

Jiangtian Li

jiangtianli91@gmail.com

Academic Positions

Postdoctoral Fellow, Department of Linguistics, University of Toronto 2025-
Advisor: Daphna Heller

Postdoctoral Fellow, Department of Psychology, University of Toronto Scarborough 2020-2025
Advisor: Blair Armstrong

Education

PhD in Philosophy, Western University 2016-2020
Advisor: Robert Stainton
Dissertation: On Polysemy: A Philosophical, Psycholinguistic, and Computational Study

Research Associate, Department of Psychology, Brain and Mind Institute, Western University 2017-2020
Advisor: Marc Joanisse

MA in Philosophy, Western University 2015-2016
Advisor: Robert Stainton
Thesis: Names are Also Polysemous

BA in Philosophy, Minzu University of China 2009-2013
Advisor: Jixuan Zhang
Thesis: Truth and Meaning — a Defense of Propositional Deflationism

Areas of Specialization and Competence

Areas of Specialization: Philosophy of Language and Mind, Cognitive Science of Language, and Computational Linguistics

Areas of Competence: Philosophy of Cognitive Science, Natural Language Processing

Publications

Peer-Reviewed Journal Articles

Li, J., & Armstrong, B. C. (2025). Issues of generalization from unreliable or unrepresentative stimuli: Broad lessons from lexical ambiguity. *Open Mind*, 9, 1185–1250. <https://doi.org/10.1162/opmi.a.21>

Li, J. (2024). Semantic Minimalism and the Continuous Nature of Polysemy. *Mind & Language*, 1–26. <https://doi.org/10.1111/mila.12509>

Li, J., & Armstrong, B. C. (2024). Probing the Representational Structure of Regular Polysemy via Sense Analogy Questions: Insights from Contextual Word Vectors. *Cognitive Science*, 48(3), e13416. <https://doi.org/10.1111/cogs.13416>

Li, J., & Joanisse, M. F. (2021). Word Senses as Clusters of Meaning Modulations: A Computational Model of Polysemy. *Cognitive Science*, 45(4), e12955. <https://doi.org/10.1111/cogs.12955>

Peer-Reviewed Proceedings Articles

Li, J., & Armstrong, B. C. (2024). Issues of Generalization from Unreliable or Unrepresentative Psycholinguistic Stimuli: A Case Study on Lexical Ambiguity. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 46. <https://escholarship.org/uc/item/52c2s25s> (Among the top 19% of all submissions)

Li, J., & Armstrong, B. C. (2023). Probing the Representational Structure of Regular Polysemy in a Contextual Word Embedding Model via Sense Analogy Questions. *Proceedings of the Annual Meeting of the Cognitive Science Society* 45. <https://escholarship.org/uc/item/300318x1> (Among the top 17.7% of all submissions)

Books

Li, J., & Armstrong, B. C. (2025). Lexical Ambiguity: An Interdisciplinary Exploration and Possible New Directions. Submitted for review at the University of Toronto Press.

Dissertation

Li, J. (2020). On Polysemy: A Philosophical, Psycholinguistic, and Computational Study. *Electronic Thesis and Dissertation Repository*. 7282. <https://ir.lib.uwo.ca/etd/7282>

Academic Presentations

Li, J.*, Armstrong, B. C., & Xu, Y. (2025). Discovering Regularity and mechanisms of Word Sense Acquisition through Time. UCL–UoT Workshop on Word Meaning and Ambiguity, London, UK.

Li, J.*, Armstrong, B. C., & Xu, Y. (2025). Discovering Regularity in Word Sense Acquisition through Time. 55th Annual Meeting of the Society for Computation in Psychology, Denver, USA.

Li, J.*, Armstrong, B. C., & Xu, Y. (2025). Discovering Regularity in Word Sense Acquisition through Time. UCL–UoT Workshop on Word Meaning and Ambiguity, Toronto, Canada.

Armstrong, B. C.*, & Li, J. (2025). Neural Network Model insights into Lexical Ambiguity. Invited Symposium Presentation at the Experimental Psychology Society (UK), Lancaster, UK.

Li, J.* (2024) Issues of Generalization from Unreliable or Unrepresentative Psycholinguistic Stimuli: A Case Study on Lexical Ambiguity. Presented at *Cognitive Science of Language (CSoL)* research group, University of Toronto

Li, J.*, & Armstrong, B. C. (2024) Issues of Generalization from Unreliable or Unrepresentative Psycholinguistic Stimuli: A Case Study on Lexical Ambiguity. Presented at *Annual Meeting of the Cognitive Science Society*, Rotterdam, Netherlands (Among the top 19% of all submissions)

Li, J.*, & Armstrong, B. C. (2023) Probing the Representational Structure of Regular Polysemy in a Contextual Word Embedding Model via Sense Analogy Questions. Presented at *Annual Meeting of the Cognitive Science Society*, Sydney, Australia (Among the top 17.7% of all submissions)

Li, J.* (2021) Polysemy as Clusters of Meaning Modulations. Presented at *Language and Cognition Lab*, UC San Diego

Li, J.* (2020) On Polysemy: A Philosophical, Psycholinguistic, and Computational Study. Presented at *Psycholinguistics* research group, University of Toronto

Journal and Conference Reviews

Psychonomic Bulletin & Review, Language Learning, Behavior Research Methods, Cognitive Science, Applied Psycholinguistics, Canadian Journal of Experimental Psychology, Quarterly Journal of Experimental Psychology, Natural Language Processing (Cambridge), Humanities & Social Sciences Communications, Annual Meeting of the Cognitive Science Society

Grant Reviews

National Science Foundation 2022

Academic Activities

Member of the Committee of Session & Technical Chairs of CogSci 2022 2022
Graduate Research Assistant at the University of Western Ontario 2020
Commenter at UWO Graduate Conference in Philosophy of Mind, Language, and Cognitive Science 2018
Commenter at UWO Graduate Conference in Philosophy of Mind, Language, and Cognitive Science 2017
Attended the North American Summer School on Logic, Language, and Information (NASSLLI) 2016
Assistant Editor in Philosophy of Language, PhilPapers 2015-2016

Grants, Honors & Awards

Western Graduate Research Scholarship ($\approx \$18k$ each year) 2015-2020
Chair's Entrance Scholarship (\$1000) 2015
Ranked 1st in Philosophy Summer School in China and awarded fellowship (£3000) 2014
Secondary Professional Scholarship 2013
Hong Kong Xinshan Scholarship 2010

Course Instruction

Introduction to Philosophy of Mind, University of Western Ontario 2019

Guest Lecturing

Computer in Linguistics, University of Toronto 2023
Philosophy of Mind, University of Western Ontario 2019
Introduction to Philosophy of Language, University of Western Ontario 2017

Teaching Assistantships

Philosophical Writing and Methodology, University of Toronto 2024
Philosophy of Neuroscience, University of Western Ontario 2019
Understanding Science, University of Western Ontario 2018
Critical Thinking, University of Western Ontario 2017-2018
Introduction to Philosophy of Language, University of Western Ontario 2017

Languages and Professional Skills

Languages: English (fluent), Mandarin (native), Japanese (fluent)

Computational Skills: Python, R, LaTex, JavaScript, PyTorch, Psychopy