

---

CONTACT INFORMATION	<p>Department of Brain and Cognitive Sciences Massachusetts Institute of Technology Building 46 Vassar Street Cambridge, MA 02139 USA</p>	<p>mobile: 954-401-1400 e-mail: <a href="mailto:kylemaho@mit.edu">kylemaho@mit.edu</a> web: <a href="http://mit.edu/kylemaho/www/">http://mit.edu/kylemaho/www/</a></p>
CURRENT POSITION	Ph.D. candidate in Brain and Cognitive Sciences, MIT.	
CITIZENSHIP	USA	
RESEARCH INTERESTS	Psycholinguistics, language as communication, statistical methods in psychology and linguistics, structure of the lexicon, computational linguistics, language neuro-imaging, historical English, information theory	
EDUCATION	<p><b>Massachusetts Institute of Technology</b>, Cambridge, MA USA</p> <p>Ph.D. candidate, <a href="#">Brain and Cognitive Sciences</a>, expected 2016</p> <ul style="list-style-type: none"> <li>• Advisor: <a href="#">Ted Gibson</a></li> <li>• Funding: National Defense Science and Engineering Grant (NDSEG), Henry E. Singleton (1940) Fund</li> </ul> <p><b>University of Oxford</b>, Oxford, England UK</p> <p>M.Phil with Distinction, <a href="#">General Linguistics and Comparative Philology</a>, July 2011</p> <ul style="list-style-type: none"> <li>• Thesis: <i>An LFG Approach to Old English Constituent Order</i> (with Distinction)</li> <li>• Advisor: <a href="#">Mary Dalrymple</a></li> <li>• Areas of Study: history and structure of English (with Distinction), morpho-phonology (with Distinction), computational linguistics (with Distinction), general linguistics (with Distinction)</li> <li>• Funding: Marshall Scholarship</li> </ul> <p><b>Harvard University</b>, Cambridge, MA USA</p> <p>A.B. Summa Cum Laude, English, June 2009</p> <ul style="list-style-type: none"> <li>• GPA: 3.96</li> </ul>	
FELLOWSHIPS	<ul style="list-style-type: none"> <li>• NSF Doctoral Dissertation Improvement Grant (with Edward Gibson) for Doctoral Dissertation Research: Investigating cognitive and communicative pressures on natural language lexicons, 2015-2016</li> <li>• National Defense Science and Engineering Graduate Fellowship (NDSEG), 2012-2015</li> <li>• Henry E Singleton (1940) Fund Fellow, 2011-2012</li> <li>• Marshall Scholarship, 2009</li> <li>• Harvard College Research Fellowship, 2008</li> </ul>	
AWARDS	<ul style="list-style-type: none"> <li>• Graduate Student Council Travel Grant, 2014</li> <li>• Angus MacDonald Award for Excellence in Undergraduate Teaching, 2014</li> <li>• AAAS/Science Program for Excellence in Science, 2014</li> <li>• CUNY 2013 Travel Award, 2013</li> <li>• Sigma Xi Scientific Research Society, elected 2012</li> </ul>	

- Bowdoin Prize, \$10,000 for Best Undergraduate Essay at Harvard, 2009
- Phi Beta Kappa Junior Electee, 1 of 24 elected as junior, 2008
- Harvard College Research Fellowship, 2008
- John Harvard Scholar, top 5% in class, 2006-2009
- United States Presidential Scholar, 2005
- Youngest Sunday New York Times crossword constructor, 2004

