

Veronica Boyce

vboyce@mit.edu or 650-933-0841

EDUCATION

Stanford University	Stanford, CA
Doctor of Philosophy in Psychology	September 2025
Dissertation: <i>Constraints on the emergence and interpretability of linguistic conventions</i>	
Massachusetts Institute of Technology	Cambridge, MA
Bachelor of Science in Brain & Cognitive Science	June 2019

EMPLOYMENT

MIT, Computational Psycholinguistics Lab	Cambridge, MA
Postdoctoral Fellow on NSF SPRF fellowship	Jan 2026 – present
Stanford University, Language and Cognition Lab	Stanford, CA
Postdoctoral Researcher	Sep 2025 – Jan 2026
MIT, Computational Psycholinguistics Lab	Cambridge, MA
Research Support Associate	June 2019 – July 2020

PUBLICATIONS

-
- V. Boyce, R. Z. Sparks, and M. C. Frank (2026). “Preschoolers can coordinate with each other to communicate about novel referents”. *PsyArxiv preprint*. Preprint at osf.io/preprints/psyarxiv/t76a5_v1.
- V. Boyce, A. Acharya, and M. C. Frank (2025). “Use of communication channels in 2x2 strategic games”. *unpublished white paper*. osf.io/preprints/psyarxiv/y6ahw_v1.
- M. C. Frank, V. A. Marchman, C. A. Bergey, V. Boyce, M. Braginsky, G. Kachergis, J. Mankewitz, S. Meyland, B. Prystawski, N. Ram, R. Sparks, A. Steffan, A. Tan, and M. Zettersten (2025). “Continuous developmental changes in word recognition support language learning across early childhood”. *eLife*. Preprint at osf.io/dtv2f_v1.
- L. Röseler, L. Wallrich, H. Hartmann, L. Altegoer, V. Boyce, S. M. Field, J. Goltermann, J. Hüffmeier, C. R. Pennington, M.-M. Pittelkow, P. Silverstein, D. van Ravenzwaaij, and F. Azevedo (2025). “Handbook on Conducting Reproduction and Replication Studies”.
- V. Boyce, R. Hawkins, N. D. Goodman, and M. C. Frank (2024). “Interaction Structure Constrains the Emergence of Conventions in Group Communication”. *PNAS*.
- V. Boyce, B. Prystawski, A. B. Abutto, E. M. Chen, Z. Chen, H. Chiu, I. Ergin, A. Gupta, C. Hu, B. Kemmann, N. Klevak, V. Y. Q. Lua, M. Mazzaferro, K. Mon, D. Ogunbamowo, A. Pereira, J. Troutman, S. Tung, R. Uricher, and M. C. Frank (2024). “Estimating the replicability of psychology experiments after an initial failure to replicate”. *Collabra: Psychology*.
- A. Chuey, V. Boyce, C. Anjie, and M. C. Frank (2024). “Conducting Developmental Research Online vs. in-Person: A Meta-Analysis”. *Open Mind*.
- M. Soderstrom, J. Rocha-Hidalgo, L. E. Muñoz, A. Bochynska, J. F. Werker, B. Skarabela, A. Seidl, Y. Ryjova, J. L. Rennels, C. E. Potter, et al. (2024). “Testing the relationship between preferences for infant-directed speech and vocabulary development: A multi-lab study”. *Journal of child language*.

- V. Boyce** and R. Levy (2023). “A-Maze of Natural Stories: Comprehension and Surprisal in the Maze Task”. *Glossa Psycholinguistics*.
- V. Boyce**, M. Mathur, and M. C. Frank (2023). “Eleven Years of Student Replication Projects Provide Evidence on the Correlates of Replicability in Psychology”. *Royal Society Open Science*.
- M. Zettersten, D. Yurovsky, T. L. Xu, S. Uner, A. S. M. Tsui, R. M. Schneider, A. N. Saleh, S. C. Meylan, V. A. Marchman, J. Mankewitz, K. MacDonald, B. Long, M. Lewis, G. Kachergis, K. Handa, B. deMayo, A. Carstensen, M. Braginsky, **V. Boyce**, N. S. Bhatt, C. A. Bergey, and M. C. Frank (2023). “Peekbank: An Open, Large-Scale Repository for Developmental Eye-Tracking Data of Children’s Word Recognition”. *Behavior Research Methods*.
- V. Boyce**, R. Futrell, and R. P. Levy (2020). “Maze Made Easy: Better and Easier Measurement of Incremental Processing Difficulty”. *Journal of Memory and Language*.

