The Social Network Dynamics of Category Formation" at the 41st Annual Meeting of the Cognitive Science Society, Montreal, Canada. (\$500)

The Culture Scholars Grant. Annenberg School for Communication. Funding to present "Defending Against Bots and Computational Propaganda" at *Rightscon*, Brussels, UK. March 31st, 2017. (\$1,000)

Courses/Certificates

The Santa Fe Summer Institute in Complex Systems, New Mexico, USA. 2019.

SICSS (Summer Institute in Computational Social Science), Duke University, USA. 2018.

Conference Papers (2018-2019)

"The Network Dynamics of Category Formation." *The Nagymaros Conference* at the Stanford Graduate School of Business, August 2019. w. Andrea Baronchelli and Damon Centola.

"The Dynamic Construction of Meaning in Social Networks." *The American Sociology Association*, August 2019. w. Andrea Baronchelli and Damon Centola.

"Social Network Dynamics in the Construction of Meaning: An Experimental Study." *The 41st Annual Meeting of the Cognitive Science Society*, July 2019. w. Andrea Baronchelli and Damon Centola. (***Best paper award**).

"The Social Network Dynamics of Category Formation." *The International Conference on Computational Social Science*, July 2019. w. Andrea Baronchelli and Damon Centola.

"Nuance matters: Collective Intelligence Dynamics in the Spread of Misinformation." *The International Conference on Computational Social Science*, July 2019. w. Joshua Becker and Ned Smith.

- "The Crowd Classification Problem." *The International Conference on Computational Social Science*, July 2019. w. Joshua Becker and Ned Smith.
- "Nuance matters: Collective Intelligence Dynamics in the Spread of Misinformation." *The 7th ACM Collective Intelligence Conference*, June 2019. w. Joshua Becker and Ned Smith.
- "How Meaning Emerges in Coordination Systems." *The International Meeting on Experimental and Behavioral Social Sciences*, May 2019. w. Andrea Baronchelli and Damon Centola.
- "How Network Modularity Mediates the Impact of Misinformation." *The International Communication Association*, May 2019. w. Eric Forbush, Jacob Gursky, and Damon Centola.
- "The Crowd Classification Problem." *The International Communication Association*, May 2019. w. Joshua Becker and Ned Smith.
- "Social categories and the network dynamics of political bias in an online social learning task." *The American Sociology Association*, Aug. 2018. w. Damon Centola and Joshua Becker.
- "Bipartisan Social Networks Reduce Political Bias in the Interpretation of Climate Trends." *The International Conference on Computational Social Science*, July 2018. w. Damon Centola and Joshua Becker (***Best paper award**).
- "Understanding Bots for Policy and Research: Challenges, Methods, and Solutions." *The International Communication Association*, March 2018. w. Rob Gorwa.
- "Using Collective Intelligence to Mitigate Motivated Reasoning in Climate Change Communications." *CompleNet*, May 2018.

Invited Lectures (2017-2019)

- "An Experimental Demonstration of Cross-cultural Variation in Category Formation." Invited lecture for the *Common Ground Visiting Lecturer Series* in the Linguistics Department @ UPenn. September 2019.
- "Radical Emergence and the Network Dynamics of Category Creation." Invited lecture for *The Social and Behavioral Science Initiative* @ UPenn. March 2019.
- "Resolving the Paradox between Content Moderation and Freedom of Speech." Invited lecture for seminar on *Regulating and "Self-Regulating" Social Media* (COMM 817) taught by Monroe Price @ Annenberg, UPenn. Feb. 2019.
- "Harnessing Social Networks to Eliminate Motivated Reasoning ." Invited lecture for seminar on *Computational Social Science* (COMM 553) taught by Damon Centola @ Annenberg, UPenn. Feb. 2019.
- "Predicting Category Emergence." Invited lecture for the *Human Behavior and Origins Lab* led by Coren Apicella in the Psychology Department, UPenn. Feb. 2019.
- "The Network Dynamics of Belief Polarization." Invited lecture for class on *Internet & Democracy* (COMM 441) taught by Yph Lelkes @ Annenberg, UPenn.
- "Using Social Networks to Enhance Classification in Crowdsourcing Platforms." Invited talk at *Zooniverse*. January 9, 2019.
- "Automating Politics and the Politics of Automation." *TTI Vanguard: Advanced Technology Series*. Tyson's Corner. September 15-17, 2017.
- "Computational Persuasion and Bots." Invited lecture for Dr. Chrsyanne Dimarco's CS 698 "Rhetoric, Argument, & Machines," a graduate level course in the computer science department. The University of Waterloo. April 3rd, 2017.
- "Defending Against Bots and Computational Propaganda." Invited workshop for *RightsCon, Brussels, UK*. March 31st, 2017.

Teaching

COMM 459 (Spring 2019) – Social Networks and the Spread of Behavior – *I taught a 2-hour undergraduate seminar each week on how to build models in Netlogo to simulate social network dynamics in the spread of behavior.*

COMM 448 (Fall 2018) – Practicum in Online Experiments – *I taught a weekly seminar that guided students through the design, implementation, and analysis of a novel online social network experiment.*

Service

Reviewer for *Nature Communications*, *The Fulbright Fellowship*, *Social Media and Society*, *Language and Cognition*, *The Journal of Big Data*, *The Journal of Pragmatics*.

Researcher for the [Transatlantic Working Group](#) on Content Moderation Online and Freedom of Expression, organized by the Annenberg Public Policy Center and the Institute for Information Law at the University of Amsterdam. For coverage, see [here](#).

Professional Experience

Consultant: The Annenberg Public Policy Center, The Institute for Information Law at the University of Amsterdam, Google, The Oxford Internet Institute, The Institute for the Future, The Campaign Legal Center.