

Melissa Kline Struhl
Center for Open Science
210 Ridge McIntire Road, Suite 500
Charlottesville, VA 22903-5083
melissa.e.kline@gmail.com

Education

2009-2015 Ph.D. in Cognitive Science
MIT Brain & Cognitive Sciences
Committee: Laura Schulz; Ted Gibson; Jesse Snedeker; Josh Tenenbaum
Thesis title: *Who did what to whom: Developmental perspectives on the meaning and communication of transitive events*

2004-2008 Sc.B. in Cognitive and Linguistic Sciences, magna cum laude
Brown University
Advisor: Katherine Demuth
Thesis title: *Syntactic generalization with novel intransitive verbs: Who is pilking?*

Employment

2019-Present Center for Open Science, Metascience Department
Research Scientist; Supervisor Tim Errington

2018-2019 Massachusetts Institute of Technology, Brain & Cognitive Sciences
Postdoctoral Associate; Supervisor Joshua Tenenbaum

2018 Harvard Extension School, Department of Psychology
Senior Teaching Fellow Supervisor Jesse Snedeker

2016-2017 Massachusetts Institute of Technology, Brain & Cognitive Sciences
Postdoctoral Associate; Supervisor Evelina Fedorenko

2015-2016 Harvard University, Department of Psychology
Postdoctoral Fellow; Supervisor Jesse Snedeker

Publications

Affourtit, J...**Kline Struhl, M.**,...Fedorenko, E. (Under Review). LanA (Language Atlas): A probabilistic atlas for the language network based on fMRI.

Kline Struhl, M., Galleé, J., Balewski, Z., & Fedorenko, E. (Under Review). Understanding jokes relies on the Theory of Mind system. Available at <https://psyarxiv.com/h2nyx/>

- Alipourfard, N., Arendt, B., ... **Kline Struhl, M.**, ... Wu, J. (Preprint). Systematizing Confidence in Open Research and Evidence (SCORE). <https://doi.org/10.31235/osf.io/46mnb>
- Nosek, B. A., Hardwicke, T. E., Moshontz, H., Allard, A., Corker, K. S., Dreber, A., Fidler, F., Hilgard, J., **Kline Struhl, M.**, Nuijten, M., Roher, J., Romero, F., Scheel, A., Scherer, L., Schönbrodt, F. & Vazire, S. (In Press). Replicability, Robustness, and Reproducibility in Psychological Science. *Annual Review of Psychology*. <https://doi.org/10.31234/osf.io/ksfvq>
- Byers-Heinlein, K., Bergmann, C., Davies, C., Frank, M. C., Hamlin, J. K., **Kline, M.**, Kominsky, J. F., Kosie, J. E., Lew-Williams, C., Liu, L., Mastroberardino, M., Singh, L., Waddell, C. P. G., Zettersten, M., & Soderstrom, M. (2020). Building a collaborative psychological science: Lessons learned from ManyBabies 1. *Canadian Psychology/ Psychologie canadienne*, 61(4), 349–363. <https://doi.org/10.1037/cap0000216>
- Black, A., Bergmann, C., Byers-Heinlein, K., Frank, M., Gervain, J. **Kline, M.**, Polka, L., Singh, Leher., Soderstrom, M. (2020). A multi-lab study of bilingual infants: Exploring the preference for infant-directed speech. *Advances in Methods and Practices in Psychological Sciences*, 3(1), 24-52.
- ManyBabies Consortium [Bergelson, E., Bergmann, C., Byers-Heinlein, K., Cristia A., Cusack, R., Dyck, K., Floccia, C., Frank, M., Gervain, J., Hamlin, K., Hannon, E., Kellier, D., **Kline, M.**, Lew-Williams, C., Nazzi, T., Panneton, R., Rabagliati, H., Rennls, J., Seidl, A., Soderstrom, M.] (2020). Quantifying sources of variability in infancy research using the infant-directed speech preference. *Advances in Methods and Practices in Psychological Sciences*. <http://doi.org/10.1177/2515245919900809>
- Kline, M.** & Scott, K. (2019). Enabling confirmatory secondary data analysis by logging data 'checkout'. in *Methods and Practices in Psychological Sciences*, 2(1), 45-54.
- Moshontz, H., Campbell, L., Ebersole, C. R., IJzerman, H., Urry, H. L.,... **Kline, M.**...Chartier, C. R. (2018) The Psychological Science Accelerator: Advancing Psychology through a Distributed Collaborative Network. *Advances in Methods and Practices in Psychological Sciences*. <https://doi.org/10.1177/2515245918797607>
- Kline, M.**, Schulz, L. & Gibson, E. (2018). Partial truths: Adults choose to mention agents and patients in proportion to informativity, even if it doesn't fully disambiguate the message. *Open Mind: Discoveries in Cognitive Science*. 1(2), 123-135. https://doi.org/10.1162/OPMI_a_00013
- Frank, M., Bergelson, E., Bergmann, C., Cristia, A., Floccia, C., Gervain, J., Hamlin, J.K., Hannon, E., **Kline, M.**, Lew-Williams, C., Nazzi, T., Panneton, R., Rabagliati, H., Soderstrom, M, Sullivan, J., Waxman, S. & Yurovsky, D. (2017). A collaborative approach to infancy research: Promoting reproducibility, best practices, and theory-building. *Infancy*. 22(4), 421-435. <http://doi.org/10.1111/infa.12182>
- Kline, M.**, Snedeker, J. & Schulz, L.E. (2017). Linking Language and Events: Spatiotemporal cues drive children's expectations about the meanings of novel transitive verbs. *Language Learning and Development*, 13(1), 1-23. <http://doi.org/10.1080/15475441.2016.1171771>
- Kline, M.** & Demuth, K. (2013). Syntactic generalization with novel intransitive verbs. *Journal of Child Language*, 41(3), 543-74. <http://dx.doi.org/10.1017/S0305000913000068>

