Ethan Gotlieb Wilcox

wilcoxeg.github.io semantic scholar ethan.wilcox@inf.ethz.ch

EMPLOYMENT

ETH Postdoctoral Fellow

Zürich, Switzerland 1/2023 - present

Department of Computer Science, ETH Zürich,

- Joint association with Ryan Cotterell and Mrinmaya Sachan, Institute for Machine Learning
- Postdoctoral Researcher (9/22 12/22)

EDUCATION

Harvard University

Cambridge, MA 9/2017 - 5/2022

Ph.D. in Linguistics

- Dissertation Title: "Informative Presupposition and Accommodation"

 Dissertation Committee: Kathryn Davidson, Gennaro Chierchia, Roger Levy
- Visiting student, Ecole Normale Supérieure, Department of Cognitive Science (Summer 2018)

Stanford University

Stanford, CA

B.A.S in Symbolic Systems and Slavic Languages and Literature with Honors

9/2011 - 8/2015

RESEARCH AND TEACHING AREAS

- Computational Models of Sentence Processing
- Natural Language Processing and Computational Linguistics
- Experimental Psycholinguistics

Journal Articles

- [1] Ethan Gotlieb Wilcox, Tiago Pimentel, Clara Meister, Ryan Cotterell, Roger Levy. "Testing the Predictions of Surprisal Theory in 11 Languages", Transactions of the Association for Computational Linguistics, 2023.
- [2] Alexandre Cremers, **Ethan Gotlieb Wilcox**, Benjamin Spector. "Exhaustivity and Anti-Exhaustivity in the RSA Framework: Testing the Effect of Prior Beliefs", *Cognitive Science*, 2023.
- [3] Tiago Pimmentel, Clara Miester, **Ethan Gotlieb Wilcox**, Roger Levy and Ryan Cotterell. "On the Effect of Anticipation on Reading Times", *Transactions of the Association for Computational Linguistics*, 2023.
- [4] Ethan Gotlieb Wilcox, Richard Futrell and Roger Levy. "Using Computational Models to Test Syntactic Learnability", *Linguistic Inquiry*, 2022.

Conference Proceedings

[1] Clara Meister, Tiago Pimentel, Luca Malagutti, **Ethan Gotlieb Wilcox**, Ryan Cotterell. "On the Efficacy of Sampling Adapters", in *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, 2023

