

EMPLOYMENT

Assistant Professor of Computational Linguistics, Georgetown University Department of Linguistics	Washington, D.C. 8/2024 - present
ETH Postdoctoral Fellow, ETH Zürich Department of Computer Science, Institute of Machine Learning	Zürich, Switzerland 9/2022 - 8/2024

RESEARCH AND TEACHING AREAS

- Computational and information-theoretic models of sentence processing and language acquisition
- Natural language processing and computational linguistics
- Experimental psycholinguistics including syntactic processing, reading, experimental methods

EDUCATION

Ph.D. in Linguistics, Harvard University Dissertation Title: “Informative Presupposition and Accommodation”	Cambridge, MA 9/2017 - 5/2022
• Visiting student, Ecole Normale Supérieure, Department of Cognitive Science (Summer 2018)	
B.A.S., Stanford University Degree in in Symbolic Systems and Slavic Languages and Literature with Honors	Stanford, CA 9/2011 - 8/2015

JOURNAL ARTICLES

- [1] Anna A. Ivanova, Aalok Sathe, Benjamin Lipkin, Unnathi Kumar, Setayesh Radkani, Thomas H. Clark, Carina Kauf, Jennifer Hu, R. T. Pramod, Gabriel Grand, Vivian Paulun, Maria Ryskina, Ekin Akyürek, **Ethan Gotlieb Wilcox**, Nafisa Rashid, Leshem Choshen, Roger Levy, Evelina Fedorenko, Joshua Tenenbaum, Jacob Andreas. “[Elements of World Knowledge \(EWOK\): A cognition-inspired framework for evaluating basic world knowledge in language models](#)”, *Under Review, Transactions of the Association for Computational Linguistics*
- [2] **Ethan Gotlieb Wilcox**, Michael Y. Hu, Alex Warstadt, Aaron Mueller, Leshem Choshen, Chengxu Zhuang, Adina Williams, Ryan Cotterell, Tal Linzen. “[Bigger is not always better: The importance of human-scale language modeling for psycholinguistics](#)”, *under review, Journal of Memory and Language*
- [3] **Ethan Gotlieb Wilcox**, Cui Ding, Mrinmaya Sachan, Lena Jäger. “[Mouse Tracking while Reading \(MoTR\): A New Incremental Processing Measurement](#)”, *Journal of Memory and Language*, 2024
- [4] **Ethan Gotlieb Wilcox**, Tiago Pimentel, Clara Meister, Ryan Cotterell. “[An Information-Theoretic Analysis of Targeted Regressions During Reading](#)”, *Cognition*, 2024.
- [5] **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.
- [6] Alexandre Cremers, **Ethan Gotlieb Wilcox**, Benjamin Spector. “[Exhaustivity and Anti-Exhaustivity in the RSA Framework: Testing the Effect of Prior Beliefs](#)”, *Cognitive Science*, 2023.

- [7] Tiago Pimentel, 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.
- [8] **Ethan Gotlieb Wilcox**, Richard Futrell and Roger Levy. “[Using Computational Models to Test Syntactic Learnability](#)”, *Linguistic Inquiry*, 2023.

CONFERENCE PROCEEDINGS

- [1] Eleftheria Tsipidi, Franz Nowak, Ryan Cotterell, **Ethan Gotlieb Wilcox**, Mario Giulianelli, Alex Warstadt. “[Surprise! Uniform Information Density Isn’t the Whole Story: Predicting Surprisal Contours in Long-form Discourse](#)” to appear in *Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2024
- [2] Samuel Kiegedland*, **Ethan Gotlieb Wilcox***, Afra Amini, David Robert Reich, Ryan Cotterell. “[Reverse Engineering the Reader](#)” to appear in *Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2024
- [3] Andreas Opedal, Eleanor Chodroff, Ryan Cotterell, **Ethan Gotlieb Wilcox**. “[On the Role of Context in Reading Time Prediction](#)” to appear in *Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2024
- [4] **Ethan Gotlieb Wilcox**, Clara Meister, Ryan Cotterell, Tiago Pimentel. “[Language Model Quality Correlates with Psychometric Predictive Power in Multiple Languages](#)” in *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2023
- [5] Tiago Pimentel, Clara Meister, **Ethan Gotlieb Wilcox**, Ryan Cotterell, Kyle Mahowald. “[Revisiting the Optimality of Word Lengths](#)”, in *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2023
- [6] Lukas Wolf, Tiago Pimentel, Evelina Fedorenko, Ryan Cotterell, Alex Warstadt, **Ethan Gotlieb Wilcox**, Tamar Regev. “[Quantifying the redundancy between prosody and text](#)”, in *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2023
- [7] Lukas Wolf, Klemen Kotar, Greta Tuckute, Eghbal Hosseini, Alex Warstadt, **Ethan Gotlieb Wilcox**, Tamar Regev. “[WhisBERT: Multimodal Text-Audio Language Modeling on 100M Words](#)”, in *Proceedings of the 2023 BabyLM Challenge*, 2023
- [8] Alex Warstadt, Aaron Mueller, Leshem Choshen, **Ethan Gotlieb Wilcox**, Chengxu Zhuang, Juan Ciro, Rafael Mosquera, Adina Williams, Bhargavi Paranjabe, Tal Linzen, Ryan Cotterell. “[Findings of the BabyLM Challenge: Sample-efficient Pretraining on Developmentally Plausible Corpora](#)”, in *Proceedings of the 2023 BabyLM Challenge*, 2023
- [9] 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
- [10] 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
- [11] 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
- [12] **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
- [13] **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*