## PAPERS

- K. Mahowald, A. James, R. Futrell, E. Gibson. In prep. A meta-analysis of syntactic priming.
- I. Dautriche\*, K. Mahowald\*, E. Gibson, S.T. Piantadosi. Under review. Cross-linguistic effects of frequency and semantics on wordform similarity.
- K. Mahowald\*, I. Dautriche\*, E. Gibson, A. Christophe, S.T. Piantadosi. Under Review. Lexical clustering in efficient language design.
- K. Mahowald, P. Isola, E. Fedorenko, A. Oliva, E. Gibson. Under review. An information-theoretic account of word memorability.
- K. Mahowald, E. Fedorenko. Under review. *Neuroimage*. Reliable individual-level neural markers of high-level language processing: A necessary precursor for relating neural variability to behavioral and genetic variability.
- K. Mahowald, P. Graff, J. Hartman, and E. Gibson. Under revision. *Language*. SNAP Judgments: A Small N Acceptability Paradigm (SNAP) for Linguistic Acceptability Judgments.
- R. Futrell, K. Mahowald, E. Gibson. Large-Scale Evidence of Dependency Length Minimization in 37 Languages. In press. *Proceedings of the National Academy of Sciences*.
- R. Singh, E. Fedorenko, K. Mahowald, E. Gibson. In press. Presupposition accommodation is costly only in implausible contexts. *Cognitive Science*.
- 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*.
- S.T. Piantadosi, K. Mahowald, C. Kidd, R. Futrell, E. Gibson. Under revision. Lexical prescriptivism reduces communicative efficiency. *Plos One*.
- E. Gibson, K. Mahowald, S.T. Piantadosi. Under review. A re-analysis and replication attempt of Hackl, Koster-Hale, Varvoutis (2012).
- K. Mahowald, T.J. O'Donnell, and J.B. Tenenbaum. Under revision. Quantifying availability through linguistic productivity.
- E. Fedorenko, Z. Balewski, and K. Mahowald. Under revision. Syntactic processing is distributed across the language network.
- K. Mahowald and E. Gibson. 2013. Short, frequent words are more likely to appear genetically related by chance. *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/lc/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. 2011. *An LFG Approach to Old English*. Master's thesis. Oxford University.
- K. Mahowald. 2010. It may nat be: Chaucer, Derrida, and the Impossibility of the Gift. *Studies in the Age of Chaucer*. 32:129-150.

REFEREED  
PRESENTATIONS

- 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. Scheduled for 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. Scheduled for 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. Scheduled for 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.

REFEREED  
POSTERS

- 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.
- 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. 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. 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.

#### TEACHING

##### **Massachusetts Institute of Technology**

- Teaching assistant, MIT 9.59 Lab in Psycholinguistics, Spring 2014 (received perfect scores in student evaluations)
- Teaching assistant, MIT 9.59j Lab in Psycholinguistics, Spring 2013 (won Angus MacDonald Award for Undergraduate Teaching)
- Guest lecture: 'Sound Structure and Communication', MIT 9.012 Cognitive Science (graduate class), Spring 2013
- Guest lecture: 'Language and Information Theory', MIT 9.59j Lab in Psycholinguistics, Spring 2013
- Guest lecture: 'Introduction to Language', MIT 9.65 Cognitive Processes, Spring 2013
- Supervisor of Michelle Frank, MIT Summer Research Program, Summer 2012

SERVICES AND ORGANIZATIONS	<p>Marshall Scholarship Selection Committee, Boston Region</p> <p><b>Invited reviewer:</b> <i>Literary and Linguistic Computing, Cogsci 2014</i></p> <p><b>Department:</b> 2012-2013 CogLunch Organizer for MIT Brain and Cognitive Sciences</p> <p><b>Memberships:</b> Sigma Xi, American Psychological Society</p>
NON-ACADEMIC POSITIONS	<ul style="list-style-type: none"> <li>• Freelance puzzle construction, published in NYT, WSJ, LA Times, GAMES Magazine, Universal Press Syndicate, Chicago Tribune, etc., 2004-</li> <li>• Spirit Airlines in-flight crossword constructor, 2004-2010</li> <li>• Founder and President of Harvard College Crossword Society, 2007-2009</li> <li>• Co-chair of Boston Crossword Tournament, over 200 participants, 2009</li> <li>• Co-chair of Harvard Crossword Tournament, over 100 participants, 2009</li> <li>• Treasurer of Harvard Lifestyle Improvement and Fitness Education, mentored inner-city students in fitness and health, 2007</li> <li>• Peer Advising Fellow, mentored incoming freshmen, 2006-2007</li> <li>• Assistant to New York Times crossword editor, 2006</li> <li>• Research assistant, Advanced Medical Treatment Centers, 2005</li> </ul>
COMPUTER EXPERTISE	R, Python, R, Stan, UNIX, Amazon Mechanical Turk, L <sup>A</sup> T <sub>E</sub> X
LANGUAGES	English (native), Spanish (good), French (basic), Middle English (reading), Old English (reading)