

CURRICULUM VITAE
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Language and Cognitive Neuroscience Lab web site: <http://lcnl.wisc.edu>.
Language at the Speed of Sight (book) web site; <http://seidenbergreading.net>

Education

Ph.D., Columbia University, Psychology (1980)
M.A., M. Phil., Columbia University, Psychology (1978)
B.A., Columbia University, Psychology (1974)

Honors, Fellowships, Awards

Distinguished Scientific Contributions Award, Society for the Scientific Study of Reading,
2020
International Dyslexia Association Samuel Torrey Orton Award, 2019
2017 Cognitive Development Society Book Award, *Language at the Speed of Sight*
Vilas Research Professor (2015-)
Hilldale Professor, University of Wisconsin-Madison (2006-2015)
ISI Highly Cited: Among top 250 most highly cited researchers in
Psychology/Psychiatry, 2005
Chadbourne College, Honored Instructor Award, University of Wisconsin-Madison
(2012)
Fellow, Cognitive Science Society
Fellow, Association for Psychological Science
Fellow, American Association for the Advancement of Science
Wisconsin Alumni Research Foundation Donald O. Hebb Professor (2003-)
NIMH Research Scientist Development Award (1995-2005)
Associate Fellow, Canadian Institute for Advanced Research, 1985-89
Fellow of the Faculty, Columbia University (1975-79)
University of Chicago Graduate Fellow (1974-75)
Graduate, *cum laude*, Columbia University (1974)

Present Position

Vilas Research Professor and Donald O. Hebb Professor, Department of Psychology, University
of Wisconsin-Madison

Employment History and Appointments

2017- present PlanetWord Museum (opening 2020, Washington, DC), advisory board
member
2019-present Neuhaus Education Center (nonprofit), scientific advisory board
2019-present Boon Foundation (nonprofit), scientific advisory board

2015-present	Vilas Research Professor, University of Wisconsin-Madison
2014-2015	Ernest R. Hilgard Visiting Scientist, Department of Psychology, Stanford University
2008-present	Affiliated scientist, Haskins Laboratories, New Haven CT
2007-2008	Visiting Professor, University of Provence, Aix-en-Provence
2006-2015	Hilldale Professor, University of Wisconsin
2003-present	Donald O. Hebb Professor, University of Wisconsin-Madison
2001-2003	Professor, Department of Psychology, University of Wisconsin-Madison
1990-2001	Professor, University of Southern California (Psychology, Linguistics, Computer Science, Neuroscience Program)
1989-90	Professor, McGill University, Department of Psychology
1988-89	Director, McGill-IBM Cooperative Project in Science, Engineering and Medicine
1986-87	Visiting scientist, MRC Applied Psychology Unit, Cambridge UK
1985-89	Associate Professor, Psychology Department, McGill University
1985-86	Director, McGill University Cognitive Sciences Center
1980-1985	Visiting researcher, Laboratory for Language and Cognitive Studies, Salk Institute
1980-1985	Assistant Professor, Psychology Department, McGill University
1979-1980	Visiting Assistant Professor, Center for the Study of Reading, University of Illinois and Bolt, Beranek & Newman, Inc. (Cambridge, MA)

Summary of Research Interests

Behavioral, computational, and neurobiological bases of reading and language. Skilled reading, learning to read. Brain bases of reading and dyslexia. Statistical learning in language acquisition. The achievement gap, impact of language background (nonmainstream dialect, bilingualism) and socioeconomic status on learning to read. Computational models of reading and language that link behavior and brain. Implications of reading science for educational practice.

