

Kyle Mahowald: CV

Assistant professor of linguistics at UT Austin, computational psycholinguist with interests in computation, cognition, quantitative methods, and NLP.

CONTACT INFORMATION e-mail: kmahowald@gmail.com
web: mahowak.github.io

RESEARCH INTERESTS Computational psycholinguistics, Natural Language Processing (NLP), quantitative methods, cognitive science, statistical methods in the sciences, language and communication, language neuro-imaging, historical English, literature, meta-analysis

ACADEMIC WORK **The University of Texas at Austin**, Austin, TX USA
Assistant Professor, Linguistics 2021-
University of California, Santa Barbara, Santa Barbara, CA USA
Assistant Professor, Linguistics 2020-2021

- Steering Committee Member & Affiliate Faculty, Cognitive Science Emphasis
- Affiliate Faculty, Center for Responsible Machine Learning
- Affiliate Faculty, Center for Quantitative Methods in the Social Sciences

Stanford University, Palo Alto, CA USA
Postdoctoral Researcher, Computer Science 2019-2020

- Advisors: Dan McFarland (Graduate School of Education), [Dan Jurafsky](#) (CS/Linguistics)

EDUCATION **Massachusetts Institute of Technology**, Cambridge, MA USA
Ph.D., [Brain and Cognitive Sciences](#) 2011-16

- Advisor: [Edward Gibson](#)
- Committee: Edward Gibson, Nancy Kanwisher, Joshua Tenenbaum
- Thesis: *Cognitive and Communicative Pressures in Natural Language*

University of Oxford, Oxford, England UK
M.Phil with Distinction, [General Linguistics and Comparative Philology](#) 2009-11
Marshall Scholar

- Advisors: [Mary Dalrymple](#), Aditi Lahiri
- Areas of Study (all with Distinction): history and structure of English, morpho-phonology, computational linguistics, general linguistics
- Thesis: *An LFG Approach to Old English Constituent Order* (with Distinction)

Harvard University, Cambridge, MA USA
A.B. Summa Cum Laude, English 2005-09

- Advisors: Daniel Donoghue, Marjorie Garber
- Thesis: *A Fairy's Tale: Queen Mab's Journey from Shakespeare to Modernity*

MAJOR EXTERNAL FUNDING

- 2023-2027. NSF Collaborative Research: SHF: Medium: Natural Language Models with Execution Data for Software Testing (Co-PI, with Jessy Li, Milos Gligoric, Sasa Misailovic). \$900,000 to UT (\$1.2M total).
- 2021-2023. NSF Computer and Information Science and Engineering (CISE) Research Initiation Initiative (CRII). Using Linguistic Variation to Understand Deep Neural Models of Language. \$175,000.

