Tal Linzen

Office 704 Center for Data Science New York University 60 5th Avenue New York, NY 10011

Email: linzen@nyu.edu Website: http://tallinzen.net Last updated: July 11, 2022 Office 514
Department of Linguistics
New York University
10 Washington Place

New York, NY 10003

EMPLOYMENT

2020–present Assistant Professor

Department of Linguistics and Center for Data Science

New York University

2021-present Research Scientist

Google

2017–2020 Assistant Professor

Department of Cognitive Science (primary appointment) Department of Computer Science (joint appointment)

Affiliated faculty, Center for Language and Speech Processing

Johns Hopkins University

2015–2017 Postdoctoral researcher

Laboratoire de Sciences Cognitives et Psycholinguistique & Institut Jean Nicod

Ecole Normale Supérieure, Paris

EDUCATION

2010–2015 New York University, Ph.D., Linguistics

Thesis title: Probabilistic linguistic representations: Between learning and

processing.

Committee: Alec Marantz (chair), Gillian Gallagher, Maria Gouskova, Liina

Pylkkänen, Florian Jaeger

2008–2010 Tel Aviv University, M.A., Linguistics, summa cum laude

Thesis title: Hebrew Possessive Datives: The effects of affectedness.

Advisor: Mira Ariel

2005–2010 Tel Aviv University, B.Sc., Mathematics & Linguistics, summa cum laude

JOURNAL ARTICLES

In press	Nouha Dziri, Hannah Rashkin, Tal Linzen & David Reitter. Evaluating groundedness in dialogue systems: the BEGIN benchmark. <i>Transactions of the Association for Computational Linguistics</i> .
2021	Grusha Prasad & Tal Linzen . Rapid syntactic adaptation in self-paced reading: detectable, but only with many participants. Journal of Experimental Psychology: Learning, Memory, and Cognition, 47(7), 1156–1172.
2021	Marten van Schijndel & Tal Linzen . Single-stage prediction models do not explain the magnitude of syntactic disambiguation difficulty. Cognitive Science, 45(6), e12988.
2021	Tal Linzen & Marco Baroni. Syntactic structure from deep learning. Annual Reviews of Linguistics, 7, 195–212.
2020	Naomi Havron, Camila Scaff, Maria Julia Carbajal, Tal Linzen , Axel Barrault & Anne Christophe. Priming syntactic ambiguity resolution in children and adults. Language, Cognition and Neuroscience, 35(10), 1445–1455.
2020	Richard T. McCoy, Robert Frank & Tal Linzen . <u>Does syntax need to grow on trees?</u> <u>Sources of hierarchical inductive bias in sequence-to-sequence networks</u> . <i>Transactions of the Association for Computational Linguistics</i> , 8, 125–140.
2019	Afra Alishahi, Grzegorz Chrupała & Tal Linzen . Analyzing and interpreting neural networks for NLP: A report on the first BlackboxNLP workshop. <i>Journal of Natural Language Engineering</i> , 25(4), 543–557.
2019	Tal Linzen . What can linguistics and deep learning contribute to each other? A response to Pater. Language, 95(1), e99–e108.
2018	Tal Linzen & Yohei Oseki. The reliability of acceptability judgments across languages. Glossa: a journal of general linguistics, 3(1), 100.
2018	Laura Gwilliams, Tal Linzen , David Poeppel & Alec Marantz. <u>In spoken word</u> recognition the future predicts the past. <i>Journal of Neuroscience</i> 38(35), 7585–7599.
2017	Tal Linzen & Gillian Gallagher. Rapid generalization in phonotactic learning. <i>Laboratory Phonology: Journal of the Association for Laboratory Phonology</i> 8(1): 24, 1–32.
2016	Tal Linzen , Emmanuel Dupoux & Yoav Goldberg. <u>Assessing the ability of LSTMs to learn syntax-sensitive dependencies</u> . <i>Transactions of the Association for Computational Linguistics</i> , 4, 521–535.
2016	Einat Shetreet, Tal Linzen & Naama Friedmann. <u>Against all odds: Exhaustive activation in lexical access of verb complementation options</u> . <i>Language, Cognition & Neuroscience 31</i> (9), 1206–1214.
2016	Tal Linzen . The diminishing role of inalienability in the Hebrew Possessive Dative. Corpus Linguistics and Linguistic Theory 12(2), 325–354.
2016	Tal Linzen & Florian Jaeger. <u>Uncertainty and expectation in sentence processing:</u> <u>Evidence from subcategorization distributions</u> . <i>Cognitive Science 40</i> (6), 1382–1411.

2015	Joseph Fruchter*, Tal Linzen *, Masha Westerlund & Alec Marantz. <u>Lexical preactivation in basic linguistic phrases</u> . <i>Journal of Cognitive Neuroscience</i> 27(10), 1912–1935. (* indicates equal contribution.)
2015	Maria Gouskova & Tal Linzen . Morphological conditioning of phonological regularization. The Linguistic Review 32(3), 427–473.
2015	Mira Ariel, Elitzur Dattner, John W. Du Bois & Tal Linzen . Pronominal datives: The royal road to argument status. Studies in Language 39(2), 257–321.
2014	Tal Linzen . Parallels between cross-linguistic and language-internal variation in Hebrew possessive constructions. Linguistics 52(3), 759–792.
2014	Allyson Ettinger, Tal Linzen & Alec Marantz. <u>The role of morphology in phoneme</u> <u>prediction: Evidence from MEG</u> . <i>Brain and Language 129</i> , 14–23.
2013	Tal Linzen , Alec Marantz & Liina Pylkkänen. Syntactic context effects in single word recognition: An MEG study. The Mental Lexicon 8(2), 117–139.
2013	Tal Linzen , Sonia Kasyanenko & Maria Gouskova. <u>Lexical and phonological variation in Russian prepositions</u> . <i>Phonology 30</i> (3), 453–515.