Grants

2019-2023	Deinlein Language and Literacy Fund; private donor, \$400,000 to support my research and outreach efforts
2015-	Vilas Research Professor (annual research stipend, \$50,000)
2014-2017	Neurocognitive bases of treatment resistance in developmental dyslexia. NICHD 1P01HD070837. PI: Robin Morris, Georgia State University. (Seidenberg, consultant).
2012-2016	Bases of reading deficits in African American children. NICHD 1R24D075454. PIs: Julie Washington, Nicole Patton-Terry (Georgia State), Mark S. Seidenberg (Wisconsin). \$2,360,076 TC (Seidenberg subcontract \$622,605 TC).
2012-2017	Nature and acquisition of the speech code. PI: J. Rueckl, Haskins Laboratories; \$1,317,592 TC (Seidenberg, consultant)

- 2010-2015 Sensory-motor systems and conceptual processing in the healthy and impaired brain. NINDS R01-DC010783 (Rutvik Desai, University of South Carolina, PI; Seidenberg co-PI, small subcontract).
- 2006-2015 Hilldale Research Professorship (annual research stipend, \$25,000)
- 2007-2010 Toward a neuroscience of education: Plasticity, experience, and educational achievement. Wisconsin Institutes for Discovery seed grant (Seidenberg, PI, \$400,000 TC).
- 2006-2011 Functional MRI of human brain language systems. NINDS R01-NS033576. (Jeffrey Binder, PI; Seidenberg, co-PI).
- 2005-2011 The nature and acquisition of the speech code and reading. NICHD A40-HD01994. (Ken Pugh, PI; Seidenberg, consulting scientist).
- 2005-2006 Faculty development award, University of Wisconsin-Madison
- 2002-2007 Interdisciplinary Behavioral Science Center grant, NIMH P50-MH64445-05. J.L. McClelland (PI; Seidenberg PI on one project).
- 2002-2007 Behavioral and computational bases of reading and dyslexia, NICHD R01-HD29891-07. Frank Manis (PI, USC; Seidenberg co-PI).
- 1999-2003 NSF Interagency Educational Research Initiative (IERI) multicenter grant, Building word recognition skills in at-risk children. (University of Houston; Seidenberg, co-PI).
- 1998-2003 Training in cognitive and computational neuroscience, NIMH T32-MH20003 (Seidenberg PI; relinquished on leaving USC).
- 1998-2003 Behavioral and computational studies of inflectional and derivational morphology, NIMH R01-MH58723.
- 1996-2000 Behavioral and computational bases of developmental dyslexia, NICHD R01-HD29891 (Frank Manis, PI, Seidenberg co-PI).
- 1995-2005 Research Scientist Development Award, NIMH KO2MH-01188 (renewal)
- 1995-2000 Research Scientist Development Award, NIMH KO2MH-01188
- 1992-1996 Semantic memory in normal aging and Alzheimer's Disease. National Institute on Aging, AG10109-01.
- 1991-1992 Faculty research innovation fund grant, USC.
- 1988-1990 McDonnell-Pew Foundation Cognitive Neuroscience Center Grant, McGill University-Montreal Neurological Hospital
- 1987-1989 Word recognition in reading. Quebec Ministry of Education (FCAR).
- 1987-1989 Parallel processes in language comprehension. National Sciences and Engineering Research Council (NSERC; Canada).
- 1987 Facility for large scale cognitive modeling. NSERC (Canada)..
- 1986-1987 Use of microcomputers with reading and learning disabled populations. IBM Co-operative Research Projects grant.

1984-1987	Morphological structure in word recognition. NSERC (Canada).
1984-1987	Development and use of lexical codes. National Institute of Child Health and Human Development (USA). With M.K. Tanenhaus (Rochester).
1984-1987	Acquisition of reading skill. Quebec Ministry of Education (FCAR).
1983	Computer laboratory for psycholinguistic research. NSERC (Canada) grant.
1982-1984	Good, poor and disabled readers' acquisition of word recognition skills. Quebec Ministry of Education (FCAC).
1980-1983	Chronometric studies of lexical ambiguity resolution. Natural Science and Engineering Research Council (Canada).

Research Overview

My research concerns the behavioral, computational, and neural bases of language. Much of the work has focused on reading, a particular instantiation of language. Reading is interesting in its own right but also because it provides a vehicle for exploring issues about the nature of language, learning, perception, and memory. The primary goal is to understand reading and its brain bases using computational models as the interface between the two. The modeling work has involved examining the relevance of a small set of principles concerning knowledge representation, processing, and statistical learning derived from the “connectionist” framework, now known as “deep learning.” This work has resulted in an influential series of models of normal and impaired reading, learning to read, the impact of writing systems on reading, and the bases of differences in how people read and how well.