FELLOWSHIPS GRANTS AND AWARDS	<ul style="list-style-type: none"> • University of Texas at Austin UGS Supplementa Course Fund (\$1,000) 2022 • University of Texas at Austin Academic Enrichment Fund (\$4,000) 2021 • UCSB Senate Faculty Grant (\$15,000, declined) 2021 • UCSB Interdisciplinary Humanities Collaborations in the Virtual Classroom Grant (\$1,100) 2020 • NSF Doctoral Dissertation Improvement Grant (\$12,000) 2015-16 • Graduate Student Council Travel Grant 2014 • Angus MacDonald Award for Excellence in Undergraduate Teaching 2014 • AAAS/Science Program for Excellence in Science 2014 • CUNY 2013 Travel Award 2013 • National Defense Science and Engineering Graduate Fellowship 2012-15 • Henry E. Singleton Fund Fellowship 2011-12 • Sigma Xi Scientific Research Society 2012 • Marshall Scholarship (1 of 40 selected nationally) 2009 • Harvard College Research Fellowship 2008 • National Merit Scholarship 2005-09 • Robert Byrd Scholarship 2005-09 • Harvard Bowdoin Prize (Undergraduate Essay), \$10,000 2009 • Harvard Phi Beta Kappa Junior Electee, 1 of 24 elected as junior 2008 • John Harvard Scholar, top 5% in class 2006-09 • United States Presidential Scholar, 1 of 2 selected from each state 2005 • Youngest Sunday New York Times crossword constructor 2004
INDUSTRY EXPERIENCE	<p>Algorithm Developer, Hudson River Trading, New York, NY USA 2016-2019</p> <ul style="list-style-type: none"> • Performed research in natural language processing and quantitative finance, wrote production code for low latency trading algorithms in C++ and Python
ARTICLES AND ARCHIVED CONFERENCE PROCEEDINGS	<p>Mahowald, K., Diachek, E., Gibson, E., Fedorenko, E., Futrell, R. (2023). Grammatical cues to subjecthood are redundant in a majority of simple clauses across languages. <i>Cognition</i>, 241, 105543.</p> <p>Chen, S., Futrell, R., Mahowald, K. (2023). An information-theoretic approach to the typology of spatial. <i>Cognition</i>, 240, 105505.</p> <p>K. Mahowald, A. Ivanova, I. Blank, N. Kanwisher, J. Tenenbaum, E. Fedorenko. 2023. Dissociating Language and Thought in Large Language Models: A Cognitive Perspective.</p> <p>K. Mahowald. 2023. A Discerning Several Thousand Judgments: GPT-3 Rates the Article + Adjective + Numeral + Noun Construction. Proceedings of EACL 2023.</p> <p>G. Chronis, K. Mahowald, K. Erk. 2023. A Method for Studying Semantic Construal in Grammatical Constructions with Interpretable Contextual Embedding Spaces. Proceedings of ACL 2023.</p> <p>J. Huang, Z. Wu, K. Mahowald, C. Potts. 2023. Inducing Character-level Structure in Subword-based Language Models with Type-level Interchange Intervention Training. Findings of ACL 2023.</p> <p>V. Govindarajan, K. Mahowald, D. Beaver, J. Li. 2023. Counterfactual Probing for the influence of affect and specificity on Intergroup Bias. Findings of ACL 2023.</p> <p>Y. Wu, W. Sheffield, K. Mahowald, J. Li. 2023. Elaborative simplification as implicit questions under discussion.</p> <p>S. Malik-Moraleda, K Mahowald, BR Conway, E Gibson. 2023. Concepts Are Restructured During Language Contact: The Birth of Blue and Other Color Concepts in Tsimane'-Spanish Bilinguals. Psychological Science.</p>

- A Srinivasan, VS Govindarajan, K Mahowald. 2023. Counterfactually Probing Language Identity in Multilingual Models. *MRL Workshop 2023*.
- V. Govindarajan, J.D. Rodriguez, K. Bostrom, K. Mahowald. 2023. Lil-Bevo: Explorations of Strategies for Training Language Models in More Humanlike Ways. *Proceedings of the 2023 BabyLM Challenge*.
- S. Malik-Moraleda, O. Jouravlev, Z. Mineroff, T. Cucu, M. Taliaferro, K. Mahowald, I. Blank, E. Fedorenko. 2023. Functional characterization of the language network of polyglots and hyperpolyglots with precision fMRI.
- W. Liang, K. Mahowald, J. Raymond, V. Krishna, D. Smith, D. Jurafsky, D. McFarland, J. Zou. 2023. How random is the review outcome? A systematic study of the impact of external factors on eLife peer review.
- O. Jouravlev, K. Mahowald, A. Paunov, E. Gibson, E. Fedorenko. 2023. Evaluation of Psychometric Properties and Inter-test Associations for Three Popular Measures of Social Competence.
- M. Mersinias, K. Mahowald. 2023. Keep it Neutral: Using Natural Language Inference to Improve Generation.
- A. Diwan, L. Berry, E. Choi, D. Harwath, K. Mahowald. 2022. Why is Winoground Hard? Investigating Failures in Visuolinguistic Compositionality. *Proceedings of EMNLP 2022*.
- N. Rezaii, K. Mahowald, R. Ryskin, B. Dickerson, E. Gibson. 2022. A syntax–lexicon trade-off in language production. *Proceedings of the National Academy of Sciences* 119 (25), e2120203119.
- A. Kaushal, K. Mahowald. 2022. What do tokens know about their characters and how do they know it? *Proceedings of NAACL 2022*.
- K. Mahowald, I. Dautriche, M. Braginsky, E. Gibson. 2022. Efficient communication and the organization of the lexicon. In *Oxford University Press Handbook of the Mental Lexicon*.
- I. Papadimitriou, R. Futrell, K. Mahowald. 2022. When classifying grammatical role, BERT doesn’t care about word order... except when it matters. *Proceedings of ACL 2022*.
- V. Kovatchev, T. Chatterjee, V. Govindarajan, J. Chen, E. Choi, G. Chronis, A. Das, K. Erk, M. Lease, J. Li, Y. Wu, K. Mahowald. 2022. longhorns at DADC 2022: How many linguists does it take to fool a Question Answering model? A systematic approach to adversarial attacks. *Proceedings of DADC 2022*.
- ManyBabies Collective. 2021. Action anticipation based on an agent’s epistemic state in toddlers and adults.
- B. Schmidt, S.T. Piantadosi, K. Mahowald. 2021. Uncontrolled corpus composition drives an apparent surge in cognitive distortions. *Letter to PNAS* (in response to Bollen et al.).
- J. Rozner, C. Potts, K. Mahowald. 2021. Decrypting Cryptic Crosswords: Semantically Complex Wordplay Puzzles as a Target for NLP. *Proceedings of NeurIPS 2021*.
- A. Jones, W. Wang, K. Mahowald. 2021. A Massively Multilingual Analysis of Cross-linguality in Shared Embedding Space. *Proceedings of EMNLP 2021*.
- T. Pimentel, I. Nikkarinen, K. Mahowald, D. Blasi, R. Cotterell. 2021. How (Non-)Optimal is the Lexicon? *Proceedings of NAACL-HLT 2021*.
- I. Papadimitriou, R. Futrell, E. Chi, K. Mahowald. 2021. Deep Subjecthood: Higher-Order Grammatical Features in Multilingual BERT. *Proceedings of EACL 2021*.