Kline, M., & Demuth, K. (2010). Factors facilitating implicit learning: The case of the Sesotho passive. *Language Acquisition*, 17(4), 220-234. <http://dx.doi.org/10.1080/10489223.2010.509268>

Demuth, K. & **Kline, M.** (2006). The distribution of passives in spoken Sesotho. *Southern African Linguistics and Applied Language Studies*, 24, 377-388. (Special issue on Theory and Description of Southern Bantu Syntax). <http://dx.doi.org/10.2989/16073610609486426>

Preregistrations

Kline, M. & members of the ManyBabies Consortium (2018) ManyBabies 1: Secondary analysis of 'lab factors' and fuss-out rates. Available at <https://osf.io/r7g83/>

Kline, M., Geojo, A., de Rechteren van Hemert, A., & Snedeker, J. (2016) MannerPathPriming - Testing generalization of event semantics across domains. Available at <https://osf.io/7nux2/>

Additional Manuscripts (Preprints & Conference Proceedings)

Kline, M., Salinas, M., Lim, E., Fedorenko, E., & Gibson, E. Word order patterns in gesture are sensitive to modality-specific production constraints. Available at <https://psyarxiv.com/62puh/>

Kline, M., Gibson, E. & Schulz, L. Young children choose informative referring expressions to describe the agents and patients of transitive events. Available at <https://psyarxiv.com/r6mwb/>

Wittenberg, E., **Kline, M.** & Hartshorne, J. (2016) Learning to talk about events: Grounding language acquisition in intuitive theories and event cognition. Proceedings of the Thirty-Eighth Annual Conference of the Cognitive Science Society

Kline, M., Snedeker, J. (2015). 2-year-olds use syntax to infer actor intentions in a rational-action paradigm. *Proceedings of the Thirty-Seventh Annual Conference of the Cognitive Science Society*.

Kline, M., Muentener, P. & Schulz, L.E. (2013). Transitive and periphrastic sentences affect memory for simple causal scenes. *Proceedings of the Thirty-Fifth Annual Conference of the Cognitive Science Society*.

Kline, M., Snedeker, J., & Schulz, L.E. (2011). Children's comprehension and production of transitive sentences is sensitive to the causal structure of events. *Proceedings of the Thirty-Third Annual Conference of the Cognitive Science Society*.

Presentations

Kline, M. (2018). ManyBabies - Using larg(er) experimental datasets for methodological and theoretical questions. Society for Research on Child Development, Special Meeting on Secondary Data in Developmental Science. Phoenix, AZ.