The complementary focus of my research is on using the same principles to understand language acquisition and processing. The questions addressed here are, what is the nature of linguistic knowledge, how is this knowledge acquired and used, what is the basis for age-related changes in language-learning capacity, and how does language relate to other cognitive capacities? The goal is the development of an integrated theory of these aspects of language, in contrast with approaches in which acquisition and skilled performance, or linguistic competence and performance, are treated as if they were governed by different principles. As in the reading work, this theoretical goal is pursued using converging methodologies including behavioral studies of normal and disordered performance, connectionist modeling, and neuroimaging.

Current research focuses on the following main topics. Recent articles are available here: <http://lcnl.wisc.edu/current/mark.recent.pubs.correct.htm>

- **Bases of achievement gaps in reading.** This research examines causes and possible ways of ameliorating the so-called “achievement gap,” which refers to low academic performance among poor and minority children. Our studies focus on low reading achievement among African American children, specifically the contributions of language ability, dialect, and socioeconomic status.
- **Connecting reading and language research to instructional practice.** There is a disconnect between what we know about how reading works and children learn and what prospective teachers are taught. Decades of research in laboratories around the world has led to a good understanding of the path to skilled reading, and conditions that

promote or interfere with children's progress. Little of this research has had an impact on educational practices, which makes learning to read more difficult for many children, especially children from racial/ethnic minorities and low income backgrounds, placing them at greater risk for failure. In my book and other writings I have identified the causes of the disconnection between science and educational practice, and explored ways to ameliorate them. I have also consulted with education officials in several states, nonprofit schools and service providers, and advocacy organizations such as DecodingDyslexia, and spoken with educators at numerous conference and conventions. I have been deeply involved in the new national discussion about using the "science of reading" to improve education, which has resulted in efforts to create legislative remedies for poor literacy outcomes.

- **Applications of machine learning/teaching technology** to develop more efficient ways for teaching and learning to occur in domains such as vocabulary development and early reading (e.g., phonics). Except for Cox et al. (2019) this research is currently unpublished because of patent and intellectual property considerations.

Publications

Book: *Language at the Speed of Sight: How We Read, Why So Many Can't, and What Can Be Done About It*. Basic Books, January 3, 2017. <http://seidenbergreading.net>. 2017 Cognitive Development Society Book Award. Excerpts from reviews at end of this document. Reprinted in Chinese (Taiwan) and Italian.

Study guide for *Language at the Speed of Sight*: available for free download from seidenbergreading.net, June 1 2020.

Book website, Reading Matters, includes documents, tools, demonstrations.

Articles: Many are downloadable from [here](#). Also [My NCBI](#).

Conant, L. L., Liebenthal, E., Desai, A., Seidenberg, M. S., & Binder, J. R. (2020). Differential activation of the visual word form area during auditory phoneme perception in youth with dyslexia. *Neuropsychologia*, 146, <https://doi.org/10.1016/j.neuropsychologia.2020.107543>.

Seidenberg, M.S., & Cooper Borkenhagen, M. (2020). Reading science and educational practice: Some tenets for teachers. *The Reading League Journal*, inaugural issue. January 2020.

Cox, C., Cooper Borkenhagen, M., & Seidenberg, M.S. (2019). Efficiency of learning in experience-limited domains: Generalization beyond the wug test. *Proceedings of the 2019 Meeting of the Cognitive Science Society*, pp. 1566-1571. <https://bit.ly/2Uj0rIp>

Perry, L.K., Mech, E.N., MacDonald, M.C., & Seidenberg, M.S. (2018). Influences of speech familiarity on immediate perception and final comprehension. *Psychonomic Bulletin & Review*, 25, 431-439.

Seidenberg, M.S., & MacDonald, M.C. (2018). The impact of language experience on language and reading: A statistical learning approach. *Topics in Language Disorders*, 38, 66-83.

Fernandino, L., Humphries, C.J., Conant, L., Seidenberg, M.S., Binder, J.R. (2016).