- K. Mahowald, M. Norris, D. Jurafsky. 2021. Concord begets concord: A Bayesian model of nominal concord typology. *Proceedings of 95th LSA* (2021).
- D. Card, P. Henderson, U. Khandelwal, R. Jia, K. Mahowald, D. Jurafsky. 2020. With little power comes great responsibility. *Proceedings of EMNLP 2020*.
- K. Mahowald, G. Kachergis, M.C. Frank. 2020. What counts as an exemplar model, anyway? A commentary on Ambridge (2020). *First Language*.
- E. Gibson, R. Futrell, S.T. Piantadosi, I. Dautriche, K. Mahowald, L. Bergen, R. Levy. 2019. How efficiency shapes human language. *Trends in Cognitive Science*.
- K. Mahowald, I. Dautriche, E. Gibson, S.T. Piantadosi. 2018. Word forms are structured for efficient use. *Cognitive Science*. doi: 10.1111/cogs.12689.
- Z. Mineroff, I.A. Blank, K. Mahowald, E. Fedorenko. 2018. A robust dissociation among the language, multiple demand, and default mode networks: evidence from inter-region correlations in effect size. *Neuropsychologia*. doi: 10.1016/j.neuropsychologia.2018.09.011
- I. Dautriche*, K. Mahowald*, E. Gibson, S.T. Piantadosi. 2017. Words cluster phonetically beyond phonotactic regularities. *Cognition* 163: 128-145. doi: 10.1016/j.cognition.2017.02.001.
*co-first authors
- E. Gibson, C. Tan, R. Futrell, K. Mahowald, L. Konieczny, B. Hemfroth, E. Fedorenko. 2017. Don't underestimate the benefits of being misunderstood. *Psychological Science*: 1-10. doi: 10.1177/0956797617690277.
- E. Gibson, R. Futrell, J. Jara-Ettinger, K. Mahowald, L. Bergen, S. Ratnasingam, M. Gibson, S.T. Piantadosi, B.R. Conway. 2017. Color naming across languages reflects color use. *Proceedings of the National Academy of Sciences*. 114(40): 10785-10790.
- K. Mahowald, A. James, R. Futrell, E. Gibson. 2016. Structural priming is most useful when the conclusions are statistically robust. *Behavioral and Brain Sciences*, E302.
- I. Dautriche, K. Mahowald, E. Gibson, S.T. Piantadosi. 2016. Wordform similarity increases with semantic similarity: an analysis of 100 languages. *Cognitive Science*. doi: 10.1111/cogs.12453
- K. Mahowald, A. James, R. Futrell, E. Gibson. 2016. A meta-analysis of syntactic priming. *Journal of Memory and Language*, 91, 5-27.
- K. Mahowald, E. Fedorenko. 2016. Reliable individual-level neural markers of highlevel language processing: A necessary precursor for relating neural variability to behavioral and genetic variability. *Neuroimage*, 139, 74-93. doi: 10.1016/j.neuroimage.2016.05.073.
- I. Blank, E. Fedorenko, Z. Balewski, and K. Mahowald. 2016. Syntactic processing is distributed across the language network. *Neuroimage*, 127, 307-323.
- K. Mahowald, P. Graff, J. Hartman, and E. Gibson. 2016. SNAP Judgments: A Small N Acceptability Paradigm (SNAP) for Linguistic Acceptability Judgments. *Language*, 92 (3), 619-635.
- R. Futrell, K. Mahowald, E. Gibson. 2015. Large-Scale Evidence of Dependency Length Minimization in 37 Languages. *Proceedings of the National Academy of Sciences*. 112 (33), 10336-10341. doi: 10.1073/pnas.1502134112
- R. Singh, E. Fedorenko, K. Mahowald, E. Gibson. 2015. Presupposition accommodation is costly only in implausible contexts. *Cognitive Science*. Published online before print July, 2015. doi: 10.1111/cogs.12260
- R. Futrell, K. Mahowald, E. Gibson. 2015. Quantifying Word Order Freedom in Dependency Corpora. *Proceedings of Depling 2015*.