- [2] Wangchunshu Zhou, Yuchen Jiang, **Ethan Gotlieb Wilcox**, Ryan Cotterell, Mrinmaya Sachan. "Controlled Text Generation with Natural Language Instructions", in *Proceedings of the International Conference on Machine Learning (ICML)*, 2023
- [3] Thomas Clark, Ethan Gotlieb Wilcox, Edward Gibson, Roger Levy. "Which Evidence for Availability Effects on Speaker Choice in the Russian Comparative Alternation", in *Proceedings of the Annual Meeting of the Cognitive Science Society*, 2022
- [4] Ethan Gotlieb Wilcox, Roger Levy, Kathryn Davidson. "Which Presuppositions are Subject to Contextual Felicity Constraints?", in *Proceedings of the Semantics and Linguistic Theory (SALT)*, 2021
- [5] Ethan Gotlieb Wilcox, Pranali Vani, Roger Levy. "A Targeted Assessment of Incremental Processing in Neural Language Models and Humans", in Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing (Volume 1: Long Papers), 2021
- [6] Pranali Vani, Ethan Gotlieb Wilcox, Roger 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, 2021
- [7] Ethan Gotlieb Wilcox, Jon Gauthier, Jennifer Hu, Peng Qian, Roger Levy. "On the Predictive Power of Neural Language Models for Human Real-Time Comprehension Behavior", in *Proceedings of the Annual Meeting of the Cognitive Science Society*, 2020
- [8] Ethan Gotlieb Wilcox, Peng Qian, Richard Futrell, Ryosuke Kohita, Roger Levy, Miguel Ballesteros. "Structural Supervision Improves Few-Shot Learning and Syntactic Generalization in Neural Language Models", in *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing* (EMNLP), 2020
- [9] Tristan Thrush, **Ethan Gotlieb Wilcox**, Roger Levy. "Investigating Novel Verb Learning in BERT: Selectional Preference Classes and Alternation-Based Syntactic Generalization", in *Proceedings of the Third BlackboxNLP Workshop on Analyzing and Interpreting Neural Networks for NLP*, 2020
- [10] Jennifer Hu, Peng Qian, Jon Gauther, **Ethan Gotlieb Wilcox**, Roger Levy. "A Systematic Assessment of Syntactic Generalization in Neural Language Models", in *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*, 2020
- [11] Jon Gauther, Jennifer Hu, **Ethan Gotlieb Wilcox**, Peng Qian, Roger Levy. "SyntaxGym: An Online Platform for Targeted Evaluation of Language Models", in *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics: System Demonstrations*, 2020
- [12] Ethan Gotlieb Wilcox, Roger Levy, Richard Futrell. "What syntactic structures block dependencies in RNN language models?", in *Proceedings of the Annual Meeting of the Cognitive Science Society*, 2019
- [13] Richard Futrell, **Ethan Gotlieb Wilcox**, Takashi Morita, Peng Qian, Miguel Ballesteros, Roger Levy. "Neural language models as psycholinguistic subjects: Representations of syntactic state", in *Proceedings of the 2019 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, Volume 1 (Long and Short Papers), 2019*
- [14] Ethan Gotlieb Wilcox, Peng Qian, Richard Futrell, Miguel Ballesteros, Roger Levy. "Structural Supervision Improves Learning of Non-Local Grammatical Dependencies", in Proceedings of the 2019 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, Volume 1 (Long and Short Papers), 2019
- [15] Aixiu An, Peng Qian, Ethan Gotlieb Wilcox, Roger Levy. "Representation of Constituents in Neural Language Models: Coordination Phrase as a Case Study", in *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP)*, 2019

- [16] Ethan Gotlieb Wilcox, Roger Levy, Richard Futrell. "Hierarchical Representation in Neural Language Models: Suppression and Recovery of Expectations", in Proceedings of the 2019 ACL Workshop BlackboxNLP: Analyzing and Interpreting Neural Networks for NLP, 2019
- [17] Ethan Gotlieb Wilcox, Benjamin Spector. "The Role of Prior Beliefs in The Rational Speech Act Model of Pragmatics: Exhaustivity as a Case Study", in Proceedings of the Annual Meeting of the Cognitive Science Society, 2019
- [18] Ethan Gotlieb Wilcox, Roger Levy, Takashi Morita, Richard Futrell. "What do RNN Language Models Learn about Filler-Gap Dependencies?", in *Proceedings of the 2018 EMNLP Workshop BlackboxNLP: Analyzing and Interpreting Neural Networks for NLP*, 2018.

BOOK CHAPTERS

[1] Ethan Gotlieb Wilcox, Jon Gauthier, Peng Qian, Jennifer Hu and Roger Levy "Learning Syntactic Structures from String Input", Algebraic Structures in Natural Language, 2022 (pp. 113-138). CRC Press.

Manuscripts and Theses

- [1] Ethan Gotlieb Wilcox, "Informative Presupposition and Accommodation", PhD Dissertation, Harvard University, 2022.
- [2] Richard Futrell, **Ethan Gotlieb Wilcox**, Takashi Morita, and Roger Levy, "RNNs as psycholinguistic subjects: Syntactic state and grammatical dependency", arXiv preprint, 2018.
- [3] Ethan Gotlieb Wilcox, "Revolutionary Linguistics: The Ideology of the Soviet Esperanto Movement 1917-1938", BA Honors Thesis, Stanford University, 2015

Invited Presentations

Conference Presentations

• "Language Models as Cognitive Models: The Cases of Syntactic Generalization and Real-Time Language Comprehension", The Fourth International Conference on Theoretical East Asian Psycholinguistics, Seoul Korea (8/23)