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- Fernandino, L., Humphries, C. J., Seidenberg, M. S., Gross, W. L., Conant, L. L., & Binder, J. R. (2015). Predicting brain activation patterns associated with individual lexical concepts based on five sensory-motor attributes. *Neuropsychologia*, *76*, 17-26. PMID: 25863238.
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- Seidenberg, M.S., & Plaut, D.C. (2014). Quasiregularity and its discontents: The legacy of the past tense debate. *Cognitive Science*, *38*, 1190-1228. PMID: 25104139.
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- Pugh, K., Frost, S., Rothman, D., Hoeft, F., Del Tufo, S., Mason, G., Molfese, P., Mencl, E., Grigorenko, E., Landi, N., Preston, J., Jacobsen, L., Seidenberg, M., and Fulbright, R. (2014). Glutamate and choline levels predict individual differences in reading ability in emergent readers. *Journal of Neuroscience*, *34*, 4082-4089. PMCID: PMC3951703.
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- way out of dyslexia?. *Current Biology*, 23, R282-R283.
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- Graves, W., Binder, J., & Seidenberg, M.S. (2013). Noun-noun combination: Meaningfulness ratings and lexical statistics for 2160 word pairs. *Behavior Research Methods*, 45, 463-469.
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- Sibley, D.E., Kello, C.T., & Seidenberg, M.S. (2009). Error, error everywhere: A look at megastudies of word reading. In N. Taatgen and H van Rijn (Eds.), *Proceedings of the 2009 Meeting of the Cognitive Science Society* (pp. 1036-1041). Austin, TX: Cognitive Science Society.
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- Pierpont, E. I., Weismer, S. E., Roberts, A. E., Tworog-Dube, E., Pierpont, M. E., Mendelsohn, N. J., & Seidenberg, M. S. (2009). The language phenotype of individuals with Noonan syndrome: Contributions of nonlinguistic factors and relation to literacy. *Journal of Speech, Hearing and Language Research*, *53*, 917-932.
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- Cognitive Science Society*, (pp. 1954-1959). Austin, TX: Cognitive Science Society.
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Recent Invited Conference Presentations, Colloquia, Interviews (selected, past 3 years)

- International Dyslexia Association, Samuel Torrey Orton Award address, Portland, October 2019.
- University of Wisconsin Roundtable, talk, April 2019. [here](#)
- University of Connecticut-Storrs colloquium, March 2019.
- MIT Science of Reading: Bridging the Classroom Gap Conference, invited talk, May 2019. [here](#)
- Decoding Dyslexia, First national meeting, keynote, Minneapolis MN, August 2019.
- State of Pennsylvania Department of Public Instruction annual education convention, keynote speaker, 2 workshops. Hershey PA, March 2019.
- Reading Horizons, On-line dyslexia summit extended interview, 2019. [here](#)
- Neuhaus Education Center (non-profit providing services for public education), talk for educators and parents, Houston, March 2019.
- Shanghai University of Finance and Economics, Shanghi Jiao Tong University, 3 colloquia, May 2019.
- Schenck School (for dyslexics), talk for parents, educators, Atlanta, October 2019.