CONFERENCE PAPERS

- V. Boyce**, B. Prystawski, A. W. Tan, and M. C. Frank (2025). “Idiosyncratic but not opaque: Linguistic conventions formed in reference games are interpretable by naïve humans and vision–language models”. Poster, preprint at https://osf.io/7d6sv_v1.
- V. Boyce**, R. Sparks, Y. Mofor, and M. C. Frank (2025). “Preschoolers can form conventional pacts with each other to communicate about novel referents”. Poster, https://osf.io/dpgfw_v1.
- A. W. M. Tan, B. Prystawski, **V. Boyce**, and M. C. Frank (2025). “Context informs pragmatic interpretation in vision-language models”. *CogInterp workshop NeurIPS 2025*. Poster, preprint at arxiv.org/pdf/2511.03908.
- V. Boyce** and M. C. Frank (2023). “Communicative Reduction in Referring Expressions within a Multi-Player Negotiation Game”. *Proceedings of the Annual Meeting of the Cognitive Science Society*. Poster.
- V. Boyce**, R. Hawkins, N. Goodman, and M. C. Frank (2022). “Two’s Company but Six Is a Crowd: Emergence of Conventions in Multiparty Communication Games”. *Proceedings of the Annual Meeting of the Cognitive Science Society*. Talk.
- J. Mankewitz, **V. Boyce**, B. Waldon, G. Loukatou, D. Yu, J. Mu, N. D. Goodman, and M. C. Frank (2021). “Multi-Party Referential Communication in Complex Strategic Games”. *Meaning in Context: Pragmatic Communication in Humans and Machines workshop. NeurIPS*. PsyArXiv.
- M. Zettersten, C. A. Bergey, N. S. Bhatt, **V. Boyce**, M. Braginsky, A. Carstensen, B. deMayo, G. Kachergis, M. Lewis, B. Long, K. MacDonald, J. Mankewitz, S. C. Meylan, A. N. Saleh, R. M. Schneider, A. S. M. Tsui, S. Uner, T. L. Xu, D. Yurovsky, and M. C. Frank (2021). “Peekbank: Exploring Children’s Word Recognition through an Open, Large-Scale Repository for Developmental Eye-Tracking Data”. *Proceedings of the Annual Meeting of the Cognitive Science Society*.
- V. Boyce**, A. Aravind, and M. Hackl (2017). “Lexical and Syntactic Effects on Auxiliary Selection: Evidence from Child French”. *Boston University Conference on Language Development*. Talk.

CONFERENCE PRESENTATIONS

- V. Boyce**, A. W. M. Tan, J. Mankewitz, F. Feng, B. Fernandez, R. Fried, B. Prystawski, M. C. Frank, and R. D. Hawkins (2026). “Refbank: an open repository of iterated reference games”. The 39th Annual Conference on Human Sentence Processing. Poster.
- V. Boyce** and R. P. Levy (2025). “Linguistic, but not visual, discourse context modulates syntactic parsing in the Maze”. The 38th Annual Conference on Human Sentence Processing. Poster.