- [14] 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
- [15] **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
- [16] **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
- [17] 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
- [18] Jennifer Hu, Peng Qian, Jon Gauthier, **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
- [19] Jon Gauthier, 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
- [20] **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
- [21] 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
- [22] **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
- [23] 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
- [24] **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
- [25] **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
- [26] **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**, Roger Levy, Kathryn Davidson. “[Presupposing Novel Information: A Cross-Trigger Experiment in English](#)”, *under review*
- [2] **Ethan Gotlieb Wilcox**, “[Informative Presupposition and Accommodation](#)”, Ph.D. Dissertation, Harvard University, 2022.
- [3] Richard Futrell, **Ethan Gotlieb Wilcox**, Takashi Morita, and Roger Levy, “[RNNs as psycholinguistic subjects: Syntactic state and grammatical dependency](#)”, arXiv preprint, 2018.
- [4] **Ethan Gotlieb Wilcox**, “[Revolutionary Linguistics: The Ideology of the Soviet Esperanto Movement 1917-1938](#)”, BA Honors Thesis, Stanford University, 2015

INVITED PRESENTATIONS

Invited Conference & Workshop Talks

- “Language Modeling in People and Machines”, ICML Workshop on Large Language Models and Cognition, International Conference on Machine Learning, Vienna, Austria (7/24)
- “Using artificial neural networks to study human language processing: Two case studies and a warning”, Workshop on Using Artificial Neural Networks for Studying Human Language Learning and Processing, Institute for Language Logic and Computation, University of Amsterdam, The Netherlands (6/24)
- “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)

Invited Colloquia

- “Information-Theoretic Perspectives on Language Comprehension”, Complex Human Data Hub, University of Melbourne, Australia (10/23)
- “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

Awards

- Outstanding Paper Award, Conference on Empirical Methods in Natural Language Processing 12/2023
Language Model Quality Correlates with Psychometric Predictive Power in Multiple Languages
- Outstanding Paper Award, Conference on Empirical Methods in Natural Language Processing 12/2023
Revisiting the Optimality of Word Lengths
- Best Honors Thesis, Division of Languages Cultures and Literatures, Stanford University 6/2015
Revolutionary Linguistics: The ideology of the Soviet Esperanto movement, 1917-1938

Grants

- ETH Zurich Postdoctoral Fellowship 1/2021 - present
Evaluating Large Language Models with Human Psycholinguistic Data
- Graduate Student Research Grant, Mind Brain Behavior Initiative, Harvard 1/2021
Experimental and computational assessment of presuppositions’ contextual felicity constraints
- Graduate Student Research Grant, Mind Brain Behavior Initiative, Harvard 10/2019
Workshop on linguistics and climate change
- Graduate Student Research Grant, Mind Brain Behavior Initiative, Harvard 5/2018
Can neural nets learn linguistic dependencies?

TEACHING AND ADVISING

Teaching Experience

As a Primary Instructor (all at Georgetown University)

- Introduction to Natural Language Processing Fall 2024
- Information, Structure and Language (Graduate Seminar) Fall 2024

As a TA

- Undergraduate Thesis Writing Workshop (Harvard) Fall 2020, Spring 2021
- Statistical Methods in Linguistics (Harvard) Spring 2020
- Computational Psycholinguistics (MIT) Spring 2020
- Language, Structure and Cognition (Intro to Linguistics Course, Harvard) Fall 2019

Theses Supervised

- Samuel Kiegeland. “Reverse-Engineering the Reader: Aligning Language Models to Psychometric Data”, Masters Thesis, ETH, Department of Computer Science, 2024.
- Cui Ding. “Mouse Tracking for Reading (MoTR): A New Incremental Processing Paradigm”, Masters Thesis, University of Zürich, Department of Computational Linguistics, 2023.

– Awarded a “Semesterpreis” for outstanding thesis

- Lukas Wolf. “On the Contribution of Prosody to Language Comprehension in Large Language Models”, Masters Thesis, ETH Zürich, Department of Computer Science, 2023.

ACADEMIC SERVICE

Conference Organization

- Organizing Committee, BabyLM Challenge shared task 2023
 - Coordinated publicity and peer-review process for workshop with 30+ submissions
 - The BabyLM Challenge was featured in a [New York Times article](#) about democratizing AI research

Departmental Service

- Graduate Student Representative, Department of Linguistics, Harvard University 2020-2022
 - Represent departmental graduate student interests to the faculty and university
 - Implemented first ever department climate survey; ran graduate portion of new faculty search

Reviewing

- **Journals:** Journal of Memory and Language (Elsevier); Open Mind (MIT Press); Behavior Research Methods (Springer); Journal of Linguistics (Cambridge); Language Acquisition (Taylor & Francis)
- **Funding Agencies:** European Research Commission (Advanced Grant, 2023)
- **Conferences:** ACL (2020, 2023); EMNLP (2020, 2021, 2022, 2023, 2024); ACL Rolling Review (2022, 2023, 2024), COLING (2022), CogSci (2021), Meaning in Context Workshop at 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
Translator and Editor	10/15 –10/16
Palantir	Palo Alto, CA
Product Quality Engineer Intern	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](#)”, Andrey Movchan, *Carnegie Center Moscow*. 2018.
- “[Is Putin Losing Control of Russia’s Conservative Nationalists?](#)”, Alexander Baunov, *Foreign Affairs*, 2017
- “[The Accidental Formation of Russia’s War Coalition](#)”, Konstantin Gaaze, *Carnegie Center Moscow*, 2017
- “[Going to the People—and Back Again: The Changing Shape of the Russian Regime](#)” (white paper), Alexander Baunov, *Carnegie Center Moscow*, 2017
- “[The Snow Queen](#)” (stage play), Evgeny Schwartz, produced by Dacha Theater, Seattle WA, 2016

REFERENCES

Roger Levy

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