- Stern Language and Literacy Center, Burlington VT October 2019. Talk and meeting with state legislators, head of state Education Agency, about state literacy crisis.
- Society for the Scientific Study of Reading, Toronto, conference presentation, August 2019.
- Workshop for educators at Jackson MS area HBCUs (Tougaloo College, Belhaven University, Jackson State University, Millsaps College), held at Tougaloo College, Jackson MS, February.
- Workshop for Mississippi Higher Education Council, Jackson MS (meeting with legislators and education representatives). February.
- University of Edinburgh, Department of Psychology, colloquium. February.
- University of Oxford, St. John's College, colloquium. February.
- Medical Research Council Cognitive and Brain Sciences Unit, Cambridge UK, colloquium. February.
- AIM Institute 6th Annual Research to Practice Symposium, AIM Academy, Conshohocken, PA., keynote speaker. March.
- Bar-Ilan University, Tel Aviv Israel, "Israeli Science Foundation International Workshop Language and Literacy Development in Multilingual and Multidialectal Contexts: Theoretical and Applied Perspectives", keynote speaker. February.
- Vanderbilt University, Department of Psychology and Human Development, colloquium. March.
- International Dyslexia Association Wisconsin Branch, annual meeting, Wisconsin Dells, keynote speaker. March .
- Society for the Scientific Study of Reading, annual convention, Brighton UK, invited speaker. July.
- Wisconsin Institutes for Discovery, Minds, Machines, and Society public event, invited speaker. July.
- Workshop on "Real-World Language: Future Directions in the Science of Communication and the Communication of Science," honoring Michael Tannenhaus, UW Madison, invited speaker. July.
- Workshop, Statistical Learning in Reading and Language, organized by Richard Aslin Haskins Laboratories, Quebec City PQ, invited speaker. August.
- PDP Symposium in Honor of James L. McClelland, Princeton University, invited speaker. September 8.
- National Center for Improving Literacy, TWG (Technical Working Group) meeting, Georgetown University, October. Meeting of advisory board members.
- Wasatch Reading Summit, Utah State Department of Public Instruction, Salt Lake City UT, keynote speaker, two workshops for educators. October.
- Reading Rockets, Meet the Experts, Video Interview and text (2018). [here](#) reposted National Center on Improving Literacy [here](#)
- Children's Dyslexia Center, Madison WI, graduation address. June 2018.

[PlanetWord](#) museum Advisory Board Meeting, New York City, October 2017.

Colorado Department of Education, keynote speaker, 2017 READING Conference, Denver, October 2017.

researchED Conference, keynote, New York City, October 2017.

The Reading League, Firist Annual Conference, Inaugural keynote speaker. Cazanovia, NY, October 2017. [here](#)

EdTech to Enhance Early Language & Reading Acquisition, and Reading Comprehension: Cross-Language and Global Perspectives. University of Jyväskylä, Jyväskylä, Finland, December 2017.

The Chinese University of Hong Kong, Department Of Psychology, Distinguished Scholar Scheme [colloquium], May 2017.

Plain Talk About Language and Literacy, annual conference, keynote speaker. New Orleans, March 2017.

DOCTORAL STUDENTS

Name	University	Current Position
Debra Jared	McGill	Professor, University of Western Ontario,
Ken McRae	McGill	Professor, University of Western Ontario
Kim Daugherty	USC	Engineer, Raytheon, Huntsville AL
Joseph Devlin	USC	Reader, University College London
Michael Harm	USC	Google, Inc., Boulder CO
Marc Joannis	USC	Professor, University of Western Ontario
Jason Zevin	USC	Associate Professor, University of Southern California
Jelena Mirković	USC	Senior Lecturer, York St. John University, England
Aimee Arnoldussen	Wisconsin	Innovation and Commercialization Specialist at Discovery to Product (D2P), UW Madison
James Keidel	Wisconsin	Research assoc., Psychology, Bangor University, Wales
Sarah Sahni (co-advisor)	Wisconsin	ABT Associates, Cambridge MA
Rene Pierpont	Wisconsin	Asst Professor, Pediatric Neurology, University of Minnesota
Megan Brown	Wisconsin	Post-doc, Georgia State University
Jon Willits (co-advisor)	Wisconsin	Assistant Professor, University of California-Riverside
Erica Wojcik (co-advisor)	Wisconsin	Assistant Professor, Skidmore College

POST-DOCTORAL STUDENTS

Name	University	Current Position
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Gloria Waters	McGill University	Associate Provost for Research, Boston
David Corina	USC	Professor, Psychology and Linguistics, University of California, Davis
Morten Christiansen	USC	Professor, Psychology, Cornell University
Daphné Bavelier	USC	Professor, Neuroscience, Université de Genève, Switzerland
James Hoeffner	USC	Lecturer, Psychology, University of Michigan
Daragh Sibley	Wisconsin	Senior Data Scientist, Stitchfix Inc.
Molly Lewis	Wisconsin	Research Scientist, Carnegie Mellon University
Lynn Perry	Wisconsin	Assistant Professor, University of Miami
Lila Rissman	Wisconsin	current
Molly Farry-Thorn	Wisconsin	current