PEER-REVIEWED PROCEEDING PAPERS

2022	Anastasia Kobzeva, Suhas Arehalli, Tal Linzen & Dave Kush. <u>LSTMs can learn basic</u> wh- and relative clause dependencies in Norwegian. <i>Proceedings of the Cognitive Science Society</i> .
2022	Linlu Qiu, Peter Shaw, Panupong Pasupat, Paweł Krzysztof Nowak, Tal Linzen , Fei Sha, Kristina Toutanova. Improving compositional generalization with latent structure and data augmentation. Proceedings of the 20th Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL).
2022	Sebastian Schuster & Tal Linzen . When a sentence does not introduce a discourse entity, Transformer-based models still often refer to it. Proceedings of the 20th Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL).
2022	Aaron Mueller, Robert Frank, Tal Linzen , Luheng Wang & Sebastian Schuster. <u>Coloring the Blank Slate: Pre-training Imparts a Hierarchical Inductive Bias to Sequence-to-sequence Models</u> . <i>Findings of the Association for Computational Linguistics</i> 2022.
2022	Thibault Sellam, Steve Yadlowsky, Jason Wei, Naomi Saphra, Alexander D'Amour, Tal Linzen , Jasmijn Bastings, Iulia Turc, Jacob Eisenstein, Dipanjan Das, Ian Tenney & Ellie Pavlick. The MultiBERTs: BERT reproductions for robustness analysis. In International Conference on Learning Representations (ICLR).
2021	Laura Aina & Tal Linzen . The language model understood the prompt was ambiguous: probing syntactic uncertainty through generation. In <i>Proceedings of the Fourth BlackboxNLP Workshop on Analyzing and Interpreting Neural Networks for NLP</i> , pages 42–57.
2021	Alicia Parrish, William Huang, Omar Agha, Soo-Hwan Lee, Nikita Nangia, Alex Warstadt, Karmanya Aggarwal, Emily Allaway, Tal Linzen & Samuel R.

	Bowman. Does putting a linguist in the loop improve NLU data collection? In Findings of the Association for Computational Linguistics: EMNLP 2021, pages 4886–4901.
2021	Alicia Parrish, Sebastian Schuster, Alex Warstadt, Omar Agha, Soo-Hwan Lee, Zhuoye Zhao, Samuel R. Bowman & Tal Linzen . NOPE: A corpus of naturally-occurring presuppositions in English. In Proceedings of the 25th Conference on Computational Natural Language Learning (CoNLL), pages 349–366.
2021	Shauli Ravfogel, Grusha Prasad, Tal Linzen & Yoav Goldberg. Counterfactual interventions reveal the causal effect of relative clause representations on agreement prediction. In <i>Proceedings of the 25th Conference on Computational Natural Language Learning (CoNLL)</i> , pages 194–209.
2021	Matthew Finalyson, Aaron Mueller, Stuart Shieber, Sebastian Gehrmann, Tal Linzen & Yonatan Belinkov. <u>Causal analysis of syntactic agreement mechanisms in neural language models</u> . In <i>Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics (ACL)</i> , pages 1828–1843.
2021	Charles Lovering, Rohan Jha, Tal Linzen & Ellie Pavlick. <u>Predicting inductive biases</u> of pre-trained models. In <i>International Conference on Learning Representations</i> (<i>ICLR</i>).
2021	Karl Mulligan, Robert Frank & Tal Linzen . Structure here, bias there: Hierarchical generalization by jointly learning syntactic transformations. In Society for Computation in Linguistics, pages 125–140.
2020	Najoung Kim & Tal Linzen . COGS: A compositional generalization challenge based on semantic interpretation. In Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP), pages 9087–9105.
2020	Paul Soulos, R. Thomas McCoy, Tal Linzen & Paul Smolensky. <u>Discovering the compositional structure of vector representations with Role Learning Networks</u> . In <i>Proceedings of the Third BlackboxNLP Workshop on Analyzing and Interpreting Neural Networks for NLP</i> , pages 238–254.
2020	R. Thomas McCoy, Junghyun Min & Tal Linzen . BERTs of a feather do not generalize together: Large variability in generalization across models with similar test set performance. In <i>Proceedings of the Third BlackboxNLP Workshop on Analyzing and Interpreting Neural Networks for NLP</i> , pages 217–227.
2020	R. Thomas McCoy, Erin Grant, Paul Smolensky, Tom Griffiths & Tal Linzen . <u>Imparting universal linguistic inductive biases via meta-learning</u> . In <i>Proceedings of the 42nd Annual Conference of the Cognitive Science Society</i> , pages 737–743.
2020	Suhas Arehalli & Tal Linzen . Neural language models capture some, but not all, agreement attraction effects. In <i>Proceedings of the 42nd Annual Conference of the Cognitive Science Society</i> , pages 370–376.
2020	Aaron Mueller, Garrett Nicolai, Panayiota Petrou-Zeniou, Natalia Talmina & Tal Linzen . Cross-linguistic syntactic evaluation of word prediction models. In Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics (ACL), pages 5523–5539.
2020	Tal Linzen. How can we accelerate progress towards human-like linguistic generalization? In Proceedings of the 58th Annual Meeting of the Association for

	Computational Linguistics (ACL), pages 5210–5217. (Honorable mention for Best Theme Paper.)
2020	Michael Lepori, Tal Linzen & Richard T. McCoy. Representations of syntax [MASK] useful: Effects of constituency and dependency structure in recursive LSTMs. In Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics (ACL), pages 3306–3316.
2020	Junghyun Min, Richard T. McCoy, Dipanjan Das, Emily Pitler & Tal Linzen . <u>Syntactic data augmentation increases robustness to inference heuristics</u> . In Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics (ACL), pages 2339–2352.
2020	Natalia Talmina & Tal Linzen . Neural network learning of the Russian genitive of negation: optionality and structure sensitivity. In <i>Proceedings of the Society for Computation in Linguistics (SCiL) 3</i> , 21.
2019	Grusha Prasad, Marten van Schijndel & Tal Linzen . <u>Using priming to uncover the organization of syntactic representations in neural language models</u> . In <i>Proceedings of the 23rd Conference on Computational Natural Language Learning (CoNLL)</i> , pages 66–76. (Honorable mention for Best Paper Award for Research Inspired by Human Language Learning and Processing.)
2019	Marten van Schijndel, Aaron Mueller & Tal Linzen . Quantity doesn't buy quality syntax with neural language models. In <i>Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing (EMNLP 2019)</i> , pages 5835–5841.
2019	R. Thomas McCoy, Ellie Pavlick & Tal Linzen . Right for the wrong reasons: diagnosing syntactic heuristics in natural language inference. In Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics (ACL), pages 3428–3448.
2019	Brenden Lake, Tal Linzen & Marco Baroni. <u>Human few-shot learning of compositional instructions</u> . In <i>Proceedings of the 41st Annual Conference of the Cognitive Science Society</i> , pages 611–616.
2019	Najoung Kim, Roma Patel, Adam Poliak, Alex Wang, Patrick Xia, R. Thomas McCoy, Ian Tenney, Alexis Ross, Tal Linzen , Benjamin Van Durme, Samuel R. Bowman, Ellie Pavlick. Probing what different NLP tasks teach machines about function word comprehension. In Proceedings of the Eighth Joint Conference on Lexical and Computational Semantics (*SEM 2019), pages 235–249. (Best Paper Award.)
2019	Shauli Ravfogel, Yoav Goldberg & Tal Linzen . Studying the inductive biases of RNNs with synthetic variations of natural languages. In Proceedings of the 17th Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL), pages 3532–3542.
2019	R. Thomas McCoy, Tal Linzen , Ewan Dunbar & Paul Smolensky. <u>RNNs implicitly implement tensor product representations</u> . In <i>International Conference on Learning Representations (ICLR) 2019</i> .
2019	R. Thomas McCoy & Tal Linzen . Non-entailed subsequences as a challenge for natural language inference. In <i>Proceedings of the Society for Computation in Linguistics (SCiL) 2019</i> (extended abstract).

