

## Robert X.D. Hawkins

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CONTACT INFORMATION	Stanford University 450 Serra Mall Stanford, CA 94305	<i>Cell:</i> (217)-549-6923 <i>E-mail:</i> rxdh@stanford.edu <i>WWW:</i> <a href="http://rxdhawkins.wordpress.com/">http://rxdhawkins.wordpress.com/</a>
EDUCATION	<b>Stanford University</b> , 2014 – Present PhD Student, Psychology (in Progress) <b>Indiana University</b> , 2010 – 2014 BS, Mathematics and Cognitive Science <b>Santa Fe Institute</b> , Summers 2012 & 2013 Edward A. Knapp Undergraduate Fellow	
AWARDS AND HONORS	E.K. Potter Fellow, Stanford Graduate Fellowship, 2017-2019 NSF Graduate Research Fellowship, 2014-2017 Cognitive Science Society travel grant, 2016 Cognitive Science Society prize for modeling in Applied Cognition, 2015 Phi Beta Kappa, 2013 Sigma Xi Outstanding Undergraduate Research Award, 2013 IU Cognitive Science Program Award for Outstanding Achievement, 2013 IU Cognitive Science Program Award for Outstanding Contribution, 2012 Hutton Honors College Research Partnership Grant, 2011 Arthur R. Metz Scholarship, 2010 Science, Technology, and Research Scholar, 2010	
PRE-PRINTS	<b>Hawkins, R.X.D.</b> , Goodman, N.D. ( <i>under revision</i> ). Questions and answers in dialogue. <b>Hawkins, R.X.D.</b> , Gweon, H. Goodman, N.D. ( <i>under review</i> ). Speakers account for asymmetries in visual perspective so listeners don't have to. <b>Hawkins, R.X.D.*</b> , Sano, M.*, Goodman, N.D., Fan, J.E. ( <i>under review</i> ). Graphical convention formation during visual communication Mukherjee, K., <b>Hawkins, R.X.D.</b> , Fan, J.E. ( <i>under review</i> ). Communicating semantic part information in drawings Achlioptas, P., Fan, J., <b>Hawkins, R.X.D.</b> , Goodman, N.D., Guibas, L. ( <i>under review</i> ). Learning to Refer to 3D Objects with Natural Language. Degen, J., <b>Hawkins, R.X.D.</b> , Krauss, E., Graf, C., Goodman, N.D. ( <i>under review</i> ). Over 'overinformativeness': rational redundant referring expressions.	

**Hawkins, R.X.D.**, Goodman, N.D., Goldstone, R.L. (2019). The emergence of social norms and conventions. *Trends in Cognitive Sciences*, 23 (2), 158–169.

**Hawkins, R.X.D.\***, Smith, E.\*, Au, C., Arias, J.M., Catapano, R., Hermann, E., Keil, M., Lampinen, A., Raposo, S., Reynolds, J., Salehi, S., Salloum, J., Tan, J., Frank, M.C. (2018). Improving the Replicability of Psychological Science Through Pedagogy. *Advances in Methods and Practices in Psychological Science*, 1 (1), 7–18.

Monroe, W., **Hawkins, R.X.D.**, Goodman, N.D., Potts, C. (2017). Colors in Context: A Pragmatic Neural Model for Grounded Language Understanding. *Transactions of the Association for Computational Linguistics*, 5, 325–338.

Avena-Koenigsberger, A, Misic, B., **Hawkins, R.X.D.**, Griffa, A., Hagmann, P., Goñi, J., and Sporns, O. (2017). Path ensembles and a tradeoff between communication efficiency and resilience in the human connectome. *Brain Structure and Function*, 222 (1), 603-618.

**Hawkins, R.X.D.**, Goldstone, R. L. (2016). The formation of social conventions in real-time environments. *PLoS ONE*, 11 (3), e0151670.

**Hawkins, R.X.D.**, Houpt, J.W., Eidels, A., Townsend, J.T. (2016). Can two dots form a Gestalt? Measuring emergent features with the capacity coefficient. *Vision Research*, 126, 19–33.

Silbert, N. H., **Hawkins, R.X.D.** (2016). A tutorial on general recognition theory. *Journal of Mathematical Psychology*, 73, 94-109.

**Hawkins, R.X.D.** (2015). Conducting real-time multiplayer experiments on the web. *Behavior Research Methods*, 47 (4), 966-976

DeDeo, S., **Hawkins, R.X.D.**, Klingenstein, S., Hitchcock, T. (2013). Bootstrap methods for the empirical study of decision-making and information flows in social systems. *Entropy*, 15 (6), 2246-2276.

**Hawkins, R.X.D.**, Franke, M., Smith, K., Goodman, N.D. (2018). Emerging abstractions: Lexical conventions are shaped by communicative context. *Proceedings of the Fortieth Annual Conference of the Cognitive Science Society*.

**Hawkins, R.X.D.**, Frank, M.C., Goodman, N.D. (2017). Convention-formation in iterated reference games. *Proceedings of the Thirty-Ninth Annual Conference of the Cognitive Science Society*.

Graf, C., Degen, J., **Hawkins, R.X.D.**, Goodman, N.D. (2016). Animal, dog, or dalmatian? Level of abstraction in nominal referring expressions. *Proceedings of the Thirty-Eighth Annual Conference of the Cognitive Science Society*.

**Hawkins, R.X.D.**, Goodman, N.D. (2016). Conversational expectations account for apparent limits on theory of mind use. *Proceedings of the Thirty-Eighth Annual Conference of the Cognitive Science Society*.