Google Scholar scholarship metrics

	All	Since 2015
Citations	41641	9350
h-index	93	49
i10-index	180	121

20 most highly cited articles

<input type="checkbox"/>	TITLE	CITED BY	YEAR
<input type="checkbox"/>	A distributed, developmental model of word recognition and naming. MS Seidenberg, JL McClelland Psychological review 96 (4), 523	4201	1989
<input type="checkbox"/>	Understanding normal and impaired word reading: computational principles in quasi-regular domains. DC Plaut, JL McClelland, MS Seidenberg, K Patterson Psychological review 103 (1), 56	3118	1996
<input type="checkbox"/>	The lexical nature of syntactic ambiguity resolution. MC MacDonald, NJ Pearlmutter, MS Seidenberg Psychological review 101 (4), 676	2239	1994
<input type="checkbox"/>	Phonology, reading acquisition, and dyslexia: insights from connectionist models. MW Harm, MS Seidenberg Psychological review 106 (3), 491	984	1999
<input type="checkbox"/>	How psychological science informs the teaching of reading K Rayner, BR Foorman, CA Perfetti, D Pesetsky, MS Seidenberg Psychological science in the public interest 2 (2), 31-74	978	2001
<input type="checkbox"/>	Computing the meanings of words in reading: cooperative division of labor between visual and phonological processes. MW Harm, MS Seidenberg Psychological review 111 (3), 662	859	2004
<input type="checkbox"/>	When does irregular spelling or pronunciation influence word recognition? MS Seidenberg, GS Waters, MA Barnes, MK Tanenhaus Journal of Verbal Learning and Verbal Behavior 23 (3), 383-404	801	1984
<input type="checkbox"/>	Automatic access of the meanings of ambiguous words in context: Some limitations of knowledge-based processing MS Seidenberg, MK Tanenhaus, JM Leiman, M Bienkowski Cognitive psychology 14 (4), 489-537	696	1982
<input type="checkbox"/>	On the nature and scope of featural representations of word meaning. K McRae, VR De Sa, MS Seidenberg Journal of Experimental Psychology: General 126 (2), 99	685	1997
<input type="checkbox"/>	Semantic feature production norms for a large set of living and nonliving things K McRae, GS Cree, MS Seidenberg, C McNorgan Behavior research methods 37 (4), 547-559	675	2005
<input type="checkbox"/>	The time course of phonological code activation in two writing systems MS Seidenberg Cognition 19 (1), 1-30	668	1985
<input type="checkbox"/>	Pre-and postlexical loci of contextual effects on word recognition MS Seidenberg, GS Waters, M Sanders, P Langer Memory & Cognition 12 (4), 315-328	660	1984
<input type="checkbox"/>	Evidence for multiple stages in the processing of ambiguous words in syntactic contexts MK Tanenhaus, JM Leiman, MS Seidenberg Journal of verbal learning and verbal behavior 18 (4), 427-440	638	1979
<input type="checkbox"/>	On the bases of two subtypes of development dyslexia FR Manis, MS Seidenberg, LM Doi, C McBride-Chang, A Petersen Cognition 58 (2), 157-195	591	1996
<input type="checkbox"/>	Language acquisition and use: Learning and applying probabilistic constraints MS Seidenberg Science 275 (5306), 1599-1603	493	1997
<input type="checkbox"/>	Semantic effects in single-word naming. E Strain, K Patterson, MS Seidenberg Journal of Experimental Psychology: Learning, Memory, and Cognition 21 (5), 1140	468	1995
<input type="checkbox"/>	Impairments in verb morphology after brain injury: A connectionist model MF Joanisse, MS Seidenberg Proceedings of the National Academy of Sciences 96 (13), 7592-7597	464	1999
<input type="checkbox"/>	Learning to segment speech using multiple cues: A connectionist model MH Christiansen, J Allen, MS Seidenberg Language and cognitive processes 13 (2-3), 221-268	441	1998
<input type="checkbox"/>	See Dick RAN: Rapid naming and the longitudinal prediction of reading subskills in first and second graders FR Manis, MS Seidenberg, LM Doi Scientific Studies of reading 3 (2), 129-157	415	1999
<input type="checkbox"/>	Orthographic effects on rhyme monitoring. MS Seidenberg, MK Tanenhaus Journal of Experimental Psychology: Human Learning and Memory 5 (6), 546	414	1979