2019	Marten van Schijndel & Tal Linzen . Can entropy explain successor surprisal effects in reading? In <i>Proceedings of the Society for Computation in Linguistics (SCiL)</i> 2019.
2018	Marten van Schijndel & Tal Linzen . A neural model of adaptation in reading. In <i>Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing (EMNLP 2018)</i> , pages 4704–4710.
2018	Rebecca Marvin & Tal Linzen . <u>Targeted syntactic evaluation of language models</u> . In <i>Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing (EMNLP 2018)</i> , pages 1192–1202.
2018	Marten van Schijndel & Tal Linzen . Modeling garden path effects without explicit hierarchical syntax. In <i>Proceedings of the 40th Annual Conference of the Cognitive Science Society</i> , pages 2600–2605.
2018	R. Thomas McCoy, Robert Frank & Tal Linzen . Revisiting the poverty of the stimulus: hierarchical generalization without a hierarchical bias in recurrent neural networks. In <i>Proceedings of the 40th Annual Conference of the Cognitive Science Society</i> , pages 2093–2098.
2018	Tal Linzen & Brian Leonard. <u>Distinct patterns of syntactic agreement errors in recurrent networks and humans</u> . In <i>Proceedings of the 40th Annual Conference of the Cognitive Science Society</i> , pages 692–697.
2018	Kristina Gulordava, Piotr Bojanowski, Edouard Grave, Tal Linzen & Marco Baroni. <u>Colorless green recurrent networks dream hierarchically</u> . In <i>Proceedings of the 16th Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL)</i> , pages 1195–1205.
2018	Laura Gwilliams, David Poeppel, Alec Marantz & Tal Linzen . Phonological (un)certainty weights lexical activation. In Proceedings of the 2018 Workshop on Cognitive Modeling and Computational Linguistics (CMCL), pages 29–34.
2017	Émile Enguehard, Yoav Goldberg & Tal Linzen . Exploring the syntactic abilities of RNNs with multi-task learning. In Proceedings of the 21st Conference on Computational Natural Language Learning (CoNLL), pages 3–14.
2017	Tal Linzen , Noam Siegelman & Louisa Bogaerts. <u>Prediction and uncertainty in an artificial language</u> . In <i>Proceedings of the 39th Annual Conference of the Cognitive Science Society</i> , pages 2592–2597.
2017	Gaël Le Godais, Tal Linzen & Emmanuel Dupoux. Comparing character-level neural language models using a lexical decision task. In Proceedings of the 15th Conference of the European Chapter of the Association for Computational Linguistics (EACL): Volume 2, Short Papers, pages 125–130.
2016	Tal Linzen . <u>Issues in evaluating semantic spaces using word analogies</u> . In <i>Proceedings</i> of the First Workshop on Evaluating Vector Space Representations for NLP (RepEval), pages 13–18.
2016	Allyson Ettinger & Tal Linzen . Evaluating vector space models using human semantic priming results. In <i>Proceedings of the First Workshop on Evaluating Vector Space Representations for NLP (RepEval)</i> , pages 72–77.
2016	Tal Linzen , Emmanuel Spector & Benjamin Spector. <u>Quantificational features in distributional word representations</u> . In <i>Proceedings of the Fifth Joint Conference</i>

on Lexical and Computational Semantics (*SEM 2016), pages 1–11. (Finalist for Best Paper Award.)
 Tal Linzen & Timothy J. O'Donnell. A model of rapid phonotactic generalization. In Proceedings of the 2015 Conference on Empirical Methods in Natural Language Processing (EMNLP 2015), pages 1126–1131.
 Tal Linzen & Florian Jaeger. Investigating the role of entropy in sentence processing. In Proceedings of the 2014 ACL Workshop on Cognitive Modeling and Computational Linguistics (CMCL), pages 10–18.

PROCEEDING PAPERS (REFEREED BY ABSTRACT)

2018	James White, René Kager, Tal Linzen , Giorgos Markopoulos, Alexander Martin, Andrew Nevins, Sharon Peperkamp, Krisztina Polgárdi, Nina Topintzi & Ruben van de Vijver. Preference for locality is affected by the prefix/suffix asymmetry: <u>Evidence from artificial language learning</u> . In Sherry Hucklebridge and Max Nelson (eds.), Proceedings of the 48th Annual Meeting of the North East Linguistic Society (NELS 48), pages 207–220.
2018	Itamar Kastner & Tal Linzen . A morphosyntactic inductive bias in artificial language learning. In Sherry Hucklebridge and Max Nelson (eds.), <i>Proceedings of the 48th Annual Meeting of the North East Linguistic Society (NELS 48)</i> , pages 81–90.
2014	Tal Linzen & Gillian Gallagher. The timecourse of generalization in phonotactic learning. In John Kingston, Claire Moore-Cantwell, Joe Pater, and Robert Staubs (eds.), <i>Proceedings of 2013 Annual Meeting on Phonology</i> .

