

# Matthew J. Cooper Borkenhagen

CONTACT	<p><b>University of Wisconsin – Madison</b> Department of Psychology 1202 West Johnson Street Madison, WI 53706 <a href="https://mcooperborkenhagen.github.io">mcooperborkenhagen.github.io</a>   <a href="mailto:cooperborken@wisc.edu">lcnl.wisc.edu</a> <a href="mailto:cooperborken@wisc.edu">cooperborken@wisc.edu</a> 608.609.3288</p>
EDUCATION	<p><i>Current Doctoral Student</i> - Psychology University of Wisconsin - Madison Area: Cognitive and Cognitive Neuroscience (Adviser: Mark Seidenberg) Graduate Minors: Education Sciences, Educational Psychology Degree expected: Spring 2022</p> <p>M.S. Psychology (Cognitive and Cognitive Neuroscience) 2017 University of Wisconsin - Madison</p> <p>M.A. Special Education (Mild/ Moderate Disabilities) 2015 San Jose State University</p> <p>M.A. Linguistics 2013 San Francisco State University</p> <p>B.A. Linguistics, Literature 2004 University of California at Santa Cruz</p>
DISSERTATION	<p>A Time-varying Computational Model of Learning to Read Printed Words Aloud Defended: <i>January 2022</i> (to be submitted spring 2022)</p>
PUBLICATIONS	<p>Wang, T., Cooper Borkenhagen, M., Barker, M., &amp; Seidenberg, M.S. (2022) Meanings within meanings: Skilled readers activate irrelevant meanings of radicals and phonetics in Chinese. <i>Reading and Writing</i>. <a href="#">[pdf]</a></p> <p>Lewis, M., Cooper Borkenhagen, M., Converse, E., Lupyan, G., &amp; Seidenberg, M. S. (2022). What might books be teaching young children about gender? <i>Psychological Science</i>, 33(1), 1 - 15.</p> <p>Seidenberg, M. S., Cooper Borkenhagen, M., &amp; Kearns, D. M. (2020). Lost in translation? Challenges in connecting reading science and educational practice. <i>Reading Research Quarterly</i>, 55(S1), S119 – S130.</p> <p>Seidenberg, M. S., &amp; Cooper Borkenhagen, M. (2020). Reading science and educational practice: Some tenets for teachers. <i>The Reading League Journal</i>, 1(1), 7-11.</p> <p>Cox, C., Cooper Borkenhagen, M., &amp; Seidenberg, M. S. (2019) Efficiency of learning in experience-limited domains: Generalization beyond the WUG test. In A.K. Goel, C.M Seifert, &amp; C. Freksa (Eds.), <i>Proceedings of the 41<sup>st</sup> Annual Conference of the Cognitive Science Society</i> (pp. 1566-1571). Montreal, QB. Cognitive Science Society. <a href="#">[pdf]</a></p>

**IN PREP**

Sen, A., Cox, C. R., Cooper Borkenhagen, M., Seidenberg, M. S., & Zhu, X. (in prep). Learning to read through machine teaching. [[preprint](#)]

Cooper Borkenhagen, M., Schilling, L., & Seidenberg, M. S. (in prep). Special words: The contents of popular sight word inventories and their instructional framing.

Cooper Borkenhagen, M., Lewis, M., Borman, M., Converse, E., & Seidenberg, M. S. (in prep). The Wisconsin Children's Book Corpus: A corpus of popular American child-directed texts.

**AWARDS,  
FELLOWSHIPS**

University Fellowship, UW Madison. 2015-2020.

Fellow, Interdisciplinary Training Program in Ed. Sciences, UW Madison. 2016-present.

Menzies Research Award, UW Madison Psychology Department. 2019.

Department Travel Award, UW Madison Psychology Department. Summer 2018.

Predoctoral Mentee, NICHD LD Hub Grant (P20). Florida Center for Reading Research (Florida State University) & Haskins Laboratories (UConn, Yale). 2017-2019.

Network Fellowship, UW Madison Network Fellows Program. Wisconsin Department of Public Instruction/Wisconsin Literacy. 2016-2017.

Bertha Kalm Scholarship, San Jose State University. 2014-2015.

Robert L. and Eleanor S. Brady Scholarship, San Jose State University. 2014-2015.

**OTHER  
PROFESSIONAL**

*Graduate Research Assistant* (2015-present)  
Department of Psychology, UW Madison

*Graduate Research Assistant* (2016-2019)  
Wisconsin Center for Education Research – UW Madison

*Science Adviser* (2016-2018), Wisconsin Literacy

*Consultant* (2015-2016)  
Charles Armstrong School for Dyslexia - Belmont, CA

*4th Grade Teacher* (2010-2015)  
Charles Armstrong School for Dyslexia - Belmont, CA

**SERVICE**

Symposium on Research in Child Language Disorders (2019). Madison, WI

Graduate Student Review Committee

Psychology Colloquium Committee Member, UW - Madison (2015-2019)

Chair (2017-2018)

Treasurer (2016-2017)