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Reviews (excerpts) for *Language at the Speed of Sight* (2017)

“In *Language at the Speed of Sight*, [Seidenberg] develops a careful argument, backed by decades of research, to show that the only responsible way to teach children to read well is to build up their abilities to connect reading with speech and then to amplify these connections through practice, developing skillful behavioral patterns hand in hand with the neurological networks that undergird them. . . . Every teacher of young children as well as those who train them should read this book.”
—*Wall Street Journal*

“An important and alarming new book. . . . Seidenberg makes a strong case for how brain science can help the teaching profession”
—*New York Times*

“Seidenberg . . . unravels the science of reading with great flair. He is the ideal guide—and it turns out that we need a guide to reading, even though we’ve been doing it most of our lives.”
—*Washington Post*

“Seidenberg reviews the latest science on reading and makes an impassioned plea for putting this knowledge to use.”
—*Scientific American*

“Cognitive neuroscientist Seidenberg digs deep into the science of reading to reveal the ways human beings learn how to read and process language. . . . Seidenberg’s analysis is backed up by numerous studies and table[s] of data. His approach is pragmatic, myth-destroying, and rooted in science—and his writing makes for powerful reading.”
—*Publishers Weekly*

“The neuroscience underlying [Seidenberg’s] findings is complex, of course, but [he] does not often fall into thickets of technicality . . . his discussions are clear and accessible. . . . A worthy primer on the science of comprehending language.”
—*Kirkus Reviews*

Education Next review**Language at the Speed of Sight: How We Read, Why So Many Can’t, and What Can Be Done About It**

by Mark Seidenberg

*Basic Books, 2017, \$28.99; 384 pages.***As reviewed by Robert Pondiscio**

Cognitive neuroscientists are the Cassandras of education.

Recall that in Greek mythology, Cassandra was blessed with the gift of prophecy by the god Apollo. But when she refused to sleep with him, Apollo didn’t rescind the gift, he added a curse: poor Cassandra could still see the future, but she was doomed never to be believed. Mark Seidenberg probably *envies* Cassandra. He writes like someone who wonders exactly whom he has to sleep with to get people to pay attention to him.

“No technologically advanced society exists without reading. This is the remarkable story of why and how it all works. From David Letterman’s irony to posited Sumerian patent trolls, the writing is lively, informative, and supremely entertaining.”

—**Daniel J. Levitin, bestselling author of
*This Is Your Brain on Music and The Organized Mind***

“Have you picked up the idea that reading is something that kids ‘just pick up’ and shouldn’t be rushed into, or that learning to read is something different from ‘comprehension,’ or that a whole book about reading would be dull? *Language at the Speed of Sight* will disabuse you of all three notions and more—pick it up and marvel at how hard it will be to put it down.”

—**John McWhorter, author of
*Word on the Move and Talking Back, Talking Black***

“Few works of science ever achieve Italo Calvino’s six qualities of our best writing: lightness, exactitude, visibility, quickness, multiplicity, and consistency. Mark Seidenberg’s new book achieves just that. If every educator, parent, and policy maker would read and heed the content of this book, the rates of functional illiteracy, with all their destructive sequelae, would be significantly reduced.”

—**Maryanne Wolf, author of *Proust and the Squid***

“A world-renowned expert explains the science of reading with clarity and wit—anyone who loves to read will be fascinated, and teachers will absolutely devour this book.”

—**Daniel Willingham, author of
*Why Don’t Students Like School?***

“*Language at the Speed of Sight* is an incisive tour through the fascinating science of reading. From cuneiform to dyslexia to the future of literacy, Seidenberg is a master guide who—lucky for us—is as gifted a writer as he is a scientist.”

—**Benjamin Bergen, author of *What the F***