FUNDING

2020–2023	Tal Linzen (PI). <u>Testing quantitative predictions of sentence processing theories with a large-scale eye-tracking database.</u> National Science Foundation (BCS-2020945; collaborative award with Brian Dillon, University of Massachusetts). \$283,075.00.
2019–2023	Tal Linzen (PI). <u>Inductive biases for the acquisition of syntactic transformations in neural networks</u> . National Science Foundation (BCS-2114505; collaborative award with Robert Frank, Yale). \$381,087.
2019–2023	Tal Linzen (PI) and Yoav Goldberg (PI). Large-scale neural networks as models of human syntactic knowledge. United States – Israel Binational Science Foundation (award 2018284). \$264,000.
2019–2024	Christopher Honey (PI) and Tal Linzen (Co-Investigator). <i>Integrating and separating information sequences in the human cerebral cortex</i> . National Institute of Mental Health (R01MH119099). \$2,182,702.
2019–2020	Tal Linzen (PI). Syntactic evaluation of neural language models with applications to text entry. Google Faculty Research Award. \$80,897.

2018–2019 Tal Linzen (PI) and Tom McCoy. *Interactive visualizations for computational concepts in cognition*. JHU Center for Educational Resources Technology Fellowship Grant.

INVITED PRESENTATIONS

2022	Successes and failures of compositionality in neural networks for language. The Challenge of Compositionality for AI, Online workshop. June 29–30.
2022	Sensitivity to Initial Weights in Out-of-Distribution Generalization. Keynote talk, Workshop on Insights from Negative Results in NLP, at ACL 2022, Dublin, May 26–27.
2022	Beyond Probing Classifiers: Deconstructing the Function and Structure of Vector Representations. Keynote talk, Workshop on Knowledge Extraction and Integration for Deep Learning Architectures (DeeLIO), at ACL 2022, Dublin, May 26–27.
2022	Inductive Biases for the Acquisition of Syntactic Transformations by Neural Networks.
	Linguistics Department Research Seminar, University of Geneva, May 17.
	Computational Linguistics Seminar, University of North Carolina, Chapel Hill, April 8.
	Language Evolution, Acquisition, and Processing Workshop, University of Chicago, February 11.
2022	Can surprisal explain syntactic disambiguation difficulty?
	Penn Linguistics Speaker Series, University of Pennsylvania, April 18.
	Linguistics and Languages Colloquium, McMaster University, Hamilton, Ontario, March 28.
2022	Causal analysis of the syntactic representations used by Transformers.
	NLP seminar, University of Pennsylvania, February 28.
	Forum on Artificial Intelligence, University of Texas, Austin, February 18.
	Weekly seminar, CLASP (Centre for Linguistic Theory and Studies in Probability), University of Gothenburg, Sweden, February 16.
2021	Language Technology Lab, University of Cambridge, October 21.
2021	Language Science Colloquium, University of California, Irvine, June 1.
2021	Computer Science Colloquium, Hebrew University of Jerusalem, Israel, April 5.
2021	Universals Colloquium, Harvard University, February 26.
2020	Invited speaker, The 28th International Conference on Computational Linguistics (COLING'2020), Barcelona, December 8–11.
2020	Invited speaker, Annual Meeting of GDR TAL (Natural Language Processing Research Group, France), Online, December 1.
2020	Language Technology Group, Amazon, Online, October 20.

2020	Neural networks as a framework for modeling human syntactic processing. Keynote talk, Architectures and Mechanisms of Language Processing (AMLaP), Online, September 3.
2020	Cognitive Science Colloquium, University of Maryland, College Park, April 2. Cancelled due to COVID-19.
2020	How well do neural NLP systems generalize?
	Data Science Colloquium, University of California, San Diego, February 11.
	NLP Seminar, University of California, Berkeley, January 23.
2020	What inductive biases enable human-like syntactic generalization?
	Linguistics Colloquium, University of Massachusetts, Amherst, April 16. (Via video conference.)
	Linguistics Colloquium, University of California, San Diego, February 10.
	Linguistics Colloquium, Stanford University, January 21.
2019	Psycholinguistics and deep learning. Lecture at the Brains, Minds, and Machines summer course, Woods Hole, MA, August 24.
2019	What inductive biases enable human-like syntactic generalization? Keynote talk, The 24th Conference on Formal Grammar, Riga, Latvia, August 11.
2019	How well do neural NLP systems generalize? Invited talk, RepEval: The Third Workshop on Evaluating Vector Space Representations for NLP (co-located with NAACL 2019), Minneapolis, MN, June 6.
2019	What can psycholinguistics and deep learning contribute to each other? Computational Psycholinguistics Seminar, Waseda University, Tokyo, May 24.
2019	Assessing syntactic generalization in artificial neural networks:
	Keynote talk, Midwest Speech and Language Days 2019, Chicago, May 3.
	Seminar talk, RIKEN Center for Advanced Intelligence Project, Tokyo, May 24.
2019	Syntactic generalization in artificial neural networks. Cognitive Talk Series, Princeton University, April 24.
2019	Linguistics in the age of deep learning. CompLang Seminar on Language and Computation, MIT, April 18.
2019	Psycholinguistic evaluation of neural NLP systems. Language Technologies Institute Colloquium, Carnegie Mellon University, Pittsburgh, PA, February 8.
2019	Linguistics as a part of cognitive science. Talk given as a part of "MarantzFest", a conference honoring Alec Marantz, January 6.
2018-9	Using cognitive science to evaluate and interpret neural language models:
	Google (NYC), January 7, 2019.
	Allen Institute for Artificial Intelligence (Seattle, WA), December 14, 2018.
	Microsoft Research (Redmond, WA), December 13, 2018.
2018	What can psycholinguistics and deep learning contribute to each other? University of Potsdam, Germany, September 4.

