JORDAN WILLIAM SUCHOW

jwsuchow@gmail.com

EMPLOYMENT

2014— University of California, Berkeley
Institute of Cognitive and Brain Sciences
Lecturer and Research Fellow
Advisor: Tom Griffiths

EDUCATION

2014 Harvard University
Department of Psychology
Ph.D. in Psychology
Advisor: George Alvarez

2012 Harvard University
A.M. in Psychology

2009 Brandeis University
B.S. in Computer Science

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

SELECTED VISION AND TECH DEMOS

1. *Reflections on a true mirror*
Uses an angled mirror and visual adaptation to show people their true selves (what others see) and a caricature that exaggerates asymmetries. (with Jason Haberman)

2. *Clockwalk*
A stochastic clock exploring variants of timekeeping that fit human experience.

3. *Zipf it.*
An instructional web app that teaches people about Zipf's law by analyzing and plotting their iTunes listening habits.

4. *Silencing*. See `http://visionlab.harvard.edu/silencing/`.
A visual illusion showing that it's hard to notice when moving objects change.
(with George Alvarez)
1st prize, *Best visual illusion of the year contest*

5. *Antisilencing*
Antisilencing is a computer-graphics method that corrects for the effects of silencing in head-up displays.

6. *Autonudger*
Turns off the internet when you don't go to the gym 3× a week. (With Justin Jungé)

7. *LQQK*
A wristband that vibrates every few minutes and does visual-experience sampling, reminding the wearer to record what they were looking at.

8. *Touching and interpreting hallucinated patterns in dynamic visual noise*
An interactive demo of visual phenomena arising from noise.
(with Justin Jungé and George Alvarez)

9. *Upside down*. See `visionlab.harvard.edu/upsidedown/`.
A visual phenomenon where, looking at an upside down face, the eyes eventually appear to flip right-side up, giving the eerie impression that they no longer belong to it.
(with Ken Nakayama and Maryam Vaziri-Pashkam)

FICTION

Suchow, J. W. (2011). A specific policy on authorship. *Nature*, 477, 244.

GRANTS AND AWARDS

2014 NSF grant under the *Directorate for Social, Behavioral & Economic Sciences,* titled "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)

MEDIA COVERAGE

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

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.

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

PAPERS

1. 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.
2. 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.* doi:10.3758/s13414-014-0690-7
3. 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.
4. Suchow, J. W. & Pelli, D. G. (2012). Learning to detect and combine the features of an object. *Proceedings of the National Academy of Sciences*.
5. Fougnie, D., Suchow, J. W., & Alvarez, G. A. (2012). Variability in the quality of visual working memory. *Nature Communications*, 3(1229), 1–8.
6. Suchow, J. W. & Alvarez, G. A. (2011). Motion silences awareness of visual change. *Current Biology*, 21, 140–143.

MANUSCRIPTS (SUBMITTED & IN PRESS)

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

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

CHAPTERS AND ESSAYS

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

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

CONFERENCE PRESENTATIONS AND TALKS

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 / MENTORING

@ UC Berkeley:

2015 *Lecturer*, Computational models of cognition, taught by Tom Griffiths

@ Harvard:

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

2013 *Mentor* for two high school students participating in the Intel Science Talent Search

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

Training:

2011 Instructional styles in psychology, PSY–5330

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

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,
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.

Last updated on March 11, 2015