JORDAN WILLIAM SUCHOW

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EMPLOYMENT

2014—   University of California, Berkeley
Institute of Cognitive and Brain Sciences
Postdoctoral fellow
Advisor: Tom Griffiths

EDUCATION

2014   Harvard University
Department of Psychology
Ph.D. in Psychology — Cognition, Brain, & Behavior
Advisor: George Alvarez

2012   Harvard University
A.M. in Psychology

2009   Brandeis University
B.S. in Computer Science

2003–2008   New York University
Center for Neural Science
Research Assistant
Advisor: Denis Pelli

PAPERS

Reprints are available at http://suchow.io.

1.   Suchow, J. W. & Alvarez, G. A. (2011). Motion silences awareness of visual change. *Current Biology*, 21, 140–143.

2.   Suchow, J. W. & Pelli, D. G. (2012). Learning to detect and combine the features of an object. *Proceedings of the National Academy of Sciences,* 110(2), 785–790.

3.   Fougnie, D., Suchow, J. W., & Alvarez, G. A. (2012). Variability in the quality of visual working memory. *Nature Communications*, 3(1229), 1–8.

4. Suchow, J. W.*, Brady, T. F.*, Fougnie, D., & Alvarez, G. A. (2013). Modeling visual working memory with the MemToolbox. *Journal of Vision,* 13(10):9, 1–8.

5. Suchow, J. W., Fougnie, D., Brady, T. F. & Alvarez, G. A. (2014). Terms of the debate on the format and structure of visual memory. *Attention, Perception, & Psychophysics,* 76(7), 2071–2079.

6. Suchow, J. W. (2015). Building a social network one choice at a time. *PLoS ONE,* 10(7), e0133463.

CHAPTERS, ESSAYS, COMMENTARIES, DISSERTATIONS, & FICTION

7. Suchow, J. W. (2005). Seeing things: Visual perception research at NYU. *Imagine Magazine,* March 2005.

8. Suchow, J. W. (2011). A specific policy on authorship. *Nature,* 477, 244.
   ⬙ Translated to audio in episode 397 of *StarShipSofa* in 2015.

9. Fan, J. E., & Suchow, J. W. (2014). The crowd is self-aware. Commentary on "Mapping collective behavior in the big-data era." *Behavioral and Brain Sciences,* 37(01), 81–82.

10. Suchow, J. W. (2014). Measuring, monitoring, and maintaining memories in a partially observable mind. PhD Thesis, Harvard University.

11. Suchow, J. W. and Alvarez, G. A. (*in press*). Silencing the awareness of change. *The Oxford Compendium of Visual Illusions.* Oxford: Oxford University Press.

MANUSCRIPTS — IN PREP, SUBMITTED, & BEYOND

Drafts are available on request; write to suchow@berkeley.edu.

Suchow, J. W., Allen, B., Nowak, M. A. & Alvarez, G. A. (*submitted*). Evolutionary dynamics of visual memory.

Suchow, J. W. & Griffiths, T. L. (*submitted*). Deciding to remember: memory maintenance as a Markov Decision Process.

Suchow, J. W., Fougnie, D. & Alvarez, G. A. (*submitted*). Looking inwards and back: realtime monitoring of visual working memory.

Herman, L. M., Suchow, J. W. & Alvarez, G. A. (*in prep*). Frequency-based synesthetic associations between letters and color.

Haberman, J., Suchow, J. W. & Alvarez, G. A. (*in prep*). Adaptation to the average orientation is revealed by dissociating local and global changes.

Fougnie, D., Suchow, J. W. & Alvarez, G. A. (*in prep*). Degradation and death by natural causes in working memory.

Suchow, J. W., et al. (*in prep*). Individual differences in the perception of age.

VISUAL DEMONSTRATIONS

1. *"Silencing."* http://visionlab.harvard.edu/silencing/.
   (with George Alvarez)
   Presented at the Vision Sciences Society's *Demo Night* in 2010.
   ⟁ *1ˢᵗ prize*, Neural Correlate Society's *2011 Best visual illusion of the year contest*

2. *"Disembodied eyes and mouth illusion."* visionlab.harvard.edu/upsidedown/.
   (with Ken Nakayama and Maryam Vaziri-Pashkam)
   Presented at the Vision Sciences Society's *Demo Night* in 2011.

3. *"Touching and interpreting hallucinated patterns in dynamic visual noise."*
   (with Justin Jungé and George Alvarez)
   Presented at the Vision Sciences Society's *Demo Night* in 2012.

4. *"Reflections on a true mirror."*
   (with Jason Haberman)
   Presented at the Vision Sciences Society's *Demo Night* in 2013.