2018	Neural networks for (psycho)linguistics. Tutorial given at the University of Potsdam, Germany, September 3.
2018	On the syntactic abilities of recurrent neural networks:
	Linguistics Colloquium, Yale University, December 10.
	Linguistics Speaker Series, Georgetown University, October 19.
	Experimental Syntax and Heritage Languages Research Group, Humboldt University, Berlin, July 2.
	Linguistics Colloquium, Tel Aviv University, Tel Aviv, Israel, June 7.
	Linguistics Colloquium, Bar-Ilan University, Ramat Gan, Israel, May 29.
	Joint Linguistics and CLIP (Computational Linguistics and Information Processing) Colloquium, University of Maryland College Park, April 11.
2018	Hierarchical behavior without explicit hierarchical representations? Common Ground Seminar at the University of Pennsylvania, Philadelphia, February 7.
2017	Structure-sensitive dependency learning in recurrent neural networks:
	Cognitive Science Colloquium, Indian Institute of Technology, Delhi, October 12 (via video conference).
	Colloquium at the Department of Linguistics, Stony Brook University, Stony Brook, New York, September 29.
	Center for Language and Speech Processing Seminar, Johns Hopkins University, September 22.
	TLP seminar at LIMSI (Computer Science Laboratory for Mechanics and Engineering Sciences), Paris-Sud University, June 20.
	Institute for Language, Cognition and Computation (ILCC) seminar, The University of Edinburgh, June 8.
	Colloquium at Tilburg center for Cognition and Communication (TiCC), Tilburg University, The Netherlands, May 31.
2017	Cognitive science and neural network models of language. Workshop on Deep Learning in Computational Cognitive Science at the 39th Annual Meeting of the Cognitive Science Society, London, July 26.
2017	Information and representations in the neurobiology of morphology. Workshop on usage statistics, semantic transparency and segmentability in the selection, access and (de)composition of complex words, University of Freiburg, Germany, May 4–6.
2017	Entropy in language comprehension. Keynote talk at the "Information-theoretic modeling of linguistic variation in context" workshop at the 39. Jahrestagung der Deutschen Gesellschaft für Sprachwissenschaft (German Linguistics Society), Saarbrücken, Germany, March 9.
2017	Can recurrent neural networks acquire hierarchical representations from natural texts? Ling Lunch, Paris Diderot University, January 26.

2016	Using English subject-verb number agreement to evaluate the syntactic capabilities of contemporary neural networks. Ling Lunch, Queen Mary University of London, November 21.
2016	Can contemporary recurrent neural networks learn syntax-sensitive dependencies? Language Research Cluster, University of Potsdam, Germany, July 6.
2016	Probabilistic computation and formal representations. Colloquium talk at the Department of Linguistics, UCLA, February 22.
2016	Understanding probabilistic prediction in sentence processing. Colloquium talk at the Department of Cognitive Science, Johns Hopkins University, January 6.
2015	Understanding probabilistic prediction in sentence processing. Language Learning and Processing Lab, The Hebrew University of Jerusalem, Israel, December 27.
2015	How might entropy affect comprehension difficulty? FEAST (Forum Entwicklung und Anwendung von Sprach-Technologien), Saarland University, Germany, December 7.
2015	Generalization in phonotactic learning:
	Linguistics Seminar, Tufts University, Cambridge, Massachusetts, February 17.
	Computational Cognitive Science Group, MIT, Cambridge, Massachusetts, February 18.
2015	Probabilistic representations in language: between learning and processing. Language and Cognition Lab, Stanford University, Palo Alto, California, January 13.
2014	Statistical prediction in language comprehension. Wohl Institute for Advanced Imaging, Tel Aviv Sourasky Medical Center, Israel, June 2.
2014	Prediction and competition as a window into linguistic representations. Colloquium talk at the Linguistics Department at Tel Aviv University, Israel, May 29.
2014	Competition and prediction in language comprehension. Language Processing Brown Bag, University of Illinois at Urbana-Champaign, April 10.

INVITED PARTICIPATION IN WORKSHOPS

2019	Compositionality in Brains and Machines, Lorentz Center, Leiden, The Netherlands, August 5–9.
2019	Understanding Human and Machine Intelligence: A Workshop on Cognitive Science and AI, Facebook AI Research, New York City, May 28–29.
2019	Language as goal-directed sequential behavior, Shonan Village Center, Japan, May 20–23.
2017	Meaning in Context (MIC 3), Stanford University, Palo Alto, California, September 11–16.

CONFERENCE AND WORKSHOP PRESENTATIONS WITHOUT PROCEEDINGS

2022	Suhas Arehalli, Brian Dillon & Tal Linzen . Syntactic surprisal from neural language models tracks garden path effects. Poster, <i>35th Annual Conference on Human Sentence Processing</i> , March 24–26.
2022	Anastasia Kobzeva, Suhas Arehalli, Tal Linzen & Dave Kush. What can an LSTM language model learn about filler-gap dependencies in Norwegian? Poster, <i>35th Annual Conference on Human Sentence Processing</i> , March 24–26.
2022	Kuan-Jung Huang, Suhas Arehalli, Mari Kugemoto, Christian Muxica, Grusha Prasad, Brian Dillon & Tal Linzen . SPR mega-benchmark shows surprisal tracks construction- but not item-level difficulty. Oral presentation, The 35th Annual Conference on Human Sentence Processing, March 24–26.
2021	Suhas Arehalli, Tal Linzen & Geraldine Legendre. Syntactic intervention cannot explain agreement attraction in English Wh-questions. Short talk, <i>Architectures and Mechanisms of Language Processing (AMLaP)</i> , September 2–4.
2020	Grusha Prasad & Tal Linzen . Rapid syntactic adaptation in SPR: detectable, but only with many participants. Oral presentation, <i>33rd CUNY Conference on Human Sentence Processing</i> , Amherst, Massachusetts, March 19–21.
2020	Suhas Arehalli & Tal Linzen . Neural language models capture some, but not all, agreement attraction effects. Poster, <i>33rd CUNY Conference on Human Sentence Processing</i> , Amherst, Massachusetts, March 19–21.
2020	Richard T. McCoy, Tal Linzen , Ewan Dunbar & Paul Smolensky. Tensor Product Decomposition Networks: Uncovering representations of structure learned by neural networks. Poster, <i>Society for Computation in Linguistics 2020</i> (based on paper published in ICLR 2019), New Orleans, January 2–5.
2019	Najoung Kim & Tal Linzen . Compositionality as directional consistency in sequential neural networks. Poster, <i>NeurIPS Workshop on Context and Compositionality in Biological and Artificial Neural Systems</i> , Vancouver, Canada, December 14.
2019	Paul Soulos, Richard T. McCoy, Tal Linzen & Paul Smolensky. Uncovering the compositional structure of vector representations with Role Learning Networks. Spotlight presentation, <i>NeurIPS Workshop on Context and Compositionality in Biological and Artificial Neural Systems</i> , Vancouver, Canada, December 14.
2019	Grusha Prasad & Tal Linzen . How much harder are hard garden path sentences than easy ones? Poster, <i>41st Annual Conference of the Cognitive Science Society</i> , Montreal, July 24–27.
2019	Grusha Prasad & Tal Linzen . Reassessing the evidence for syntactic adaptation from self-paced reading studies. Poster, <i>32nd CUNY Conference on Human Sentence Processing</i> , Boulder, Colorado, March 29–31.
2019	Grusha Prasad, Marten van Schijndel & Tal Linzen . Using syntactic priming to investigate how recurrent neural networks represent syntax. Poster, <i>32nd CUNY Conference on Human Sentence Processing</i> , Boulder, Colorado, March 29–31.
2019	Rebecca Marvin & Tal Linzen . Targeted syntactic evaluation of language models. Oral presentation, <i>Society for Computation in Linguistics 2019</i> (based on paper published in EMNLP 2018), New York City, January 3–6.