- E. Gibson, P. Jacobson, P. Graff, E. Fedorenko, K. Mahowald, S.T. Piantadosi. 2014. A pragmatic account of complexity in definite Antecedent-Contained-Deletion relative clauses. *Journal of Semantics*. 32 (4): 579-618.
- K. Mahowald and E. Gibson. 2013. Short, frequent words are more likely to appear genetically related by chance. Letter to *Proceedings of the National Academy of Sciences*.
- K. Mahowald, E. Fedorenko, S.T. Piantadosi, and E. Gibson. 2013. Info/information theory: speakers choose shorter words in predictive contexts. *Cognition*, 126, 313-318.
- K. Mahowald. 2012. A Naive Bayes Classifier for Shakespeare’s second person pronoun. *Literary and Linguistic Computing*. 27 (1): 17-23. doi:10.1093/llc/fqr045
- K. Mahowald. 2011. An LFG Account of Word Order Freezing. In M. Butt and T. H. King, eds., *Proceedings of the LFG11 Conference*. Hong Kong: CSLI Publications: <http://www-csli.stanford.edu/publications>.
- K. Mahowald. 2010. “It may nat be”: Chaucer, Derrida, and the Impossibility of the Gift. *Studies in the Age of Chaucer*. 32:129-150.
- TUTORIALS
- R. Cotterell, R. Futrell, K. Mahowald, C. Meister, T. Pimentel, A. Williams, and A. Arora. 2022. Information Theory in Linguistics: Methods and Applications. COLING 2022.
- POP SCIENCE ARTICLES
- S. AnderBois, K. Mahowald, N. Tomlin. 2023. The Unspoken Language of Crosswords. *The Atlantic*.
- K. Mahowald, A. Ivanova. 2022. Google’s powerful AI spotlights a human cognitive glitch: Mistaking fluent speech for fluent thought. *The Conversation*.
- THESES
- K. Mahowald. 2016. Cognitive and communicative pressures in natural language. Ph.D. thesis. Massachusetts Institute of Technology.
- K. Mahowald. 2011. An LFG Approach to Old English. Master’s thesis. Oxford University.
- K. Mahowald. 2009. A Fairy’s Tale: Queen Mab’s Journey from Shakespeare to Modernity. Harvard College.
- REFEREED PRESENTATIONS
- S. Malik-Moraleda, K. Mahowald, B. Conway, E. Gibson. 2022. Frequency Trumps Proficiency During Lexical Access: Color Naming in Tsimane’-Spanish Bilinguals. AMLAP 2022.
- S. Chen, R. Futrell, K. Mahowald. 2022. Investigating information-theoretic properties of the typology of spatial demonstratives. SIGTYP 2022.
- I. Papadimitriou, R. Futrell, K. Mahowald. 2022. When Classifying Arguments, BERT Doesn’t Care About Word Order... Except When It Matters. SCiL 2022.
- T. Cucu, K. Mahowald. How do linguistics papers talk about non-English languages? Metascience 2021.
- K. Mahowald, I. Papadimitriou, D. Jurafsky, R. Futrell. 2021. Accessibility-Based Constraints on Morphosyntax in Corpora of 54 Languages. CUNY Conference on Human Sentence Processing, CUNY 2021.
- M. Yen, I. Blank, K. Mahowald. 2021. Competing Effects of Syntax and Animacy in Priming of Relative Clause Attachment. CUNY Conference on Human Sentence Processing, CUNY 2021.
- N. Rezaii, K. Mahowald, R. Ryskin, B. Dickerson, E. Gibson. 2021. Syntactic Rule Frequency as a Measure of Syntactic Complexity: Insights from Primary Progressive Aphasia. CUNY Conference on Human Sentence Processing, CUNY 2021.

