

Robert X.D. Hawkins

CONTACT INFORMATION	Stanford University 450 Serra Mall Stanford, CA 94305	Cell: (217)-549-6923 E-mail: rxdh@stanford.edu WWW: http://rxdhawkins.com/
EDUCATION AND ACADEMIC APPOINTMENTS	Princeton University , Starting 2019 – C. V. Starr Postdoctoral Fellow Stanford University , 2014 – 2019 (Expected) PhD, Psychology Indiana University , 2010 – 2014 BS, Mathematics and Cognitive Science Santa Fe Institute , Summers 2012 & 2013 Edward A. Knapp Undergraduate Fellow	
AWARDS AND HONORS	C.V. Starr Postdoctoral Research Fellow, 2019-present E.K. Potter Fellow, Stanford Graduate Fellowship, 2017-2019 NSF Graduate Research Fellowship, 2014-2017 Cognitive Science Society Glushko Student Travel Award, 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 Best Paper Award, Midwest Undergraduate Cognitive Science Conference, 2012 IU Hutton Honors College Research Partnership Grant, 2011 Arthur R. Metz Scholarship, IU, 2010 Science, Technology, and Research (STARS) Scholarship, IU, 2010	
PRE-PRINTS	Hawkins, R.X.D. , Goodman, N.D. (<i>under revision</i>). Questions and answers in dialogue. Hawkins, R.X.D. , Gweon, H. Goodman, N.D. (<i>under review</i>). Speakers account for asymmetries in visual perspective so listeners don't have to. Achlioptas, P., Fan, J., Hawkins, R.X.D. , Goodman, N.D., Guibas, L. (<i>under review</i>). GeoGlot: Learning to Ground Referential Language in Geometry. Degen, J., Hawkins, R.X.D. , Krauss, E., Graf, C., Goodman, N.D. (<i>under review</i>). Over 'overinformativeness': rational redundant referring expressions. Fan, J., Hawkins, R.X.D. , Wu, M., Goodman, N.D. (<i>under review</i>). Pragmatic inference and visual abstraction enable contextual flexibility during visual communication.	

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.*, Sano, M.*, Goodman, N.D., Fan, J.E. (2019). Graphical convention formation during visual communication. *Proceedings of the Forty-First Annual Conference of the Cognitive Science Society*.

Mukherjee, K., **Hawkins, R.X.D.**, Fan, J.E. (2019). Communicating semantic part information in drawings. *Proceedings of the Forty-First Annual Conference of the Cognitive Science Society*.

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 Workshop on Teaching Methods via Replication Studies, Montreal, July 2019.
 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.
 STARS Research Symposium, Indiana University, March 2014.
 ‘Grey Matters’ Seminar, Indiana University, November 2013.
- SELECTED CONFERENCE TALKS AND POSTERS Talk at 40th Annual Conference of the Cognitive Science Society (*CogSci*) Madison, WI, 2018
 Talk at *Evolang XII* Torun, Poland, 2018

Poster & talk at 39th Annual Conference of the Cognitive Science Society (*CogSci*)
London, UK, 2017

Poster at CSLI Workshop on “Bridging computational and psycholinguistic approaches to the study of meaning”;
Stanford, CA, 2017

Talk at 38th Annual Conference of the Cognitive Science Society (*CogSci*)
Philadelphia, PA, 2016

Poster at 37th Annual Conference of the Cognitive Science Society (*CogSci*)
Pasadena, CA, 2015.

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

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

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

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

Talk at Midwest Undergraduate Cognitive Science Conference (*MUCSC*)
Bloomington, IN, 2012.

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

Talk at 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