2019	Kristina Gulordava, Piotr Bojanowski, Edouard Grave, Tal Linzen & Marco Baroni. Colorless green recurrent networks dream hierarchically. Oral presentation, <i>Society for Computation in Linguistics 2019</i> (based on paper published in NAACL 2018), New York City, January 3–6.
2018	Marten van Schijndel & Tal Linzen . A neural model of adaptation in reading. Poster, <i>Architectures and Mechanisms of Language Processing (AMLaP) 2018</i> , Berlin, September 6–8.
2018	Marten van Schijndel & Tal Linzen . Can entropy explain successor surprisal effects in reading? Poster, <i>Architectures and Mechanisms of Language Processing</i> (<i>AMLaP</i>) 2018, Berlin, September 6–8.
2018	R. Thomas McCoy, Robert Frank & Tal Linzen . Investigating hierarchical bias in the acquisition of English question formation with recurrent neural networks. Poster, 2018 Legrain conference: Learning Language in Humans and in Machines, Paris, July 5–6.
2018	Tal Linzen & Brian Leonard. Agreement attraction does not depend on time pressure. Poster, 31st Annual CUNY Conference on Human Sentence Processing, Davis, California, March 15.
2018	Robert Frank, R. Thomas McCoy & Tal Linzen . Neural network syntax in the age of deep learning: the case of question formation. Oral presentation, <i>Society for Computation in Linguistics</i> , Salt Lake City, Utah, January 4–7.
2018	Tal Linzen & Yohei Oseki. The reliability of acceptability judgments beyond English. Oral presentation (by invitation) at the symposium "Understanding Judgment Data in Syntax and Semantics: Insights from Experimental Methodologies", <i>Linguistic Society of America 2018 Annual Meeting</i> , Salt Lake City, Utah, January 4–7.
2017	Tal Linzen , Yoav Goldberg & Emmanuel Dupoux. Agreement attraction errors in neural networks. Poster, <i>30th Annual CUNY Conference on Human Sentence Processing</i> , Cambridge, Massachusetts, March 30–April 1.
2016	Ewan Dunbar & Tal Linzen . Three important properties of Bayesian inference. Tutorial, <i>MFM Fringe Workshop on Computational Phonology</i> , Manchester.
2016	Tal Linzen . Variation and Change in the Hebrew Dative. Oral presentation, <i>The Second Usage-Based Linguistics Conference</i> , Tel Aviv, Israel, June 16.
2016	Tal Linzen , Timothy J. O'Donnell & Gillian Gallagher. Rapid phonotactic generalization: Behavioral evidence and a Bayesian model. Oral presentation, <i>Linguistic Society of America 2016 Annual Meeting</i> , Washington, D.C., January 6–10.
2016	Tal Linzen & Yohei Oseki. The reliability of acceptability judgments beyond English. Oral presentation, <i>Linguistic Society of America 2016 Annual Meeting</i> , Washington, D.C., January 6–10.
2015	Tal Linzen & Timothy J. O'Donnell. A model of rapid phonotactic generalization. Poster, <i>Workshop on Computational Phonology and Morphology at the Linguistic Summer Institute</i> , Chicago, July 11.

2014	Tal Linzen & Gillian Gallagher. The time course of phonotactic learning. Oral presentation, <i>Eighth Northeast Computational Phonology Meeting</i> , New York City, November 15.
2014	Tal Linzen , Phoebe Gaston, Laura Gwilliams & Alec Marantz. Competition and prediction in the auditory processing of morphologically complex words. Poster, <i>Sixth Annual Society for the Neurobiology of Language Conference</i> , Amsterdam, August 27–29.
2014	Joseph King, Tal Linzen & Alec Marantz. Noun/verb entropy: An MEG study of word-level syntactic category ambiguity. Poster, <i>Sixth Annual Society for the Neurobiology of Language Conference</i> , Amsterdam, August 27–29.
2014	Tal Linzen & Gillian Gallagher. The time course of generalization in phonotactic learning. Member abstract presented as a poster, <i>36th Annual Conference of the Cognitive Science Society</i> , Québec, Canada, July 23–26.
2013	Maria Gouskova & Tal Linzen . Less than words: Morphological effects in lexical variation. Poster, <i>Phonology 2013</i> , Amherst, Massachusetts, November 8–10.
2013	Tal Linzen & Florian Jaeger. Uncertainty and surprisal in sentence processing. Poster, <i>Architectures and Mechanisms for Language Processing (AMLaP) 2013</i> , Marseille, September 5–7.
2013	Tal Linzen , Joseph Fruchter, Masha Westerlund & Alec Marantz. Predicting the foreseeable future: MEG evidence for preactivation of predicted words. Poster, 20th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, April 13–16.
2013	Allyson Ettinger, Tal Linzen & Alec Marantz. The role of morphology in phoneme prediction: Evidence from MEG. Poster, 20th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, April 13–16.
2013	Tal Linzen , Joseph Fruchter, Masha Westerlund & Alec Marantz. Predicting the foreseeable future: MEG evidence for preactivation of predicted words. Oral presentation, <i>26th Annual CUNY Conference on Human Sentence Processing</i> , Columbia, South Carolina, March 21–23.
2013	Allyson Ettinger, Tal Linzen & Alec Marantz. The role of morphology in phoneme prediction: Evidence from MEG. Poster, <i>26th Annual CUNY Conference on Human Sentence Processing</i> , Columbia, South Carolina, March 21–23.
2012	Tal Linzen , Alec Marantz, & Liina Pylkkänen. Syntactic effects in single word recognition: Evidence from MEG. Oral presentation, <i>Eighth Mental Lexicon Conference</i> , Montreal, October 24–26.
2012	Tal Linzen & Masha Westerlund. Predicting the foreseeable future: Do readers use collocational transition probability to predict upcoming words? Oral presentation, <i>Eighth Mental Lexicon Conference</i> , Montreal, October 24–26.
2012	Tal Linzen , Sonia Kasyanenko & Maria Gouskova. Lexical and phonological variation in Russian prepositions. Oral presentation, <i>Ninth Old World Conference in Phonology</i> , Berlin, January 18–21.
2011	Tal Linzen , Einat Shetreet & Naama Friedmann. Exploring the neural basis of dependency resolution using coordination sentences. Poster, <i>Third Annual Neurobiology of Language Conference</i> , Annapolis, Maryland, November 10–11.

