Ethan Gotlieb Wilcox

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EDUCATION

Harvard University

Cambridge, MA

Ph.D. in Linguistics

Expected May 2022

- Dissertation Title: "Presupposition Accommodation: Experimental and Theoretical Approaches"
- Dissertation Committee: Kathryn Davidson, Gennaro Chierchia, Roger Levy
- Visiting student, Ecole Normale Supérieure, Department of Cognitive Science, Summer 2018

Stanford University

Stanford, CA

Bachelor of Arts and Science in Symbolic Systems and Slavic Languages and Literature with Honors

2015

RESEARCH AND TEACHING AREAS

- Computational Models of Sentence Processing
- Experimental Semantics and Pragmatics
- Natural Language Processing and Computational Linguistics

Works in Progress

[1] E. G. Wilcox, R. Futrell and R. Levy. "Using Computational Models to Test Syntactic Learnability", under review, 2021

Peer-Reviewed Publications

- [1] P. Vani, E. G. Wilcox, and R. Levy, "Using the interpolated maze task to assess incremental processing in english relative clauses", in *Proceedings of the Annual Meeting of the Cognitive Science Society*, vol. 43, 2021.
- [2] E. G. Wilcox, R. Levy, and K. Davidson, "Which presuppositions are subject to contextual felicity constraints?", Semantics and Linguistic Theory, 2021.
- [3] E. G. Wilcox, P. Vani, and R. Levy, "A targeted assessment of incremental processing in neural languagemodels and humans", ACL, 2021.
- [4] J. Gauthier, J. Hu, E. G. Wilcox, P. Qian, and R. Levy, "Syntaxgym: An online platform for targeted evaluation of language models", in *Proceedings of the 58th Annual Meeting of the Association for Computational Linquistics: System Demonstrations*, 2020.
- [5] J. Gauthier, J. Hu, E. G. Wilcox, P. Qian, and R. Levy, "Syntaxgym: An online platform for targeted evaluation of language models", in *ACL*, 2020.
- [6] J. Hu, J. Gauthier, P. Qian, E. G. Wilcox, and R. Levy, "A systematic assessment of syntactic generalization in neural language models", in *ACL*, 2020.
- [7] T. Thrush, E. G. Wilcox, and R. Levy, "Investigating novel verb learning in bert: Selectional preference classes and alternation-based syntactic generalization", in *BLACKBOXNLP*, 2020.

- [8] E. G. Wilcox, J. Gauthier, J. Hu, P. Qian, and R. Levy, "On the predictive power of neural language models for human real-time comprehension behavior", *CogSci*, vol. abs/2006.01912, 2020.
- [9] E. G. Wilcox, P. Qian, R. Futrell, R. Kohita, R. Levy, and M. Ballesteros, "Structural supervision improves few-shot learning and syntactic generalization in neural language models", in *EMNLP*, 2020.
- [10] A. An, P. Qian, E. G. Wilcox, and R. Levy, "Representation of constituents in neural language models: Coordination phrase as a case study", in *EMNLP*, 2019.
- [11] R. Futrell, E. G. Wilcox, T. Morita, P. Qian, M. Ballesteros, and R. Levy, "Neural language models as psycholinguistic subjects: Representations of syntactic state", in *NAACL*, 2019.
- [12] E. G. Wilcox, R. Levy, and R. Futrell, "Hierarchical representation in neural language models: Suppression and recovery of expectations", in *BlackboxNLP@ACL*, 2019.
- [13] E. G. Wilcox, R. Levy, and R. Futrell, "What syntactic structures block dependencies in rnn language models?", in *CogSci*, 2019.
- [14] E. G. Wilcox, P. Qian, R. Futrell, M. Ballesteros, and R. Levy, "Structural supervision improves learning of non-local grammatical dependencies", in *NAACL*, 2019.
- [15] E. G. Wilcox and B. Spector, "The role of prior beliefs in the rational speech act model of pragmatics: Exhaustivity as a case study", in *CoqSci*, 2019.
- [16] E. G. Wilcox, R. Levy, T. Morita, and R. Futrell, "What do rnn language models learn about filler—gap dependencies?", in *BlackboxNLP@EMNLP*, 2018.