- K. Mahowald, D. Jurafsky, M. Norris. 2021. Concord begets concord: a Bayesian model of nominal concord. *Linguistics Society of America Conference* 2021.
- I. Papadimitriou, R. Futrell, E. Chi, K. Mahowald. 2021. Multilingual BERT, ergativity, and grammatical subjecthood. *SCiL* 2021.
- I. Papadimitriou, R. Futrell, E. Chi, K. Mahowald. 2020. Multilingual BERT learns abstract case representations. *EMNLP 2020: SIGTYP*.
- K. Mahowald, A. James, R. Futrell, E. Gibson. 2016. A meta-analysis of syntactic priming in language production. *Annual CUNY Conference on Human Sentence Processing, CUNY 2016*. Gainesville, FL. March 3-5, 2016.
- K. Mahowald, I. Dautriche, E. Gibson, A. Christophe, E. Gibson. 2014. Efficient phonological clustering in the mental lexicon. *Ninth International Conference on the Mental Lexicon*. Niagara-on-the-Lake, Ontario, Canada. September 30-October 2, 2014.
- I. Dautriche, K. Mahowald, E. Gibson, A. Christophe, E. Gibson. 2014. Lexical clustering in efficient language design. *AMLaP 2014 (Architectures and Mechanisms for Language Processing)*. Edinburgh, UK. September 3-6, 2014.
- K. Mahowald, P. Graff, J. Hartman, E. Gibson. 2014. SNAP Judgments: Small N Acceptability Paradigm (SNAP) for linguistic judgments. *AMLaP 2014 (Architectures and Mechanisms for Language Processing)*. Edinburgh, UK. September 3-6, 2014.
- K. Mahowald, A. Jacobs, A. Fahimipour, M. Kleiman-Weiner. 2013. Measure for Measure: Quantifying Shakespearean Drama. *Links 2013*. MIT Media Lab. July 22–23, 2013.
- K. Mahowald. 2011. An LFG Account of Word Order Freezing. *Sixteenth International LFG Conference*. Hong Kong. July 16–19, 2011.
- S. Chen, R. Futrell, K. Mahowald. 2022. An information-theoretic approach to the typology of spatial demonstratives. *Human Sentence Processing (HSP) 2022*.
- T.I. Regev, J. Affourtit, X. Chen, L. Bergen, K. Mahowald, E. Fedorenko. 2020. Sensitivity of high-level language processing brain regions to phonological information. *Society for the Neurobiology of Language 2020*.
- S. Ratnasingam, E. Gibson, R. Futrell, J. Jara-Ettinger, K. Mahowald, L. Bergen, S.T. Piantadosi, B. Conway. 2017. Statistical variations in the power spectrum of daylight over a day predict communicative efficiency of color-language. *VSS*.
- K. Mahowald, M. Kline, E. Fedorenko, E. Gibson. 2015. Informativity and efficient compression of sentences. *Annual CUNY Conference on Human Sentence Processing, CUNY 2015*. Los Angeles, CA. March 19-21, 2014.
- K. Mahowald, S.T. Piantadosi, M. Alper, E. Gibson. 2015. Lexical items are privileged slots for meaning. *Annual CUNY Conference on Human Sentence Processing, CUNY 2015*. Los Angeles, CA. March 19-21, 2014.
- R. Futrell, K. Mahowald, E. Gibson. 2014. CLIQS: Cross-Linguistic Investigations in Quantitative Syntax. *AMLaP 2014 (Architectures and Mechanisms for Language Processing)*. Edinburgh, UK. September 3-6, 2014.
- K. Mahowald, P. Isola, E. Fedorenko, A. Oliva, E. Gibson. 2014. An information-theoretic account of word memorability. *AMLaP 2014 (Architectures and Mechanisms for Language Processing)*. Edinburgh, UK. September 3-6, 2014.
- K. Mahowald, E. Fedorenko. Reliable individual-level neural markers of language activity. *Neurobiology of Language 2014*. Amsterdam. August 27-29, 2014.