2011	Einat Shetreet, Tal Linzen & Naama Friedmann. The effects of complement predictability on the processing of verbs' complementation options. Poster, <i>Third Annual Neurobiology of Language Conference</i> , Annapolis, Maryland, November 10–11.
2011	Einat Shetreet, Tal Linzen & Naama Friedmann. Are all complementation options activated when accessing the verb? Oral presentation, <i>Structuring the Argument</i> , Paris. September 5–7.
2010	Tal Linzen . Tracking the change in Hebrew possessive constructions using a blog corpus. Poster, <i>New Ways of Analyzing Variation 40</i> , Washington, D.C., October 27–30.
2010	Tal Linzen . Hebrew statistical linguistics using a morphologically analyzed blog corpus. Oral presentation, <i>Israeli Seminar on Computational Linguistics</i> , Tel Aviv, June 16.
2010	Tal Linzen . The Hebrew possessive dative: From affectedness to possession. Oral presentation, <i>Variation and Change in Argument Realization</i> , Naples, May 27–30.

AWARDS

2019	Finalist, Excellence in Teaching Award: Graduate Teaching and Mentoring, Krieger School of Arts and Science, Johns Hopkins University
2012	Dean's Travel Grant, New York University
2010–2015	Henry M. MacCracken Fellowship, New York University
2008–2009	Graduate fellowship, Department of Linguistics, Tel Aviv University
2008	Excellence Prize, School of Mathematics, Tel Aviv University
2007	Excellence Prize, The Adi Lautman Interdisciplinary Program for Outstanding Students, Tel Aviv University
2005–2009	Fellowship, The Adi Lautman Interdisciplinary Program for Outstanding Students, Tel Aviv University

TEACHING

New York University

Spring 2022	DS-GA 1003: Machine Learning (with He He)
Fall 2021	LING-GA 3320: Seminar in Syntax (with Ailis Cournane)
	LING-UA 102: Seminar: Computational Psycholinguistics
Fall 2020	DS-GA 1011: Natural Language Processing with Representation Learning
	LING-GA 3340: Seminar in Semantics (with Sam Bowman)

Johns Hopkins University

2017–2022 AS.050.819: Research Seminar in Psycholinguistics (every semester)

Fall 2019 AS.050.360/660: Computational Psycholinguistics

AS.050.202: Introduction to Computational Cognitive Science

Spring 2019 AS.050.360/660: Computational Psycholinguistics

Fall 2018 AS.050.202: Introduction to Computational Cognitive Science

Fall 2017 AS.050.101: Cognition

New York University

2013 Math Tools for Cognitive Science and Neuroscience (offered by the Psychology and

Neural Science department). Teaching assistant for Nathaniel Daw.

2012 Language (offered by the Linguistics department). Teaching assistant for Maria

Gouskova.

Tel Aviv University

2008 Foundations of Theoretical Linguistics (offered by the Linguistics department).

Teaching assistant for Aya Meltzer and Lior Laks.

Other

2013 Statistics workshop, NYU Linguistics (six meetings on regression and mixed-effects

modeling in R, co-taught with Sean Martin).

ADVISING AND MENTORING

Postdoctoral researchers

2021–present Sebastian Schuster (NSF/CRA Computing Innovation Fellow)

2020–present Kristijan Armeni (jointly supervised with Christopher Honey, JHU)

2017–2019 Marten van Schijndel (Assistant Professor of Linguistics, Cornell, 2019–present)

PhD advisees

2022–present Cara Leong (Linguistics, NYU)

2021–present Aaron Mueller (Computer Science, JHU, NSF Graduate Research Fellow, co-advised

with Mark Dredze)

2021-present William Merrill (Data Science, NYU, NSF Graduate Research Fellow, co-advised with

Sam Bowman)

2019–2021 Karl Mulligan (Cognitive Science, JHU)

2018–present Suhas Arehalli (Cognitive Science, JHU)

2017–2022	Grusha Prasad (Cognitive Science, JHU; starting Fall 2022: Assistant Professor of Computer Science, Colgate University)
2017–2022	Tom McCoy (Cognitive Science, JHU, NSF Graduate Research Fellow, co-advised by Paul Smolensky)

Master's students

2019–2020 Junghyun Min (JHU)

Undergraduate researchers

2020–present	Aditya Yedetore (JHU Summer Provost Undergraduate Research Award)
2019–2020	Michael Lepori (JHU Computer Science senior thesis)
2018–2019	Nicholas Douglass, Daniela Torres (JHU)

NYU qualifying paper committee

2021–2022	Soo-Hwan Lee (Linguistics)
2020-present	Francesco Mantegna (Psychology)

JHU Graduate Board Oral exams

2021	Aaron Mueller (Computer Science)
2020	Shijie Wu (Computer Science)
2018	Hsiang-Yun Sherry Chien (Psychological and Brian Sciences)
2018	Chenxi Liu (Computer Science)
2017	Adi Renduchintala (Computer Science)