- Hawkins, R.X.D.**, Stuhlmüller, A., Degen, J., Goodman, N.D. (2015). Why do you ask? Good questions provoke informative answers. *Proceedings of the Thirty-Seventh Annual Conference of the Cognitive Science Society*.
- Krafft, P.M. **Hawkins, R.X.D.**, Pentland, A.S., Goodman, N.D., Tenenbaum, J.B. (2015). Emergent collective sensing in human groups. *Proceedings of the Thirty-Seventh Annual Conference of the Cognitive Science Society*.
- BOOK CHAPTERS     Algom, D., Eidels, A. **Hawkins, R.X.D.**, Jefferson, B., Townsend, J.T. (2015). Features of response times: Identification of cognitive mechanisms through mathematical modeling. In *The Oxford Handbook of Computational and Mathematical Psychology*.
- BOOKS (PRINT/WEB)     N. D. Goodman, J. B. Tenenbaum, and The ProbMods Contributors (2016). Probabilistic Models of Cognition (2nd ed.). (<https://probmods.org/>)
- TECHNICAL REPORTS     Stuhlmüller, A., **Hawkins, R.X.D.**, Narayanaswamy, S., Goodman, N.D. (2015). Coarse-to-fine sequential Monte Carlo for probabilistic programs. arXiv:1509.02962.
- INVITED TALKS     Center for Research in Language (CRL), UCSD, May 2019.
- Concepts and Categories (ConCats) Seminar, NYU, December 2018.
- PDP Seminar, Princeton University, September 2018.
- Symbolic Systems Society Symposium, Stanford University, February 2018.
- Interacting Minds Center (IMC) Seminar, Aarhus University, August 2017.
- Language Evolution Seminar, University of Edinburgh, August 2017.
- Linguistics Colloquium, University of Tübingen, July 2017.
- Platform Speaker, STARS Research Symposium, Indiana University, March 2014.
- ‘Grey Matters’ Seminar, Indiana University, November 2013.
- SELECTED CONFERENCE PRESENTATIONS     Talk, 40th Annual Conference of the Cognitive Science Society (*CogSci*); Madison, 2018
- Talk, *Evolang XII*; Torun, Poland, 2018
- Poster & talk, 39th Annual Conference of the Cognitive Science Society (*Cogsci*); London, UK, 2017
- Poster, CSLI Workshop on “Bridging computational and psycholinguistic approaches to the study of meaning”; Stanford, CA, 2017
- Talk, 38th Annual Conference of the Cognitive Science Society (*CogSci*); Philadelphia, PA, 2016
- Poster, 37th Annual Conference of the Cognitive Science Society (*CogSci*); Pasadena, CA, 2015.

Talk, 14th Annual Summer Interdisciplinary Conference (*ASIC*), Mammoth Lakes, CA, 2015.

Talk, 4th Annual Midwest Cognitive Science Conference (*MCSC*); Dayton, OH, 2014.

Poster, 35th Annual Conference of the Cognitive Science Society (*CogSci*); Berlin, Germany, 2013.

Poster, Vision Sciences Society Annual Meeting (*VSS*); Naples, FL, 2012.

Talk, Midwest Undergraduate Cognitive Science Conference (*MUCSC*); Bloomington, IN, 2012. **[Winner of Best Paper Award]**

Poster at Object Perception, Attention, and Memory (*OPAM*); Seattle, WA, 2011.

Talk, Midwest Undergraduate Cognitive Science Conference (*MUCSC*); Bloomington, IN, 2011.

ADVISING &  
TEACHING

*Students*

- Kushin Mukherjee, undergraduate at Vassar (2018)
- Megumi Sano, undergraduate at Stanford (2018)
- Ethan Herenstein, Master's student at Stanford (2018)
- Karl Mulligan, undergraduate at Rutgers (2017)
- Nicole Maslan, undergraduate at Claremont McKenna (2015-2016)

*Graduate Teaching Assistant, Stanford University*

- Computation and Cognition: a Probabilistic Approach, Falls 2016 - 2018
- Bayesian Statistics for Psychologists, Summer 2016
- Lab in Experimental Methods, Winter 2016
- Statistical Methods for Behavioral and Social Sciences, Fall 2015

*Undergraduate Teaching Assistant, Indiana University*

- Programming Languages, Fall 2012, Spring 2013
- Philosophical Foundations of Cognitive Science, Spring 2012

PROFESSIONAL  
SERVICE

*Ad Hoc Reviewer*

- Journal of Experimental Psychology: General
- Journal of Experimental Psychology: Human Perception and Performance
- Journal of Memory & Language
- Cognition
- Cognitive Science
- Computational Brain & Behavior
- Behavior Research Methods
- Cognitive Science Society conference proceedings

*Conference Service*

- Co-organizer for "Emergence of Conventions" symposium at the 38th Annual Meeting of the Cognitive Science Society, Philadelphia, PA, 2016

- Co-organizer for Stanford-Berkeley Cognitive Area Meetup, 2015
- Co-organizer for 5th Annual Midwest Undergraduate Cognitive Science Conference, Bloomington, IN, 2013

*Departmental Service*

- Graduate program committee, 2015-2018
- Co-organizer for Stanford cognitive science training seminar, 2017-2018
- Co-organizer for Stanford Cog/Neuro area training seminar, 2016-2017
- Stanford graduate admissions committee, 2015-2016

President of IU Student Organization for Cognitive Science, 2011 - 2012

IU Vice Provost for Undergraduate Education Advisory Board, 2011 - 2012