REFEREED
POSTERS

- E. Gibson, P. Jacobson, P. Graff, K. Mahowald, E. Fedorenko, S.T. Piantadosi. Pragmatic influences on the processing of ACD relative clauses. 27th Annual CUNY Conference on Human Sentence Processing, CUNY 2014. Columbus, OH. March 13-15, 2014.
- R. Futrell, K. Mahowald, S.T. Piantadosi, E. Gibson. Efficient Communication Forwards and Backwards. 27th Annual CUNY Conference on Human Sentence Processing, CUNY 2014. Columbus, OH. March 13-15, 2014.
- K. Mahowald, S.T. Piantadosi, E. Gibson. 2013. Lexical clustering in efficient language design. 26th Annual CUNY Conference on Human Sentence Processing, CUNY 2013. Columbia, SC. March 22, 2013.
- K. Mahowald, T.J. O'Donnell, and J.B. Tenenbaum. 2013. Filling in the blanks in morphological productivity: a word completion task. 26th Annual CUNY Conference on Human Sentence Processing, CUNY 2013. Columbia, SC. March 23, 2013.
- K. Mahowald, E. Fedorenko, S.T. Piantadosi, E. Gibson. 2012. Info/information theory: speakers actively choose shorter word in predictive contexts. 25th Annual CUNY Conference on Human Sentence Processing, CUNY 2012. New York. March 16, 2012.

INVITED
PRESENTATIONS

- K. Mahowald. September 20, 2023. Virtual Psycholinguistics Forum (VPF) in Hong Kong.
- K. Mahowald. December 7, 2022. Princeton Language Group. Princeton University.
- K. Mahowald. February, 2023. NYU Online Philosophy of Deep Learning Group.
- K. Mahowald. March 22, 2023. Allen Institute for AI, Yejin Choi's Group Meeting.
- K. Mahowald (with A. Ivanova). March 21, 2023. Intel Corporation Deep Learning Community of Practice.
- K. Mahowald (with A. Ivanova), March 22, 2023. NERT Group Meeting at Georgetown Linguistics/CS.
- K. Mahowald (with A. Ivanova). April 4, 2023. KUIS AI Talk. Koç University, Istanbul, Turkey.
- K. Mahowald. April 11, 2023. UC Irvine Language Sciences Department Colloquium, UC Irvine.
- K. Mahowald. 2022. Exploring subjectivity in large language models using predicates of personal taste. Subjectivity and Semantic Interpretation. Workshop at NASSLLI 2022.
- K. Mahowald. 2022. Redundancy of grammatical cues and word meanings. Ev Fedorenko Lab Meeting. MIT.
- K. Mahowald. 2021. Language models: Surprisingly good at modeling language, unsurprisingly bad at modeling thought. UT Linguistics Syntax-Semantics Research Seminar.
- K. Mahowald. 2021. Deep Subjecthood. SIGTYP Lecture Series. September 10, 2021.
- K. Mahowald. 2021. Exploring grammatical role in machines. Boston University. March 11, 2021.
- K. Mahowald. 2021. Deep Subjecthood: Exploring grammatical role in humans and machines. UT Austin. March 1, 2021.
- K. Mahowald. 2020. A BERT's eye view of linguistics. Trace. Modesto, California [remote]. August 21, 2020.