Dissertation committees

2022	Phu Mon Htut (NYU Data Science)
2021-present	Alicia Parrish (NYU Linguistics)
2021-present	Anastasia Kobzeva (Norwegian University of Science and Technology, Department of Language and Literature)
2021–2022	Mostafa Abdou (University of Copenhagen)
2020–2022	Alex Warstadt (NYU Linguistics)
2020–2021	Najoung Kim (JHU Cognitive Science)
2019–2021	Mariya Toneva (Carnegie Mellon University, Machine Learning and Neural Computation)
2020–2021	Hsiang-Yun Sherry Chien (JHU Psychological and Brian Sciences)
2019–2020	Jane Lutken (JHU Cognitive Science)
2019	Dingquan Wang (JHU Computer Science)

SERVICE

Departmental service (JHU Cognitive Science)

2019–2020	Chair, colloquium committee
2017–2019	Co-chair, colloquium committee
2017-2019	Brown Bag talk series organizer (except Spring 2018)

Conference and workshop organization

2019	Context and Compositionality in Biological and Artificial Neural Systems, co-located with the 2019 Conference on Neural Information Processing Systems (NeurIPS), Vancouver, Canada, December 14 (co-organizer).
2019	BlackboxNLP: Analyzing and interpreting neural networks for NLP, co-located with the Association for Computational Linguistics (ACL), Florence, Italy, August 1 (co-organizer).
2019	The 2019 Workshop on Cognitive Modeling and Computational Linguistics, co-located with the North American Chapter of the Association for Computational Linguistics (NAACL), Minneapolis, MN, June 7 (co-organizer).
2018	BlackboxNLP: Analyzing and interpreting neural networks for NLP, co-located with Empirical Methods in Natural Language Processing (EMNLP), Brussels, Belgium, November 1 (co-organizer).
2018	The 2018 Workshop on Cognitive Modeling and Computational Linguistics, co-located with the Society for Computational in Linguistics (SCiL) and the Linguistic Society of America (LSA), Salt Lake City, Utah, January 7 (co-organizer).
2017	The 2017 Workshop on Cognitive Modeling and Computational Linguistics, co-located with the Conference of the European Chapter of the Association for Computational Linguistics, Valencia, Spain, April 3 (co-organizer).

Editorial responsibilities for journals

2022-present	Action editor, Glossa: Psycholinguistics.
2021-present	Action editor, Computational Linguistics.
2018-present	Standing reviewing team member, <i>Transactions of the Association for Computational Linguistics</i> .

Editorial responsibilities for scientific meetings

2022	Action Editor, Cognitive Science Society (CogSci).
2021	Area Chair, Association for Computational Linguistics (ACL).
2020	Co-Chair, CoNLL 2020 (The SIGNLL Conference on Computational Natural Language Learning), Online, November 19–20.
2019	Area Chair (Language and Computation), European Summer School in Logic, Language and Information, Riga, Latvia, August 5–16.

2018 Technical chair, Learning Language in Humans and in Machines, Paris, France, July 5-6. 2018 Area chair, 27th International Conference on Computational Linguistics (COLING 2018), Santa Fe, New Mexico, August 20-26. Ad-hoc grant proposal reviewing 2022 National Science Foundation (1), Natural Sciences and Engineering Research Council of Canada (NSERC), Israeli Science Foundation. 2021 Israel-United Status Binational Science Foundation (1), National Science Foundation (2), European Research Council (1). 2020 National Science Foundation (1). 2019 National Science Foundation (1). 2018 National Science Foundation (1). Ad-hoc journal reviewing 2022 Cognitive Science; Proceedings of the National Academy of Sciences. 2021 Cognitive Science; Frontiers in Artificial Intelligence; Frontiers in Psychology; Linguistic Inquiry. 2020 Cognition; Journal of Language Modeling; Journal of Memory and Language; Transactions of the Association for Computational Linguistics. 2019 Journal of Memory and Language; Language, Cognition & Neuroscience; Proceedings of the National Academy of Sciences; Trends in Cognitive Sciences. 2018 Cognition; Glossa; Language, Cognition & Neuroscience. Journal of Memory and Language; Language; Language, Cognition & Neuroscience; 2017 Neuroscience & Biobehavioral Reviews: PLOS Computational Biology. 2016 Brain and Language; Cognition (x3); Frontiers in Human Neuroscience; Journal of Neuroscience. 2015 Cortex; Language, Cognition & Neuroscience; Phonology. 2014 Cognitive Science; Lingua. 2013 Phonology; Language and Cognitive Processes; The Mental Lexicon. **Conference reviewing** 2022 ACL Rolling Review. 2021 ACL Rolling Review; Computational Natural Language Learning (CoNLL); Workshop on Insights from Negative Results in NLP; Society for Computation in Linguistics (SCiL). 2020 Architectures and Mechanisms for Language Processing (AMLaP); Blackbox NLP (EMNLP workshop); Bridging AI and Cognitive Science Workshop; Cognitive Science Society; Deep Learning Inside Out (EMNLP workshop); The CUNY Sentence Processing Conference; Conference on Neural Information Processing Systems

(NeurIPS); Society for Computation in Linguistics (SCiL); Workshop on Insights from Negative Results in NLP. 2019 Association for Computational Linguistics (ACL); Cognitive Science Society; Empirical Methods in Natural Language Processing (EMNLP); Joint Conference on Lexical and Computational Semantics (*SEM); Workshop on Evaluating Vector Space Representations for NLP (RepEval); Society for Computation in Linguistics (SCiL); The CUNY Sentence Processing Conference. 2018 Association for Computational Linguistics (ACL); The CUNY Sentence Processing Conference; Empirical Methods in Natural Language Processing (EMNLP); International Conference on Learning Representations (ICLR); Society for Computation in Linguistics (SCiL). Association for Computational Linguistics (ACL); Computational Natural Language 2017 Learning (CoNLL); Empirical Methods in Natural Language Processing (EMNLP); Society for Computation in Linguistics (SCiL); Society for the Neurobiology of Language (SNL). 2016 Computational Natural Language Learning (CoNLL); CUNY Sentence Processing Conference; Deutsche Gesellschaft für Sprachwissenschaft; Empirical Methods in Natural Language Processing (EMNLP); European Association for Computational Linguistics (EACL); International Conference on Computational Linguistics (COLING); Penn Linguistics Colloquium; Usage-Based Linguistics Conference; Society for the Neurobiology of Language (SNL). 2015 Empirical Methods in Natural Language Processing (EMNLP); Israeli Association for Theoretical Linguistics. 2014 Penn Linguistics Colloquium.