**MEMBERSHIPS**

The International Dyslexia Association

The Society for the Scientific Study of Reading

Cognitive Science Society

International Literacy Association

## TALKS, POSTERS

- Schilling, L., Cooper Borkenhagen, M., & Seidenberg, M. S. (2022). Inconsistent treatment of “sight words” in instructional materials. Poster presented at the 29<sup>th</sup> Meeting of the Society for the Scientific Study of Reading. Newport Beach, CA. Society for the Scientific Study of Reading.
- Cooper Borkenhagen, M., Sen., A., Cox, C., Seidenberg, M., & Zhu, J. (2020). Enhancing generalization through an optimized sequential curriculum: Learning (to read) through machine teaching. Proceedings of the 2020 Meeting of the Cognitive Science Society. Toronto, Ontario, Canada. Cognitive Science Society.
- Cooper Borkenhagen, M., Siegelman, N., Seidenberg, M. S., & Rueckl, J. G. (2020). The effect of reliability of print-speech correspondences on generalization in word reading development: A computational approach. Poster presented at the 28<sup>th</sup> Meeting of the Society for the Scientific Study of Reading (cancelled due to COVID-19). Newport Beach, CA. Society for the Scientific Study of Reading.
- Seidenberg, M. S., Korenuk, R. E., & Cooper Borkenhagen, M. (2020). Children’s books for general and African American audiences: Comparisons of language and content. Poster presented at the 28<sup>th</sup> Meeting of the Society for the Scientific Study of Reading (cancelled due to COVID-19). Newport Beach, CA. Society for the Scientific Study of Reading.
- Schilling, L., Cooper Borkenhagen, M., & Seidenberg, M. S. (2020). Words that children are taught differ from those they read and hear: Evidence from a popular reading curriculum. Poster presented at Wisconsin Center for Education Research Poster Fair (cancelled due to COVID-19). Madison, Wisconsin. Wisconsin Center for Education Research. [[poster](#)]
- Cox, C., Cooper Borkenhagen, M., and Seidenberg, M. (2019) Efficiency of learning in experience-limited domains: Generalization beyond the WUG test. Proceedings of the 2019 Meeting of the Cognitive Science Society. Montreal, QB. Cognitive Science Society. [[poster](#)][[proceedings](#)]
- Seidenberg, M.S. & Cooper Borkenhagen, M. (2019) Toward a new standard theory of learning to read. Paper presented at the 27<sup>th</sup> Meeting of the Society for the Scientific Study of Reading. Toronto, Ontario, Canada. Society for the Scientific Study of Reading.
- Converse, E., Lewis, M. Y., & Cooper Borkenhagen, M., Lupyan, G., & Seidenberg, M. S. (2020). Children’s books are an early source of gender knowledge. Poster presented at the 27<sup>th</sup> Meeting of the Society for the Scientific Study of Reading. Toronto, Ontario, Canada. Society for the Scientific Study of Reading. [[poster](#)]
- Cooper Borkenhagen, M., Cox, C., and Seidenberg, M. (2019) Efficient learning and maximal generalization: A new view of the early development of basic reading skills. Paper presented at the 27<sup>th</sup> Meeting of the Society for the Scientific Study of Reading. Toronto, Ontario, Canada. Society for the Scientific Study of Reading.
- Cox, C., Cooper Borkenhagen, M., and Seidenberg, M. (2018) Learning to read with a machine teacher: Discovering efficient training procedures for training the orth-to-phon relationships in English. 2018 Meeting of the Cognitive Science Society [[poster](#)]. Madison, WI. July, 2018. [[pdf](#)]

Cooper Borkenhagen, M., Wang, T., Barker, M., & Seidenberg, M. (2018). Meanings within meanings: Skilled readers activate irrelevant meanings of radicals and phonetics in Chinese. 26<sup>th</sup> Meeting of the Society for the Scientific Study of Reading [poster]. Brighton, England. July, 2018.

Barker, M., Wang, T., Cooper Borkenhagen, M., & Seidenberg, M. (2018). Is dislike female in written Chinese? Computing sublexical semantics in Mandarin character reading. 2018 Undergraduate Research Symposium at UW Madison [poster]. Madison, WI. May, 2018.

Lei, X. & Cooper Borkenhagen, M. *Structural competition effect in L1 Mandarin speakers' production of English articles*. The Second Language Research Forum [talk]. 2017 October 12<sup>th</sup> -15<sup>th</sup>. Columbus, OH.

Beginning to read. (November 2017). Course guest lecture: The science of reading and its educational implications (Prof. Mark Seidenberg). Department of Psychology, UW Madison.

Cooper Borkenhagen, M. & Seidenberg, M. (2017). Where language meets math: The impact of reading skill on solving math story problems. 25<sup>th</sup> Meeting of the Society for the Scientific Study of Reading [talk]. Halifax, Nova Scotia, Canada. July, 2017.

Reading science in reading pedagogy. (November, 2016). Guest Lecture (two lectures), Course: Teaching reading and writing (Instructor: Melanie Obitz-Bukartek). Department of Curriculum & Instruction. UW Madison.

Automaticity and the Assessment of Elementary-aged Children with LD (October 2014, March 2015). Course guest lecture: Teaching children with special needs (Prof. Jennifer Madigan). Special Education Dept. Notre Dame de Namur University. Belmont, CA.

## TASHIPS

Teaching Assistant, The Science of Reading and Its Educational Implications (Instructor: Mark Seidenberg), University of Wisconsin – Madison, fall 2017.

Teaching Assistant, History of the English Language (Instructor: Troi Carleton), San Francisco State University, spring 2011.

Teaching Assistant, Introduction to the Study of Language (Instructor: Rachelle Waxler), San Francisco State University, spring 2010.

Teaching Assistant (*undergraduate*), Syntax I (Instructor: Judith Aissen), University of California – Santa Cruz, fall 2004.

Teaching Assistant (*undergraduate*), Syntax I (Instructor: Judith Aissen), University of California – Santa Cruz, fall 2003.

## MENTORSHIP

Research assistants, mentees:

- Madison Barker (Graduate student, UC Davis, Psychology; former RA)
- Cher Yang (Graduate student, University of Washington, Psychology; former RA)
- Christine White (Graduate student, Florida State University, Psychology; former RA)
- Ellen Converse (Research Specialist, UW-Madison; former RA)
- Lauren Schilling (current post-baccalaureate RA)
- Sarah Wang (Medical resident, Yale School of Medicine; former RA)