- K. Mahowald. 2020. Understanding linguistic structure through computational models of language. Linguistics Department. University of California, Santa Cruz [remote]. June 18, 2020.
- K. Mahowald 2020. Computation and Language. Apple, Inc. Cupertino, California [remote]. April 17, 2020.
- K. Mahowald. 2020. Computational and communicative pressures in language. Linguistics Department. Boston University. February 20, 2020.
- K. Mahowald. 2020. Cognitive pressures in language. Linguistics. University of Texas Austin. February 17, 2020.
- K. Mahowald. 2020. Cognitive and communicative pressures in language. Department of Psychology, Department of Language Sciences. University of Wisconsin Madison. February 3, 2020.
- K. Mahowald. 2020. Human language as a window into cognition. Department of Psychology. University of California Berkeley. January 29, 2020.
- K. Mahowald. 2020. Communicative pressures in language. Linguistics Department. University of California Santa Barbara. January 23, 2020.
- K. Mahowald. 2020. Cognitive and communicative pressures in language. Language and Cognition Talk Series. Stanford University. January 16, 2020.
- K. Mahowald. 2019. NLP, Communication, and Language. NLP Lunch. Stanford University. October 31, 2019.
- K. Mahowald. 2019. Cognitive and communicative pressures in natural language. Department of Linguistics and Department of Computer Science. McGill University. March 14, 2019.
- K. Mahowald. 2019. Cognitive and communicative pressures in language. School of Philosophy, Psychology, and Language Sciences. Edinburgh University. February 28, 2019.
- K. Mahowald. 2019. Cognitive and communicative pressures in language. Department of Linguistics. University of Florida. February 5, 2019.
- K. Mahowald. 2019. Cognitive and communicative pressures in language. Department of Linguistics. Northwestern University. January 31, 2019.
- K. Mahowald. 2015. Four mini-talks in psycholinguistics. CogLunch. Department of Brain and Cognitive Sciences. MIT. May 12, 2015.
- K. Mahowald. 2014. Efficient structure in the lexicon. Mini-Symposium on the Neural and Cognitive Mechanisms of Language. Department of Psychology. Harvard University. December 4, 2014.
- K. Mahowald. 2014. Efficient lexical structure. Department of Brain and Cognitive Sciences. Invited Talk. University of Rochester. October 3, 2014.
- K. Mahowald. 2014. Learning and organizational structure of the lexicon. Stanford Language and Cognition Lab Meeting. Stanford University. May 13, 2014.
- K. Mahowald, A. Jacobs, A. Fahimipour, E. Pechenick, M. Kleiman-Weiner. 2013. Measure for Measure: Quantifying Shakespeare. Santa Fe Complex Systems Summer School. Santa Fe Institute. June 28, 2013.
- K. Mahowald. 2013. Finding structure in the lexicon. CogLunch. MIT. April 9, 2013.
- K. Mahowald. 2013. Efficient lexical design. Tedlab Lab Meeting. MIT. April 8, 2013.

- M. Frank, K. Mahowald, and E. Gibson. 2012. Syntactic and lexical alternations in noisy environments. MIT Summer Research Program, 2012.
- K. Mahowald. 2011. Computationally classifying the second person pronoun in Early Modern English. Tedlab Lab Meeting. MIT. October 4, 2011.
- K. Mahowald. 2011. Word order freezing in Old English. Oxford Syntax Working Group. Oxford. February 23, 2011.
- K. Mahowald. 2010. Verb clusters in Old English. 3rd South of England LFG Meeting. SOAS, London. October 23, 2010.

MEDIA
APPEARANCES

Large Language Models

- Wired, “Some Glimpse AGI in ChatGPT. Others Call It a Mirage”
- TechTalks, “To understand language models, we must separate language from thought”
- The Atlantic, “The Difference Between Speaking and Thinking”

Wordle

- The Ringer, in “What to Do When Playing the Word Game Wordle Isn’t Enough? Solve It.”
- Stanford Daily, in “How to beat Wordle: linguists from Stanford explain”
- Fort Worth Star Telegram, in “Wordle strategy: Common daily words to start the online game”

Wordnesia

- Slate, Rohds. Rowds. Row-ads? Rhowds???

Sudoku

- Seattle Times, in “Sudoku as spectator sport: Game has its first smackdown”

STUDENTS
SUPERVISED

Dissertation committee member

- Gabriella Chronis, UT Austin
- Venkata Govindarajan, UT Austin
- Yejin Cho, UT Austin
- Kristin Denlinger, UT Austin
- Phill Rogers, UCSB, 2022

Qualifying paper committee member

- Gabriella Chronis, UT Austin, 2022

Master’s theses supervised

- Jaylen Pittman, UCSB, 2020-2021

Master’s thesis committee member

- Phill Rogers, UCSB, 2021

Undergraduate theses supervised

- David Arriaza, UCSB, 2020-2021

TEACHING

UT Austin

- Instructor, LIN 313 Language and Computers Fall 2021
- Instructor, LIN 393 What Do Neural Networks Know About Linguistic Structure Spring 2022

University of California Santa Barbara

- Instructor, LING 226 Cognitive Foundations of Language Fall 2020
- Instructor, LING 127 Psychology of Language Winter 2021
- Instructor, LING 104 Statistical Methods in Linguistics Spring 2021

- Instructor of record for UCSB Linguistics Inclusive teaching initiative for LING 226, LING 127, LING 104 2020-2021