Manuscripts and Theses

- [1] R. Futrell, E. G. Wilcox, T. Morita, and R. Levy, "Rnns as psycholinguistic subjects: Syntactic stateand grammatical dependency", ArXiv, vol. abs/1809.01329, 2018.
- [2] Ethan Wilcox. "Revolutionary Linguistics: The Ideology of the Soviet Esperanto Movement 1917-1938" BA Honors Thesis, Stanford Unviersity

Invited Presentations

- How to Evaluate Neural Networks as Models of Linguistic Cognition. Department of English Colloquium,
 Dongguk University, Korea. (2/21)
- Benchmarking Neural Networks as Models of Human Language Processing. CogLunch, MIT, Cambridge MA. (3/20)
- Using Global Hotspots to Assess the Effects of Climate Change on Linguistic Diversity. Computational Psycholinguistics Lab Meeting, MIT, Cambridge, MA (10/19)
- Neural Network Language Models and the Argument from the Poverty of the Stimulus. Ling Lunch, MIT,
 Cambridge MA. (10/19)
- Neural Network Language Models as Psycholinguistic Subjects: The case of Filler-Gap Dependencies.
 - Group on Computation and Linguistics, MIT, Cambridge (5/19)
 - Mind Brain Behavior Lunch Series, Department of Psychology, Harvard (3/19)
 - Language and Cognition, Department of Psychology, Harvard University, Cambridge MA (3/19)
 - Workshop on Developing and Evaluating Neural and Symbolic Architectures for Language Modeling, MIT, Cambridge MA. (2/19)
- The Role of Prior Beliefs in The Rational Speech Act Model of Pragmatics: Exhaustivity as a Case Study.
 Meaning and Modality Lab Meeting, Harvard University, Cambridge MA. (3/19)

- Using Structure to Predict the next Word: What RNN Language Models Learn about Syntax
 - Computation and Psycholinguistics Lab, Johns Hopkins, MD (2/19)
 - CogLunch, MIT, Cambridge MA (3/19)
- What do RNN Language Models Learn about the Filler-Gap Dependency? Psycholinguistics and Cognitive Science Laboratory, Ecole Normale Superieure, Paris, France (8/18)

Conference Presentations

- * indicates peer-reviewed
- *A Targeted Assessment of Incremental Processing in Neural Language Models and Humans. Poster presented at the annual conference for the Association of Computational Linguistics, remote (8/21)
- *Which Presuppositions are Subject to Contextual Felicity Constraints? Poster Presented at the 31st conference on Semantics and Linguistic Theory, remote. (5/21)
- *Interpolated Maze: High Sensitivity Measurement of Ungrammatical Input Processing. Poster presented at the 34th CUNY Sentence Processing Conference, remote (3/21)
- *Structural Supervision Improves Few-Shot Learning and Syntactic Generalization in Neural Language Models. Poster presented at 2020 Conference on Empirical Methods in Natural Language Processing, remote (11/20)
- *Investigating Novel Verb Learning in BERT: Selectional Preference Classes and Alternation-Based Syntactic Generalization. Poster presented at Blackbox NLP Workshop, remote (11/20)
- *Benchmarking Neural Networks as Models of Language Processing. Talk presented at the 26th Conference on Architectures and Mechanisms of Language Processing, 2020, remote (9/20)
- Evaluating the Effect of Model Inductive Bias and Training Data in Predicting Human Reading Times. Poster presented at the MIT-IBM Watson AI Lab Week, remote (5/20)
- *Evaluating the Effect of Model Inductive Bias and Training Data in Predicting Human Reading Times. Poster presented at the 33rd CUNY Sentence Processing Conference, Amherst MA and remote (3/20)
- Syntax Gym: A Unified Platform for Psycholinguistic Assessment of Neural Language Models. IBM AI Week, Cambridge MA (9/19)
- Evaluating Syntactic Generalizations of Neural Language Models. Poster presented at IBM AI Week, Cambridge MA (9/19)
- *What Syntactic Structures block Dependencies in RNN Language Models? Poster presented at the Annual Conference of the Cognitive Science Society (7/19)
- *The Role of Prior Beliefs in The Rational Speech Act Model of Pragmatics: Exhaustivity as a Case Study. Poster presented at the Annual Conference of the Cognitive Science Society (7/19)
- *Testing Gender Markedness of Nouns with Self a Paced Reading Study. Poster presented at the Annual Conference of the Cognitive Science Society (7/19)
- *Phonological Cues to Syntactic Structure in a Large-Scale Corpus. Poster presented at the Annual Conference of the Cognitive Science Society (7/19)
- *Syntactic Structure Aids Learning of Grammatical Dependencies in Neural Networks. Poster Presented at the annual meeting of the North American Chapter of the Association of Computational Linguistics, 2019. (6/19)
- Syntactic Structure Aids Learning of Grammatical Dependencies in Neural Networks. IBM Watson AI Lab Poster Reception (5/19)