- V. Boyce**, B. Prystawski, A. W. Tan, and M. C. Frank (2025). “Context matters: History and informativity affect understanding of opaque references”. The 38th Annual Conference on Human Sentence Processing. Poster.
- J. Vigly, **V. Boyce**, M. Socolof, J. Michaelov, T. von der Malsburg, and R. Levy (2025). “Implicit gender bias in linguistic descriptions for expected events: The case of the 2024 United States presidential election”. The 38th Annual Conference on Human Sentence Processing. Poster.
- V. Boyce**, I. Chen, B. Sparks, M. Perez, and M. C. Frank (2024). “4-5 year old children can successfully communicate using ad-hoc referential expressions”. CAMP 6. Talk.
- V. Boyce**, R. Hawkins, N. Goodman, and M. C. Frank (2023). “Thick Feedback Facilitates Referential Coordination in Larger Groups”. CAMP 5. Talk.
- V. Boyce**, R. Hawkins, N. Goodman, and M. C. Frank (2023). “Thick Feedback Facilitates Referential Coordination in Larger Groups”. HSP. Poster.
- T. Poppels, **V. Boyce**, C. Ajunwa, T. von der Malsburg, and R. Levy (2021). “Bias against ‘she’ Pronouns Can Be Rapidly Overcome by Changing Event Expectations”. CUNY Human Sentence Processing Conference. Short talk.
- V. Boyce** and R. Levy (2020). “A-Maze of Natural Stories: Texts Are Comprehensible Using the Maze Task”. Architectures and Mechanisms for Language Processing. Talk.
- V. Boyce**, R. Futrell, and R. P. Levy (2019). “Maze Made Easy: Better and Easier Measurement of Incremental Processing Difficulty”. CUNY Human Sentence Processing Conference. Poster.
- V. Boyce**, T. von der Malsburg, T. Poppels, and R. Levy (2019). “Female Gender Is Consistently Under-Expressed in Pronoun Production and under-Inferred in Comprehension”. Linguistic Society of American Annual Meeting. Poster.
- V. Boyce**, T. von der Malsburg, T. Poppels, and R. Levy (2019). “Remember ‘Him’, Forget ‘Her’: Gender Bias in the Comprehension of Pronominal Referents.” CUNY Human Sentence Processing Conference. Poster.
- V. Boyce**, T. von der Malsburg, T. Poppels, and R. Levy (2018). “Implicit Gender Biases in the Production and Comprehension of Pronominal References”. CUNY Human Sentence Processing Conference. Poster.

AWARDS

Open Science Innovator Prize, Stanford CORES	2025
--	------

TEACHING

Stanford, Department of Psychology	Stanford, CA
TA for PSYCH 125: Research Methods in Psychology	Jan 2024 – March 2024
TA for PSYCH 251: Experimental Methods	Sep 2022 – Dec 2022, Sep 2023 – Dec 2023
TA for PSYCH 45: Introduction to Learning and Memory	April 2023 – June 2023
TA for PSYCH 220B: Probabilistic Models of Cognition: Language	Sep 2021 – Dec 2021
MIT, Department of Brain & Cognitive Science	Cambridge, MA
TA for Computational Psycholinguistics	February 2019 – May 2019

MENTORING

Fiona Feng (Queens College undergrad)	2025-2026
Ryder Fried (Stanford undergrad)	2025
Benji Fernandez (Stanford undergrad)	2025
Spurti Nimbali (Stanford undergrad)	2025
Zihan Wang (Stanford undergrad)	2025
Yannick Mofo (Stanford undergrad)	2024
Rebecca Pizzitola (Stanford undergrad)	2024
Ilaria Chen (Stanford undergrad)	2023
Malia Perez (Stanford undergrad)	2023
Brittany Linus (Stanford undergrad)	2022
Chelsea Ajunwa (MIT undergrad)	2020
Arun Wongprommoon (MIT undergrad)	2019

REVIEWING

Journals: Psychological Science (2025), Perspectives on Psychological Science (2025), Open Mind (2025), Language, Cognition, and Neuroscience (2024), Nature Human Behavior (2024), Glossa Psycholinguistics (2021-2023), Royal Society Open Science (2024), Journal of Experimental Psychology: Learning, Memory, and Cognition (2023), Journal of Memory and Language (2023),
Conferences: CogSci (2021-2026), HSP (2026), California Meeting of Psycholinguists (2023), Society for Computation in Linguistics (2020), Association for Computational Linguistics (2019)