SOFTWARE, HARDWARE, & INVENTIONS

1. MemToolbox, http://memtoolbox.org. A MATLAB toolbox for Bayesian modeling of visual working memory.

2. Wallace, http://github.com/suchow/Wallace. A platform for simulating cultural evolution in structured populations online.

3. Dissertate, http://dissertate.io. Beautiful LaTeX templates for a dissertation.

4. Autonudger, https://github.com/suchow/Autonudger. An iPhone-based commitment device that monitors movement and exercise.

5. LQQK, an Arduino-based wristband that facilitates visual experience sampling.

6. *"Antisilencing,"* https://vimeo.com/34934039.
   Invention reported to Harvard's *Office of Technology Development* in 2012.

7. *"Methods and compositions for determining differences in taste perception."*
   Invention reported to UC Berkeley's *Office of Intellectual Property and Industry Research Alliances* in 2015.

CONFERENCE PRESENTATIONS & TALKS

Suchow, J. W., Morgan, T. J. H., Hamrick, J., Pacer, M., Meylan, S. C. & Griffiths, T. L. (2015). Wallace: A platform for simulating cultural evolution in structured populations online. Presented as a talk at the *Crowdsourcing and Online Behavioral Experiments* workshop at the *ACM Conference on Economics and Computation*.

Suchow, J. W. & Alvarez, G. A. (2014). The more you try to remember, the faster you forget: Load dependent forgetting and overreaching. Presented as a talk at the *Vision Sciences Society* conference in St. Petersburg, FL.

Suchow, J. W. (2013). Maintaining memories in a partially observable mind. Presented as an invited talk at the *Visual Attention Seminar* at Brigham & Women's Hospital.

Suchow, J. W., Allen, B., Nowak, M. A. & Alvarez, G. A. (2013). Evolutionary dynamics of visual memory. Presented as a poster at the *Vision Sciences Society* conference in Naples, FL.

Herman, L., Suchow, J. W., & Alvarez, G. A. (2013). Frequency-based synesthetic associations between letters and colors. Presented as a poster at the *Vision Sciences Society* conference in Naples, FL.

Fougnie, D., Suchow, J. W., & Alvarez, G. A. (2013). Gradual decay and death by natural causes in visual working memory. Presented as a poster at the *Vision Sciences Society* conference in Naples, FL.

Alvarez, G. A., Brady, T. F., Fougnie, D. & Suchow, J. W. (2013). Beyond slots vs. resources. Presented as a talk in the symposium *The structure of visual working memory* at the *Vision Sciences Society* conference in Naples, FL.

Herman, L., Suchow, J. W., & Alvarez, G. A. (2013). Frequency-based synesthetic associations between letters and colors. Presented as a poster at the *Seventeenth International Conference on Cognitive and Neural Systems* in Boston, MA.

Brady, T. F., Suchow, J., Fougnie, D. & Alvarez, G. A. (2012). MemToolbox: A MATLAB toolbox for analyzing visual working memory experiments. Presented as a poster the *Portland Working Memory Conference*, Portland, OR.

Fougnie, D., Suchow, J. W., & Alvarez, G. A. (2012). Gradual decay and death by natural causes in visual working memory. Presented as a poster at the *Portland Working Memory Conference*, Portland, OR.

Suchow, J. W., Fougnie, D., & Alvarez, G. A. (2012). Visual working metamemory. Presented as a poster at the *Vision Sciences Society* conference in Naples, FL.

Fougnie, D., Suchow, J. W., & Alvarez, G. A. (2012). The volatility of working memory. Presented as a talk at the *Vision Sciences Society* conference in Naples, FL.

Suchow, J. W. (2012). Metamemory and evolutionary dynamics in cognitive processes. Presented as a talk at the *Cognition, Brain, and Behavior Seminar* at Harvard.

Fougnie, D., Suchow, J. W., & Alvarez, G. A. (2011). Variable precision among working memory representations. Presented as a talk at the *Object Perception, Attention, & Memory* conference in Seattle, WA.

Suchow, J. W. & Alvarez, G. A. (2011). Background motion silences awareness of foreground change. Presented as a poster at *SIGGRAPH* in Vancouver, Canada.

⚡ *Semifinalist*, ACM Student research competition

Suchow, J. W. & Alvarez, G. A. (2011). Silencing awareness of change by background motion. Presented as a poster at the 15th annual meeting of the *Association for the Scientific Study of Consciousness* in Kyoto, Japan.

Haberman, J., Suchow, J. W., & Alvarez, G. A. (2011). The visual system adapts to mean orientation. Presented as a poster at the *Vision Sciences Society* conference in Naples, FL.

Suchow, J. W., & Alvarez, G. A. (2011). Which kinds of motion silence awareness of visual change? Presented as a poster at the *Vision Sciences Society* conference in Naples, FL.