Departmental Colloquia

- "Learning and Processing Linguistic Structure in Humans and Machines", Department of Cognitive Science,
 Johns Hopkins University, USA. (2/23)
- "Using Computational Models to Test Syntactic Learnability", Department of Linguistics, University of Geneva, Switzerland. (12/22)
- "Structure and Statistical Processing in Humans and Machines", Department of Linguistics, Yale University, USA. (3/22)
- "Using Computational Models to Test Syntactic Learnability", Department of English, Dongguk University, Korea. (1/22)
- "Using Presuppositions to Introduce Novel Information", Department of Linguistics (Universals Colloquium Series), Harvard University, USA. (11/21)
- "How to Evaluate Neural Networks as Models of Linguistic Cognition", Department of English, Dongguk University, Korea. (2/21)

Lab Talks / Other Invited Presentations

- "Structure and Statistical Processing in Humans and Machines", Language, Logic Learning Lab, UC Davis, USA. (5/22)
- "Neural Network Language Models and the Argument from the Poverty of the Stimulus", Department of Linguistics (Ling Lunch Series), Massachusetts Institute of Technology, USA. (10/19)
- "Using Structure to Predict the next Word: What RNN Language Models Learn about Syntax", Computation and Psycholinguistics Lab, Johns Hopkins University, USA. (2/19)
- "What do RNN Language Models Learn about the Filler-Gap Dependency?", Psycholinguistics and Cognitive Science Laboratory, Ecole Normale Supérieure (Paris), France (8/18)

Grants and Awards

• ETH Zurich Postdoctoral Fellowship

1/2021 - present

• Graduate Student Research Grant, Mind Brain Behavior Initiative, Harvard

1/2021, 10/2019, 5,2018

• Best Honors Thesis, Division of Languages Cultures and Literatures, Stanford University

6/2015

TEACHING

• Assistant Head Tutor, Department of Linguistics, Harvard	9/2020-5/2021
• "Statistical Methods in Linguistics" (Ling 190), Harvard (TA)	1/2020 - 5/2020
• "Computational Psycholinguistics" (BCS 9.19), MIT (TA)	1/2020 - 5/2020
• "Language, Structure and Cognition" (Ling 83), Harvard (TA) Certificate for Distinction in Teaching	9/2019 - 12/2019

ACADEMIC SERVICE

Conference Organization

• Organizing Committee, "BabyLM Challenge" shared task at the Conference on Computational Natural Language Learning (CoNLL)

Departmental Service

- Graduate Student Representative, Department of Linguistics, Harvard University (2020-2022)
 - Implemented first ever department climate survey
 - Ran graduate portion of new faculty search
 - Coordinated graduate student Covid-19 Response

Reviewing

- Journals: Open Mind (MIT Press); Behavior Research Methods
- Conferences: ACL (2020, 2023); EMNLP (2020, 2021, 2022, 2023); ACL Rolling Review (2022, 2023),
 COLING (2022), CogSci (2021), Meaning in Context Workshop @ ICLR (2021)
 Outstanding reviewer recognition, EMNLP, 2020

Professional Experience

Transcendent Endeavors

Computational Linguist

New York, NY 10/16 -8/17

Carnegie Endowment for International Peace and Freelance

Translator and Editor

Moscow and Remote 10/15 - 10/16

Palantir
Product Quality Engineer Intern

Palo Alto, CA 6/14 -9/14

SELECTED TRANSLATIONS

All work co-translated from Russian with Mikhail Lion

- "Sanctions and Retaliation: Where Russia-U.S. Relations are Headed" by Andrey Movchan, Carnegie Center Moscow. 2018.
- "Is Putin Losing Control of Russia's Conservative Nationalists?" by Alexander Baunov, Foreign Affairs, 2017
- "The Accidental Formation of Russia's War Coalition" by Konstantin Gaaze, Carnegie Center Moscow, 2017
- "Going to the People and Back Again: The Changing Shape of the Russian Regime" (white paper) by Alexander Baunov, Carnegie Center Moscow, 2017
- "The Snow Queen" by Evgeny Schwartz (stage play), produced by Dacha Theater / Lesser Known Players, Seattle WA, 2016

REFERENCES

Roger Levy

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Harvard University

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