- Kline, M. and the ManyBabies Consortium. (2018). Analysis of "fussout effects" in the ManyBabies1 dataset. 21st Biennial Congress of the International Congress of Infant Studies, Philadelphia, PA.
- Kline, M. (2018). Machine-readable, human-friendly data standardization for psychological science. Lightning talk & Hackathon. Third meeting of the Society for the Improvement of Psychological Sciences, Grand Rapids, MI.
- Kline, M. & Snedeker, J. (2018). How are events represented for language? Eighth annual meeting of the Budapest CEU Conference on Cognitive Development, Budapest, Hungary.
- Kline, M. & Snedeker, J. (2017) Do children appreciate parallels in means/ends event structure across semantic fields? 2017 Biennial Meeting of the Society for Research on Child Development, Austin, TX.
- Kline, M. (2017). We need an open database for psychological stimuli (all of them) - Lightning talk & Hackathon. Second meeting of the Society for the Improvement of Psychological Sciences, Charlottesville, VA.
- Kline, M. (2017). Language, Space & Time. Workshop on Cognitive Universals, CUNY Sentence Processing Conference, 2017
- Kline, M. (2016) Which semantic primitives and why those ones? Workshop talk, Learning to Talk About Events, 38th Annual Conference of the Cognitive Science Society, Philadelphia, PA.
- Kline, M., Snedeker, J. (2015). 2-year-olds use syntax to infer actor intentions in a rational-action paradigm. 37th Annual Conference of the Cognitive Science Society, Pasadena, CA
- Kline, M., Muentener, P. & Schulz, L.E. (2013). Transitive and periphrastic sentences affect memory for simple causal scenes. 35th Annual Conference of the Cognitive Science Society, Berlin, Germany.
- Kline, M., Snedeker, J. & Schulz, L.E. (2013) Representations of causality in verb learning. 2013 Biennial Meeting of the Society for Research on Child Development, Seattle, WA.
- Kline, M., Snedeker, J., & Schulz, L.E. (2011). Preschoolers prefer to map novel transitive verbs to events with spatiotemporal features that mark causation. 36th Annual Boston University Conference on Language Development, Boston, MA.
- Kline, M., Snedeker, J., & Schulz, L.E. (2011). Children's comprehension and production of transitive sentences is sensitive to the causal structure of events. 33rd Annual Conference of the Cognitive Science Society, Boston, MA.
- Kline, M. & Demuth, K. (2008). Syntactic generalization with novel intransitive verbs: Who is pilking? 33rd Annual Boston University Conference on Language Development, Boston, MA.
- Kline, M. & Demuth, K. (2008). Frequency and structural priming in the input: Implications for learning the passive. Generative Approaches to Language Acquisition North America (GALANA) 3, Storrs, CT.
- Kline, M. & Demuth, K. (2006). Learning passives from the input: Evidence from Sesotho. 2nd Bantu Acquisition Workshop, Northampton, MA.

Conference Posters

Mahowald, K., Kline, M., Fedorenko, E. & Gibson, T. (2015). Informativity and efficient compression of sentences. Annual CUNY Conference on Human Sentence Processing, CUNY 2015. Los Angeles, CA

Kline, M., Snedeker, J. (2014) Daxing my toy or Daxing TO my toy? Two-year-olds use syntax to override rational imitation effects. 39th Annual Boston University Conference on Language Development, Boston, MA.

Friel, D., Kline, M., Seed, A., & Schulz, L. (2011). It's okay to judge a block by its color: Toddlers' use of symbolic and intrinsic cues to objects' causal powers. Seventh Biennial Meeting of the Cognitive Development Society, Philadelphia, PA.

Honors and Awards

Harvard University Foundations of Human Behavior Grant, 2015 (\$40,000)

NSF SBE Doctoral Dissertation Research Improvement Grant, 2012-2014 (Project title: *Causal Representations in Children's Transitive Sentences*; \$12,000)

NSF Fellowship, 2011-2014

Norman B. Leventhal Fellowship, 2010-2011

Singleton Graduate Fellowship, 2009-2010

Service

Executive Committee, Society for the Improvement of Psychological Science (2018-)

Steering Committee, PsyArxiv (2017-)

Governing Board, ManyBabies (2017-)

Organizing committee, CUNY Sentence Processing Conference (March 2017)

Co-Organizer, Learning to Talk About Events Workshop (August 2016)

Co-Chair, Events in Language & Cognition Workshop (March 2016)

CogLunch coordinator, 2010-2011

Reviewer for Autism Research, Collabra: Psychology, Cognitive Science, Developmental Science, Infant Behavior & Development, Journal of Child Language, Journal of Experimental Psychology, Language Cognition & Neuroscience, Language Learning and Development, Semantics and Pragmatics (Journals); Society for Research in Child Development, Cognitive Science, CUNY Sentence Processing Conference (Conferences)

Teaching Experience

Human Development (Graduate/Undergraduate level), 2018 (Senior Teaching Fellow)

Science of Living Systems 20/ Introduction to Psychological Science, 2013 (Teaching Fellow)

Project consultant for 'Special Topics' independent research students, Spring 2013 and 2014

Graduate Student Teaching Certificate Program, 2011-2012

Infant & Early Childhood Cognition, Fall 2011 (Teaching Assistant)

Laboratory in Higher-Level Cognition, Spring 2011 (Teaching Assistant)
Models of Computation, Fall 2006 (Teaching Assistant)
After-school science educator, 2008-2009 (AmeriCorps, Providence Children's Museum)

Students Supervised

2019-Present: Supervisor for one full-time direct report employee

2010-2019: Supervisor for 4 masters' students, 10 full time and 34 part time/semester undergraduate research assistants, including one senior thesis supervision.