Suchow, J. W., & Alvarez, G. A. (2010). Silent updating: cross-dimensional change suppression. Journal of Vision, 10(7), 299. Presented as a talk at the *Vision Sciences Society* conference in Naples, FL.

Suchow, J. W., & Pelli, D. G. (2008). Letter learning: feature detection and combination. Journal of Vision, 9(6), 1133. Presented as a poster at the *Vision Sciences Society* conference in Naples, FL.

Suchow, J. W. (2006). Feature integration during letter learning. Presented as a talk at *The Leadership Alliance* national symposium in Chantilly, VA. Also presented at the *NYU Summer Undergraduate Research Symposium* in New York, NY.

Suchow, J. W., & Pelli, D. G. (2005). Learning to identify letters: Generalization in high-level perceptual learning. Journal of Vision, 5(8), 712. Presented as a poster at the *Vision Sciences Society* conference in Sarasota, FL.

TEACHING, UC BERKELEY

2015   *Lecturer*, 2 sections of "Computational models of cognition"

TEACHING, HARVARD

2013   *Instructor*, "Contemporary issues in psychology: intensive cross-level analysis"
⋈ Derek Bok Center teaching award
⋈ George W. Goethals teaching award

2012   *Teaching fellow*, 2 sections of "Psychological science", taught by Dan Gilbert

2012   *Instructor*, "Contemporary issues in psychology: intensive cross-level analysis"
⋈ George W. Goethals teaching award

2012   *Teaching fellow*, "MATLAB programming for behavioral testing", taught by George Alvarez

2011   *Teaching fellow*, 2 sections of "Psychological science", taught by Dan Gilbert

FELLOWSHIPS & GRANTS

2014 NSF Postdoctoral Research Fellowship, awarded under the *Directorate for Social, Behavioral & Economic Sciences,* for project "The dynamics of updating and transmitting individual and collective memories"($172,425, Co-PI w/ Tom Griffiths, UC Berkeley).

2011 *Mind, Brain & Behavior Graduate Student Award*, Harvard University

2009–2012 *Sosland Fellow*, Harvard University

2005–2009 *Presidential Scholar*, Brandeis University

2005 *Semifinalist*, Intel Science Talent Search (formerly, Westinghouse STS), for project "Learning to identify letters: Generalization in high-level perceptual learning", advised by Denis Pelli at NYU.

TRAINING

2014 Participant in a 2-week graduate summer school on brains, minds and machines at the *Marine Biological Laboratory* in Woods Hole, organized by the *Center for Brains, Minds, and Machines.*

2011 Participant in a 2-week graduate summer school in probabilistic models of cognition at UCLA's *Institute for Pure & Applied Mathematics*, organized by Josh Tenenbaum, Noah Goodman, and Alan Yuille.

2006 NSF Research Experience for Undergraduates, at New York University

2006 The Leadership Alliance Early Identification Summer Research Program

2003–2005 Columbia University Science Honors Program

MEDIA COVERAGE

Suchow & Alvarez (2011) was covered by *Scientific American*, *New Scientist*, The Washington Post, Slashdot, Gizmodo, Wired.co.uk and .it, MSNBC, CVC Radio, CBS, *Sciences et avenir*, and others. As of 2014, the official demo page had been seen by 150,000 visitors and the YouTube demos had been played 2,000,000 times. *The Exploratorium*, a museum of science, art, and human perception in San Francisco, runs a physical installation of silencing.

Suchow & Pelli (2012) was covered in an interview by *Medical Xpress*.

Interview with *Nerve.com* published as 'Sex advice from neuroscientists' in June 2009.

PROFESSIONAL SERVICE & OUTREACH

2012 *Judge*, Neural Correlate Society's *2012 Best visual illusion of the year contest*

2011–2013 Editorial board of *The New School Psychology Bulletin*

2011–2013 *Scientific advisor* to Pubget, Inc.

2011–2012   e-print committee of the *Association for the Scientific Study of Consciousness*

Ad hoc reviewer for:
> *Attention, Perception, & Psychophysics,*
> *Cognition,*
> *Cognitive Psychology,*
> *Frontiers in Human Neuroscience,*
> *Journal of Cognitive Psychology,*
> *Journal of Comparative Psychology,*
> *Journal of Experimental Psychology: Human Perception and Performance,*
> *Journal of Experimental Psychology: Learning, Memory, and Cognition*
> *Journal of the Optical Society of America A,*
> *Journal of Vision,*
> PLOS ONE,
> *Perception,*
> *Psychological Research,*
> *Psychological Science,*
> *Psychonomic Bulletin & Review,* and
> *The New School Psychology Bulletin.*

Member of the Vision Sciences Society, American Psychological Association, Cognitive Science Society, and the Association for Computing Machinery.

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via http://suchow.io