- *Syntactic Structure aids Learning of Grammatical Dependencies in Neural Networks. Poster presented at the 32nd CUNY Sentence Processing Conference, Boulder CO (3/19)
- Targeted Syntactic Analysis of RNNGs and LSTMs. Symposium on Robust, Interpretable, Deep Learning Systems, MIT, Cambridge MA (11/18)
- Hierarchically Structured Symbolic Architectures with Neural Control for Robust and Human-like Natural Language Parsing, IBM AI Research Horizons, MIT, Cambridge MA (10/18)
- *What do RNN Language Models Learn about the Filler-Gap Dependency? Talk presented at the 1st Blackbox NLP Workshop, Brussels, Belgium (11/18)

Grants and Awards

• Graduate Student Award, Mind Brain Behavior Initiative, Harvard	2021
• Graduate Student Award, Mind Brain Behavior Initiative, Harvard University	2019
• Graduate Student Award, Mind Brain Behavior Initiative, Harvard University	2018
• Best Honors Thesis Award, Division of Languages Cultures and Literatures, Stanford University	2015
• Major Language Study Grant, Division of Languages, Cultures and Literatures, Stanford University	
• Minor Language Study Grant, Department of Slavic Languages and Literatures, Stanford University	2012

Teaching

• Assistant Head Tutor, Department of Linguistics, Harvard	2020-2021
• "Undergraduate Thesis Writing Workshop" (Ling 99), Harvard (TA)	Fall 2020
• "Statistical Methods in Linguistics" (Ling 190), Harvard (TA)	Spring 2020
• "Computational Psycholinguistics" (BCS 9.19), MIT (TA)	Spring 2020
• "Language, Structure and Cognition" (Ling 83), Harvard (TA)	
Certificate for Distinction in Teaching	Fall 2019

ACADEMIC SERVICE

Departmental

• Graduate Student External Representative, Linguis	stics Department, Harvard	2020-2021
 Graduate Student Representative, Department of L Implimented first ever department climate survey Ran graduate portion of new faculty search (Springer) 	y (Spring 2019)	
- Coordinated graduate student Covid-19 Response	e (Spring 2020)	2020-2021
• Chair, Admitted Students Committee, Linguistics I	Department, Harvard	2018-2019
• Event Organizer, Harvard Graduate Students in Lin	nguistics, Harvard University	2017-2018
• Academic Theme Associate, Slavianskii Dom, Stanf	ford University	2013-2015
• Writing Tutor, Structured Liberal Education, Stanf	ford University	2013-2015
• Undergraduate Representative to the Breadth Gove	ernance Board, Stanford University	2013-2014

Reviewing

EMNLP (2020, 2021); ACL (2020); CogSci (2021), Meaning in Context Workshop @ ICLR (2021)

- Outstanding reviewer recognition, EMNLP, 2020

Professional Experience

Transcendent Endeavors

New York, NY

Computational Linguist

10/16 - 8/17

Carnegie Endowment for International Peace and Freelance

Moscow and Remote 10/15 -10/16

Translator and Editor

Palo Alto, CA

Palantir
Product Quality Engineer Intern

6/14 - 9/14

SELECTED TRANSLATIONS

All work co-translated from Russian with Mikhail Lion

- [1] "Sanctions and Retaliation: Where Russia-U.S. Relations are Headed" Andrey Movchan, Carnegie Center Moscow. 2018.
- [2] "Is Putin Losing Control of Russia's Conservative Nationalists?" Alexander Baunov, Foreign Affairs, 2017
- [3] "Is Putin Losing Control of Russia's Conservative Nationalists?" Alexander Baunov, Foreign Affairs, 2017
 - Nominated: Open Russia, Journalism as a Profession best Opinion Article, 2017
- [4] "The Accidental Formation of Russia's War Coalition" Konstantin Gaaze, Carnegie Center Moscow. Winner: Open Russia, Journalism as a Profession best Opinion Article, 2017
- [5] "The Snow Queen" by Evgeny Schwartz (stage play), produced by Dacha Theater / Lesser Known Players, Seattle WA
- [6] "Going to the People and Back Again: The Changing Shape of the Russian Regime" (white paper) by Alexander Baunov, Carnegie Center Moscow