Massachusetts Institute of Technology

- Teaching assistant, MIT 9.59 Lab in Psycholinguistics 2014
 - Received perfect student evaluations.
 - Refined statistics curriculum developed in 2013.
 - Held regular lectures instructing students in R and statistics.
- Teaching assistant, MIT 9.59j Lab in Psycholinguistics 2013
 - Designed and taught data analysis section of lab course. Held regular lectures instructing students in R and statistics.
 - Helped students design, run, and analyze their own psycholinguistics experiments.
 - Won Angus McDonald Award for Undergraduate Teaching.
- Research supervisor 2011-
 - Supervised student for MIT Summer Research Program, 2012
 - Supervised ~ 5 students for UROP (MIT's undergraduate research program)
 - Instructed and advised students in research methods, experimental design, and writing.

Guest Lectures

- 'Language algorithms and AI Ethics', UC Santa Cruz PHIL 190 Ethics of Data and Technology, Fall 2020
- 'Cognitive Science: Language', UCSB 200A, Fall 2020
- 'Language and information', MIT 9.012, Spring 2015
- 'Sound Structure and Communication', MIT 9.012 Cognitive Science (graduate class), Spring 2013
- 'Language and Information Theory', MIT 9.59j Lab in Psycholinguistics, Spring 2013
- 'Introduction to Language', MIT 9.65 Cognitive Processes, Spring 2013

SERVICE AND DIVERSITY WORK

Services

- 2021-2022, Member, UT Data in the Social & Behavioral Sciences Task Force
- 2021-2022, Member, UT College of Liberal Arts Competitive Scholarship Committee
- 2021-2022, Member, UT Austin Scholarships Committee (for UT Marshall and Rhodes candidates)
- 2021-2022, Member, UT Linguistics Colloquium Committee
- 2020-2021, Participant, Undocumented Student Services Mentoring Program
- 2020-2021, Member, UCSB Linguistics Inclusive Teaching Initiative
- 2019-2020, Committee member, Committee on Climate, Diversity, and Inclusion, Stanford University NLP Group
- 2020-2021 Committee member, UCSB National Scholarships Selection Committee
- Reader, Marshall Scholarship Selection Committee, Boston Region
- Member, MIT Distinguished Fellowship Committee
- Volunteer fellowships panelist, Harvard Office of Career Services

Editing and Chairing

- Area chair, EMNLP 2021
- Area chair, ACL-IJCNLP 2021
- Ethics Committee member, EMNLP 2022
- Guest editor, *Open Mind*

Grant Reviewing

- 2022, External Evaluator, British Academy/Wolfson Research Professorships
- 2021-2022 Panelist, NSF Education and Human Resources (EHR)
- 2021-2022 Panelist, NSF Computer and Information Science and Engineering (CISE)

- 2021 Ad-hoc reviewer, NSF Education and Human Resources (EHR)

Paper Reviewing

- 2023, ACL
- 2023, Open Mind
- 2023, Cognition
- 2022, JML
- 2022, ACL Rolling Review October (2 papers)
- 2021, ACL Rolling Review October (2 papers)
- 2021, ACL Rolling Review November (5 papers)
- 2022, ACL Rolling Review January (2 papers)
- 2022, ACL Rolling Review March (1 paper)
- 2022, Reviewer for Human Sentence Processing Conference (8 abstracts)
- 2022, Reviewer for CogSci 2022
- 2022, Glossa
- 2021-2022, Cognition (2x)
- 2022, Cognitive Science (3x)
- 2021-2022, Journal of Memory and Language (4x)
- 2021, PLoS One
- 2021, Psychological Science
- 2021, Open Mind
- *Science*
- *Entropy*
- *Science Advances*
- *Cognitive Science*
- *Memory & Cognition*
- *Journal of Experimental Psychology: Learning, Memory, and Cognition*
- *Open Mind*
- *Journal of Memory and Language*
- *Topics in Cognitive Science*
- *Cognition*
- *Literary and Linguistic Computing*
- *Cogsci* conference
- *CUNY Sentence Processing Conference 2017, 2018*
- *Events in Language and Cognition 2016*

NON-ACADEMIC POSITIONS

- Freelance puzzle construction, published in NYT, WSJ, LA Times, GAMES Magazine, Universal Press Syndicate, Chicago Tribune, etc., 2004-
- Spirit Airlines in-flight crossword constructor, 2004-2010
- Assistant to New York Times crossword editor Will Shortz, 2006